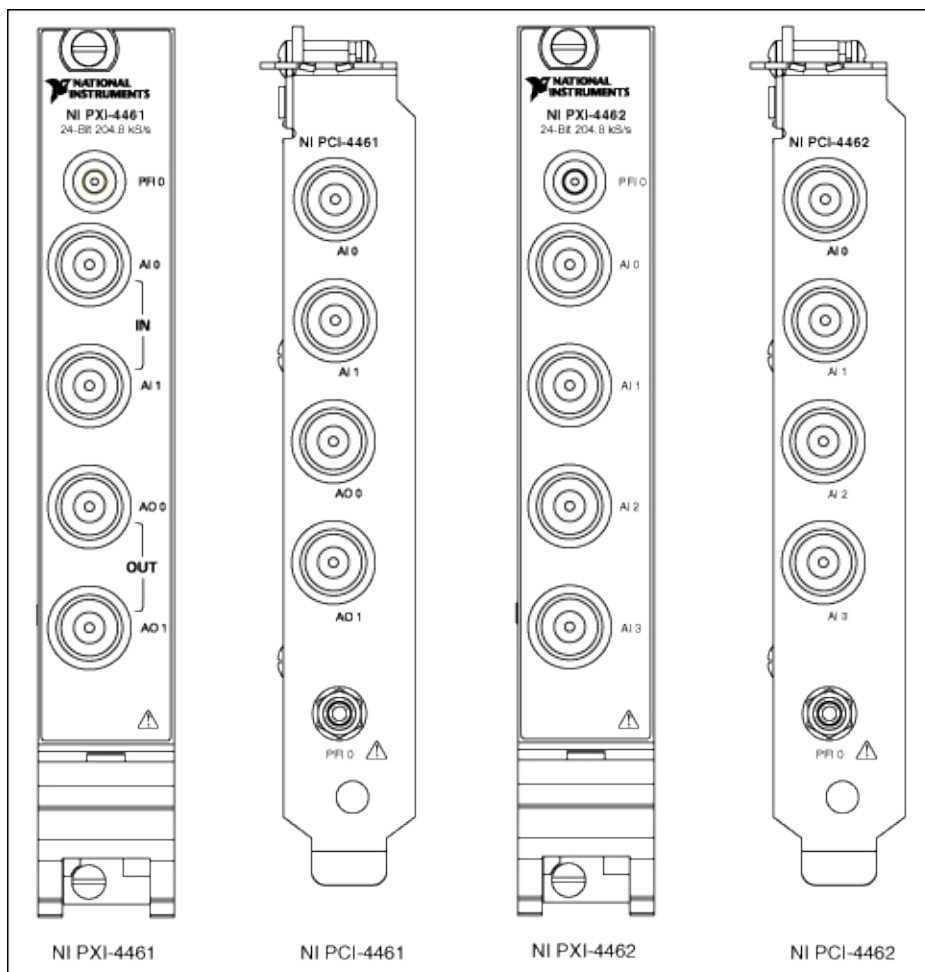


## **DAQ Devices**

Pinout descriptions in this book include DAQ devices supported by NI-DAQmx.

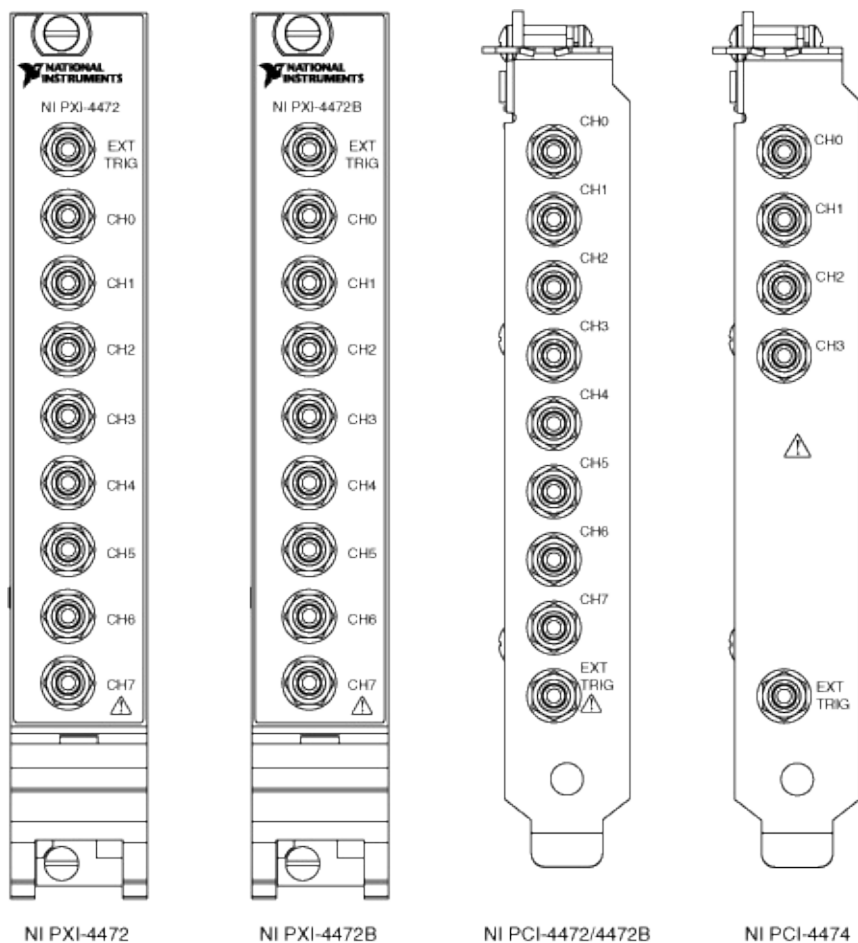
# NI 446x

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

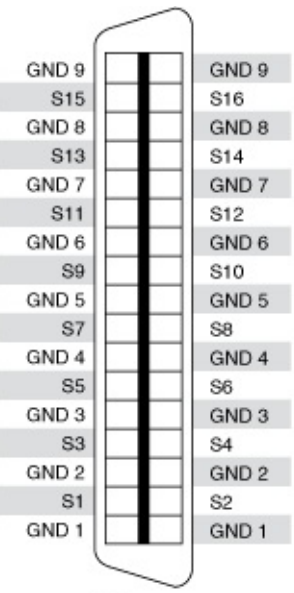
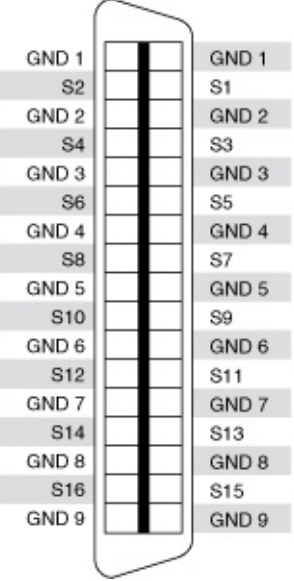


# NI 447x

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



# NI 4496

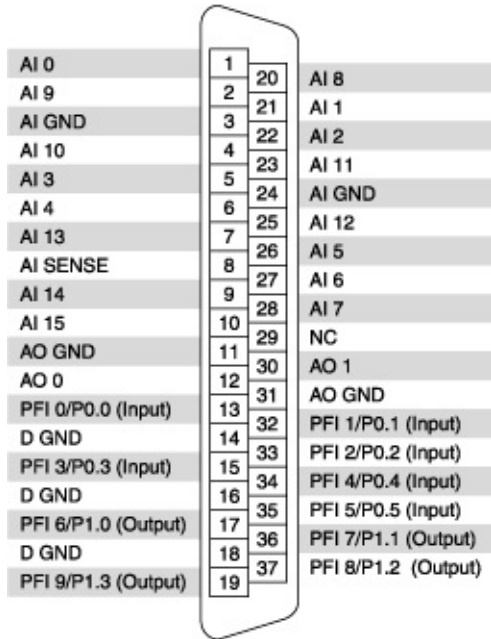
| Front Connector Diagram                                                            | Pin     | Connector AI 0–7 | Connector AI 8–15 |
|------------------------------------------------------------------------------------|---------|------------------|-------------------|
|   | S1      | AI 7 +           | AI 15 +           |
|                                                                                    | S2      | AI 7 –           | AI 15 –           |
|                                                                                    | S3      | AI 6 +           | AI 14 +           |
|                                                                                    | S4      | AI 6 –           | AI 14 –           |
|                                                                                    | S5      | AI 5 +           | AI 13 +           |
|                                                                                    | S6      | AI 5 –           | AI 13 –           |
|                                                                                    | S7      | AI 4 +           | AI 12 +           |
|                                                                                    | S8      | AI 4 –           | AI 12 –           |
|                                                                                    | S9      | AI 3 +           | AI 11 +           |
|                                                                                    | S10     | AI 3 –           | AI 11 –           |
|                                                                                    | S11     | AI 2 +           | AI 10 +           |
|                                                                                    | S12     | AI 2 –           | AI 10 –           |
|                                                                                    | S13     | AI 1 +           | AI 9 +            |
|                                                                                    | S14     | AI 1 –           | AI 9 –            |
|                                                                                    | S15     | AI 0 +           | AI 8 +            |
|                                                                                    | S16     | AI 0 –           | AI 8 –            |
|  | GND 1–9 | Ground           | Ground            |
|                                                                                    | Shield  | Ground           | Ground            |



# NI 4498

| Front Connector Diagram | Pin     | Connector AI 0–7 | Connector AI 8–15 |
|-------------------------|---------|------------------|-------------------|
|                         | S1      | AI 7 +           | AI 15 +           |
|                         | S2      | AI 7 –           | AI 15 –           |
|                         | S3      | AI 6 +           | AI 14 +           |
|                         | S4      | AI 6 –           | AI 14 –           |
|                         | S5      | AI 5 +           | AI 13 +           |
|                         | S6      | AI 5 –           | AI 13 –           |
|                         | S7      | AI 4 +           | AI 12 +           |
|                         | S8      | AI 4 –           | AI 12 –           |
|                         | S9      | AI 3 +           | AI 11 +           |
|                         | S10     | AI 3 –           | AI 11 –           |
|                         | S11     | AI 2 +           | AI 10 +           |
|                         | S12     | AI 2 –           | AI 10 –           |
|                         | S13     | AI 1 +           | AI 9 +            |
|                         | S14     | AI 1 –           | AI 9 –            |
|                         | S15     | AI 0 +           | AI 8 +            |
|                         | S16     | AI 0 –           | AI 8 –            |
|                         | GND 1–9 | Ground           | Ground            |
|                         | Shield  | Ground           | Ground            |

# NI PCI-6010



NC = No Connect

## Default NI-DAQmx Counter Terminals

| Terminal | Signal Name | Signal Name |
|----------|-------------|-------------|
| 13       | CTR 0 SRC   | PFI 0       |
| 32       | CTR 0 GATE  | PFI 1       |
| 33       | CTR 0 AUX   | PFI 2       |
| 17       | CTR 0 OUT   | PFI 6       |
| 15       | CTR 1 SRC   | PFI 3       |
| 34       | CTR 1 GATE  | PFI 4       |
| 35       | CTR 1 AUX   | PFI 5       |
| 36       | CTR 1 OUT   | PFI 7       |
| 37       | FREQ OUT    | PFI 8       |

## NI 6011E (NI PCI-MIO-16XE-50)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

# NI 6013



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| NC                  | 22 | 56 | AI GND            |
| NC                  | 21 | 55 | NC                |
| NC                  | 20 | 54 | NC                |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5               | 6  | 40 | CTR 1 OUT         |
| PFI 6               | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect

# NI 6014



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| NC                  | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect

## NI DAQPad-6015

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Digital and Timing |    |    |                     | Analog   |    |    |        |
|--------------------|----|----|---------------------|----------|----|----|--------|
| P0.0               | 33 | 49 | CTR 0 OUT           | AI 0     | 1  | 17 | AI 4   |
| P0.1               | 34 | 50 | PFI 8/CTR 0 SOURCE  | AI 8     | 2  | 18 | AI 12  |
| D GND              | 35 | 51 | D GND               | AI GND   | 3  | 19 | AI GND |
| P0.2               | 36 | 52 | PFI 9/CTR 0 GATE    | AI 1     | 4  | 20 | AI 5   |
| P0.3               | 37 | 53 | PFI 5/AO SAMP CLK   | AI 9     | 5  | 21 | AI 13  |
| P0.4               | 38 | 54 | PFI 6/AO START TRIG | AI GND   | 6  | 22 | AI GND |
| D GND              | 39 | 55 | D GND               | AI 2     | 7  | 23 | AI 6   |
| P0.5               | 40 | 56 | PFI 7/AI SAMP CLK   | AI 10    | 8  | 24 | AI 14  |
| P0.6               | 41 | 57 | CTR 1 OUT           | AI GND   | 9  | 25 | AI GND |
| P0.7               | 42 | 58 | PFI 3/CTR 1 SOURCE  | AI 3     | 10 | 26 | AI 7   |
| D GND              | 43 | 59 | D GND               | AI 11    | 11 | 27 | AI 15  |
| AI HOLD COMP       | 44 | 60 | PFI 4/CTR 1 GATE    | AI GND   | 12 | 28 | AI GND |
| EXT STROBE         | 45 | 61 | PFI 1/AI REF TRIG   | AI SENSE | 13 | 29 | AI GND |
| PFI 2/AI CONV CLK  | 46 | 62 | PFI 0/AI START TRIG | AI GND   | 14 | 30 | AI GND |
| +5 V               | 47 | 63 | D GND               | AO 0     | 15 | 31 | AO 1   |
| D GND              | 48 | 64 | FREQ OUT            | AO GND   | 16 | 32 | AO GND |

## NI DAQPad-6015 (BNC)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|          |    |    |              |
|----------|----|----|--------------|
| PFI 9    | 2  | 1  | P0.7         |
| PFI 8    | 4  | 3  | P0.6         |
| PFI 7    | 6  | 5  | P0.5         |
| PFI 6    | 8  | 7  | P0.4         |
| PFI 5    | 10 | 9  | P0.3         |
| PFI 4    | 12 | 11 | P0.2         |
| PFI 3    | 14 | 13 | P0.1         |
| PFI 2    | 16 | 15 | P0.0         |
| PFI 1    | 18 | 17 | CTR 1 OUT    |
| D GND    | 20 | 19 | D GND        |
| USER 2   | 22 | 21 | USER 1       |
| FREQ OUT | 24 | 23 | AI HOLD COMP |
| +5 V     | 26 | 25 | EXT STROBE   |
| +5 V     | 28 | 27 | AI SENSE     |
| D GND    | 30 | 29 | AI GND       |



# NI DAQPad-6015 (Mass Termination)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| NC                  | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect

## NI DAQPad-6016

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Extended Digital |    |    |       | Digital and Timing |    |    |                     | Analog   |    |    |        |
|------------------|----|----|-------|--------------------|----|----|---------------------|----------|----|----|--------|
| P3.7             | 96 | 80 | P3.3  | P0.0               | 33 | 49 | CTR 0 OUT           | AI 0     | 1  | 17 | AI 4   |
| D GND            | 95 | 79 | D GND | P0.1               | 34 | 50 | PFI 8/CTR 0 SOURCE  | AI 8     | 2  | 18 | AI 12  |
| P3.6             | 94 | 78 | P3.2  | D GND              | 36 | 51 | D GND               | AI GND   | 3  | 19 | AI GND |
| P3.5             | 93 | 77 | P3.1  | P0.2               | 36 | 52 | PFI 9/CTR 0 GATE    | AI 1     | 4  | 20 | AI 5   |
| P3.4             | 92 | 76 | P3.0  | P0.3               | 37 | 53 | PFI 5/AO SAMP CLK   | AI 9     | 5  | 21 | AI 13  |
| D GND            | 91 | 75 | D GND | P0.4               | 38 | 54 | PFI 6/AO START TRIG | AI GND   | 6  | 22 | AI GND |
| P2.7             | 90 | 74 | P2.3  | D GND              | 39 | 55 | D GND               | AI 2     | 7  | 23 | AI 6   |
| P2.6             | 89 | 73 | P2.2  | P0.5               | 40 | 56 | PFI 7/AI SAMP CLK   | AI 10    | 8  | 24 | AI 14  |
| P2.5             | 88 | 72 | P2.1  | P0.6               | 41 | 57 | CTR 1 OUT           | AI GND   | 9  | 25 | AI GND |
| D GND            | 87 | 71 | D GND | P0.7               | 42 | 58 | PFI 3/CTR 1 SOURCE  | AI 3     | 10 | 26 | AI 7   |
| P2.4             | 86 | 70 | P2.0  | D GND              | 43 | 59 | D GND               | AI 11    | 11 | 27 | AI 15  |
| P1.7             | 85 | 69 | P1.3  | AI HOLD COMP       | 44 | 60 | PFI 4/CTR 1 GATE    | AI GND   | 12 | 28 | AI GND |
| P1.6             | 84 | 68 | P1.2  | EXT STROBE         | 45 | 61 | PFI 1/AI REF TRIG   | AI SENSE | 13 | 29 | AI GND |
| D GND            | 83 | 67 | D GND | PFI 2/AI CONV CLK  | 46 | 62 | PFI 0/AI START TRIG | AI GND   | 14 | 30 | AI GND |
| P1.5             | 82 | 66 | P1.1  | +5 V               | 47 | 63 | D GND               | AO 0     | 15 | 31 | AO 1   |
| P1.4             | 81 | 65 | P1.0  | D GND              | 48 | 64 | FREQ OUT            | AO GND   | 16 | 32 | AO GND |

# NI 6020E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

## NI DAQPad-6020E (BNC)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|          |    |    |              |
|----------|----|----|--------------|
| PFI 9    | 2  | 1  | P0.7         |
| PFI 8    | 4  | 3  | P0.6         |
| PFI 7    | 6  | 5  | P0.5         |
| PFI 6    | 8  | 7  | P0.4         |
| PFI 5    | 10 | 9  | P0.3         |
| PFI 4    | 12 | 11 | P0.2         |
| PFI 3    | 14 | 13 | P0.1         |
| PFI 2    | 16 | 15 | P0.0         |
| PFI 1    | 18 | 17 | CTR 1 OUT    |
| D GND    | 20 | 19 | D GND        |
| USER 2   | 22 | 21 | USER 1       |
| FREQ OUT | 24 | 23 | AI HOLD COMP |
| +5 V     | 26 | 25 | EXT STROBE   |
| +5 V     | 28 | 27 | AI SENSE     |
| D GND    | 30 | 29 | AI GND       |

# NI 6023E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| NC                  | 22 | 56 | AI GND            |
| NC                  | 21 | 55 | NC                |
| NC                  | 20 | 54 | NC                |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5               | 6  | 40 | CTR 1 OUT         |
| PFI 6               | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect

# NI 6024E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| NC                  | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect

## NI 6025E

If you are using an NI 6025E with an SH1006868 cable, refer to the [100-68-68-Pin Extended DIO](#) pinout. If you are using the NI 6025E with an R1005050 cable assembly, refer to the [100-50-50-Pin Extended DIO](#) pinout.



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |     |       |
|---------------------|----|-----|-------|
| AI GND              | 1  | 51  | P3.7  |
| AI GND              | 2  | 52  | D GND |
| AI 0                | 3  | 53  | P3.6  |
| AI 8                | 4  | 54  | D GND |
| AI 1                | 5  | 55  | P3.5  |
| AI 9                | 6  | 56  | D GND |
| AI 2                | 7  | 57  | P3.4  |
| AI 10               | 8  | 58  | D GND |
| AI 3                | 9  | 59  | P3.3  |
| AI 11               | 10 | 60  | D GND |
| AI 4                | 11 | 61  | P3.2  |
| AI 12               | 12 | 62  | D GND |
| AI 5                | 13 | 63  | P3.1  |
| AI 13               | 14 | 64  | D GND |
| AI 6                | 15 | 65  | P3.0  |
| AI 14               | 16 | 66  | D GND |
| AI 7                | 17 | 67  | P2.7  |
| AI 15               | 18 | 68  | D GND |
| AI SENSE            | 19 | 69  | P2.6  |
| AO 0                | 20 | 70  | D GND |
| AO 1                | 21 | 71  | P2.5  |
| NC                  | 22 | 72  | D GND |
| AO GND              | 23 | 73  | P2.4  |
| D GND               | 24 | 74  | D GND |
| P0.0                | 25 | 75  | P2.3  |
| P0.4                | 26 | 76  | D GND |
| P0.1                | 27 | 77  | P2.2  |
| P0.5                | 28 | 78  | D GND |
| P0.2                | 29 | 79  | P2.1  |
| P0.6                | 30 | 80  | D GND |
| P0.3                | 31 | 81  | P2.0  |
| P0.7                | 32 | 82  | D GND |
| D GND               | 33 | 83  | P1.7  |
| +5 V                | 34 | 84  | D GND |
| +5 V                | 35 | 85  | P1.6  |
| AI HOLD COMP        | 36 | 86  | D GND |
| EXT STROBE          | 37 | 87  | P1.5  |
| PFI 0/AI START TRIG | 38 | 88  | D GND |
| PFI 1/AI REF TRIG   | 39 | 89  | P1.4  |
| PFI 2/AI CONV CLK   | 40 | 90  | D GND |
| PFI 3/CTR 1 SRC     | 41 | 91  | P1.3  |
| PFI 4/CTR 1 GATE    | 42 | 92  | D GND |
| CTR 1 OUT           | 43 | 93  | P1.2  |
| PFI 5/AO SAMP CLK   | 44 | 94  | D GND |
| PFI 6/AO START TRIG | 45 | 95  | P1.1  |
| PFI 7/AI SAMP CLK   | 46 | 96  | D GND |
| PFI 8/CTR 0 SRC     | 47 | 97  | P1.0  |
| PFI 9/CTR 0 GATE    | 48 | 98  | D GND |
| CTR 0 OUT           | 49 | 99  | +5 V  |
| FREQ OUT            | 50 | 100 | D GND |

NC = No Connect



## NI 6030E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

# NI 6031E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |     |            |
|---------------------|----|-----|------------|
| AI GND              | 1  | 51  | AI 16      |
| AI GND              | 2  | 52  | AI 24      |
| AI 0                | 3  | 53  | AI 17      |
| AI 8                | 4  | 54  | AI 25      |
| AI 1                | 5  | 55  | AI 18      |
| AI 9                | 6  | 56  | AI 26      |
| AI 2                | 7  | 57  | AI 19      |
| AI 10               | 8  | 58  | AI 27      |
| AI 3                | 9  | 59  | AI 20      |
| AI 11               | 10 | 60  | AI 28      |
| AI 4                | 11 | 61  | AI 21      |
| AI 12               | 12 | 62  | AI 29      |
| AI 5                | 13 | 63  | AI 22      |
| AI 13               | 14 | 64  | AI 30      |
| AI 6                | 15 | 65  | AI 23      |
| AI 14               | 16 | 66  | AI 31      |
| AI 7                | 17 | 67  | AI 32      |
| AI 15               | 18 | 68  | AI 40      |
| AI SENSE            | 19 | 69  | AI 33      |
| AO 0                | 20 | 70  | AI 41      |
| AO 1                | 21 | 71  | AI 34      |
| AO EXT REF          | 22 | 72  | AI 42      |
| AO GND              | 23 | 73  | AI 35      |
| D GND               | 24 | 74  | AI 43      |
| P0.0                | 25 | 75  | AI SENSE 2 |
| P0.4                | 26 | 76  | AI GND     |
| P0.1                | 27 | 77  | AI 36      |
| P0.5                | 28 | 78  | AI 44      |
| P0.2                | 29 | 79  | AI 37      |
| P0.6                | 30 | 80  | AI 45      |
| P0.3                | 31 | 81  | AI 38      |
| P0.7                | 32 | 82  | AI 46      |
| D GND               | 33 | 83  | AI 39      |
| +5 V                | 34 | 84  | AI 47      |
| +5 V                | 35 | 85  | AI 48      |
| AI HOLD COMP        | 36 | 86  | AI 56      |
| EXT STROBE          | 37 | 87  | AI 49      |
| PFI 0/AI START TRIG | 38 | 88  | AI 57      |
| PFI 1/AI REF TRIG   | 39 | 89  | AI 50      |
| PFI 2/AI CONV CLK   | 40 | 90  | AI 58      |
| PFI 3/CTR 1 SRC     | 41 | 91  | AI 51      |
| PFI 4/CTR 1 GATE    | 42 | 92  | AI 59      |
| CTR 1 OUT           | 43 | 93  | AI 52      |
| PFI 5/AO SAMP CLK   | 44 | 94  | AI 60      |
| PFI 6/AO START TRIG | 45 | 95  | AI 53      |
| PFI 7/AI SAMP CLK   | 46 | 96  | AI 61      |
| PFI 8/CTR 0 SRC     | 47 | 97  | AI 54      |
| PFI 9/CTR 0 GATE    | 48 | 98  | AI 62      |
| CTR 0 OUT           | 49 | 99  | AI 55      |
| FREQ OUT            | 50 | 100 | AI 63      |

# NI 6032E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| NC                  | 22 | 56 | AI GND            |
| NC                  | 21 | 55 | NC                |
| NC                  | 20 | 54 | NC                |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5               | 6  | 40 | CTR 1 OUT         |
| PFI 6               | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect

## NI 6033E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |     |            |
|---------------------|----|-----|------------|
| AI GND              | 1  | 51  | AI 16      |
| AI GND              | 2  | 52  | AI 24      |
| AI 0                | 3  | 53  | AI 17      |
| AI 8                | 4  | 54  | AI 25      |
| AI 1                | 5  | 55  | AI 18      |
| AI 9                | 6  | 56  | AI 26      |
| AI 2                | 7  | 57  | AI 19      |
| AI 10               | 8  | 58  | AI 27      |
| AI 3                | 9  | 59  | AI 20      |
| AI 11               | 10 | 60  | AI 28      |
| AI 4                | 11 | 61  | AI 21      |
| AI 12               | 12 | 62  | AI 29      |
| AI 5                | 13 | 63  | AI 22      |
| AI 13               | 14 | 64  | AI 30      |
| AI 6                | 15 | 65  | AI 23      |
| AI 14               | 16 | 66  | AI 31      |
| AI 7                | 17 | 67  | AI 32      |
| AI 15               | 18 | 68  | AI 40      |
| AI SENSE            | 19 | 69  | AI 33      |
| NC                  | 20 | 70  | AI 41      |
| NC                  | 21 | 71  | AI 34      |
| NC                  | 22 | 72  | AI 42      |
| NC                  | 23 | 73  | AI 35      |
| D GND               | 24 | 74  | AI 43      |
| P0.0                | 25 | 75  | AI SENSE 2 |
| P0.4                | 26 | 76  | AI GND     |
| P0.1                | 27 | 77  | AI 36      |
| P0.5                | 28 | 78  | AI 44      |
| P0.2                | 29 | 79  | AI 37      |
| P0.6                | 30 | 80  | AI 45      |
| P0.3                | 31 | 81  | AI 38      |
| P0.7                | 32 | 82  | AI 46      |
| D GND               | 33 | 83  | AI 39      |
| +5 V                | 34 | 84  | AI 47      |
| +5 V                | 35 | 85  | AI 48      |
| AI HOLD COMP        | 36 | 86  | AI 56      |
| EXT STROBE          | 37 | 87  | AI 49      |
| PFI 0/AI START TRIG | 38 | 88  | AI 57      |
| PFI 1/AI REF TRIG   | 39 | 89  | AI 50      |
| PFI 2/AI CONV CLK   | 40 | 90  | AI 58      |
| PFI 3/CTR 1 SRC     | 41 | 91  | AI 51      |
| PFI 4/CTR 1 GATE    | 42 | 92  | AI 59      |
| CTR 1 OUT           | 43 | 93  | AI 52      |
| PFI 5               | 44 | 94  | AI 60      |
| PFI 6               | 45 | 95  | AI 53      |
| PFI 7/AI SAMP CLK   | 46 | 96  | AI 61      |
| PFI 8/CTR 0 SRC     | 47 | 97  | AI 54      |
| PFI 9/CTR 0 GATE    | 48 | 98  | AI 62      |
| CTR 0 OUT           | 49 | 99  | AI 55      |
| FREQ OUT            | 50 | 100 | AI 63      |

NC = No Connect

# NI 6034E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| NC                  | 22 | 56 | AI GND            |
| NC                  | 21 | 55 | NC                |
| NC                  | 20 | 54 | NC                |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5               | 6  | 40 | CTR 1 OUT         |
| PFI 6               | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect

# NI 6035E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| NC                  | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect

# NI 6036E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| NC                  | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

NC = No Connect



## NI 6040E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

# NI 6052E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

## NI DAQPad-6052E (BNC)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|          |    |    |              |
|----------|----|----|--------------|
| PFI 9    | 2  | 1  | P0.7         |
| PFI 8    | 4  | 3  | P0.6         |
| PFI 7    | 6  | 5  | P0.5         |
| PFI 6    | 8  | 7  | P0.4         |
| PFI 5    | 10 | 9  | P0.3         |
| PFI 4    | 12 | 11 | P0.2         |
| PFI 3    | 14 | 13 | P0.1         |
| PFI 2    | 16 | 15 | P0.0         |
| PFI 1    | 18 | 17 | CTR 1 OUT    |
| D GND    | 20 | 19 | D GND        |
| USER 2   | 22 | 21 | USER 1       |
| FREQ OUT | 24 | 23 | AI HOLD COMP |
| +5 V     | 26 | 25 | EXT STROBE   |
| +5 V     | 28 | 27 | AI SENSE     |
| D GND    | 30 | 29 | AI GND       |

# NI DAQCard-6062E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

# NI 6070E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

## NI DAQPad-6070E (BNC)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|          |    |    |              |
|----------|----|----|--------------|
| PFI 9    | 2  | 1  | P0.7         |
| PFI 8    | 4  | 3  | P0.6         |
| PFI 7    | 6  | 5  | P0.5         |
| PFI 6    | 8  | 7  | P0.4         |
| PFI 5    | 10 | 9  | P0.3         |
| PFI 4    | 12 | 11 | P0.2         |
| PFI 3    | 14 | 13 | P0.1         |
| PFI 2    | 16 | 15 | P0.0         |
| PFI 1    | 18 | 17 | CTR 1 OUT    |
| D GND    | 20 | 19 | D GND        |
| USER 2   | 22 | 21 | USER 1       |
| FREQ OUT | 24 | 23 | AI HOLD COMP |
| +5 V     | 26 | 25 | EXT STROBE   |
| +5 V     | 28 | 27 | AI SENSE     |
| D GND    | 30 | 29 | AI GND       |

# NI 6071E



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |     |            |
|---------------------|----|-----|------------|
| AI GND              | 1  | 51  | AI 16      |
| AI GND              | 2  | 52  | AI 24      |
| AI 0                | 3  | 53  | AI 17      |
| AI 8                | 4  | 54  | AI 25      |
| AI 1                | 5  | 55  | AI 18      |
| AI 9                | 6  | 56  | AI 26      |
| AI 2                | 7  | 57  | AI 19      |
| AI 10               | 8  | 58  | AI 27      |
| AI 3                | 9  | 59  | AI 20      |
| AI 11               | 10 | 60  | AI 28      |
| AI 4                | 11 | 61  | AI 21      |
| AI 12               | 12 | 62  | AI 29      |
| AI 5                | 13 | 63  | AI 22      |
| AI 13               | 14 | 64  | AI 30      |
| AI 6                | 15 | 65  | AI 23      |
| AI 14               | 16 | 66  | AI 31      |
| AI 7                | 17 | 67  | AI 32      |
| AI 15               | 18 | 68  | AI 40      |
| AI SENSE            | 19 | 69  | AI 33      |
| AO 0                | 20 | 70  | AI 41      |
| AO 1                | 21 | 71  | AI 34      |
| AO EXT REF          | 22 | 72  | AI 42      |
| AO GND              | 23 | 73  | AI 35      |
| D GND               | 24 | 74  | AI 43      |
| P0.0                | 25 | 75  | AI SENSE 2 |
| P0.4                | 26 | 76  | AI GND     |
| P0.1                | 27 | 77  | AI 36      |
| P0.5                | 28 | 78  | AI 44      |
| P0.2                | 29 | 79  | AI 37      |
| P0.6                | 30 | 80  | AI 45      |
| P0.3                | 31 | 81  | AI 38      |
| P0.7                | 32 | 82  | AI 46      |
| D GND               | 33 | 83  | AI 39      |
| +5 V                | 34 | 84  | AI 47      |
| +5 V                | 35 | 85  | AI 48      |
| AI HOLD COMP        | 36 | 86  | AI 56      |
| EXT STROBE          | 37 | 87  | AI 49      |
| PFI 0/AI START TRIG | 38 | 88  | AI 57      |
| PFI 1/AI REF TRIG   | 39 | 89  | AI 50      |
| PFI 2/AI CONV CLK   | 40 | 90  | AI 58      |
| PFI 3/CTR 1 SRC     | 41 | 91  | AI 51      |
| PFI 4/CTR 1 GATE    | 42 | 92  | AI 59      |
| CTR 1 OUT           | 43 | 93  | AI 52      |
| PFI 5/AO SAMP CLK   | 44 | 94  | AI 60      |
| PFI 6/AO START TRIG | 45 | 95  | AI 53      |
| PFI 7/AI SAMP CLK   | 46 | 96  | AI 61      |
| PFI 8/CTR 0 SRC     | 47 | 97  | AI 54      |
| PFI 9/CTR 0 GATE    | 48 | 98  | AI 62      |
| CTR 0 OUT           | 49 | 99  | AI 55      |
| FREQ OUT            | 50 | 100 | AI 63      |

## NI 6110

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                       |    |    |                       |
|-----------------------|----|----|-----------------------|
| AI 0 -                | 34 | 68 | AI 0 +                |
| AI 1 +                | 33 | 67 | AI 0 GND              |
| AI 1 GND              | 32 | 66 | AI 1 -                |
| AI 2 - <sup>1</sup>   | 31 | 65 | AI 2 + <sup>1</sup>   |
| AI 3 + <sup>1</sup>   | 30 | 64 | AI 2 GND <sup>1</sup> |
| AI 3 GND <sup>1</sup> | 29 | 63 | AI 3 - <sup>1</sup>   |
| NC                    | 28 | 62 | NC                    |
| NC                    | 27 | 61 | NC                    |
| NC                    | 26 | 60 | NC                    |
| NC                    | 25 | 59 | NC                    |
| NC                    | 24 | 58 | NC                    |
| NC                    | 23 | 57 | NC                    |
| AO 0                  | 22 | 56 | NC                    |
| AO 1                  | 21 | 55 | AO GND                |
| NC                    | 20 | 54 | AO GND                |
| P0.4                  | 19 | 53 | D GND                 |
| D GND                 | 18 | 52 | P0.0                  |
| P0.1                  | 17 | 51 | P0.5                  |
| P0.6                  | 16 | 50 | D GND                 |
| D GND                 | 15 | 49 | P0.2                  |
| +5 V                  | 14 | 48 | P0.7                  |
| D GND                 | 13 | 47 | P0.3                  |
| D GND                 | 12 | 46 | AI HOLD COMP          |
| PFI 0/AI START TRIG   | 11 | 45 | EXT STROBE*           |
| PFI 1/AI REF TRIG     | 10 | 44 | D GND                 |
| D GND                 | 9  | 43 | PFI 2/AI CONV CLK     |
| +5 V                  | 8  | 42 | PFI 3/CTR 1 SOURCE    |
| D GND                 | 7  | 41 | PFI 4/CTR 1 GATE      |
| PFI 5/AO SAMP CLK*    | 6  | 40 | CTR 1 OUT             |
| PFI 6/AO START TRIG   | 5  | 39 | D GND                 |
| D GND                 | 4  | 38 | PFI 7/AI SAMP CLK     |
| PFI 9/CTR 0 GATE      | 3  | 37 | PFI 8/CTR 0 SOURCE    |
| CTR 0 OUT             | 2  | 36 | D GND                 |
| FREQ OUT              | 1  | 35 | D GND                 |

NC = No Connect

<sup>1</sup> NC on NI 6111



## NI 6111

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                       |    |    |                       |
|-----------------------|----|----|-----------------------|
| AI 0 -                | 34 | 68 | AI 0 +                |
| AI 1 +                | 33 | 67 | AI 0 GND              |
| AI 1 GND              | 32 | 66 | AI 1 -                |
| AI 2 - <sup>1</sup>   | 31 | 65 | AI 2 + <sup>1</sup>   |
| AI 3 + <sup>1</sup>   | 30 | 64 | AI 2 GND <sup>1</sup> |
| AI 3 GND <sup>1</sup> | 29 | 63 | AI 3 - <sup>1</sup>   |
| NC                    | 28 | 62 | NC                    |
| NC                    | 27 | 61 | NC                    |
| NC                    | 26 | 60 | NC                    |
| NC                    | 25 | 59 | NC                    |
| NC                    | 24 | 58 | NC                    |
| NC                    | 23 | 57 | NC                    |
| AO 0                  | 22 | 56 | NC                    |
| AO 1                  | 21 | 55 | AO GND                |
| NC                    | 20 | 54 | AO GND                |
| P0.4                  | 19 | 53 | D GND                 |
| D GND                 | 18 | 52 | P0.0                  |
| P0.1                  | 17 | 51 | P0.5                  |
| P0.6                  | 16 | 50 | D GND                 |
| D GND                 | 15 | 49 | P0.2                  |
| +5 V                  | 14 | 48 | P0.7                  |
| D GND                 | 13 | 47 | P0.3                  |
| D GND                 | 12 | 46 | AI HOLD COMP          |
| PFI 0/AI START TRIG   | 11 | 45 | EXT STROBE*           |
| PFI 1/AI REF TRIG     | 10 | 44 | D GND                 |
| D GND                 | 9  | 43 | PFI 2/AI CONV CLK     |
| +5 V                  | 8  | 42 | PFI 3/CTR 1 SOURCE    |
| D GND                 | 7  | 41 | PFI 4/CTR 1 GATE      |
| PFI 5/AO SAMP CLK*    | 6  | 40 | CTR 1 OUT             |
| PFI 6/AO START TRIG   | 5  | 39 | D GND                 |
| D GND                 | 4  | 38 | PFI 7/AI SAMP CLK     |
| PFI 9/CTR 0 GATE      | 3  | 37 | PFI 8/CTR 0 SOURCE    |
| CTR 0 OUT             | 2  | 36 | D GND                 |
| FREQ OUT              | 1  | 35 | D GND                 |

NC = No Connect

<sup>1</sup> NC on NI 6111

## NI 6115

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                       |    |    |                    |
|-----------------------|----|----|--------------------|
| AI 0 -                | 34 | 68 | AI 0 +             |
| AI 1 +                | 33 | 67 | AI 0 GND           |
| AI 1 GND              | 32 | 66 | AI 1 -             |
| AI 2 - <sup>1</sup>   | 31 | 65 | AI 2 +             |
| AI 3 + <sup>1</sup>   | 30 | 64 | AI 2 GND           |
| AI 3 GND <sup>1</sup> | 29 | 63 | AI 3 -             |
| NC                    | 28 | 62 | NC                 |
| NC                    | 27 | 61 | NC                 |
| NC                    | 26 | 60 | NC                 |
| NC                    | 25 | 59 | NC                 |
| NC                    | 24 | 58 | NC                 |
| NC                    | 23 | 57 | NC                 |
| AO 0                  | 22 | 56 | NC                 |
| AO 1                  | 21 | 55 | AO GND             |
| NC                    | 20 | 54 | AO GND             |
| P0.4                  | 19 | 53 | D GND              |
| D GND                 | 18 | 52 | P0.0               |
| P0.1                  | 17 | 51 | P0.5               |
| P0.6                  | 16 | 50 | D GND              |
| D GND                 | 15 | 49 | P0.2               |
| +5 V                  | 14 | 48 | P0.7               |
| D GND                 | 13 | 47 | P0.3               |
| D GND                 | 12 | 46 | AI HOLD COMP       |
| PFI 0/AI START TRIG   | 11 | 45 | EXT STROBE*        |
| PFI 1/AI REF TRIG     | 10 | 44 | D GND              |
| D GND                 | 9  | 43 | PFI 2/AI CONV CLK  |
| +5 V                  | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND                 | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK*    | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG   | 5  | 39 | D GND              |
| D GND                 | 4  | 38 | PFI 7/AI SAMP CLK  |
| PFI 9/CTR 0 GATE      | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT             | 2  | 36 | D GND              |
| FREQ OUT              | 1  | 35 | D GND              |

NC = No Connect

## NI 6120

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                       |    |    |                    |
|-----------------------|----|----|--------------------|
| AI 0 -                | 34 | 68 | AI 0 +             |
| AI 1 +                | 33 | 67 | AI 0 GND           |
| AI 1 GND              | 32 | 66 | AI 1 -             |
| AI 2 - <sup>1</sup>   | 31 | 65 | AI 2 +             |
| AI 3 + <sup>1</sup>   | 30 | 64 | AI 2 GND           |
| AI 3 GND <sup>1</sup> | 29 | 63 | AI 3 -             |
| NC                    | 28 | 62 | NC                 |
| NC                    | 27 | 61 | NC                 |
| NC                    | 26 | 60 | NC                 |
| NC                    | 25 | 59 | NC                 |
| NC                    | 24 | 58 | NC                 |
| NC                    | 23 | 57 | NC                 |
| AO 0                  | 22 | 56 | NC                 |
| AO 1                  | 21 | 55 | AO GND             |
| NC                    | 20 | 54 | AO GND             |
| P0.4                  | 19 | 53 | D GND              |
| D GND                 | 18 | 52 | P0.0               |
| P0.1                  | 17 | 51 | P0.5               |
| P0.6                  | 16 | 50 | D GND              |
| D GND                 | 15 | 49 | P0.2               |
| +5 V                  | 14 | 48 | P0.7               |
| D GND                 | 13 | 47 | P0.3               |
| D GND                 | 12 | 46 | AI HOLD COMP       |
| PFI 0/AI START TRIG   | 11 | 45 | EXT STROBE*        |
| PFI 1/AI REF TRIG     | 10 | 44 | D GND              |
| D GND                 | 9  | 43 | PFI 2/AI CONV CLK  |
| +5 V                  | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND                 | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK*    | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG   | 5  | 39 | D GND              |
| D GND                 | 4  | 38 | PFI 7/AI SAMP CLK  |
| PFI 9/CTR 0 GATE      | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT             | 2  | 36 | D GND              |
| FREQ OUT              | 1  | 35 | D GND              |

NC = No Connect

# NI 6122

|                       |    |    |                       |
|-----------------------|----|----|-----------------------|
| AI 0 –                | 34 | 68 | AI 0 +                |
| AI 1 +                | 33 | 67 | AI 0 GND              |
| AI 1 GND              | 32 | 66 | AI 1 –                |
| AI 2 –                | 31 | 65 | AI 2 +                |
| AI 3 +                | 30 | 64 | AI 2 GND              |
| AI 3 GND              | 29 | 63 | AI 3 –                |
| AI 4 + <sup>1</sup>   | 28 | 62 | NC                    |
| AI 4 GND <sup>1</sup> | 27 | 61 | AI 4 – <sup>1</sup>   |
| AI 5 – <sup>1</sup>   | 26 | 60 | AI 5 + <sup>1</sup>   |
| AI 6 + <sup>1</sup>   | 25 | 59 | AI 5 GND <sup>1</sup> |
| AI 6 GND <sup>1</sup> | 24 | 58 | AI 6 – <sup>1</sup>   |
| AI 7 – <sup>1</sup>   | 23 | 57 | AI 7 + <sup>1</sup>   |
| NC                    | 22 | 56 | AI 7 GND <sup>1</sup> |
| NC                    | 21 | 55 | NC                    |
| NC                    | 20 | 54 | NC                    |
| P0.4                  | 19 | 53 | D GND                 |
| D GND                 | 18 | 52 | P0.0                  |
| P0.1                  | 17 | 51 | P0.5                  |
| P0.6                  | 16 | 50 | D GND                 |
| D GND                 | 15 | 49 | P0.2                  |
| +5 V                  | 14 | 48 | P0.7                  |
| D GND                 | 13 | 47 | P0.3                  |
| D GND                 | 12 | 46 | AI HOLD COMP          |
| PFI 0/AI START TRIG   | 11 | 45 | EXT STROBE*           |
| PFI 1/AI REF TRIG     | 10 | 44 | D GND                 |
| D GND                 | 9  | 43 | PFI 2/AI CONV CLK     |
| +5 V                  | 8  | 42 | PFI 3/CTR 1 SOURCE    |
| D GND                 | 7  | 41 | PFI 4/CTR 1 GATE      |
| PFI 5                 | 6  | 40 | CTR 1 OUT             |
| PFI 6                 | 5  | 39 | D GND                 |
| D GND                 | 4  | 38 | PFI 7/AI SAMP CLK     |
| PFI 9/CTR 0 GATE      | 3  | 37 | PFI 8/CTR 0 SOURCE    |
| CTR 0 OUT             | 2  | 36 | D GND                 |
| FREQ OUT              | 1  | 35 | D GND                 |

NC = No Connect

<sup>1</sup> NC on NI 6122/6132

# NI 6123

|                       |    |    |                       |
|-----------------------|----|----|-----------------------|
| AI 0 –                | 34 | 68 | AI 0 +                |
| AI 1 +                | 33 | 67 | AI 0 GND              |
| AI 1 GND              | 32 | 66 | AI 1 –                |
| AI 2 –                | 31 | 65 | AI 2 +                |
| AI 3 +                | 30 | 64 | AI 2 GND              |
| AI 3 GND              | 29 | 63 | AI 3 –                |
| AI 4 + <sup>1</sup>   | 28 | 62 | NC                    |
| AI 4 GND <sup>1</sup> | 27 | 61 | AI 4 – <sup>1</sup>   |
| AI 5 – <sup>1</sup>   | 26 | 60 | AI 5 + <sup>1</sup>   |
| AI 6 + <sup>1</sup>   | 25 | 59 | AI 5 GND <sup>1</sup> |
| AI 6 GND <sup>1</sup> | 24 | 58 | AI 6 – <sup>1</sup>   |
| AI 7 – <sup>1</sup>   | 23 | 57 | AI 7 + <sup>1</sup>   |
| NC                    | 22 | 56 | AI 7 GND <sup>1</sup> |
| NC                    | 21 | 55 | NC                    |
| NC                    | 20 | 54 | NC                    |
| P0.4                  | 19 | 53 | D GND                 |
| D GND                 | 18 | 52 | P0.0                  |
| P0.1                  | 17 | 51 | P0.5                  |
| P0.6                  | 16 | 50 | D GND                 |
| D GND                 | 15 | 49 | P0.2                  |
| +5 V                  | 14 | 48 | P0.7                  |
| D GND                 | 13 | 47 | P0.3                  |
| D GND                 | 12 | 46 | AI HOLD COMP          |
| PFI 0/AI START TRIG   | 11 | 45 | EXT STROBE*           |
| PFI 1/AI REF TRIG     | 10 | 44 | D GND                 |
| D GND                 | 9  | 43 | PFI 2/AI CONV CLK     |
| +5 V                  | 8  | 42 | PFI 3/CTR 1 SOURCE    |
| D GND                 | 7  | 41 | PFI 4/CTR 1 GATE      |
| PFI 5                 | 6  | 40 | CTR 1 OUT             |
| PFI 6                 | 5  | 39 | D GND                 |
| D GND                 | 4  | 38 | PFI 7/AI SAMP CLK     |
| PFI 9/CTR 0 GATE      | 3  | 37 | PFI 8/CTR 0 SOURCE    |
| CTR 0 OUT             | 2  | 36 | D GND                 |
| FREQ OUT              | 1  | 35 | D GND                 |

NC = No Connect

<sup>1</sup> NC on NI 6122/6132

# NI 6132

|                       |    |    |                       |
|-----------------------|----|----|-----------------------|
| AI 0 –                | 34 | 68 | AI 0 +                |
| AI 1 +                | 33 | 67 | AI 0 GND              |
| AI 1 GND              | 32 | 66 | AI 1 –                |
| AI 2 –                | 31 | 65 | AI 2 +                |
| AI 3 +                | 30 | 64 | AI 2 GND              |
| AI 3 GND              | 29 | 63 | AI 3 –                |
| AI 4 + <sup>1</sup>   | 28 | 62 | NC                    |
| AI 4 GND <sup>1</sup> | 27 | 61 | AI 4 – <sup>1</sup>   |
| AI 5 – <sup>1</sup>   | 26 | 60 | AI 5 + <sup>1</sup>   |
| AI 6 + <sup>1</sup>   | 25 | 59 | AI 5 GND <sup>1</sup> |
| AI 6 GND <sup>1</sup> | 24 | 58 | AI 6 – <sup>1</sup>   |
| AI 7 – <sup>1</sup>   | 23 | 57 | AI 7 + <sup>1</sup>   |
| NC                    | 22 | 56 | AI 7 GND <sup>1</sup> |
| NC                    | 21 | 55 | NC                    |
| NC                    | 20 | 54 | NC                    |
| P0.4                  | 19 | 53 | D GND                 |
| D GND                 | 18 | 52 | P0.0                  |
| P0.1                  | 17 | 51 | P0.5                  |
| P0.6                  | 16 | 50 | D GND                 |
| D GND                 | 15 | 49 | P0.2                  |
| +5 V                  | 14 | 48 | P0.7                  |
| D GND                 | 13 | 47 | P0.3                  |
| D GND                 | 12 | 46 | AI HOLD COMP          |
| PFI 0/AI START TRIG   | 11 | 45 | EXT STROBE*           |
| PFI 1/AI REF TRIG     | 10 | 44 | D GND                 |
| D GND                 | 9  | 43 | PFI 2/AI CONV CLK     |
| +5 V                  | 8  | 42 | PFI 3/CTR 1 SOURCE    |
| D GND                 | 7  | 41 | PFI 4/CTR 1 GATE      |
| PFI 5                 | 6  | 40 | CTR 1 OUT             |
| PFI 6                 | 5  | 39 | D GND                 |
| D GND                 | 4  | 38 | PFI 7/AI SAMP CLK     |
| PFI 9/CTR 0 GATE      | 3  | 37 | PFI 8/CTR 0 SOURCE    |
| CTR 0 OUT             | 2  | 36 | D GND                 |
| FREQ OUT              | 1  | 35 | D GND                 |

NC = No Connect

<sup>1</sup> NC on NI 6122/6132

# NI 6133

|                       |    |    |                       |
|-----------------------|----|----|-----------------------|
| AI 0 –                | 34 | 68 | AI 0 +                |
| AI 1 +                | 33 | 67 | AI 0 GND              |
| AI 1 GND              | 32 | 66 | AI 1 –                |
| AI 2 –                | 31 | 65 | AI 2 +                |
| AI 3 +                | 30 | 64 | AI 2 GND              |
| AI 3 GND              | 29 | 63 | AI 3 –                |
| AI 4 + <sup>1</sup>   | 28 | 62 | NC                    |
| AI 4 GND <sup>1</sup> | 27 | 61 | AI 4 – <sup>1</sup>   |
| AI 5 – <sup>1</sup>   | 26 | 60 | AI 5 + <sup>1</sup>   |
| AI 6 + <sup>1</sup>   | 25 | 59 | AI 5 GND <sup>1</sup> |
| AI 6 GND <sup>1</sup> | 24 | 58 | AI 6 – <sup>1</sup>   |
| AI 7 – <sup>1</sup>   | 23 | 57 | AI 7 + <sup>1</sup>   |
| NC                    | 22 | 56 | AI 7 GND <sup>1</sup> |
| NC                    | 21 | 55 | NC                    |
| NC                    | 20 | 54 | NC                    |
| P0.4                  | 19 | 53 | D GND                 |
| D GND                 | 18 | 52 | P0.0                  |
| P0.1                  | 17 | 51 | P0.5                  |
| P0.6                  | 16 | 50 | D GND                 |
| D GND                 | 15 | 49 | P0.2                  |
| +5 V                  | 14 | 48 | P0.7                  |
| D GND                 | 13 | 47 | P0.3                  |
| D GND                 | 12 | 46 | AI HOLD COMP          |
| PFI 0/AI START TRIG   | 11 | 45 | EXT STROBE*           |
| PFI 1/AI REF TRIG     | 10 | 44 | D GND                 |
| D GND                 | 9  | 43 | PFI 2/AI CONV CLK     |
| +5 V                  | 8  | 42 | PFI 3/CTR 1 SOURCE    |
| D GND                 | 7  | 41 | PFI 4/CTR 1 GATE      |
| PFI 5                 | 6  | 40 | CTR 1 OUT             |
| PFI 6                 | 5  | 39 | D GND                 |
| D GND                 | 4  | 38 | PFI 7/AI SAMP CLK     |
| PFI 9/CTR 0 GATE      | 3  | 37 | PFI 8/CTR 0 SOURCE    |
| CTR 0 OUT             | 2  | 36 | D GND                 |
| FREQ OUT              | 1  | 35 | D GND                 |

NC = No Connect

<sup>1</sup> NC on NI 6122/6132

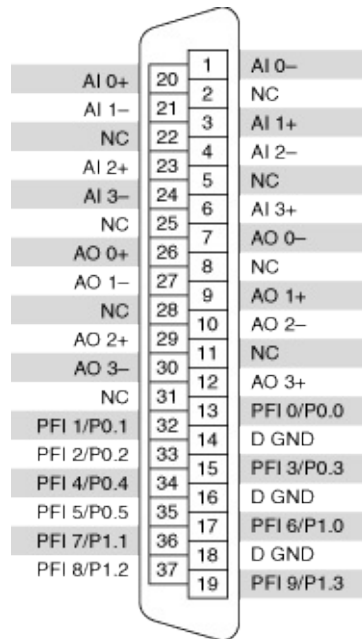
# NI 6143

|                     |    |    |                    |
|---------------------|----|----|--------------------|
| AI 0 –              | 34 | 68 | AI 0 +             |
| AI 1 +              | 33 | 67 | AI 0 GND           |
| AI 1 GND            | 32 | 66 | AI 1 –             |
| AI 2 –              | 31 | 65 | AI 2 +             |
| AI 3 +              | 30 | 64 | AI 2 GND           |
| AI 3 GND            | 29 | 63 | AI 3 –             |
| AI 4 +              | 28 | 62 | NC                 |
| AI 4 GND            | 27 | 61 | AI 4 –             |
| AI 5 –              | 26 | 60 | AI 5 +             |
| AI 6 +              | 25 | 59 | AI 5 GND           |
| AI 6 GND            | 24 | 58 | AI 6 –             |
| AI 7 –              | 23 | 57 | AI 7 +             |
| NC                  | 22 | 56 | AI 7 GND           |
| NC                  | 21 | 55 | NC                 |
| NC                  | 20 | 54 | NC                 |
| P0.4                | 19 | 53 | D GND              |
| D GND               | 18 | 52 | P0.0               |
| P0.1                | 17 | 51 | P0.5               |
| P0.6                | 16 | 50 | D GND              |
| D GND               | 15 | 49 | P0.2               |
| +5 V                | 14 | 48 | P0.7               |
| D GND               | 13 | 47 | P0.3               |
| D GND               | 12 | 46 | AI HOLD COMP       |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE*        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND              |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK  |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5               | 6  | 40 | CTR 1 OUT          |
| PFI 6               | 5  | 39 | D GND              |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK  |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT           | 2  | 36 | D GND              |
| FREQ OUT            | 1  | 35 | D GND              |

NC = No Connect

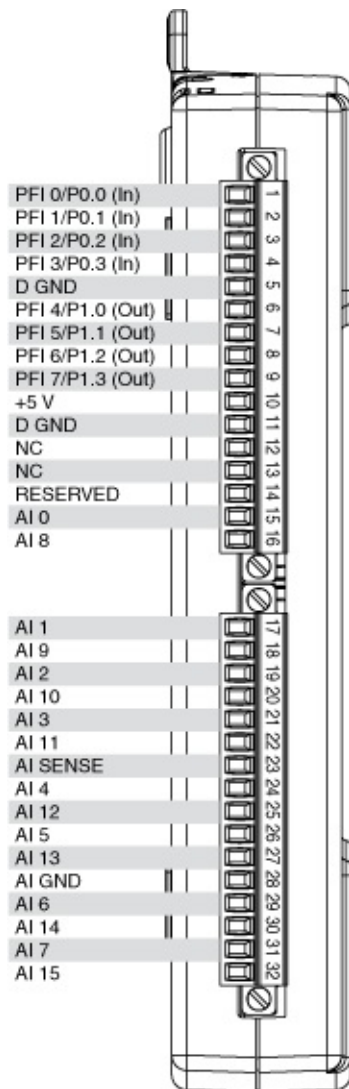


# NI 6154



NC = No Connect

# NI USB-6210

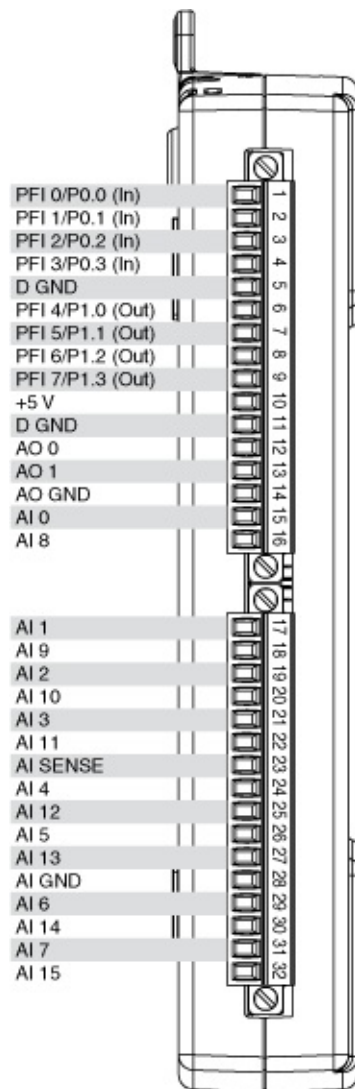


NC = No Connect

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 1                  | PFI 0       |
| CTR 0 GATE           | 2                  | PFI 1       |
| CTR 0 AUX            | 1                  | PFI 0       |
| CTR 0 OUT            | 6                  | PFI 4       |
| CTR 0 A              | 1                  | PFI 0       |
| CTR 0 Z              | 3                  | PFI 2       |
| CTR 0 B              | 2                  | PFI 1       |
| CTR 1 SRC            | 4                  | PFI 3       |
| CTR 1 GATE           | 3                  | PFI 2       |
| CTR 1 AUX            | 4                  | PFI 3       |
| CTR 1 OUT            | 7                  | PFI 5       |
| CTR 1 A              | 4                  | PFI 3       |
| CTR 1 Z              | 2                  | PFI 1       |
| CTR 1 B              | 3                  | PFI 2       |
| FREQ OUT             | 8                  | PFI 6       |

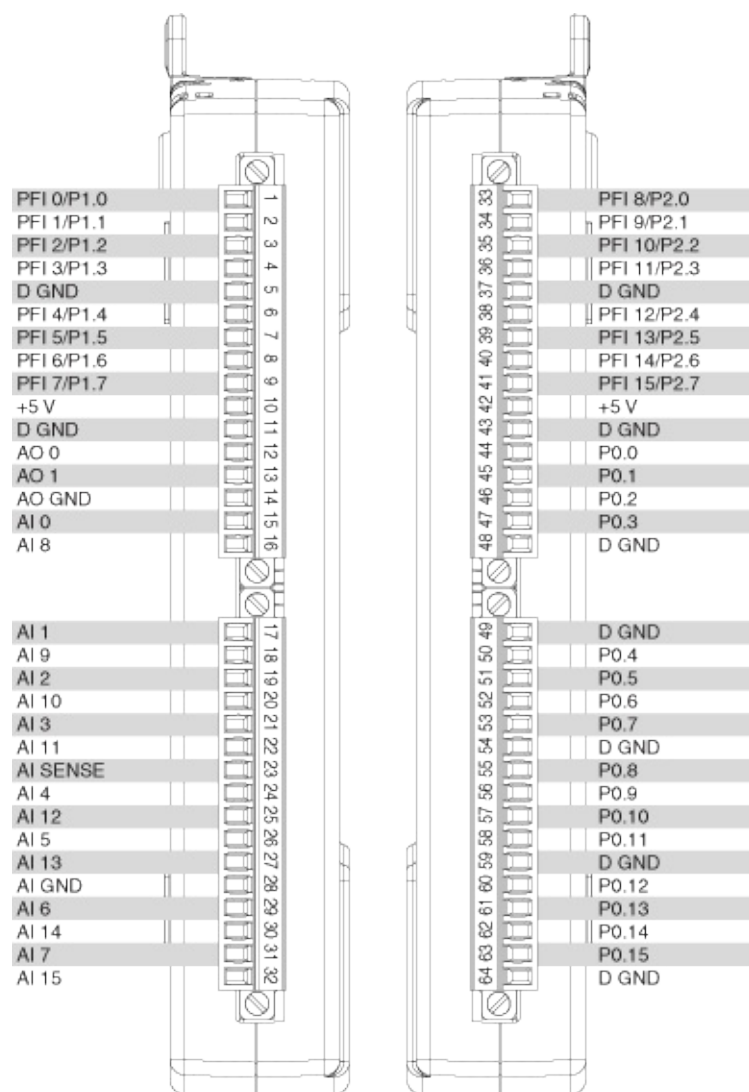
# NI USB-6211



## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 1                  | PFI 0       |
| CTR 0 GATE           | 2                  | PFI 1       |
| CTR 0 AUX            | 1                  | PFI 0       |
| CTR 0 OUT            | 6                  | PFI 4       |
| CTR 0 A              | 1                  | PFI 0       |
| CTR 0 Z              | 3                  | PFI 2       |
| CTR 0 B              | 2                  | PFI 1       |
| CTR 1 SRC            | 4                  | PFI 3       |
| CTR 1 GATE           | 3                  | PFI 2       |
| CTR 1 AUX            | 4                  | PFI 3       |
| CTR 1 OUT            | 7                  | PFI 5       |
| CTR 1 A              | 4                  | PFI 3       |
| CTR 1 Z              | 2                  | PFI 1       |
| CTR 1 B              | 3                  | PFI 2       |
| FREQ OUT             | 8                  | PFI 6       |

# NI USB-6212



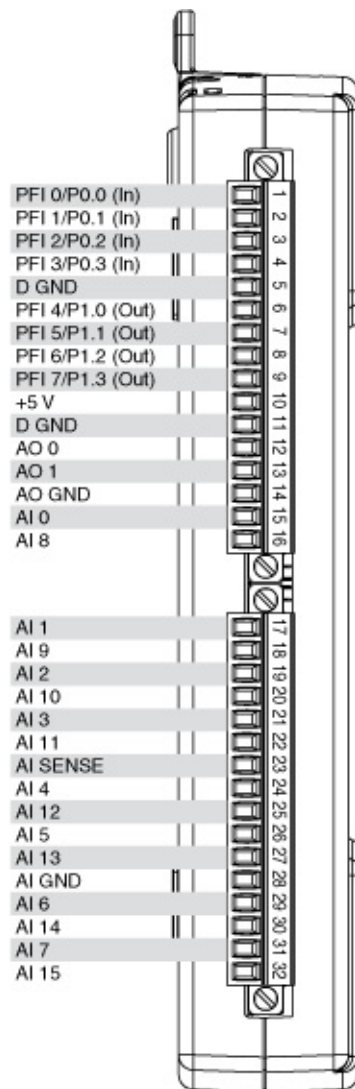
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 33                 | PFI 8       |
| CTR 0 GATE           | 34                 | PFI 9       |
| CTR 0 AUX            | 35                 | PFI 10      |
| CTR 0 OUT            | 38                 | PFI 12      |
| CTR 0 A              | 33                 | PFI 8       |
| CTR 0 Z              | 34                 | PFI 9       |
| CTR 0 B              | 35                 | PFI 10      |
| CTR 1 SRC            | 4                  | PFI 3       |
| CTR 1 GATE           | 6                  | PFI 4       |
| CTR 1 AUX            | 36                 | PFI 11      |
| CTR 1 OUT            | 39                 | PFI 13      |
| CTR 1 A              | 4                  | PFI 3       |
| CTR 1 Z              | 6                  | PFI 4       |
| CTR 1 B              | 36                 | PFI 11      |
| FREQ OUT             | 40                 | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6215

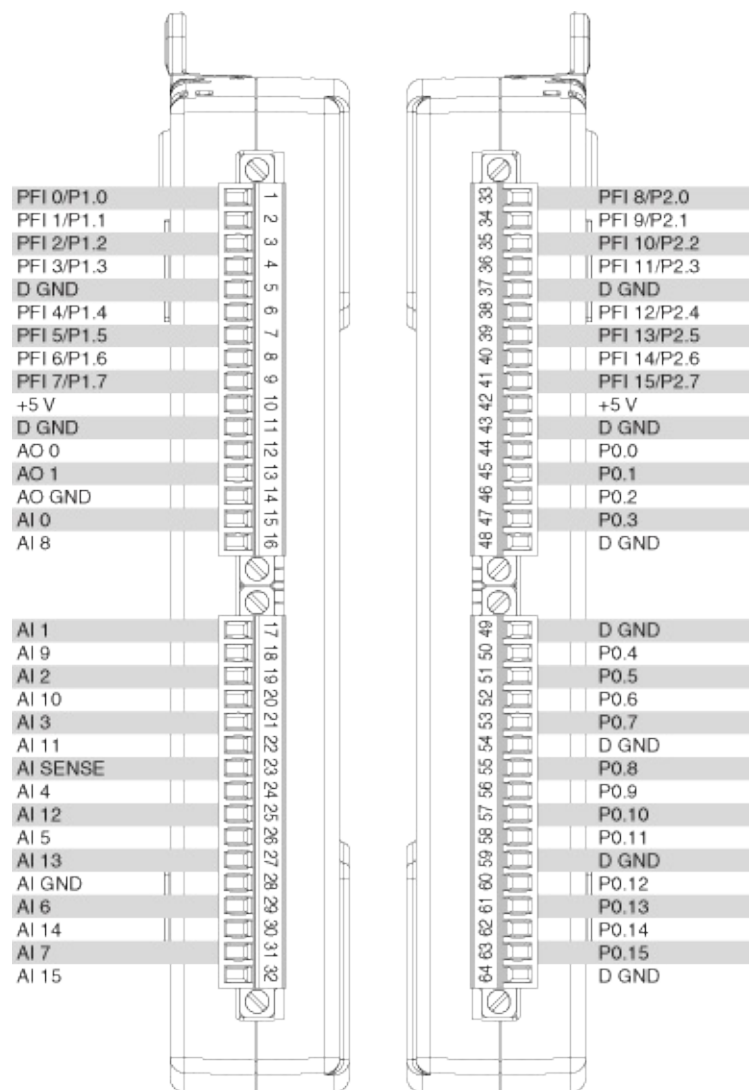




## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 1                  | PFI 0       |
| CTR 0 GATE           | 2                  | PFI 1       |
| CTR 0 AUX            | 1                  | PFI 0       |
| CTR 0 OUT            | 6                  | PFI 4       |
| CTR 0 A              | 1                  | PFI 0       |
| CTR 0 Z              | 3                  | PFI 2       |
| CTR 0 B              | 2                  | PFI 1       |
| CTR 1 SRC            | 4                  | PFI 3       |
| CTR 1 GATE           | 3                  | PFI 2       |
| CTR 1 AUX            | 4                  | PFI 3       |
| CTR 1 OUT            | 7                  | PFI 5       |
| CTR 1 A              | 4                  | PFI 3       |
| CTR 1 Z              | 2                  | PFI 1       |
| CTR 1 B              | 3                  | PFI 2       |
| FREQ OUT             | 8                  | PFI 6       |

# NI USB-6216



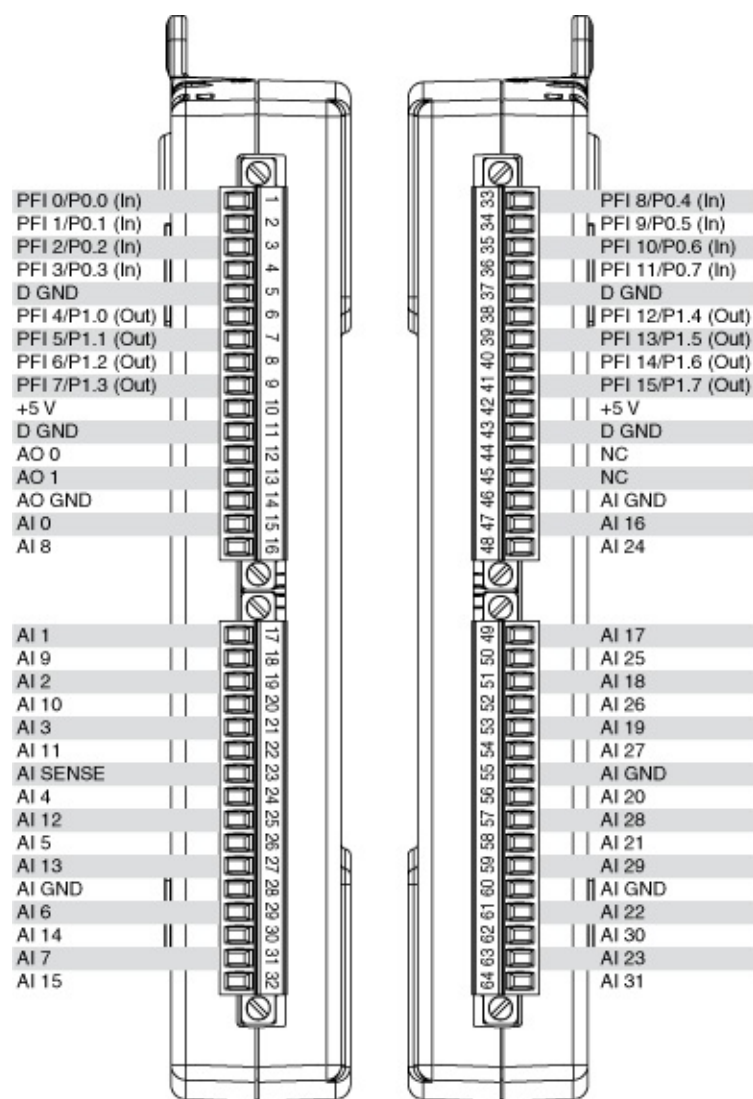
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 33                 | PFI 8       |
| CTR 0 GATE           | 34                 | PFI 9       |
| CTR 0 AUX            | 35                 | PFI 10      |
| CTR 0 OUT            | 38                 | PFI 12      |
| CTR 0 A              | 33                 | PFI 8       |
| CTR 0 Z              | 34                 | PFI 9       |
| CTR 0 B              | 35                 | PFI 10      |
| CTR 1 SRC            | 4                  | PFI 3       |
| CTR 1 GATE           | 6                  | PFI 4       |
| CTR 1 AUX            | 36                 | PFI 11      |
| CTR 1 OUT            | 39                 | PFI 13      |
| CTR 1 A              | 4                  | PFI 3       |
| CTR 1 Z              | 6                  | PFI 4       |
| CTR 1 B              | 36                 | PFI 11      |
| FREQ OUT             | 40                 | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6218



NC = No Connect

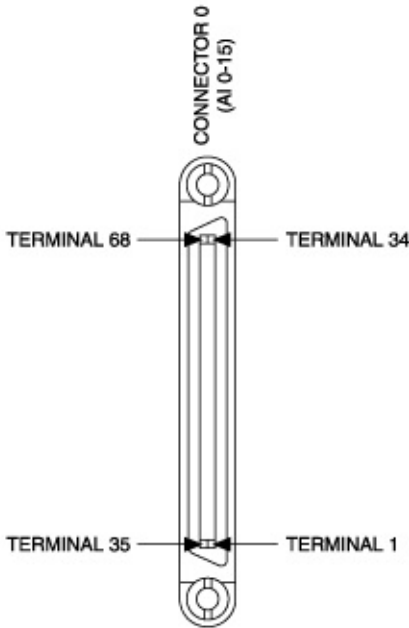
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 1                  | PFI 0       |
| CTR 0 GATE           | 2                  | PFI 1       |
| CTR 0 AUX            | 34                 | PFI 9       |
| CTR 0 OUT            | 6                  | PFI 4       |
| CTR 0 A              | 1                  | PFI 0       |
| CTR 0 Z              | 2                  | PFI 1       |
| CTR 0 B              | 34                 | PFI 9       |
| CTR 1 SRC            | 4                  | PFI 3       |
| CTR 1 GATE           | 3                  | PFI 2       |
| CTR 1 AUX            | 35                 | PFI 10      |
| CTR 1 OUT            | 7                  | PFI 5       |
| CTR 1 A              | 4                  | PFI 3       |
| CTR 1 Z              | 3                  | PFI 2       |
| CTR 1 B              | 35                 | PFI 10      |
| FREQ OUT             | 8                  | PFI 6       |

NI PCI/PXI-6220

|             |    |    |             |
|-------------|----|----|-------------|
| AI 0        | 68 | 34 | AI 8        |
| AI GND      | 67 | 33 | AI 1        |
| AI 9        | 66 | 32 | AI GND      |
| AI 2        | 65 | 31 | AI 10       |
| AI GND      | 64 | 30 | AI 3        |
| AI 11       | 63 | 29 | AI GND      |
| AI SENSE    | 62 | 28 | AI 4        |
| AI 12       | 61 | 27 | AI GND      |
| AI 5        | 60 | 26 | AI 13       |
| AI GND      | 59 | 25 | AI 6        |
| AI 14       | 58 | 24 | AI GND      |
| AI 7        | 57 | 23 | AI 15       |
| AI GND      | 56 | 22 | NC          |
| NC          | 55 | 21 | NC          |
| NC          | 54 | 20 | NC          |
| D GND       | 53 | 19 | P0.4        |
| P0.0        | 52 | 18 | D GND       |
| P0.5        | 51 | 17 | P0.1        |
| D GND       | 50 | 16 | P0.6        |
| P0.2        | 49 | 15 | D GND       |
| P0.7        | 48 | 14 | +5 V        |
| P0.3        | 47 | 13 | D GND       |
| PFI 11/P2.3 | 46 | 12 | D GND       |
| PFI 10/P2.2 | 45 | 11 | PFI 0/P1.0  |
| D GND       | 44 | 10 | PFI 1/P1.1  |
| PFI 2/P1.2  | 43 | 9  | D GND       |
| PFI 3/P1.3  | 42 | 8  | +5 V        |
| PFI 4/P1.4  | 41 | 7  | D GND       |
| PFI 13/P2.5 | 40 | 6  | PFI 5/P1.5  |
| PFI 15/P2.7 | 39 | 5  | PFI 6/P1.6  |
| PFI 7/P1.7  | 38 | 4  | D GND       |
| PFI 8/P2.0  | 37 | 3  | PFI 9/P2.1  |
| D GND       | 36 | 2  | PFI 12/P2.4 |
| D GND       | 35 | 1  | PFI 14/P2.6 |

NC = No Connect



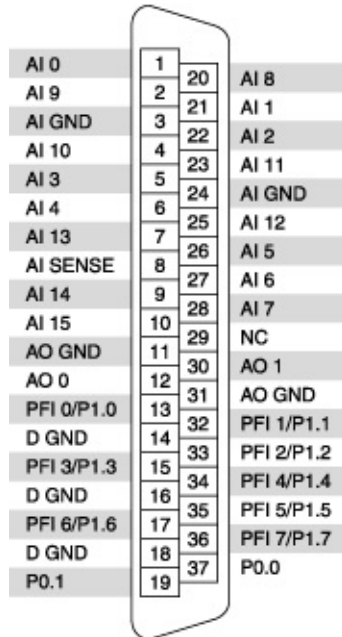
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

## NI PCI-6221 (37-Pin)



NC = No Connect



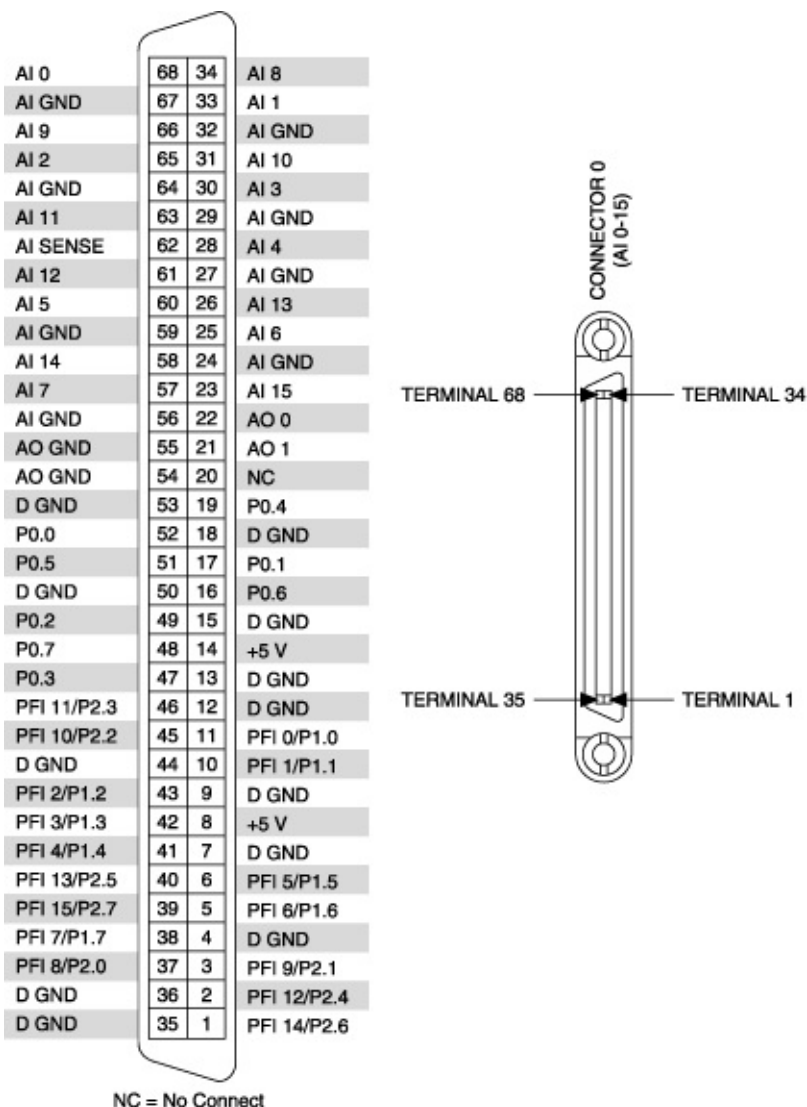
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 13                 | PFI 0       |
| CTR 0 GATE           | 32                 | PFI 1       |
| CTR 0 AUX            | 33                 | PFI 2       |
| CTR 0 OUT            | 17                 | PFI 6       |
| CTR 0 A              | 13                 | PFI 0       |
| CTR 0 Z              | 32                 | PFI 1       |
| CTR 0 B              | 33                 | PFI 2       |
| CTR 1 SRC            | 15                 | PFI 3       |
| CTR 1 GATE           | 34                 | PFI 4       |
| CTR 1 AUX            | 35                 | PFI 5       |
| CTR 1 OUT            | 36                 | PFI 7       |
| CTR 1 A              | 15                 | PFI 3       |
| CTR 1 Z              | 34                 | PFI 4       |
| CTR 1 B              | 35                 | PFI 5       |
| FREQ OUT             | 35                 | PFI 5       |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6221 (68-Pin)



## Default NI-DAQmx Counter Terminals

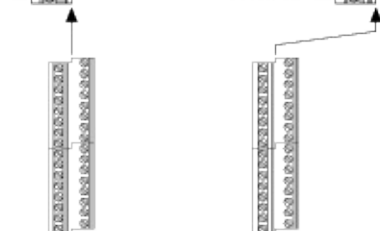
| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6221 Screw Terminal

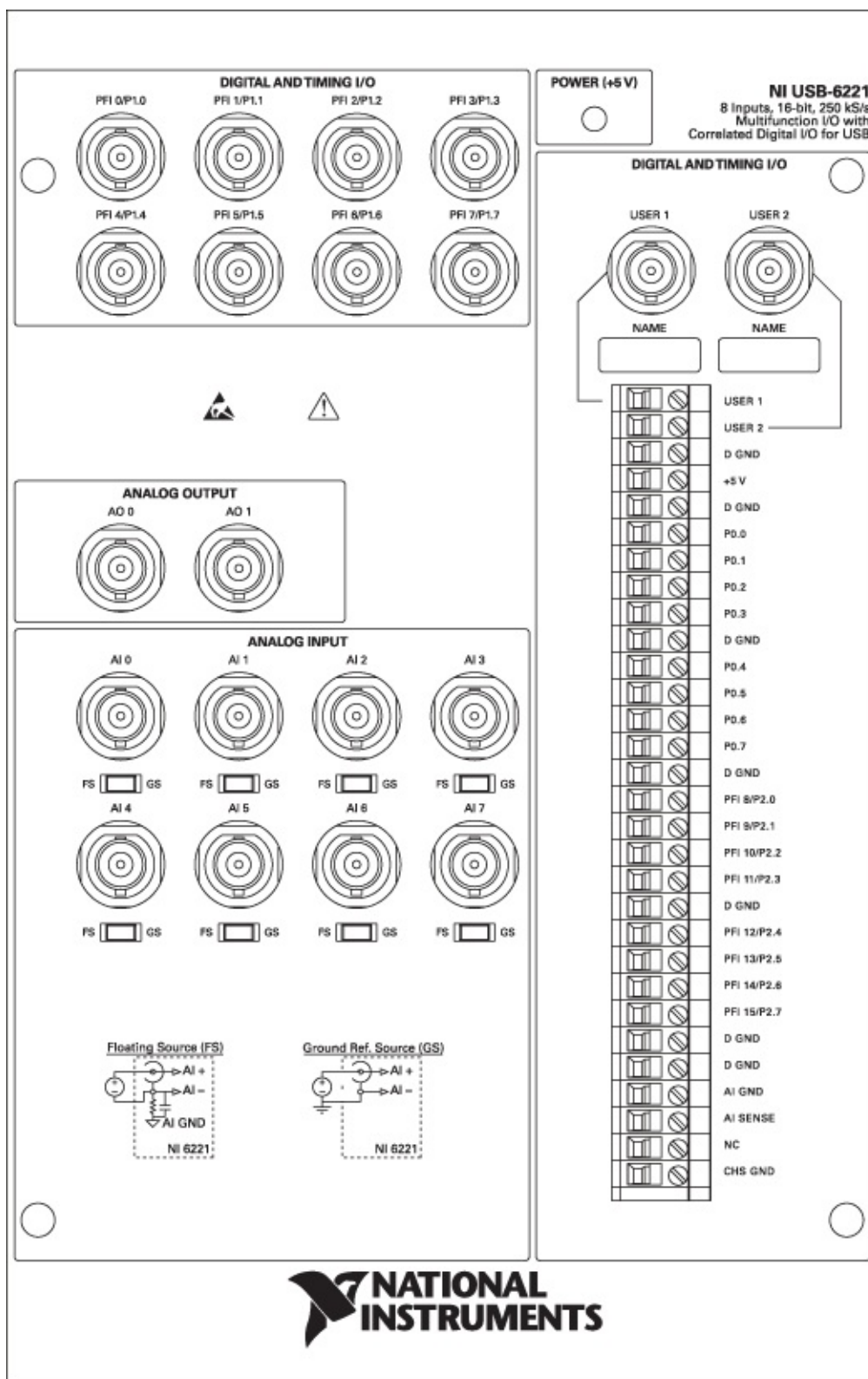
|          |    |           |            |    |                |
|----------|----|-----------|------------|----|----------------|
| AI 0     | 1  | 17 AI 4   | P0.0       | 65 | 81 PFI 8/P2.0  |
| AI 8     | 2  | 18 AI 12  | P0.1       | 66 | 82 D GND       |
| AI GND   | 3  | 19 AI GND | P0.2       | 67 | 83 PFI 9/P2.1  |
| AI 1     | 4  | 20 AI 5   | P0.3       | 68 | 84 D GND       |
| AI 9     | 5  | 21 AI 13  | P0.4       | 69 | 85 PFI 10/P2.2 |
| AI GND   | 6  | 22 AI GND | P0.5       | 70 | 86 D GND       |
| AI 2     | 7  | 23 AI 6   | P0.6       | 71 | 87 PFI 11/P2.3 |
| AI 10    | 8  | 24 AI 14  | P0.7       | 72 | 88 D GND       |
| AI GND   | 9  | 25 AI GND | PFI 0/P1.0 | 73 | 89 PFI 12/P2.4 |
| AI 3     | 10 | 26 AI 7   | PFI 1/P1.1 | 74 | 90 D GND       |
| AI 11    | 11 | 27 AI 15  | PFI 2/P1.2 | 75 | 91 PFI 13/P2.5 |
| AI GND   | 12 | 28 AI GND | PFI 3/P1.3 | 76 | 92 D GND       |
| AI SENSE | 13 | 29 NC     | PFI 4/P1.4 | 77 | 93 PFI 14/P2.6 |
| AI GND   | 14 | 30 AI GND | PFI 5/P1.5 | 78 | 94 D GND       |
| AO 0     | 15 | 31 AO 1   | PFI 6/P1.6 | 79 | 95 PFI 15/P2.7 |
| AO GND   | 16 | 32 AO GND | PFI 7/P1.7 | 80 | 96 +5 V        |



## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 81                 | PFI 8       |
| CTR 0 GATE           | 83                 | PFI 9       |
| CTR 0 AUX            | 85                 | PFI 10      |
| CTR 0 OUT            | 89                 | PFI 12      |
| CTR 0 A              | 81                 | PFI 8       |
| CTR 0 Z              | 83                 | PFI 9       |
| CTR 0 B              | 85                 | PFI 10      |
| CTR 1 SRC            | 76                 | PFI 3       |
| CTR 1 GATE           | 77                 | PFI 4       |
| CTR 1 AUX            | 87                 | PFI 11      |
| CTR 1 OUT            | 91                 | PFI 13      |
| CTR 1 A              | 76                 | PFI 3       |
| CTR 1 Z              | 77                 | PFI 4       |
| CTR 1 B              | 87                 | PFI 11      |
| FREQ OUT             | 93                 | PFI 14      |

# NI USB-6221 BNC



## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Signal Name |
|----------------------|-------------|
| CTR 0 SRC            | PFI 8       |
| CTR 0 GATE           | PFI 9       |
| CTR 0 AUX            | PFI 10      |
| CTR 0 OUT            | PFI 12      |
| CTR 0 A              | PFI 8       |
| CTR 0 Z              | PFI 9       |
| CTR 0 B              | PFI 10      |
| CTR 1 SRC            | PFI 3       |
| CTR 1 GATE           | PFI 4       |
| CTR 1 AUX            | PFI 11      |
| CTR 1 OUT            | PFI 13      |
| CTR 1 A              | PFI 3       |
| CTR 1 Z              | PFI 4       |
| CTR 1 B              | PFI 11      |
| FREQ OUT             | PFI 14      |

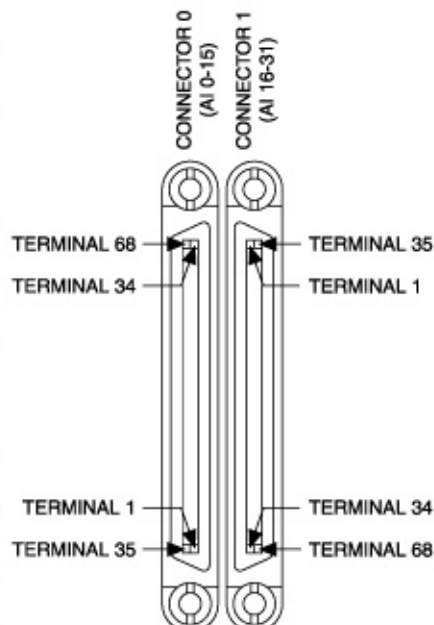


**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6224

|             |    |    |             |
|-------------|----|----|-------------|
| AI 0        | 68 | 34 | AI 8        |
| AI GND      | 67 | 33 | AI 1        |
| AI 9        | 66 | 32 | AI GND      |
| AI 2        | 65 | 31 | AI 10       |
| AI GND      | 64 | 30 | AI 3        |
| AI 11       | 63 | 29 | AI GND      |
| AI SENSE    | 62 | 28 | AI 4        |
| AI 12       | 61 | 27 | AI GND      |
| AI 5        | 60 | 26 | AI 13       |
| AI GND      | 59 | 25 | AI 6        |
| AI 14       | 58 | 24 | AI GND      |
| AI 7        | 57 | 23 | AI 15       |
| AI GND      | 56 | 22 | NC          |
| NC          | 55 | 21 | NC          |
| NC          | 54 | 20 | NC          |
| D GND       | 53 | 19 | P0.4        |
| P0.0        | 52 | 18 | D GND       |
| P0.5        | 51 | 17 | P0.1        |
| D GND       | 50 | 16 | P0.6        |
| P0.2        | 49 | 15 | D GND       |
| P0.7        | 48 | 14 | +5 V        |
| P0.3        | 47 | 13 | D GND       |
| PFI 11/P2.3 | 46 | 12 | D GND       |
| PFI 10/P2.2 | 45 | 11 | PFI 0/P1.0  |
| D GND       | 44 | 10 | PFI 1/P1.1  |
| PFI 2/P1.2  | 43 | 9  | D GND       |
| PFI 3/P1.3  | 42 | 8  | +5 V        |
| PFI 4/P1.4  | 41 | 7  | D GND       |
| PFI 13/P2.5 | 40 | 6  | PFI 5/P1.5  |
| PFI 15/P2.7 | 39 | 5  | PFI 6/P1.6  |
| PFI 7/P1.7  | 38 | 4  | D GND       |
| PFI 8/P2.0  | 37 | 3  | PFI 9/P2.1  |
| D GND       | 36 | 2  | PFI 12/P2.4 |
| D GND       | 35 | 1  | PFI 14/P2.6 |

NC = No Connect



|        |    |    |            |
|--------|----|----|------------|
| P0.30  | 1  | 35 | D GND      |
| P0.28  | 2  | 36 | D GND      |
| P0.25  | 3  | 37 | P0.24      |
| D GND  | 4  | 38 | P0.23      |
| P0.22  | 5  | 39 | P0.31      |
| P0.21  | 6  | 40 | P0.29      |
| D GND  | 7  | 41 | P0.20      |
| +5 V   | 8  | 42 | P0.19      |
| D GND  | 9  | 43 | P0.18      |
| P0.17  | 10 | 44 | D GND      |
| P0.16  | 11 | 45 | P0.26      |
| D GND  | 12 | 46 | P0.27      |
| D GND  | 13 | 47 | P0.11      |
| +5 V   | 14 | 48 | P0.15      |
| D GND  | 15 | 49 | P0.10      |
| P0.14  | 16 | 50 | D GND      |
| P0.9   | 17 | 51 | P0.13      |
| D GND  | 18 | 52 | P0.8       |
| P0.12  | 19 | 53 | D GND      |
| NC     | 20 | 54 | NC         |
| NC     | 21 | 55 | NC         |
| NC     | 22 | 56 | AI GND     |
| AI 31  | 23 | 57 | AI 23      |
| AI GND | 24 | 58 | AI 30      |
| AI 22  | 25 | 59 | AI GND     |
| AI 29  | 26 | 60 | AI 21      |
| AI GND | 27 | 61 | AI 28      |
| AI 20  | 28 | 62 | AI SENSE 2 |
| AI GND | 29 | 63 | AI 27      |
| AI 19  | 30 | 64 | AI GND     |
| AI 26  | 31 | 65 | AI 18      |
| AI GND | 32 | 66 | AI 25      |
| AI 17  | 33 | 67 | AI GND     |
| AI 24  | 34 | 68 | AI 16      |

NC = No Connect



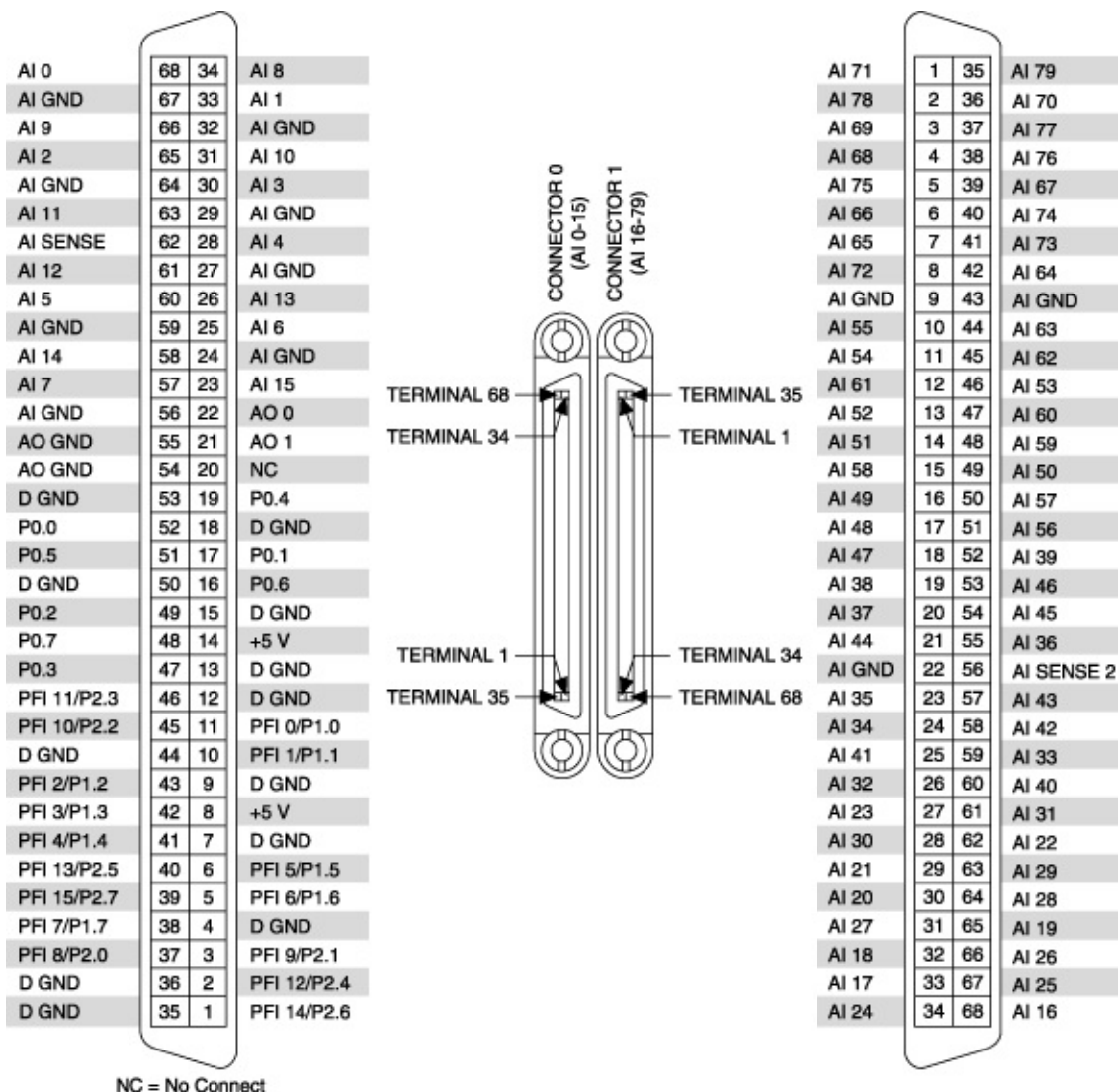
## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

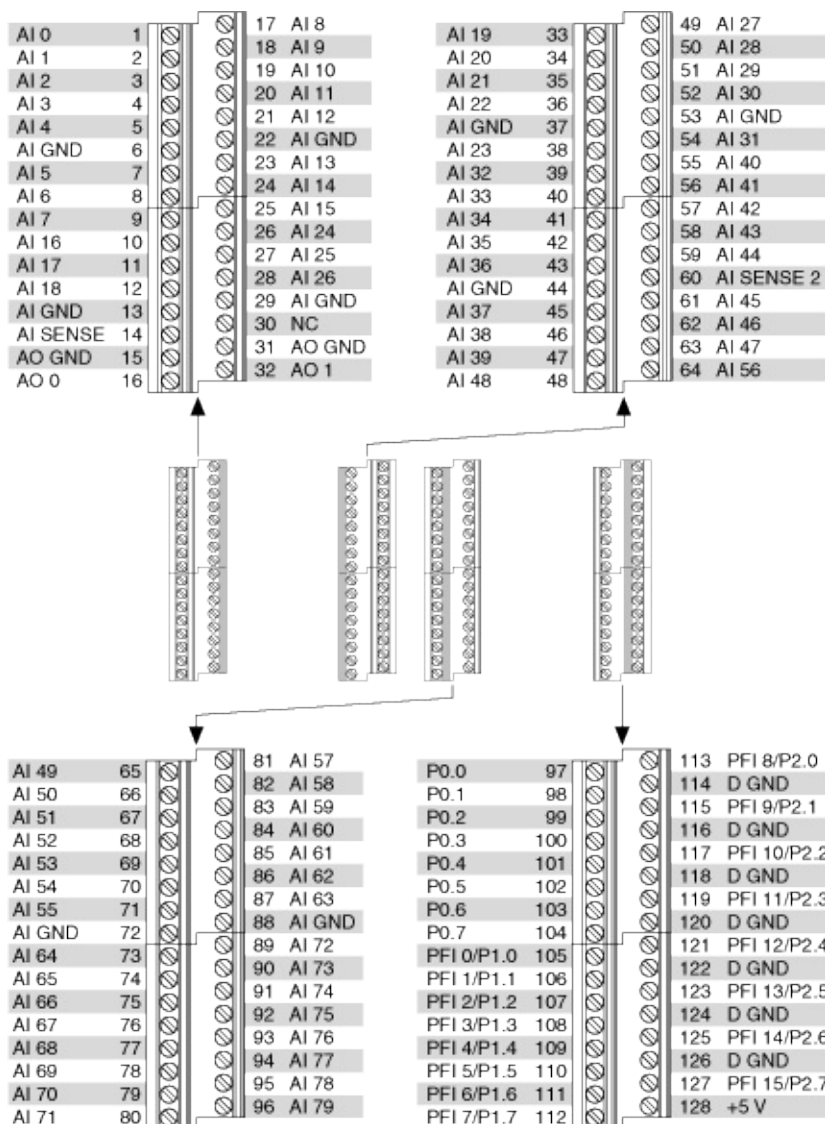
# NI PCI/PXI-6225



## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |

# NI USB-6225 Screw Terminal



NC = No Connect

## Default NI-DAQmx Counter Terminals

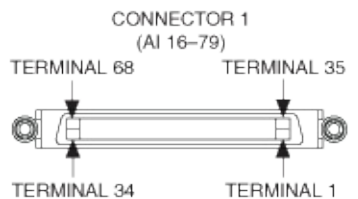
| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 113                | PFI 8       |
| CTR 0 GATE           | 115                | PFI 9       |
| CTR 0 AUX            | 117                | PFI 10      |
| CTR 0 OUT            | 121                | PFI 12      |
| CTR 0 A              | 113                | PFI 8       |
| CTR 0 Z              | 115                | PFI 9       |
| CTR 0 B              | 117                | PFI 10      |
| CTR 1 SRC            | 108                | PFI 3       |
| CTR 1 GATE           | 109                | PFI 4       |
| CTR 1 AUX            | 119                | PFI 11      |
| CTR 1 OUT            | 123                | PFI 13      |
| CTR 1 A              | 108                | PFI 3       |
| CTR 1 Z              | 109                | PFI 4       |
| CTR 1 B              | 119                | PFI 11      |
| FREQ OUT             | 125                | PFI 14      |



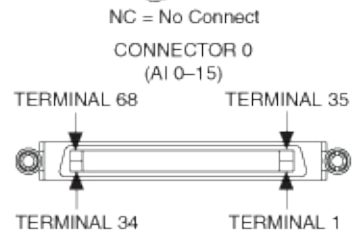
**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6225 Mass Termination

|        |    |    |            |
|--------|----|----|------------|
| AI 24  | 34 | 68 | AI 16      |
| AI 17  | 33 | 67 | AI 25      |
| AI 18  | 32 | 66 | AI 26      |
| AI 27  | 31 | 65 | AI 19      |
| AI 20  | 30 | 64 | AI 28      |
| AI 21  | 29 | 63 | AI 29      |
| AI 30  | 28 | 62 | AI 22      |
| AI 23  | 27 | 61 | AI 31      |
| AI 32  | 26 | 60 | AI 40      |
| AI 41  | 25 | 59 | AI 33      |
| AI 34  | 24 | 58 | AI 42      |
| AI 35  | 23 | 57 | AI 43      |
| AI GND | 22 | 56 | AI SENSE 2 |
| AI 44  | 21 | 55 | AI 36      |
| AI 37  | 20 | 54 | AI 45      |
| AI 38  | 19 | 53 | AI 46      |
| AI 47  | 18 | 52 | AI 39      |
| AI 48  | 17 | 51 | AI 56      |
| AI 49  | 16 | 50 | AI 57      |
| AI 58  | 15 | 49 | AI 50      |
| AI 51  | 14 | 48 | AI 59      |
| AI 52  | 13 | 47 | AI 60      |
| AI 61  | 12 | 46 | AI 53      |
| AI 54  | 11 | 45 | AI 62      |
| AI 55  | 10 | 44 | AI 63      |
| AI GND | 9  | 43 | AI GND     |
| AI 72  | 8  | 42 | AI 64      |
| AI 65  | 7  | 41 | AI 73      |
| AI 66  | 6  | 40 | AI 74      |
| AI 75  | 5  | 39 | AI 67      |
| AI 68  | 4  | 38 | AI 76      |
| AI 69  | 3  | 37 | AI 77      |
| AI 78  | 2  | 36 | AI 70      |
| AI 71  | 1  | 35 | AI 79      |



|             |    |    |             |
|-------------|----|----|-------------|
| AI 8        | 34 | 68 | AI 0        |
| AI 1        | 33 | 67 | AI GND      |
| AI GND      | 32 | 66 | AI 9        |
| AI 10       | 31 | 65 | AI 2        |
| AI 3        | 30 | 64 | AI GND      |
| AI GND      | 29 | 63 | AI 11       |
| AI 4        | 28 | 62 | AI SENSE    |
| AI GND      | 27 | 61 | AI 12       |
| AI 13       | 26 | 60 | AI 5        |
| AI 6        | 25 | 59 | AI GND      |
| AI GND      | 24 | 58 | AI 14       |
| AI 15       | 23 | 57 | AI 7        |
| AO 0        | 22 | 56 | AI GND      |
| AO 1        | 21 | 55 | AO GND      |
| NC          | 20 | 54 | AO GND      |
| P0.4        | 19 | 53 | D GND       |
| D GND       | 18 | 52 | P0.0        |
| P0.1        | 17 | 51 | P0.5        |
| P0.6        | 16 | 50 | D GND       |
| D GND       | 15 | 49 | P0.2        |
| +5 V        | 14 | 48 | P0.7        |
| D GND       | 13 | 47 | P0.3        |
| D GND       | 12 | 46 | PFI 11/P2.3 |
| PFI 0/P1.0  | 11 | 45 | PFI 10/P2.2 |
| PFI 1/P1.1  | 10 | 44 | D GND       |
| D GND       | 9  | 43 | PFI 2/P1.2  |
| +5 V        | 8  | 42 | PFI 3/P1.3  |
| D GND       | 7  | 41 | PFI 4/P1.4  |
| PFI 5/P1.5  | 6  | 40 | PFI 13/P2.5 |
| PFI 6/P1.6  | 5  | 39 | PFI 15/P2.7 |
| D GND       | 4  | 38 | PFI 7/P1.7  |
| PFI 9/P2.1  | 3  | 37 | PFI 8/P2.0  |
| PFI 12/P2.4 | 2  | 36 | D GND       |
| PFI 14/P2.6 | 1  | 35 | D GND       |



## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |

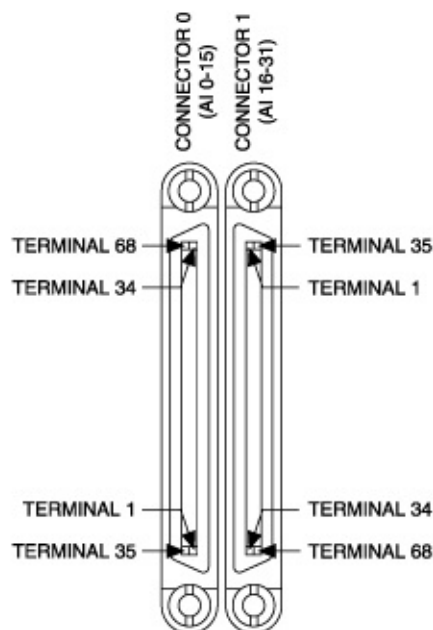


**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6229

|             |    |    |             |
|-------------|----|----|-------------|
| AI 0        | 68 | 34 | AI 8        |
| AI GND      | 67 | 33 | AI 1        |
| AI 9        | 66 | 32 | AI GND      |
| AI 2        | 65 | 31 | AI 10       |
| AI GND      | 64 | 30 | AI 3        |
| AI 11       | 63 | 29 | AI GND      |
| AI SENSE    | 62 | 28 | AI 4        |
| AI 12       | 61 | 27 | AI GND      |
| AI 5        | 60 | 26 | AI 13       |
| AI GND      | 59 | 25 | AI 6        |
| AI 14       | 58 | 24 | AI GND      |
| AI 7        | 57 | 23 | AI 15       |
| AI GND      | 56 | 22 | AO 0        |
| AO GND      | 55 | 21 | AO 1        |
| AO GND      | 54 | 20 | NC          |
| D GND       | 53 | 19 | P0.4        |
| P0.0        | 52 | 18 | D GND       |
| P0.5        | 51 | 17 | P0.1        |
| D GND       | 50 | 16 | P0.6        |
| P0.2        | 49 | 15 | D GND       |
| P0.7        | 48 | 14 | +5 V        |
| P0.3        | 47 | 13 | D GND       |
| PFI 11/P2.3 | 46 | 12 | D GND       |
| PFI 10/P2.2 | 45 | 11 | PFI 0/P1.0  |
| D GND       | 44 | 10 | PFI 1/P1.1  |
| PFI 2/P1.2  | 43 | 9  | D GND       |
| PFI 3/P1.3  | 42 | 8  | +5 V        |
| PFI 4/P1.4  | 41 | 7  | D GND       |
| PFI 13/P2.5 | 40 | 6  | PFI 5/P1.5  |
| PFI 15/P2.7 | 39 | 5  | PFI 6/P1.6  |
| PFI 7/P1.7  | 38 | 4  | D GND       |
| PFI 8/P2.0  | 37 | 3  | PFI 9/P2.1  |
| D GND       | 36 | 2  | PFI 12/P2.4 |
| D GND       | 35 | 1  | PFI 14/P2.6 |

NC = No Connect



|        |    |    |            |
|--------|----|----|------------|
| P0.30  | 1  | 35 | D GND      |
| P0.28  | 2  | 36 | D GND      |
| P0.25  | 3  | 37 | P0.24      |
| D GND  | 4  | 38 | P0.23      |
| P0.22  | 5  | 39 | P0.31      |
| P0.21  | 6  | 40 | P0.29      |
| D GND  | 7  | 41 | P0.20      |
| +5 V   | 8  | 42 | P0.19      |
| D GND  | 9  | 43 | P0.18      |
| P0.17  | 10 | 44 | D GND      |
| P0.16  | 11 | 45 | P0.26      |
| D GND  | 12 | 46 | P0.27      |
| D GND  | 13 | 47 | P0.11      |
| +5 V   | 14 | 48 | P0.15      |
| D GND  | 15 | 49 | P0.10      |
| P0.14  | 16 | 50 | D GND      |
| P0.9   | 17 | 51 | P0.13      |
| D GND  | 18 | 52 | P0.8       |
| P0.12  | 19 | 53 | D GND      |
| NC     | 20 | 54 | AO GND     |
| AO 3   | 21 | 55 | AO GND     |
| AO 2   | 22 | 56 | AI GND     |
| AI 31  | 23 | 57 | AI 23      |
| AI GND | 24 | 58 | AI 30      |
| AI 22  | 25 | 59 | AI GND     |
| AI 29  | 26 | 60 | AI 21      |
| AI GND | 27 | 61 | AI 28      |
| AI 20  | 28 | 62 | AI SENSE 2 |
| AI GND | 29 | 63 | AI 27      |
| AI 19  | 30 | 64 | AI GND     |
| AI 26  | 31 | 65 | AI 18      |
| AI GND | 32 | 66 | AI 25      |
| AI 17  | 33 | 67 | AI GND     |
| AI 24  | 34 | 68 | AI 16      |

NC = No Connect



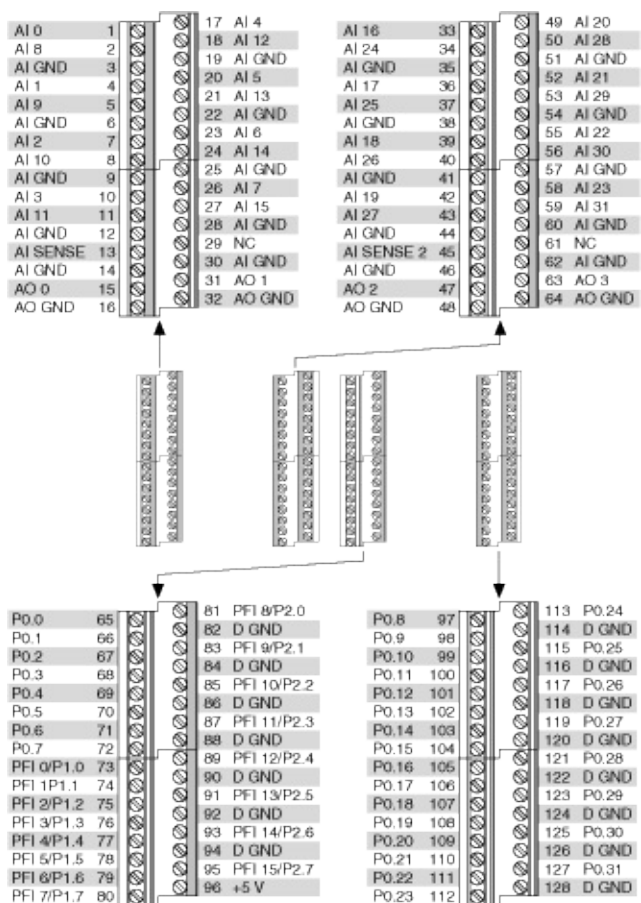
## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6229 Screw Terminal



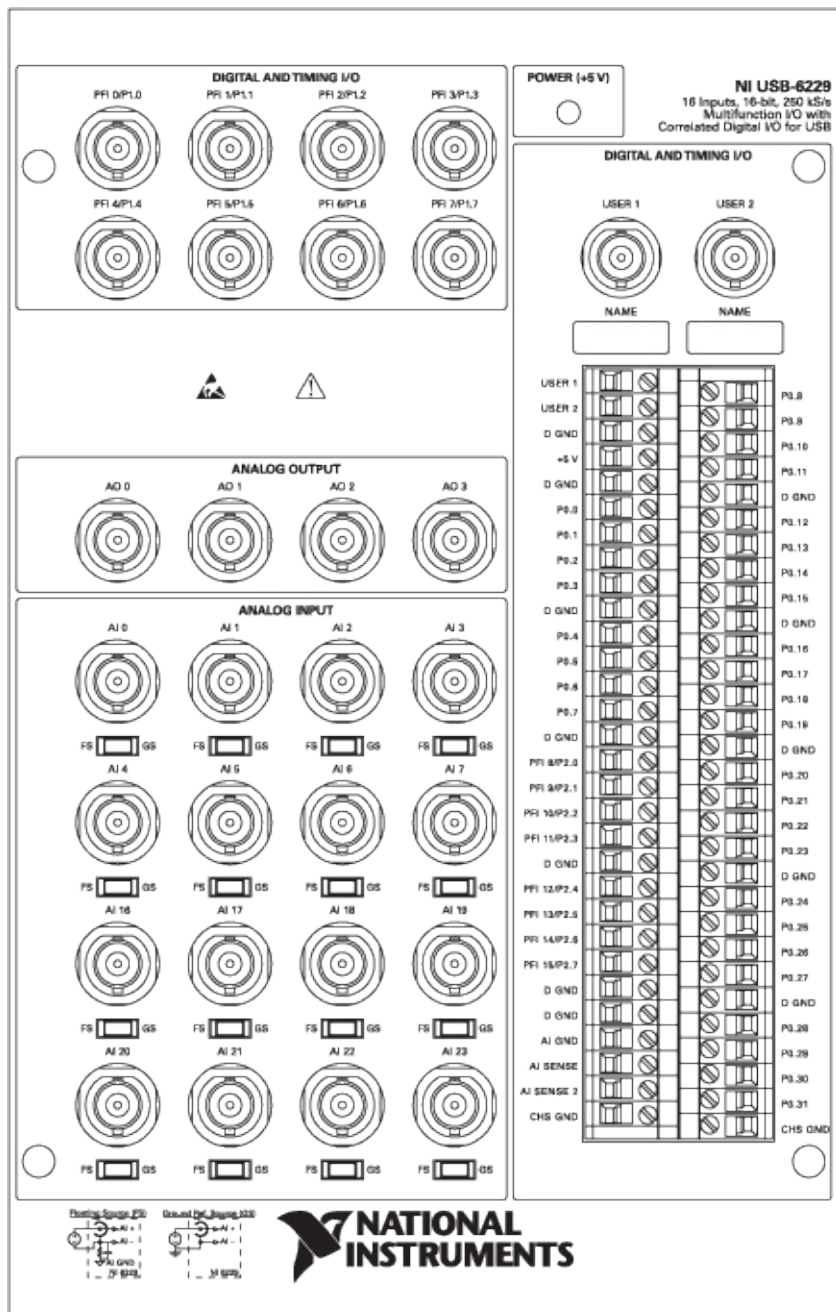
NC = No Connect

NC = No Connect

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 81                 | PFI 8       |
| CTR 0 GATE           | 83                 | PFI 9       |
| CTR 0 AUX            | 85                 | PFI 10      |
| CTR 0 OUT            | 89                 | PFI 12      |
| CTR 0 A              | 81                 | PFI 8       |
| CTR 0 Z              | 83                 | PFI 9       |
| CTR 0 B              | 85                 | PFI 10      |
| CTR 1 SRC            | 76                 | PFI 3       |
| CTR 1 GATE           | 77                 | PFI 4       |
| CTR 1 AUX            | 87                 | PFI 11      |
| CTR 1 OUT            | 91                 | PFI 13      |
| CTR 1 A              | 76                 | PFI 3       |
| CTR 1 Z              | 77                 | PFI 4       |
| CTR 1 B              | 87                 | PFI 11      |
| FREQ OUT             | 93                 | PFI 14      |

# NI USB-6229 BNC



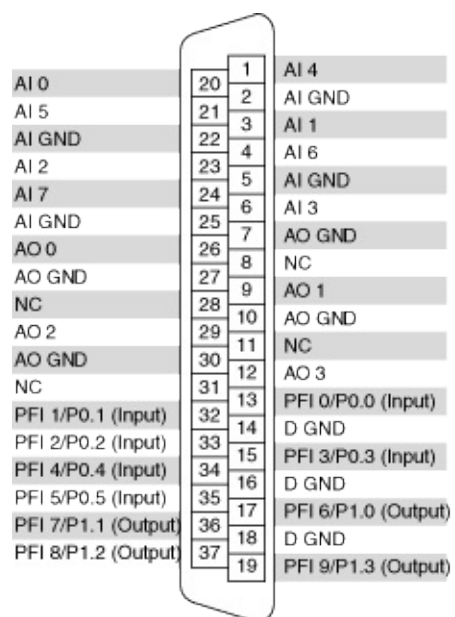
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Signal Name |
|----------------------|-------------|
| CTR 0 SRC            | PFI 8       |
| CTR 0 GATE           | PFI 9       |
| CTR 0 AUX            | PFI 10      |
| CTR 0 OUT            | PFI 12      |
| CTR 0 A              | PFI 8       |
| CTR 0 Z              | PFI 9       |
| CTR 0 B              | PFI 10      |
| CTR 1 SRC            | PFI 3       |
| CTR 1 GATE           | PFI 4       |
| CTR 1 AUX            | PFI 11      |
| CTR 1 OUT            | PFI 13      |
| CTR 1 A              | PFI 3       |
| CTR 1 Z              | PFI 4       |
| CTR 1 B              | PFI 11      |
| FREQ OUT             | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6230

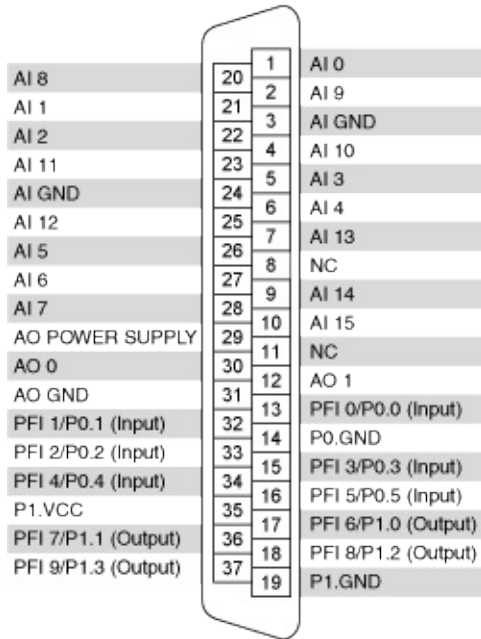


NC = No Connect

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 13                 | PFI 0/P0.0  |
| CTR 0 GATE           | 32                 | PFI 1/P0.1  |
| CTR 0 AUX            | 33                 | PFI 2/P0.2  |
| CTR 0 OUT            | 17                 | PFI 6/P1.0  |
| CTR 0 A              | 13                 | PFI 0/P0.0  |
| CTR 0 Z              | 32                 | PFI 1/P0.1  |
| CTR 0 B              | 33                 | PFI 2/P0.3  |
| CTR 1 SRC            | 15                 | PFI 3/P0.3  |
| CTR 1 GATE           | 34                 | PFI 4/P0.4  |
| CTR 1 AUX            | 35                 | PFI 5/P0.5  |
| CTR 1 OUT            | 36                 | PFI 7/P1.1  |
| CTR 1 A              | 15                 | PFI 3/P0.3  |
| CTR 1 Z              | 34                 | PFI 4/P0.4  |
| CTR 1 B              | 35                 | PFI 5/P0.5  |
| FREQ OUT             | 37                 | PFI 8       |

# NI PCI/PXI-6232



NC = No Connect



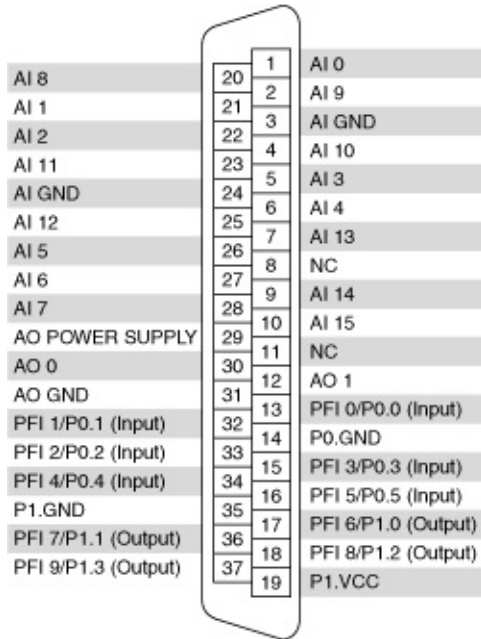
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 13                 | PFI 0       |
| CTR 0 GATE           | 32                 | PFI 1       |
| CTR 0 AUX            | 33                 | PFI 2       |
| CTR 0 OUT            | 17                 | PFI 6       |
| CTR 0 A              | 13                 | PFI 0       |
| CTR 0 Z              | 32                 | PFI 1       |
| CTR 0 B              | 33                 | PFI 2       |
| CTR 1 SRC            | 15                 | PFI 3       |
| CTR 1 GATE           | 34                 | PFI 4       |
| CTR 1 AUX            | 16                 | PFI 5       |
| CTR 1 OUT            | 36                 | PFI 7       |
| CTR 1 A              | 15                 | PFI 3       |
| CTR 1 Z              | 34                 | PFI 4       |
| CTR 1 B              | 16                 | PFI 5       |
| FREQ OUT             | 18                 | PFI 8       |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6233



NC = No Connect

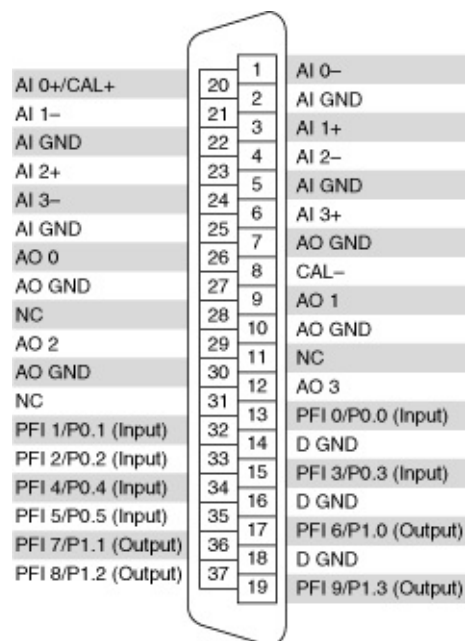
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 13                 | PFI 0       |
| CTR 0 GATE           | 32                 | PFI 1       |
| CTR 0 AUX            | 33                 | PFI 2       |
| CTR 0 OUT            | 17                 | PFI 6       |
| CTR 0 A              | 13                 | PFI 0       |
| CTR 0 Z              | 32                 | PFI 1       |
| CTR 0 B              | 33                 | PFI 2       |
| CTR 1 SRC            | 15                 | PFI 3       |
| CTR 1 GATE           | 34                 | PFI 4       |
| CTR 1 AUX            | 16                 | PFI 5       |
| CTR 1 OUT            | 36                 | PFI 7       |
| CTR 1 A              | 15                 | PFI 3       |
| CTR 1 Z              | 34                 | PFI 4       |
| CTR 1 B              | 16                 | PFI 5       |
| FREQ OUT             | 18                 | PFI 8       |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6236



NC = No Connect

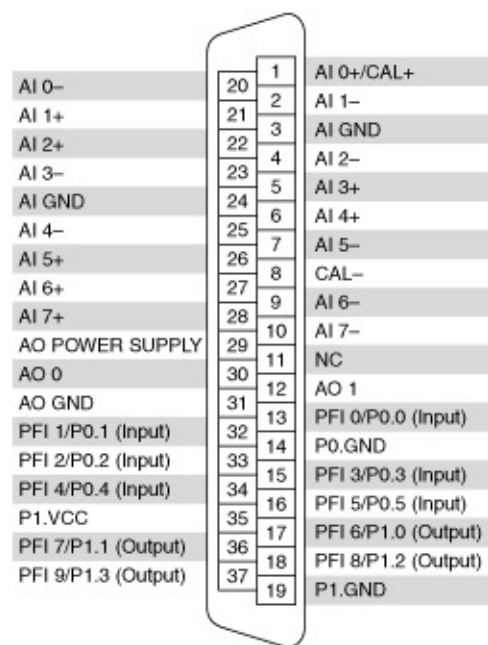
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 13                 | PFI 0       |
| CTR 0 GATE           | 32                 | PFI 1       |
| CTR 0 AUX            | 33                 | PFI 2       |
| CTR 0 OUT            | 17                 | PFI 6       |
| CTR 0 A              | 13                 | PFI 0       |
| CTR 0 Z              | 32                 | PFI 1       |
| CTR 0 B              | 33                 | PFI 2       |
| CTR 1 SRC            | 15                 | PFI 3       |
| CTR 1 GATE           | 34                 | PFI 4       |
| CTR 1 AUX            | 35                 | PFI 5       |
| CTR 1 OUT            | 36                 | PFI 7       |
| CTR 1 A              | 34                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 35                 | PFI 5       |
| FREQ OUT             | 37                 | PFI 8       |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6238



NC = No Connect

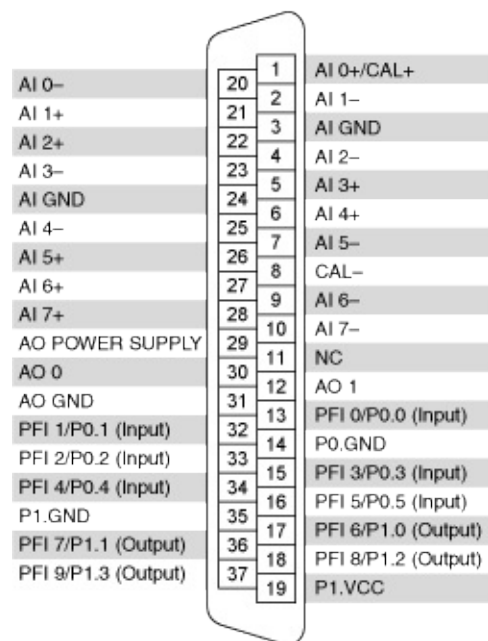
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 13                 | PFI 0       |
| CTR 0 GATE           | 32                 | PFI 1       |
| CTR 0 AUX            | 33                 | PFI 2       |
| CTR 0 OUT            | 17                 | PFI 6       |
| CTR 0 A              | 13                 | PFI 0       |
| CTR 0 Z              | 32                 | PFI 1       |
| CTR 0 B              | 33                 | PFI 2       |
| CTR 1 SRC            | 15                 | PFI 3       |
| CTR 1 GATE           | 34                 | PFI 4       |
| CTR 1 AUX            | 16                 | PFI 5       |
| CTR 1 OUT            | 36                 | PFI 7       |
| CTR 1 A              | 15                 | PFI 3       |
| CTR 1 Z              | 34                 | PFI 4       |
| CTR 1 B              | 16                 | PFI 5       |
| FREQ OUT             | 18                 | PFI 8       |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6239



NC = No Connect



## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 13                 | PFI 0       |
| CTR 0 GATE           | 32                 | PFI 1       |
| CTR 0 AUX            | 33                 | PFI 2       |
| CTR 0 OUT            | 17                 | PFI 6       |
| CTR 0 A              | 13                 | PFI 0       |
| CTR 0 Z              | 32                 | PFI 1       |
| CTR 0 B              | 33                 | PFI 2       |
| CTR 1 SRC            | 15                 | PFI 3       |
| CTR 1 GATE           | 34                 | PFI 4       |
| CTR 1 AUX            | 16                 | PFI 5       |
| CTR 1 OUT            | 36                 | PFI 7       |
| CTR 1 A              | 15                 | PFI 3       |
| CTR 1 Z              | 34                 | PFI 4       |
| CTR 1 B              | 16                 | PFI 5       |
| FREQ OUT             | 18                 | PFI 8       |

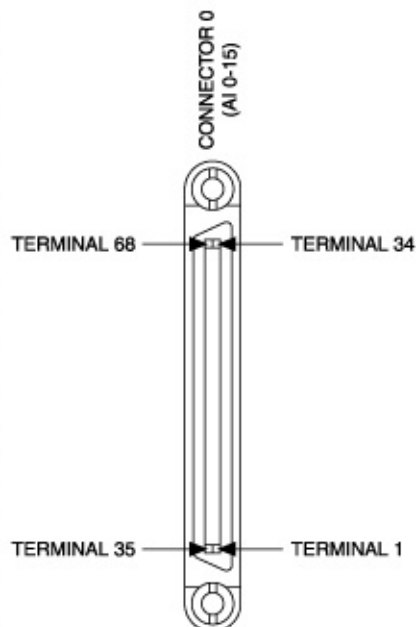


**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6250

|             |    |    |             |
|-------------|----|----|-------------|
| AI 0        | 68 | 34 | AI 8        |
| AI GND      | 67 | 33 | AI 1        |
| AI 9        | 66 | 32 | AI GND      |
| AI 2        | 65 | 31 | AI 10       |
| AI GND      | 64 | 30 | AI 3        |
| AI 11       | 63 | 29 | AI GND      |
| AI SENSE    | 62 | 28 | AI 4        |
| AI 12       | 61 | 27 | AI GND      |
| AI 5        | 60 | 26 | AI 13       |
| AI GND      | 59 | 25 | AI 6        |
| AI 14       | 58 | 24 | AI GND      |
| AI 7        | 57 | 23 | AI 15       |
| AI GND      | 56 | 22 | NC          |
| NC          | 55 | 21 | NC          |
| NC          | 54 | 20 | APFI 0      |
| D GND       | 53 | 19 | P0.4        |
| P0.0        | 52 | 18 | D GND       |
| P0.5        | 51 | 17 | P0.1        |
| D GND       | 50 | 16 | P0.6        |
| P0.2        | 49 | 15 | D GND       |
| P0.7        | 48 | 14 | +5 V        |
| P0.3        | 47 | 13 | D GND       |
| PFI 11/P2.3 | 46 | 12 | D GND       |
| PFI 10/P2.2 | 45 | 11 | PFI 0/P1.0  |
| D GND       | 44 | 10 | PFI 1/P1.1  |
| PFI 2/P1.2  | 43 | 9  | D GND       |
| PFI 3/P1.3  | 42 | 8  | +5 V        |
| PFI 4/P1.4  | 41 | 7  | D GND       |
| PFI 13/P2.5 | 40 | 6  | PFI 5/P1.5  |
| PFI 15/P2.7 | 39 | 5  | PFI 6/P1.6  |
| PFI 7/P1.7  | 38 | 4  | D GND       |
| PFI 8/P2.0  | 37 | 3  | PFI 9/P2.1  |
| D GND       | 36 | 2  | PFI 12/P2.4 |
| D GND       | 35 | 1  | PFI 14/P2.6 |

NC = No Connect



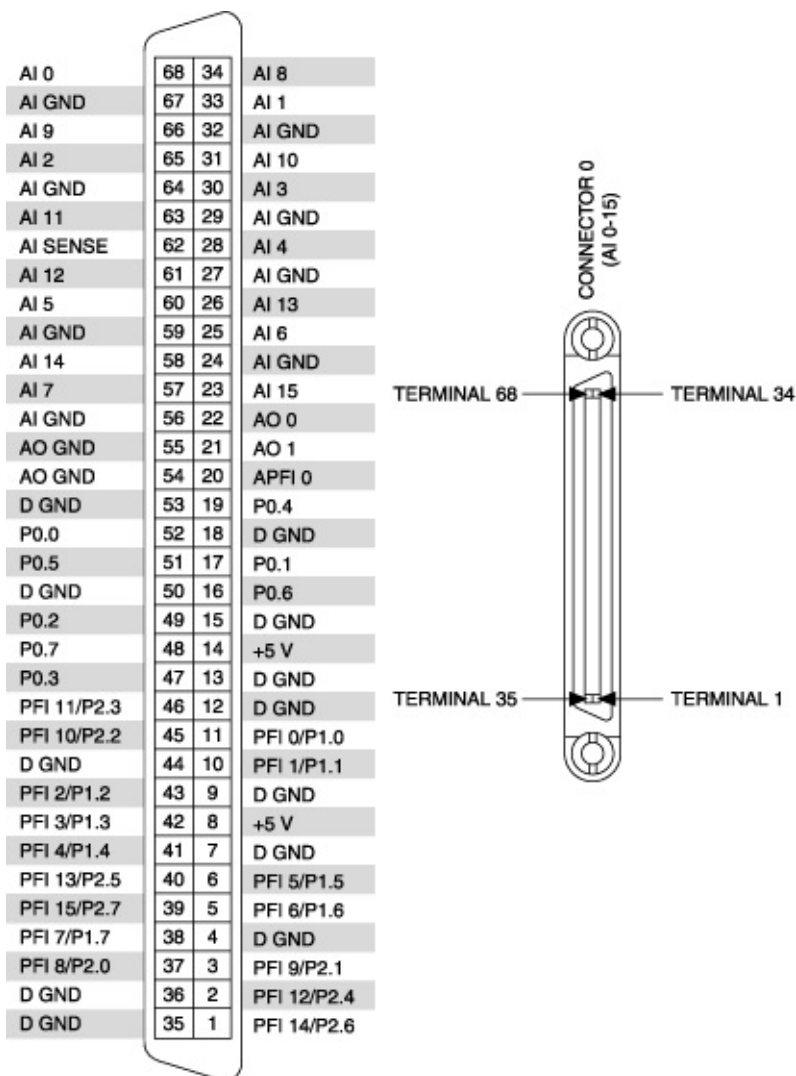
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PCle/PXI/PXIe-6251



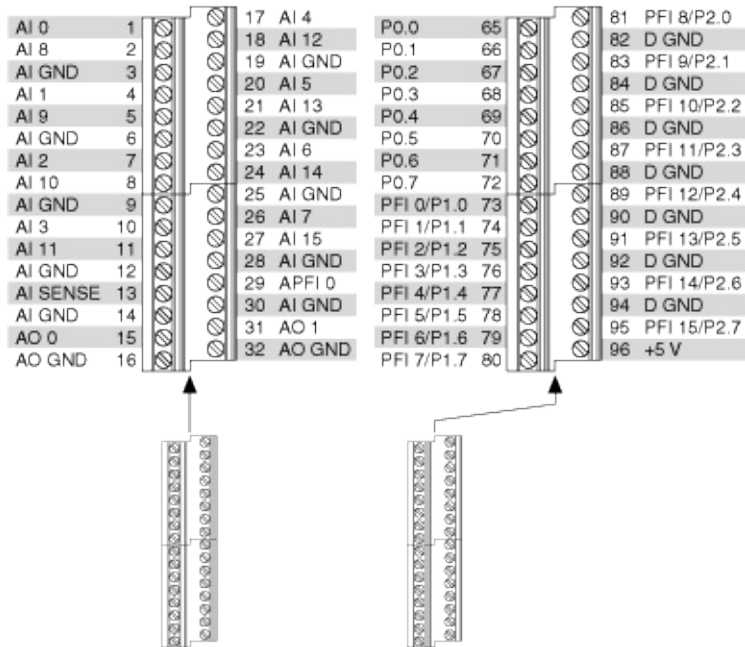
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

## NI USB-6251 Screw Terminal

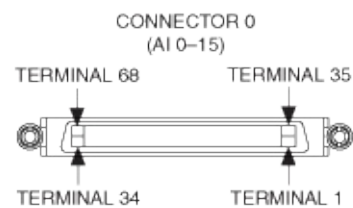


## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 81                 | PFI 8       |
| CTR 0 GATE           | 83                 | PFI 9       |
| CTR 0 AUX            | 85                 | PFI 10      |
| CTR 0 OUT            | 89                 | PFI 12      |
| CTR 0 A              | 81                 | PFI 8       |
| CTR 0 Z              | 83                 | PFI 9       |
| CTR 0 B              | 85                 | PFI 10      |
| CTR 1 SRC            | 76                 | PFI 3       |
| CTR 1 GATE           | 77                 | PFI 4       |
| CTR 1 AUX            | 87                 | PFI 11      |
| CTR 1 OUT            | 91                 | PFI 13      |
| CTR 1 A              | 76                 | PFI 3       |
| CTR 1 Z              | 77                 | PFI 4       |
| CTR 1 B              | 87                 | PFI 11      |
| FREQ OUT             | 93                 | PFI 14      |

# NI USB-6251 Mass Termination

|             |    |    |             |
|-------------|----|----|-------------|
| AI 8        | 34 | 68 | AI 0        |
| AI 1        | 33 | 67 | AI GND      |
| AI GND      | 32 | 66 | AI 9        |
| AI 10       | 31 | 65 | AI 2        |
| AI 3        | 30 | 64 | AI GND      |
| AI GND      | 29 | 63 | AI 11       |
| AI 4        | 28 | 62 | AI SENSE    |
| AI GND      | 27 | 61 | AI 12       |
| AI 13       | 26 | 60 | AI 5        |
| AI 6        | 25 | 59 | AI GND      |
| AI GND      | 24 | 58 | AI 14       |
| AI 15       | 23 | 57 | AI 7        |
| AO 0        | 22 | 56 | AI GND      |
| AO 1        | 21 | 55 | AO GND      |
| APFI 0      | 20 | 54 | AO GND      |
| P0.4        | 19 | 53 | D GND       |
| D GND       | 18 | 52 | P0.0        |
| P0.1        | 17 | 51 | P0.5        |
| P0.6        | 16 | 50 | D GND       |
| D GND       | 15 | 49 | P0.2        |
| +5 V        | 14 | 48 | P0.7        |
| D GND       | 13 | 47 | P0.3        |
| D GND       | 12 | 46 | PFI 11/P2.3 |
| PFI 0/P1.0  | 11 | 45 | PFI 10/P2.2 |
| PFI 1/P1.1  | 10 | 44 | D GND       |
| D GND       | 9  | 43 | PFI 2/P1.2  |
| +5 V        | 8  | 42 | PFI 3/P1.3  |
| D GND       | 7  | 41 | PFI 4/P1.4  |
| PFI 5/P1.5  | 6  | 40 | PFI 13/P2.5 |
| PFI 6/P1.6  | 5  | 39 | PFI 15/P2.7 |
| D GND       | 4  | 38 | PFI 7/P1.7  |
| PFI 9/P2.1  | 3  | 37 | PFI 8/P2.0  |
| PFI 12/P2.4 | 2  | 36 | D GND       |
| PFI 14/P2.6 | 1  | 35 | D GND       |

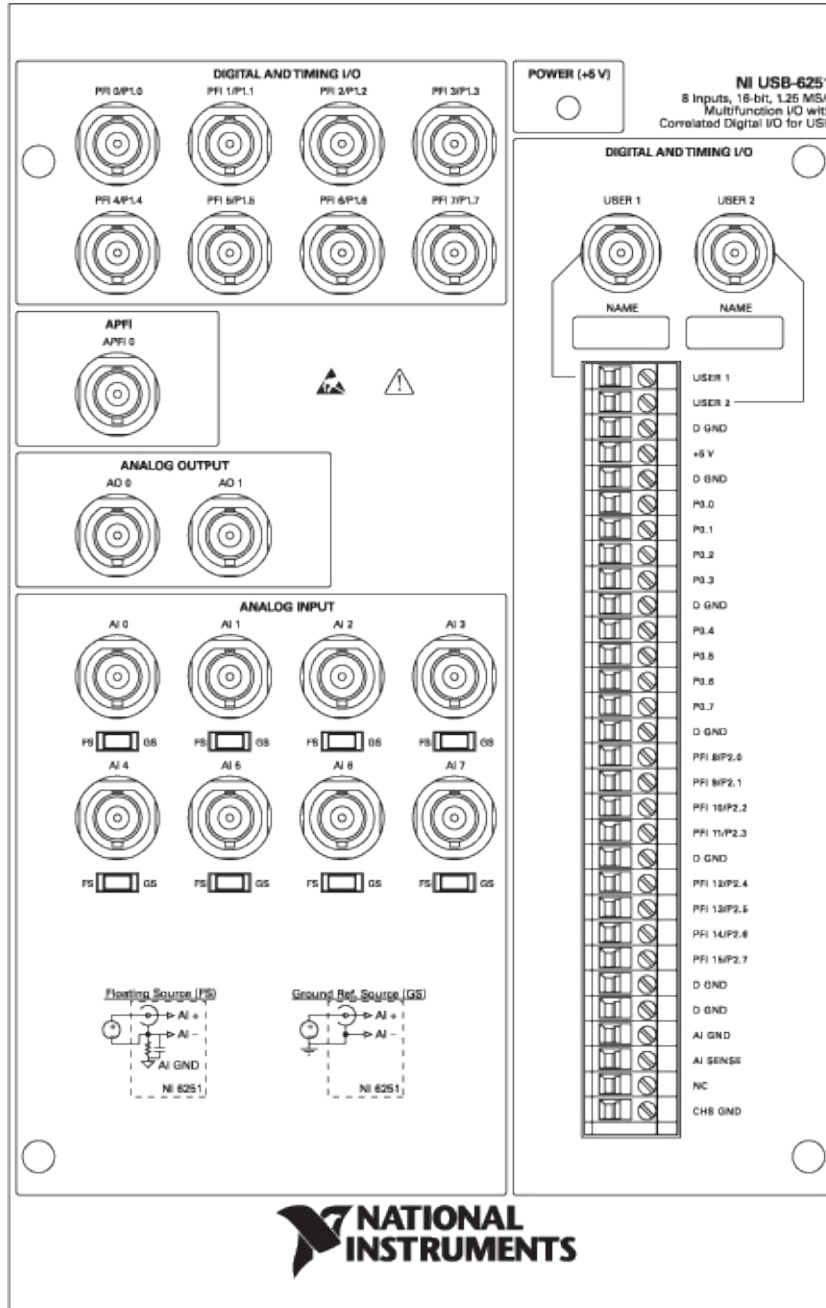




## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |

# NI USB-6251 BNC



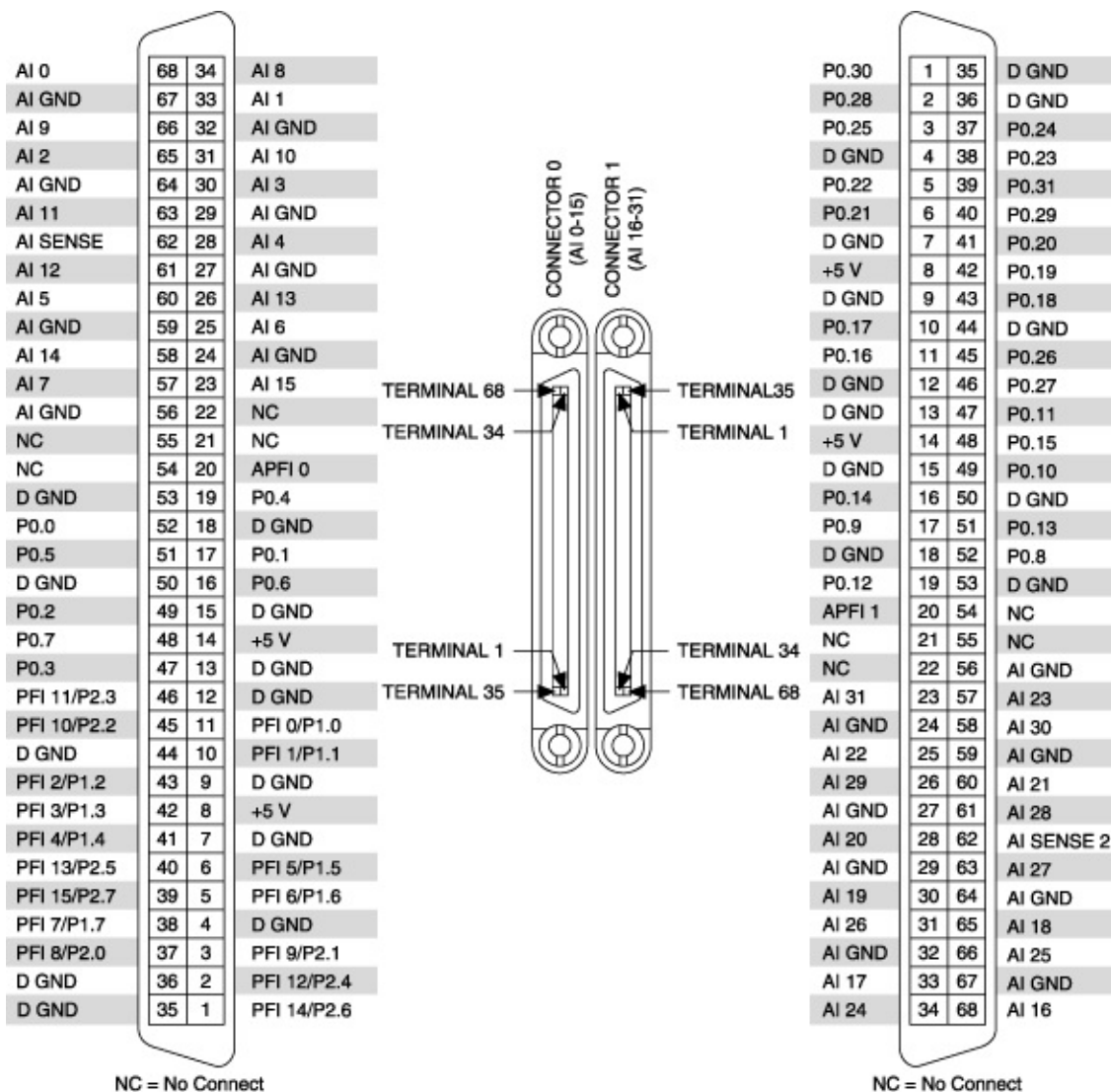
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Signal Name |
|----------------------|-------------|
| CTR 0 SRC            | PFI 8       |
| CTR 0 GATE           | PFI 9       |
| CTR 0 AUX            | PFI 10      |
| CTR 0 OUT            | PFI 12      |
| CTR 0 A              | PFI 8       |
| CTR 0 Z              | PFI 9       |
| CTR 0 B              | PFI 10      |
| CTR 1 SRC            | PFI 3       |
| CTR 1 GATE           | PFI 4       |
| CTR 1 AUX            | PFI 11      |
| CTR 1 OUT            | PFI 13      |
| CTR 1 A              | PFI 3       |
| CTR 1 Z              | PFI 4       |
| CTR 1 B              | PFI 11      |
| FREQ OUT             | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6254



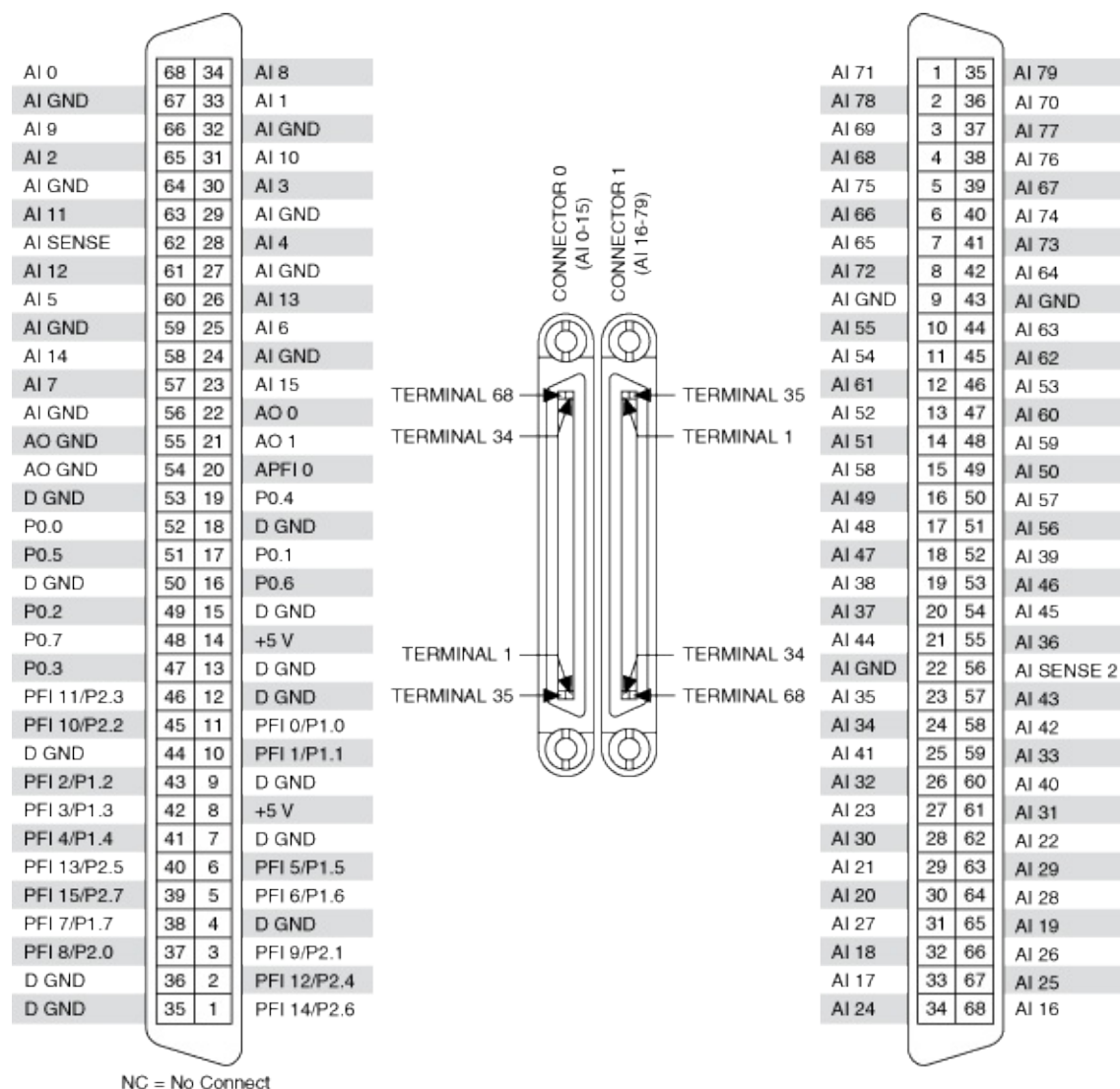
## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

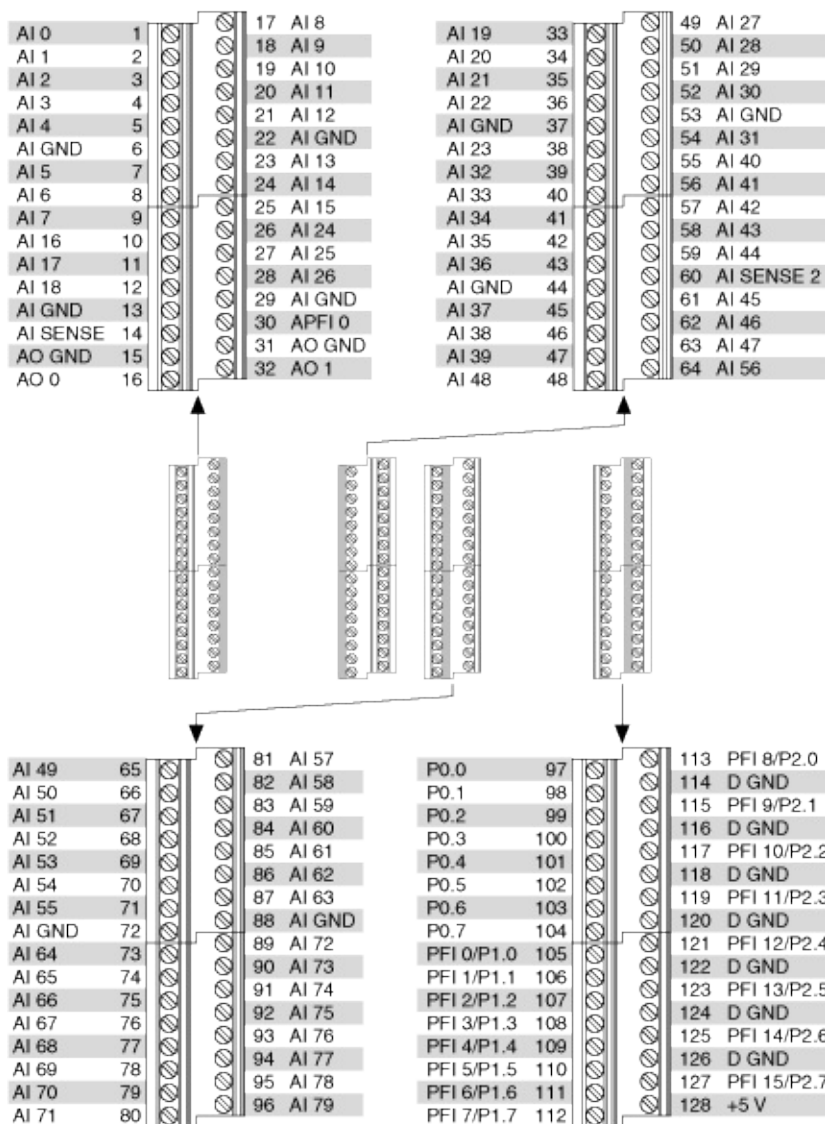
# NI PCI/PXI-6255



## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |

## NI USB-6255 Screw Terminal





## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 113                | PFI 8       |
| CTR 0 GATE           | 115                | PFI 9       |
| CTR 0 AUX            | 117                | PFI 10      |
| CTR 0 OUT            | 121                | PFI 12      |
| CTR 0 A              | 113                | PFI 8       |
| CTR 0 Z              | 115                | PFI 9       |
| CTR 0 B              | 117                | PFI 10      |
| CTR 1 SRC            | 108                | PFI 3       |
| CTR 1 GATE           | 109                | PFI 4       |
| CTR 1 AUX            | 119                | PFI 11      |
| CTR 1 OUT            | 123                | PFI 13      |
| CTR 1 A              | 108                | PFI 3       |
| CTR 1 Z              | 109                | PFI 4       |
| CTR 1 B              | 119                | PFI 11      |
| FREQ OUT             | 125                | PFI 14      |

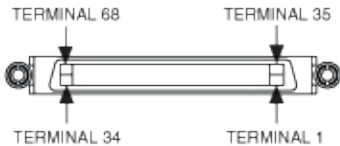


**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6255 Mass Termination

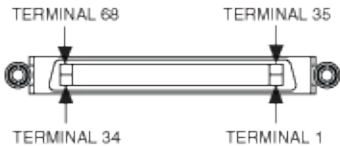
|        |    |    |            |
|--------|----|----|------------|
| AI 24  | 34 | 68 | AI 16      |
| AI 17  | 33 | 67 | AI 25      |
| AI 18  | 32 | 66 | AI 26      |
| AI 27  | 31 | 65 | AI 19      |
| AI 20  | 30 | 64 | AI 28      |
| AI 21  | 29 | 63 | AI 29      |
| AI 30  | 28 | 62 | AI 22      |
| AI 23  | 27 | 61 | AI 31      |
| AI 32  | 26 | 60 | AI 40      |
| AI 41  | 25 | 59 | AI 33      |
| AI 34  | 24 | 58 | AI 42      |
| AI 35  | 23 | 57 | AI 43      |
| AI GND | 22 | 56 | AI SENSE 2 |
| AI 44  | 21 | 55 | AI 36      |
| AI 37  | 20 | 54 | AI 45      |
| AI 38  | 19 | 53 | AI 46      |
| AI 47  | 18 | 52 | AI 39      |
| AI 48  | 17 | 51 | AI 56      |
| AI 49  | 16 | 50 | AI 57      |
| AI 58  | 15 | 49 | AI 50      |
| AI 51  | 14 | 48 | AI 59      |
| AI 52  | 13 | 47 | AI 60      |
| AI 61  | 12 | 46 | AI 53      |
| AI 54  | 11 | 45 | AI 62      |
| AI 55  | 10 | 44 | AI 63      |
| AI GND | 9  | 43 | AI GND     |
| AI 72  | 8  | 42 | AI 64      |
| AI 65  | 7  | 41 | AI 73      |
| AI 66  | 6  | 40 | AI 74      |
| AI 75  | 5  | 39 | AI 67      |
| AI 68  | 4  | 38 | AI 76      |
| AI 69  | 3  | 37 | AI 77      |
| AI 78  | 2  | 36 | AI 70      |
| AI 71  | 1  | 35 | AI 79      |

CONNECTOR 1  
(AI 16-79)



|             |    |    |             |
|-------------|----|----|-------------|
| AI 8        | 34 | 68 | AI 0        |
| AI 1        | 33 | 67 | AI GND      |
| AI GND      | 32 | 66 | AI 9        |
| AI 10       | 31 | 65 | AI 2        |
| AI 3        | 30 | 64 | AI GND      |
| AI GND      | 29 | 63 | AI 11       |
| AI 4        | 28 | 62 | AI SENSE    |
| AI GND      | 27 | 61 | AI 12       |
| AI 13       | 26 | 60 | AI 5        |
| AI 6        | 25 | 59 | AI GND      |
| AI GND      | 24 | 58 | AI 14       |
| AI 15       | 23 | 57 | AI 7        |
| AO 0        | 22 | 56 | AI GND      |
| AO 1        | 21 | 55 | AO GND      |
| APFI 0      | 20 | 54 | AO GND      |
| P0.4        | 19 | 53 | D GND       |
| D GND       | 18 | 52 | P0.0        |
| P0.1        | 17 | 51 | P0.5        |
| P0.6        | 16 | 50 | D GND       |
| D GND       | 15 | 49 | P0.2        |
| +5 V        | 14 | 48 | P0.7        |
| D GND       | 13 | 47 | P0.3        |
| D GND       | 12 | 46 | PFI 11/P2.3 |
| PFI 0/P1.0  | 11 | 45 | PFI 10/P2.2 |
| PFI 1/P1.1  | 10 | 44 | D GND       |
| D GND       | 9  | 43 | PFI 2/P1.2  |
| +5 V        | 8  | 42 | PFI 3/P1.3  |
| D GND       | 7  | 41 | PFI 4/P1.4  |
| PFI 5/P1.5  | 6  | 40 | PFI 13/P2.5 |
| PFI 6/P1.6  | 5  | 39 | PFI 15/P2.7 |
| D GND       | 4  | 38 | PFI 7/P1.7  |
| PFI 9/P2.1  | 3  | 37 | PFI 8/P2.0  |
| PFI 12/P2.4 | 2  | 36 | D GND       |
| PFI 14/P2.6 | 1  | 35 | D GND       |

CONNECTOR 0  
(AI 0-15)



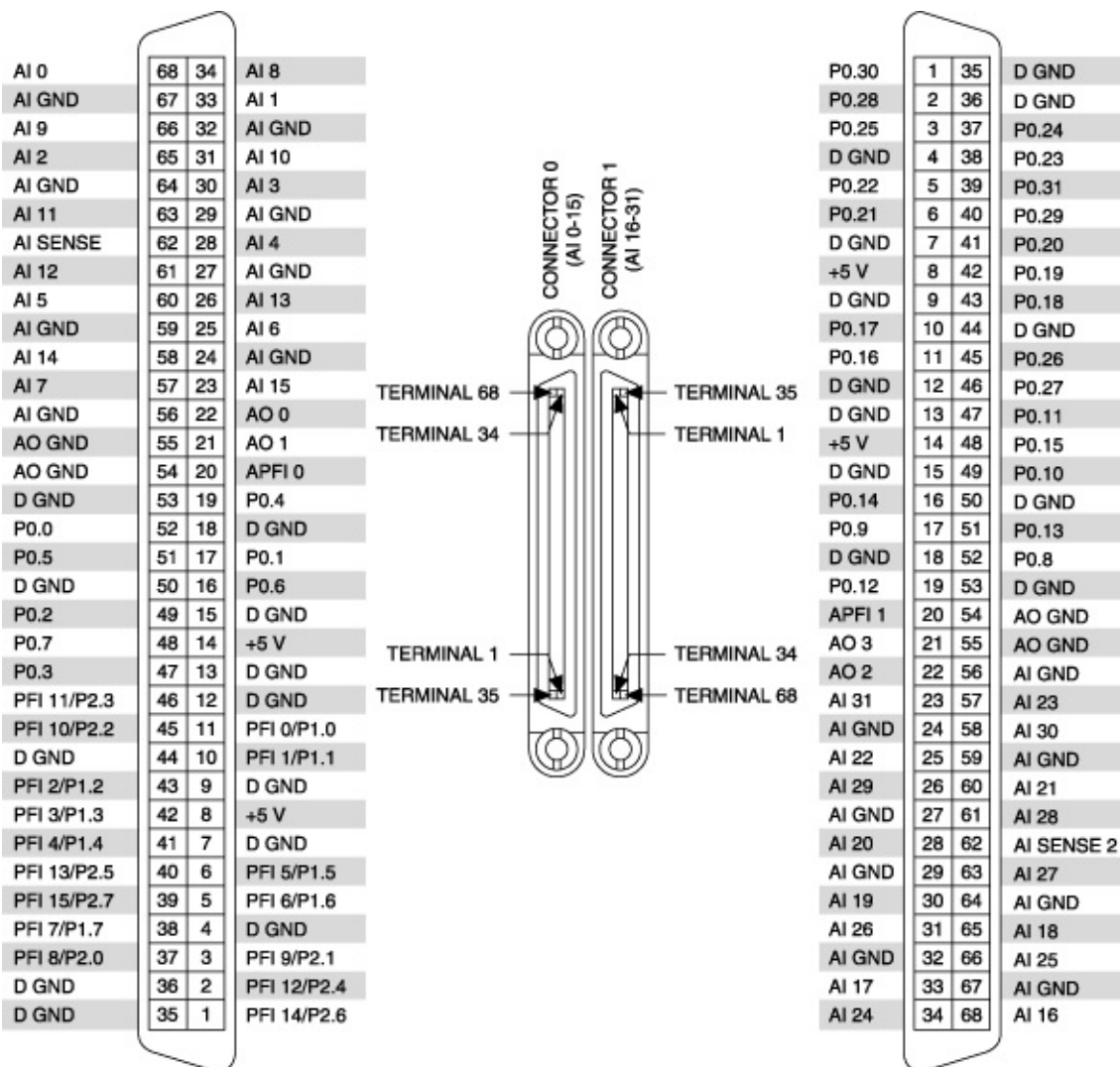
## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PCle/PXI/PXle-6259



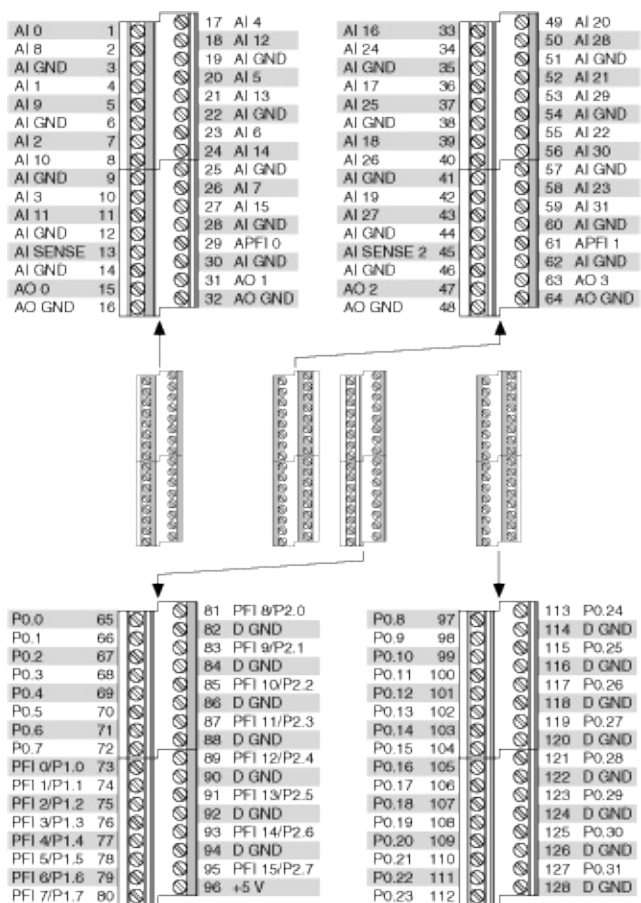
## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6259 Screw Terminal



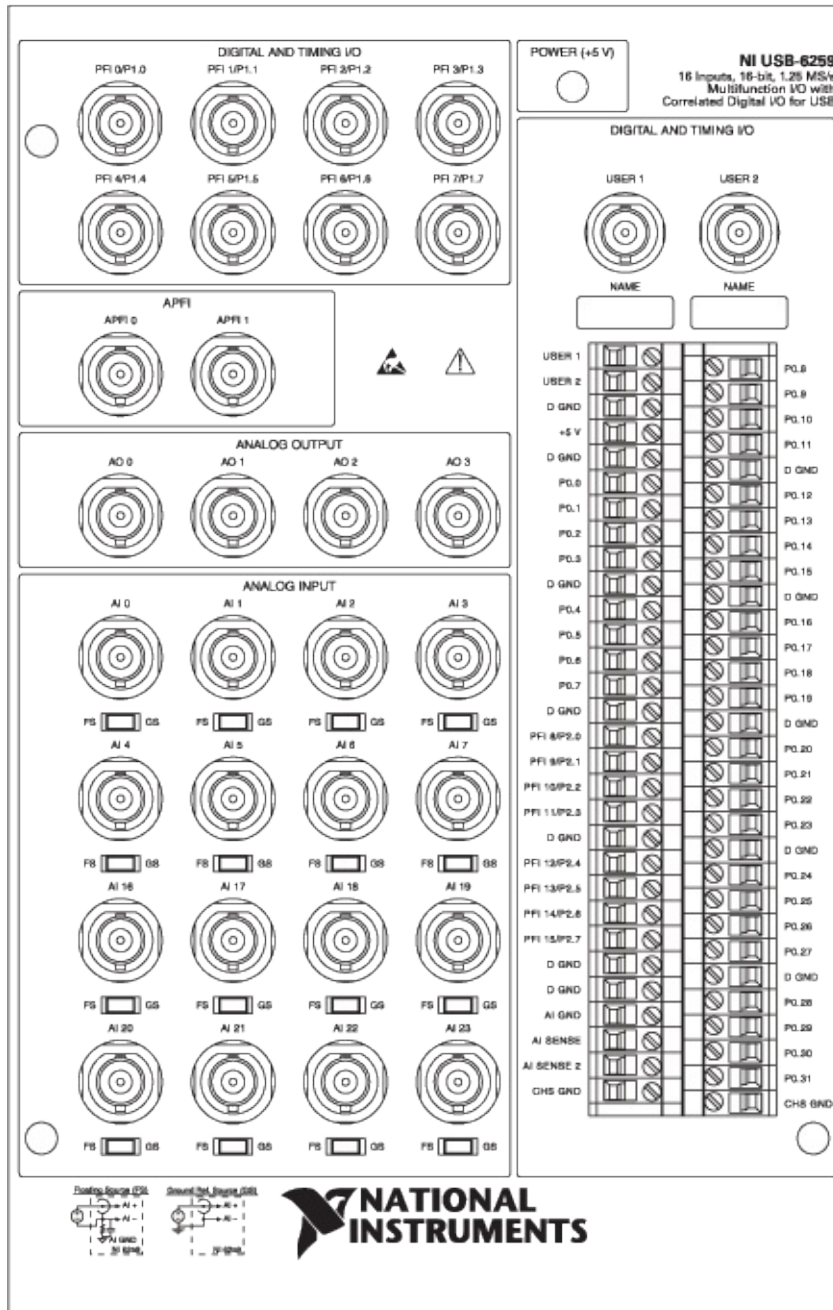
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 81                 | PFI 8       |
| CTR 0 GATE           | 83                 | PFI 9       |
| CTR 0 AUX            | 85                 | PFI 10      |
| CTR 0 OUT            | 89                 | PFI 12      |
| CTR 0 A              | 81                 | PFI 8       |
| CTR 0 Z              | 83                 | PFI 9       |
| CTR 0 B              | 85                 | PFI 10      |
| CTR 1 SRC            | 76                 | PFI 3       |
| CTR 1 GATE           | 77                 | PFI 4       |
| CTR 1 AUX            | 87                 | PFI 11      |
| CTR 1 OUT            | 91                 | PFI 13      |
| CTR 1 A              | 76                 | PFI 3       |
| CTR 1 Z              | 77                 | PFI 4       |
| CTR 1 B              | 87                 | PFI 11      |
| FREQ OUT             | 93                 | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6259 BNC





## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Signal Name |
|----------------------|-------------|
| CTR 0 SRC            | PFI 8       |
| CTR 0 GATE           | PFI 9       |
| CTR 0 AUX            | PFI 10      |
| CTR 0 OUT            | PFI 12      |
| CTR 0 A              | PFI 8       |
| CTR 0 Z              | PFI 9       |
| CTR 0 B              | PFI 10      |
| CTR 1 SRC            | PFI 3       |
| CTR 1 GATE           | PFI 4       |
| CTR 1 AUX            | PFI 11      |
| CTR 1 OUT            | PFI 13      |
| CTR 1 A              | PFI 3       |
| CTR 1 Z              | PFI 4       |
| CTR 1 B              | PFI 11      |
| FREQ OUT             | PFI 14      |

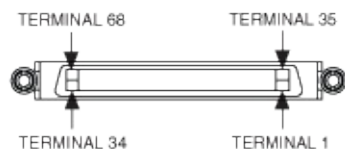


**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6259 Mass Termination

|             |    |    |             |
|-------------|----|----|-------------|
| AI 8        | 34 | 68 | AI 0        |
| AI 1        | 33 | 67 | AI GND      |
| AI GND      | 32 | 66 | AI 9        |
| AI 10       | 31 | 65 | AI 2        |
| AI 3        | 30 | 64 | AI GND      |
| AI GND      | 29 | 63 | AI 11       |
| AI 4        | 28 | 62 | AI SENSE    |
| AI GND      | 27 | 61 | AI 12       |
| AI 13       | 26 | 60 | AI 5        |
| AI 6        | 25 | 59 | AI GND      |
| AI GND      | 24 | 58 | AI 14       |
| AI 15       | 23 | 57 | AI 7        |
| AO 0        | 22 | 56 | AI GND      |
| AO 1        | 21 | 55 | AO GND      |
| APFI 0      | 20 | 54 | AO GND      |
| P0.4        | 19 | 53 | D GND       |
| D GND       | 18 | 52 | P0.0        |
| P0.1        | 17 | 51 | P0.5        |
| P0.6        | 16 | 50 | D GND       |
| D GND       | 15 | 49 | P0.2        |
| +5 V        | 14 | 48 | P0.7        |
| D GND       | 13 | 47 | P0.3        |
| D GND       | 12 | 46 | PFI 11/P2.3 |
| PFI 0/P1.0  | 11 | 45 | PFI 10/P2.2 |
| PFI 1/P1.1  | 10 | 44 | D GND       |
| D GND       | 9  | 43 | PFI 2/P1.2  |
| +5 V        | 8  | 42 | PFI 3/P1.3  |
| D GND       | 7  | 41 | PFI 4/P1.4  |
| PFI 5/P1.5  | 6  | 40 | PFI 13/P2.5 |
| PFI 6/P1.6  | 5  | 39 | PFI 15/P2.7 |
| D GND       | 4  | 38 | PFI 7/P1.7  |
| PFI 9/P2.1  | 3  | 37 | PFI 8/P2.0  |
| PFI 12/P2.4 | 2  | 36 | D GND       |
| PFI 14/P2.6 | 1  | 35 | D GND       |

CONNECTOR 0  
(AI 0–15)



|        |    |    |            |
|--------|----|----|------------|
| AI 24  | 34 | 68 | AI 16      |
| AI 17  | 33 | 67 | AI GND     |
| AI GND | 32 | 66 | AI 25      |
| AI 26  | 31 | 65 | AI 18      |
| AI 19  | 30 | 64 | AI GND     |
| AI GND | 29 | 63 | AI 27      |
| AI 20  | 28 | 62 | AI SENSE 2 |
| AI GND | 27 | 61 | AI 28      |
| AI 29  | 26 | 60 | AI 21      |
| AI 22  | 25 | 59 | AI GND     |
| AI GND | 24 | 58 | AI 30      |
| AI 31  | 23 | 57 | AI 23      |
| AO 2   | 22 | 56 | AI GND     |
| AO 3   | 21 | 55 | AO GND     |
| APFI 1 | 20 | 54 | AO GND     |
| P0.12  | 19 | 53 | D GND      |
| D GND  | 18 | 52 | P0.8       |
| P0.9   | 17 | 51 | P0.13      |
| P0.14  | 16 | 50 | D GND      |
| D GND  | 15 | 49 | P0.10      |
| +5 V   | 14 | 48 | P0.15      |
| D GND  | 13 | 47 | P0.11      |
| D GND  | 12 | 46 | P0.27      |
| P0.16  | 11 | 45 | P0.26      |
| P0.17  | 10 | 44 | D GND      |
| D GND  | 9  | 43 | P0.18      |
| +5 V   | 8  | 42 | P0.19      |
| D GND  | 7  | 41 | P0.20      |
| P0.21  | 6  | 40 | P0.29      |
| P0.22  | 5  | 39 | P0.31      |
| D GND  | 4  | 38 | P0.23      |
| P0.25  | 3  | 37 | P0.24      |
| P0.28  | 2  | 36 | D GND      |
| P0.30  | 1  | 35 | D GND      |

CONNECTOR 1  
(AI 16–31)



## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |

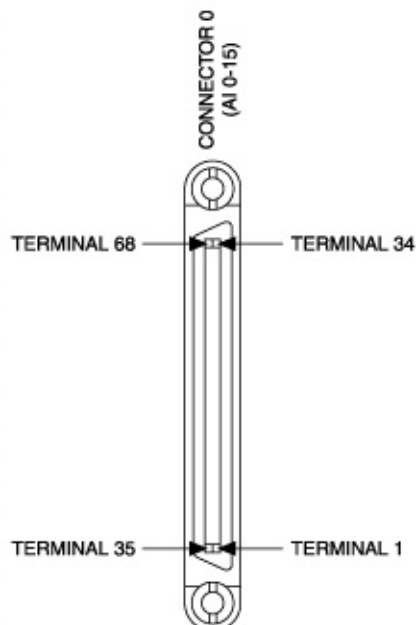


**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6280

|             |    |    |             |
|-------------|----|----|-------------|
| AI 0        | 68 | 34 | AI 8        |
| AI GND      | 67 | 33 | AI 1        |
| AI 9        | 66 | 32 | AI GND      |
| AI 2        | 65 | 31 | AI 10       |
| AI GND      | 64 | 30 | AI 3        |
| AI 11       | 63 | 29 | AI GND      |
| AI SENSE    | 62 | 28 | AI 4        |
| AI 12       | 61 | 27 | AI GND      |
| AI 5        | 60 | 26 | AI 13       |
| AI GND      | 59 | 25 | AI 6        |
| AI 14       | 58 | 24 | AI GND      |
| AI 7        | 57 | 23 | AI 15       |
| AI GND      | 56 | 22 | NC          |
| NC          | 55 | 21 | NC          |
| NC          | 54 | 20 | APFI 0      |
| D GND       | 53 | 19 | P0.4        |
| P0.0        | 52 | 18 | D GND       |
| P0.5        | 51 | 17 | P0.1        |
| D GND       | 50 | 16 | P0.6        |
| P0.2        | 49 | 15 | D GND       |
| P0.7        | 48 | 14 | +5 V        |
| P0.3        | 47 | 13 | D GND       |
| PFI 11/P2.3 | 46 | 12 | D GND       |
| PFI 10/P2.2 | 45 | 11 | PFI 0/P1.0  |
| D GND       | 44 | 10 | PFI 1/P1.1  |
| PFI 2/P1.2  | 43 | 9  | D GND       |
| PFI 3/P1.3  | 42 | 8  | +5 V        |
| PFI 4/P1.4  | 41 | 7  | D GND       |
| PFI 13/P2.5 | 40 | 6  | PFI 5/P1.5  |
| PFI 15/P2.7 | 39 | 5  | PFI 6/P1.6  |
| PFI 7/P1.7  | 38 | 4  | D GND       |
| PFI 8/P2.0  | 37 | 3  | PFI 9/P2.1  |
| D GND       | 36 | 2  | PFI 12/P2.4 |
| D GND       | 35 | 1  | PFI 14/P2.6 |

NC = No Connect



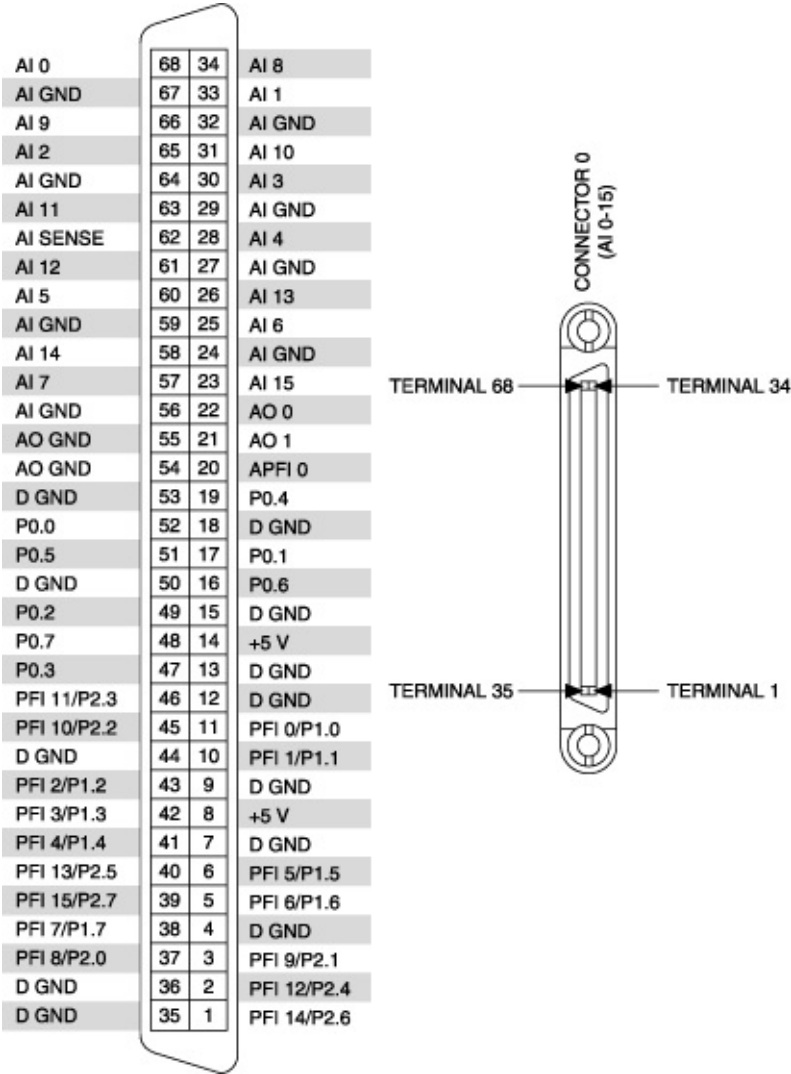
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

NI PCI/PXI-6281



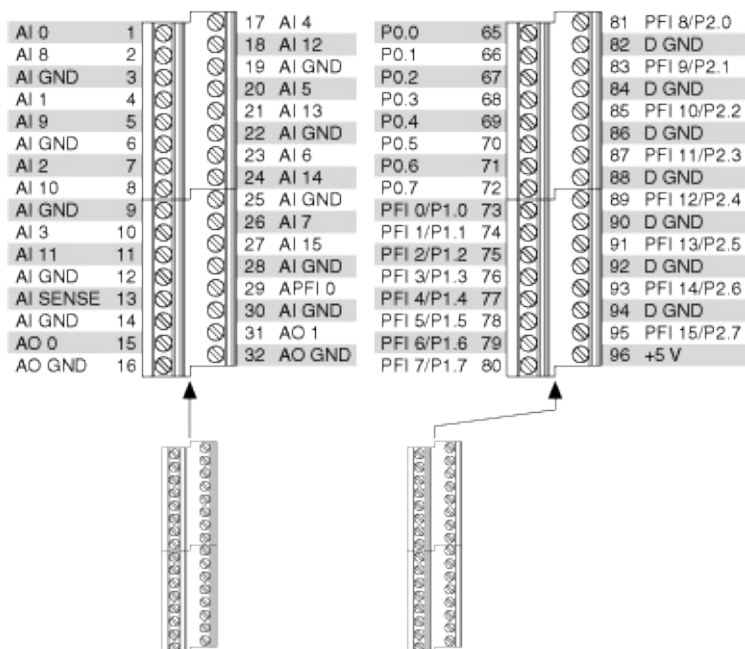
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

## NI USB-6281 Screw Terminal





## Default NI-DAQmx Counter Terminals

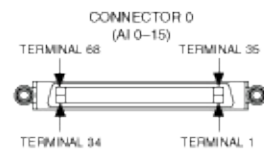
| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 81                 | PFI 8       |
| CTR 0 GATE           | 83                 | PFI 9       |
| CTR 0 AUX            | 85                 | PFI 10      |
| CTR 0 OUT            | 89                 | PFI 12      |
| CTR 0 A              | 81                 | PFI 8       |
| CTR 0 Z              | 83                 | PFI 9       |
| CTR 0 B              | 85                 | PFI 10      |
| CTR 1 SRC            | 76                 | PFI 3       |
| CTR 1 GATE           | 77                 | PFI 4       |
| CTR 1 AUX            | 87                 | PFI 11      |
| CTR 1 OUT            | 91                 | PFI 13      |
| CTR 1 A              | 76                 | PFI 3       |
| CTR 1 Z              | 77                 | PFI 4       |
| CTR 1 B              | 87                 | PFI 11      |
| FREQ OUT             | 93                 | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6281 Mass Termination

|             |    |    |             |
|-------------|----|----|-------------|
| AI 8        | 34 | 68 | AI 0        |
| AI 1        | 33 | 67 | AI GND      |
| AI GND      | 32 | 66 | AI 9        |
| AI 10       | 31 | 65 | AI 2        |
| AI 3        | 30 | 64 | AI GND      |
| AI GND      | 29 | 63 | AI 11       |
| AI 4        | 28 | 62 | AI SENSE    |
| AI GND      | 27 | 61 | AI 12       |
| AI 13       | 26 | 60 | AI 5        |
| AI 6        | 25 | 59 | AI GND      |
| AI GND      | 24 | 58 | AI 14       |
| AI 15       | 23 | 57 | AI 7        |
| AO 0        | 22 | 56 | AI GND      |
| AO 1        | 21 | 55 | AO GND      |
| APFI 0      | 20 | 54 | AO GND      |
| P0.4        | 19 | 53 | D GND       |
| D GND       | 18 | 52 | P0.0        |
| P0.1        | 17 | 51 | P0.5        |
| P0.6        | 16 | 50 | D GND       |
| D GND       | 15 | 49 | P0.2        |
| +5 V        | 14 | 48 | P0.7        |
| D GND       | 13 | 47 | P0.3        |
| D GND       | 12 | 46 | PFI 11/P2.3 |
| PFI 0/P1.0  | 11 | 45 | PFI 10/P2.2 |
| PFI 1/P1.1  | 10 | 44 | D GND       |
| D GND       | 9  | 43 | PFI 2/P1.2  |
| +5 V        | 8  | 42 | PFI 3/P1.3  |
| D GND       | 7  | 41 | PFI 4/P1.4  |
| PFI 5/P1.5  | 6  | 40 | PFI 13/P2.5 |
| PFI 6/P1.6  | 5  | 39 | PFI 15/P2.7 |
| D GND       | 4  | 38 | PFI 7/P1.7  |
| PFI 9/P2.1  | 3  | 37 | PFI 8/P2.0  |
| PFI 12/P2.4 | 2  | 36 | D GND       |
| PFI 14/P2.6 | 1  | 35 | D GND       |



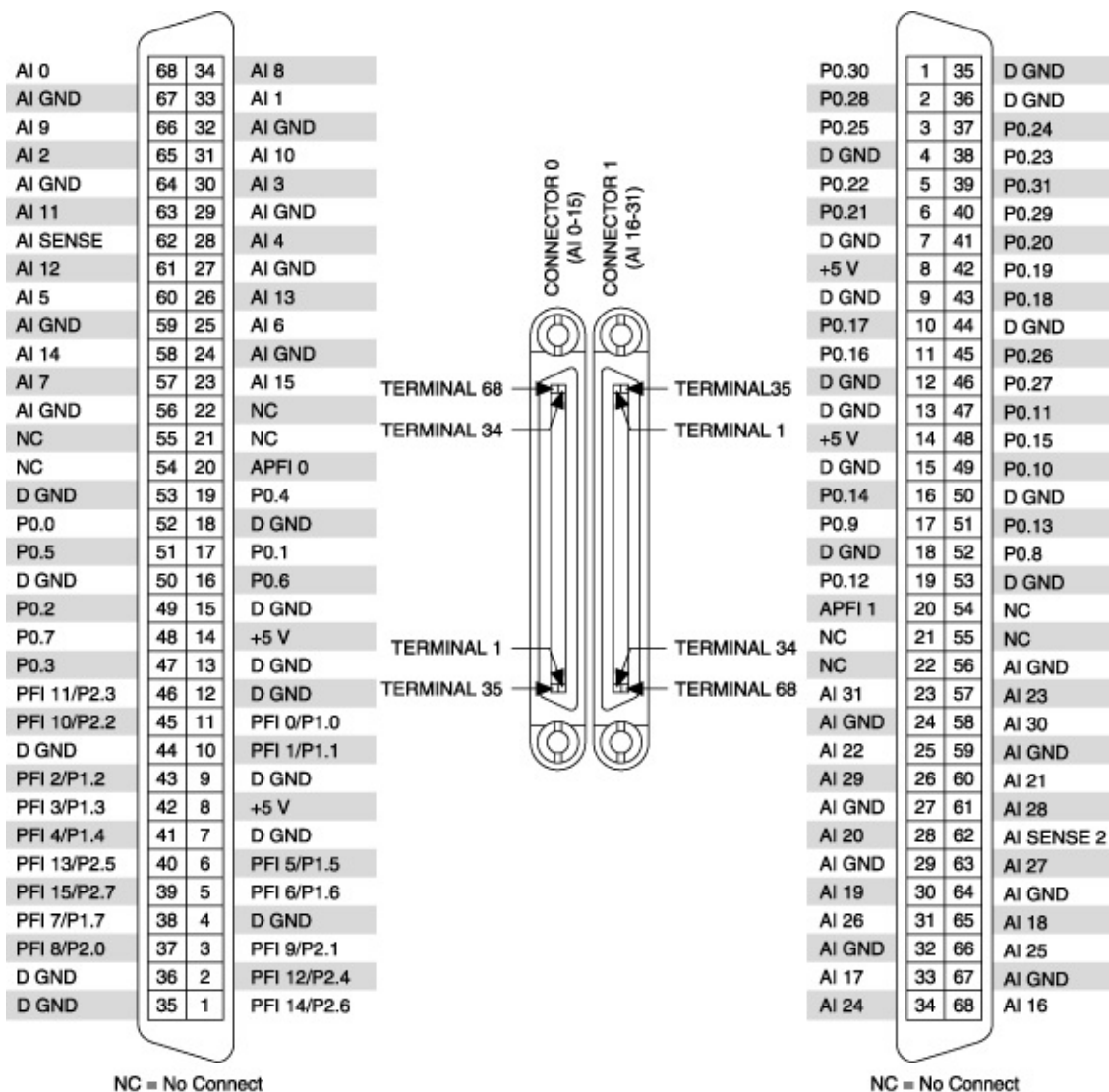
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6284



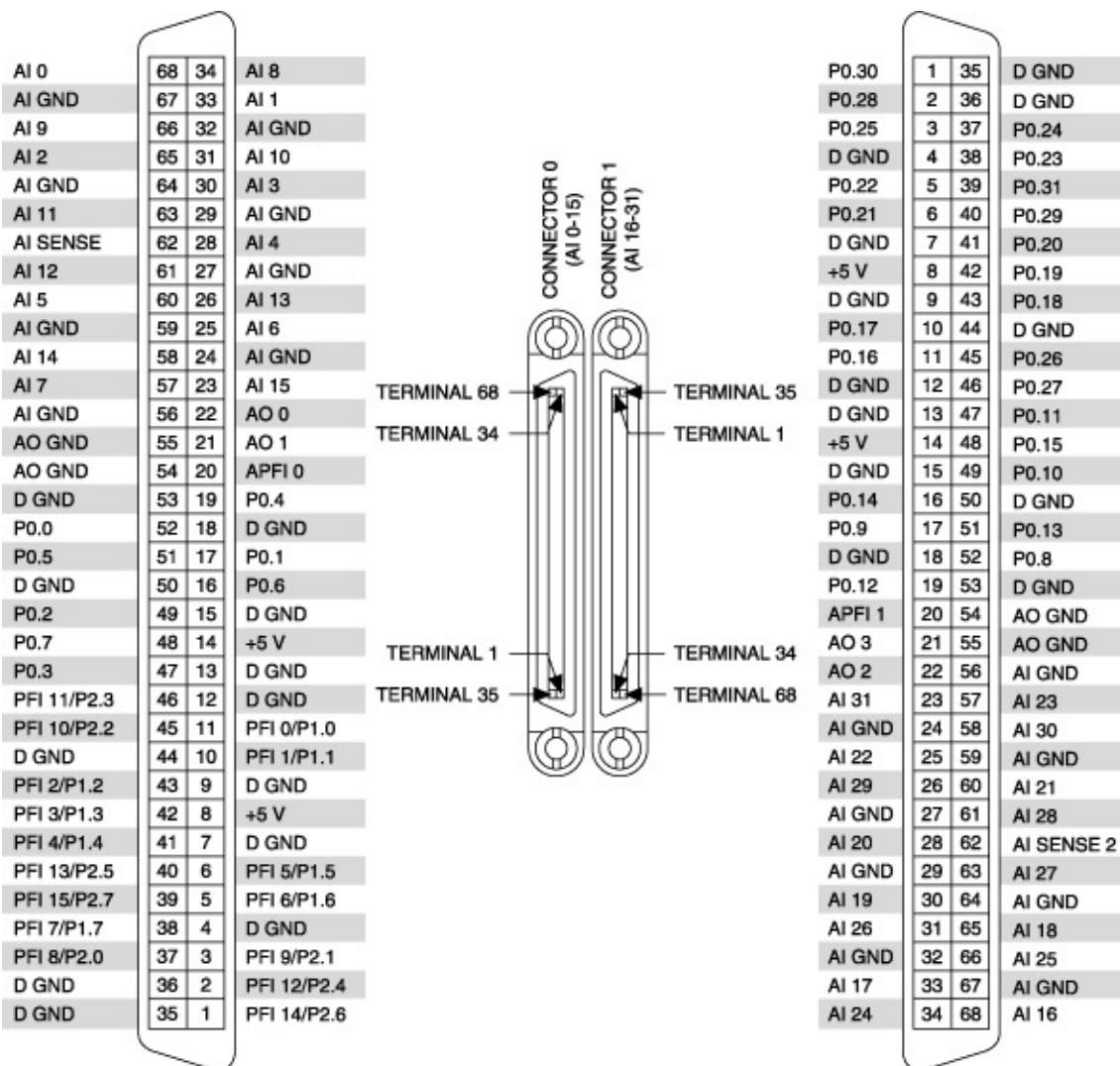
## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI PCI/PXI-6289



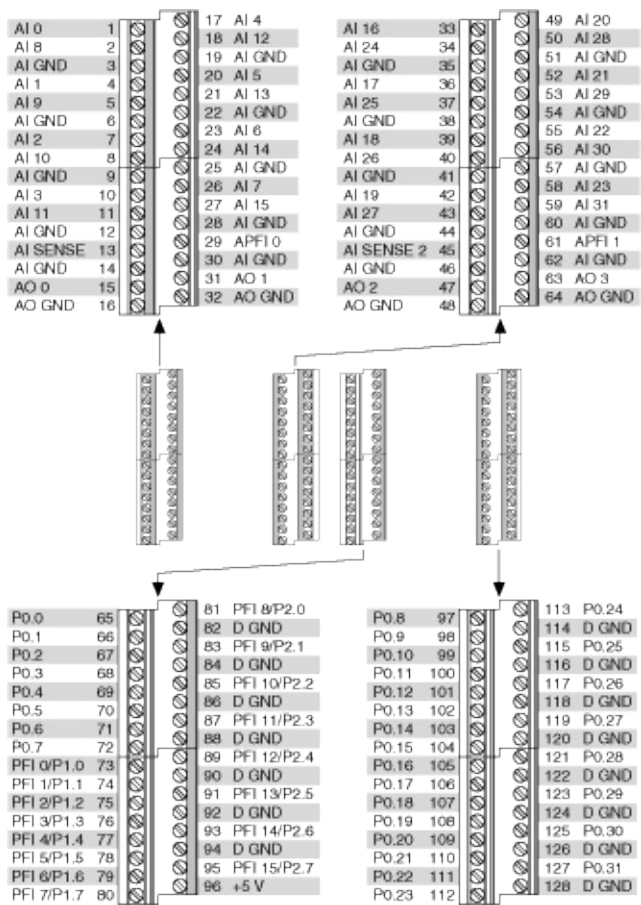
## Default NI-DAQmx Counter Terminals (Connector 0)

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6289 Screw Terminal





## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 81                 | PFI 8       |
| CTR 0 GATE           | 83                 | PFI 9       |
| CTR 0 AUX            | 85                 | PFI 10      |
| CTR 0 OUT            | 89                 | PFI 12      |
| CTR 0 A              | 81                 | PFI 8       |
| CTR 0 Z              | 83                 | PFI 9       |
| CTR 0 B              | 85                 | PFI 10      |
| CTR 1 SRC            | 76                 | PFI 3       |
| CTR 1 GATE           | 77                 | PFI 4       |
| CTR 1 AUX            | 87                 | PFI 11      |
| CTR 1 OUT            | 91                 | PFI 13      |
| CTR 1 A              | 76                 | PFI 3       |
| CTR 1 Z              | 77                 | PFI 4       |
| CTR 1 B              | 87                 | PFI 11      |
| FREQ OUT             | 93                 | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

# NI USB-6289 Mass Termination



## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 37                 | PFI 8       |
| CTR 0 GATE           | 3                  | PFI 9       |
| CTR 0 AUX            | 45                 | PFI 10      |
| CTR 0 OUT            | 2                  | PFI 12      |
| CTR 0 A              | 37                 | PFI 8       |
| CTR 0 Z              | 3                  | PFI 9       |
| CTR 0 B              | 45                 | PFI 10      |
| CTR 1 SRC            | 42                 | PFI 3       |
| CTR 1 GATE           | 41                 | PFI 4       |
| CTR 1 AUX            | 46                 | PFI 11      |
| CTR 1 OUT            | 40                 | PFI 13      |
| CTR 1 A              | 42                 | PFI 3       |
| CTR 1 Z              | 41                 | PFI 4       |
| CTR 1 B              | 46                 | PFI 11      |
| FREQ OUT             | 1                  | PFI 14      |



**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

## NI 6503

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|      |    |    |     |
|------|----|----|-----|
| P2.7 | 1  | 2  | GND |
| P2.6 | 3  | 4  | GND |
| P2.5 | 5  | 6  | GND |
| P2.4 | 7  | 8  | GND |
| P2.3 | 9  | 10 | GND |
| P2.2 | 11 | 12 | GND |
| P2.1 | 13 | 14 | GND |
| P2.0 | 15 | 16 | GND |
| P1.7 | 17 | 18 | GND |
| P1.6 | 19 | 20 | GND |
| P1.5 | 21 | 22 | GND |
| P1.4 | 23 | 24 | GND |
| P1.3 | 25 | 26 | GND |
| P1.2 | 27 | 28 | GND |
| P1.1 | 29 | 30 | GND |
| P1.0 | 31 | 32 | GND |
| P0.7 | 33 | 34 | GND |
| P0.6 | 35 | 36 | GND |
| P0.5 | 37 | 38 | GND |
| P0.4 | 39 | 40 | GND |
| P0.3 | 41 | 42 | GND |
| P0.2 | 43 | 44 | GND |
| P0.1 | 45 | 46 | GND |
| P0.0 | 47 | 48 | GND |
| +5 V | 49 | 50 | GND |

## NI 6508

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|      |    |     |       |
|------|----|-----|-------|
| P2.7 | 1  | 51  | P8.7  |
| P5.7 | 2  | 52  | P11.7 |
| P2.6 | 3  | 53  | P8.6  |
| P5.6 | 4  | 54  | P11.6 |
| P2.5 | 5  | 55  | P8.5  |
| P5.5 | 6  | 56  | P11.5 |
| P2.4 | 7  | 57  | P8.4  |
| P5.4 | 8  | 58  | P11.4 |
| P2.3 | 9  | 59  | P8.3  |
| P5.3 | 10 | 60  | P11.3 |
| P2.2 | 11 | 61  | P8.2  |
| P5.2 | 12 | 62  | P11.2 |
| P2.1 | 13 | 63  | P8.1  |
| P5.1 | 14 | 64  | P11.1 |
| P2.0 | 15 | 65  | P8.0  |
| P5.0 | 16 | 66  | P11.0 |
| P1.7 | 17 | 67  | P7.7  |
| P4.7 | 18 | 68  | P10.7 |
| P1.6 | 19 | 69  | P7.6  |
| P4.6 | 20 | 70  | P10.6 |
| P1.5 | 21 | 71  | P7.5  |
| P4.5 | 22 | 72  | P10.5 |
| P1.4 | 23 | 73  | P7.4  |
| P4.4 | 24 | 74  | P10.4 |
| P1.3 | 25 | 75  | P7.3  |
| P4.3 | 26 | 76  | P10.3 |
| P1.2 | 27 | 77  | P7.2  |
| P4.2 | 28 | 78  | P10.2 |
| P1.1 | 29 | 79  | P7.1  |
| P4.1 | 30 | 80  | P10.1 |
| P1.0 | 31 | 81  | P7.0  |
| P4.0 | 32 | 82  | P10.0 |
| P0.7 | 33 | 83  | P6.7  |
| P3.7 | 34 | 84  | P9.7  |
| P0.6 | 35 | 85  | P6.6  |
| P3.6 | 36 | 86  | P9.6  |
| P0.5 | 37 | 87  | P6.5  |
| P3.5 | 38 | 88  | P9.5  |
| P0.4 | 39 | 89  | P6.4  |
| P3.4 | 40 | 90  | P9.4  |
| P0.3 | 41 | 91  | P6.3  |
| P3.3 | 42 | 92  | P9.3  |
| P0.2 | 43 | 93  | P6.2  |
| P3.2 | 44 | 94  | P9.2  |
| P0.1 | 45 | 95  | P6.1  |
| P3.1 | 46 | 96  | P9.1  |
| P0.0 | 47 | 97  | P6.0  |
| P3.0 | 48 | 98  | P9.0  |
| +5 V | 49 | 99  | +5 V  |
| GND  | 50 | 100 | GND   |

## NI USB-6509

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## NI USB-6509 with the SH100-100-F Cable

|      |    |     |       |
|------|----|-----|-------|
| P2.7 | 1  | 51  | P8.7  |
| P5.7 | 2  | 52  | P11.7 |
| P2.6 | 3  | 53  | P8.6  |
| P5.6 | 4  | 54  | P11.6 |
| P2.5 | 5  | 55  | P8.5  |
| P5.5 | 6  | 56  | P11.5 |
| P2.4 | 7  | 57  | P8.4  |
| P5.4 | 8  | 58  | P11.4 |
| P2.3 | 9  | 59  | P8.3  |
| P5.3 | 10 | 60  | P11.3 |
| P2.2 | 11 | 61  | P8.2  |
| P5.2 | 12 | 62  | P11.2 |
| P2.1 | 13 | 63  | P8.1  |
| P5.1 | 14 | 64  | P11.1 |
| P2.0 | 15 | 65  | P8.0  |
| P5.0 | 16 | 66  | P11.0 |
| P1.7 | 17 | 67  | P7.7  |
| P4.7 | 18 | 68  | P10.7 |
| P1.6 | 19 | 69  | P7.6  |
| P4.6 | 20 | 70  | P10.6 |
| P1.5 | 21 | 71  | P7.5  |
| P4.5 | 22 | 72  | P10.5 |
| P1.4 | 23 | 73  | P7.4  |
| P4.4 | 24 | 74  | P10.4 |
| P1.3 | 25 | 75  | P7.3  |
| P4.3 | 26 | 76  | P10.3 |
| P1.2 | 27 | 77  | P7.2  |
| P4.2 | 28 | 78  | P10.2 |
| P1.1 | 29 | 79  | P7.1  |
| P4.1 | 30 | 80  | P10.1 |
| P1.0 | 31 | 81  | P7.0  |
| P4.0 | 32 | 82  | P10.0 |
| P0.7 | 33 | 83  | P6.7  |
| P3.7 | 34 | 84  | P9.7  |
| P0.6 | 35 | 85  | P6.6  |
| P3.6 | 36 | 86  | P9.6  |
| P0.5 | 37 | 87  | P6.5  |
| P3.5 | 38 | 88  | P9.5  |
| P0.4 | 39 | 89  | P6.4  |
| P3.4 | 40 | 90  | P9.4  |
| P0.3 | 41 | 91  | P6.3  |
| P3.3 | 42 | 92  | P9.3  |
| P0.2 | 43 | 93  | P6.2  |
| P3.2 | 44 | 94  | P9.2  |
| P0.1 | 45 | 95  | P6.1  |
| P3.1 | 46 | 96  | P9.1  |
| P0.0 | 47 | 97  | P6.0  |
| P3.0 | 48 | 98  | P9.0  |
| +5 V | 49 | 99  | +5 V  |
| GND  | 50 | 100 | GND   |



# NI USB-6509 with the R1005050 Cable

Positions 1 through 50

|      |    |    |      |
|------|----|----|------|
| P2.7 | 1  | 2  | P5.7 |
| P2.6 | 3  | 4  | P5.6 |
| P2.5 | 5  | 6  | P5.5 |
| P2.4 | 7  | 8  | P5.4 |
| P2.3 | 9  | 10 | P5.3 |
| P2.2 | 11 | 12 | P5.2 |
| P2.1 | 13 | 14 | P5.1 |
| P2.0 | 15 | 16 | P5.0 |
| P1.7 | 17 | 18 | P4.7 |
| P1.6 | 19 | 20 | P4.6 |
| P1.5 | 21 | 22 | P4.5 |
| P1.4 | 23 | 24 | P4.4 |
| P1.3 | 25 | 26 | P4.3 |
| P1.2 | 27 | 28 | P4.2 |
| P1.1 | 29 | 30 | P4.1 |
| P1.0 | 31 | 32 | P4.0 |
| P0.7 | 33 | 34 | P3.7 |
| P0.6 | 35 | 36 | P3.6 |
| P0.5 | 37 | 38 | P3.5 |
| P0.4 | 39 | 40 | P3.4 |
| P0.3 | 41 | 42 | P3.3 |
| P0.2 | 43 | 44 | P3.2 |
| P0.1 | 45 | 46 | P3.1 |
| P0.0 | 47 | 48 | P3.0 |
| +5 V | 49 | 50 | GND  |

Positions 51 through 100

|      |    |    |       |
|------|----|----|-------|
| P8.7 | 1  | 2  | P11.7 |
| P8.6 | 3  | 4  | P11.6 |
| P8.5 | 5  | 6  | P11.5 |
| P8.4 | 7  | 8  | P11.4 |
| P8.3 | 9  | 10 | P11.3 |
| P8.2 | 11 | 12 | P11.2 |
| P8.1 | 13 | 14 | P11.1 |
| P8.0 | 15 | 16 | P11.0 |
| P7.7 | 17 | 18 | P10.7 |
| P7.6 | 19 | 20 | P10.6 |
| P7.5 | 21 | 22 | P10.5 |
| P7.4 | 23 | 24 | P10.4 |
| P7.3 | 25 | 26 | P10.3 |
| P7.2 | 27 | 28 | P10.2 |
| P7.1 | 29 | 30 | P10.1 |
| P7.0 | 31 | 32 | P10.0 |
| P6.7 | 33 | 34 | P9.7  |
| P6.6 | 35 | 36 | P9.6  |
| P6.5 | 37 | 38 | P9.5  |
| P6.4 | 39 | 40 | P9.4  |
| P6.3 | 41 | 42 | P9.3  |
| P6.2 | 43 | 44 | P9.2  |
| P6.1 | 45 | 46 | P9.1  |
| P6.0 | 47 | 48 | P9.0  |
| +5 V | 49 | 50 | GND   |

## NI 6509

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## NI 6509 with the SH100-100-F Cable

|      |    |     |       |
|------|----|-----|-------|
| P2.7 | 1  | 51  | P8.7  |
| P5.7 | 2  | 52  | P11.7 |
| P2.6 | 3  | 53  | P8.6  |
| P5.6 | 4  | 54  | P11.6 |
| P2.5 | 5  | 55  | P8.5  |
| P5.5 | 6  | 56  | P11.5 |
| P2.4 | 7  | 57  | P8.4  |
| P5.4 | 8  | 58  | P11.4 |
| P2.3 | 9  | 59  | P8.3  |
| P5.3 | 10 | 60  | P11.3 |
| P2.2 | 11 | 61  | P8.2  |
| P5.2 | 12 | 62  | P11.2 |
| P2.1 | 13 | 63  | P8.1  |
| P5.1 | 14 | 64  | P11.1 |
| P2.0 | 15 | 65  | P8.0  |
| P5.0 | 16 | 66  | P11.0 |
| P1.7 | 17 | 67  | P7.7  |
| P4.7 | 18 | 68  | P10.7 |
| P1.6 | 19 | 69  | P7.6  |
| P4.6 | 20 | 70  | P10.6 |
| P1.5 | 21 | 71  | P7.5  |
| P4.5 | 22 | 72  | P10.5 |
| P1.4 | 23 | 73  | P7.4  |
| P4.4 | 24 | 74  | P10.4 |
| P1.3 | 25 | 75  | P7.3  |
| P4.3 | 26 | 76  | P10.3 |
| P1.2 | 27 | 77  | P7.2  |
| P4.2 | 28 | 78  | P10.2 |
| P1.1 | 29 | 79  | P7.1  |
| P4.1 | 30 | 80  | P10.1 |
| P1.0 | 31 | 81  | P7.0  |
| P4.0 | 32 | 82  | P10.0 |
| P0.7 | 33 | 83  | P6.7  |
| P3.7 | 34 | 84  | P9.7  |
| P0.6 | 35 | 85  | P6.6  |
| P3.6 | 36 | 86  | P9.6  |
| P0.5 | 37 | 87  | P6.5  |
| P3.5 | 38 | 88  | P9.5  |
| P0.4 | 39 | 89  | P6.4  |
| P3.4 | 40 | 90  | P9.4  |
| P0.3 | 41 | 91  | P6.3  |
| P3.3 | 42 | 92  | P9.3  |
| P0.2 | 43 | 93  | P6.2  |
| P3.2 | 44 | 94  | P9.2  |
| P0.1 | 45 | 95  | P6.1  |
| P3.1 | 46 | 96  | P9.1  |
| P0.0 | 47 | 97  | P6.0  |
| P3.0 | 48 | 98  | P9.0  |
| +5 V | 49 | 99  | +5 V  |
| GND  | 50 | 100 | GND   |

# NI 6509 with the R1005050 Cable

Positions 1 through 50

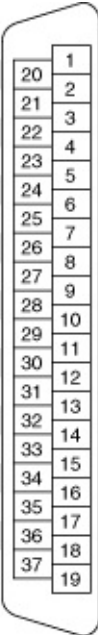
|      |    |    |      |
|------|----|----|------|
| P2.7 | 1  | 2  | P5.7 |
| P2.6 | 3  | 4  | P5.6 |
| P2.5 | 5  | 6  | P5.5 |
| P2.4 | 7  | 8  | P5.4 |
| P2.3 | 9  | 10 | P5.3 |
| P2.2 | 11 | 12 | P5.2 |
| P2.1 | 13 | 14 | P5.1 |
| P2.0 | 15 | 16 | P5.0 |
| P1.7 | 17 | 18 | P4.7 |
| P1.6 | 19 | 20 | P4.6 |
| P1.5 | 21 | 22 | P4.5 |
| P1.4 | 23 | 24 | P4.4 |
| P1.3 | 25 | 26 | P4.3 |
| P1.2 | 27 | 28 | P4.2 |
| P1.1 | 29 | 30 | P4.1 |
| P1.0 | 31 | 32 | P4.0 |
| P0.7 | 33 | 34 | P3.7 |
| P0.6 | 35 | 36 | P3.6 |
| P0.5 | 37 | 38 | P3.5 |
| P0.4 | 39 | 40 | P3.4 |
| P0.3 | 41 | 42 | P3.3 |
| P0.2 | 43 | 44 | P3.2 |
| P0.1 | 45 | 46 | P3.1 |
| P0.0 | 47 | 48 | P3.0 |
| +5 V | 49 | 50 | GND  |

Positions 51 through 100

|      |    |    |       |
|------|----|----|-------|
| P8.7 | 1  | 2  | P11.7 |
| P8.6 | 3  | 4  | P11.6 |
| P8.5 | 5  | 6  | P11.5 |
| P8.4 | 7  | 8  | P11.4 |
| P8.3 | 9  | 10 | P11.3 |
| P8.2 | 11 | 12 | P11.2 |
| P8.1 | 13 | 14 | P11.1 |
| P8.0 | 15 | 16 | P11.0 |
| P7.7 | 17 | 18 | P10.7 |
| P7.6 | 19 | 20 | P10.6 |
| P7.5 | 21 | 22 | P10.5 |
| P7.4 | 23 | 24 | P10.4 |
| P7.3 | 25 | 26 | P10.3 |
| P7.2 | 27 | 28 | P10.2 |
| P7.1 | 29 | 30 | P10.1 |
| P7.0 | 31 | 32 | P10.0 |
| P6.7 | 33 | 34 | P9.7  |
| P6.6 | 35 | 36 | P9.6  |
| P6.5 | 37 | 38 | P9.5  |
| P6.4 | 39 | 40 | P9.4  |
| P6.3 | 41 | 42 | P9.3  |
| P6.2 | 43 | 44 | P9.2  |
| P6.1 | 45 | 46 | P9.1  |
| P6.0 | 47 | 48 | P9.0  |
| +5 V | 49 | 50 | GND   |

## NI 6510

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



|      |    |    |      |
|------|----|----|------|
| P0.1 | 20 | 1  | P0.0 |
| P0.3 | 21 | 2  | P0.2 |
| P0.5 | 22 | 3  | P0.4 |
| P0.7 | 23 | 4  | P0.6 |
| P1.0 | 24 | 5  | COM  |
| P1.2 | 25 | 6  | P1.1 |
| P1.4 | 26 | 7  | P1.3 |
| P1.6 | 27 | 8  | P1.5 |
| COM  | 28 | 9  | P1.7 |
| P2.1 | 29 | 10 | P2.0 |
| P2.3 | 30 | 11 | P2.2 |
| P2.5 | 31 | 12 | P2.4 |
| P2.7 | 32 | 13 | P2.6 |
| P3.0 | 33 | 14 | COM  |
| P3.2 | 34 | 15 | P3.1 |
| P3.4 | 35 | 16 | P3.3 |
| P3.6 | 36 | 17 | P3.5 |
| COM  | 37 | 18 | P3.7 |
|      |    | 19 | COM  |

## NI 6511

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|        |    |     |        |
|--------|----|-----|--------|
| P0.0   | 1  | 51  | P1.0   |
| P0.1   | 2  | 52  | P1.1   |
| P0.2   | 3  | 53  | P1.2   |
| P0.3   | 4  | 54  | P1.3   |
| P0.4   | 5  | 55  | P1.4   |
| P0.5   | 6  | 56  | P1.5   |
| P0.6   | 7  | 57  | P1.6   |
| P0.7   | 8  | 58  | P1.7   |
| P0.COM | 9  | 59  | P1.COM |
| P0.COM | 10 | 60  | P1.COM |
| P0.COM | 11 | 61  | P1.COM |
| P0.COM | 12 | 62  | P1.COM |
| P2.0   | 13 | 63  | P3.0   |
| P2.1   | 14 | 64  | P3.1   |
| P2.2   | 15 | 65  | P3.2   |
| P2.3   | 16 | 66  | P3.3   |
| P2.4   | 17 | 67  | P3.4   |
| P2.5   | 18 | 68  | P3.5   |
| P2.6   | 19 | 69  | P3.6   |
| P2.7   | 20 | 70  | P3.7   |
| P2.COM | 21 | 71  | P3.COM |
| P2.COM | 22 | 72  | P3.COM |
| P2.COM | 23 | 73  | P3.COM |
| P2.COM | 24 | 74  | P3.COM |
| NC     | 25 | 75  | NC     |
| P4.0   | 26 | 76  | P5.0   |
| P4.1   | 27 | 77  | P5.1   |
| P4.2   | 28 | 78  | P5.2   |
| P4.3   | 29 | 79  | P5.3   |
| P4.4   | 30 | 80  | P5.4   |
| P4.5   | 31 | 81  | P5.5   |
| P4.6   | 32 | 82  | P5.6   |
| P4.7   | 33 | 83  | P5.7   |
| P4.COM | 34 | 84  | P5.COM |
| P4.COM | 35 | 85  | P5.COM |
| P4.COM | 36 | 86  | P5.COM |
| P4.COM | 37 | 87  | P5.COM |
| P6.0   | 38 | 88  | P7.0   |
| P6.1   | 39 | 89  | P7.1   |
| P6.2   | 40 | 90  | P7.2   |
| P6.3   | 41 | 91  | P7.3   |
| P6.4   | 42 | 92  | P7.4   |
| P6.5   | 43 | 93  | P7.5   |
| P6.6   | 44 | 94  | P7.6   |
| P6.7   | 45 | 95  | P7.7   |
| P6.COM | 46 | 96  | P7.COM |
| P6.COM | 47 | 97  | P7.COM |
| P6.COM | 48 | 98  | P7.COM |
| P6.COM | 49 | 99  | P7.COM |
| NC     | 50 | 100 | NC     |

## NI 6512

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



|                 |    |     |                 |
|-----------------|----|-----|-----------------|
| P0.0            | 1  | 51  | P1.0            |
| P0.1            | 2  | 52  | P1.1            |
| P0.2            | 3  | 53  | P1.2            |
| P0.3            | 4  | 54  | P1.3            |
| P0.4            | 5  | 55  | P1.4            |
| P0.5            | 6  | 56  | P1.5            |
| P0.6            | 7  | 57  | P1.6            |
| P0.7            | 8  | 58  | P1.7            |
| P0.COM (P0.GND) | 9  | 59  | P1.COM (P1.GND) |
| P0.VCC          | 10 | 60  | P1.VCC          |
| P0.VCC          | 11 | 61  | P1.VCC          |
| P0.VCC          | 12 | 62  | P1.VCC          |
| P2.0            | 13 | 63  | P3.0            |
| P2.1            | 14 | 64  | P3.1            |
| P2.2            | 15 | 65  | P3.2            |
| P2.3            | 16 | 66  | P3.3            |
| P2.4            | 17 | 67  | P3.4            |
| P2.5            | 18 | 68  | P3.5            |
| P2.6            | 19 | 69  | P3.6            |
| P2.7            | 20 | 70  | P3.7            |
| P2.COM (P2.GND) | 21 | 71  | P3.COM (P3.GND) |
| P2.VCC          | 22 | 72  | P3.VCC          |
| P2.VCC          | 23 | 73  | P3.VCC          |
| P2.VCC          | 24 | 74  | P3.VCC          |
| NC              | 25 | 75  | NC              |
| P4.0            | 26 | 76  | P5.0            |
| P4.1            | 27 | 77  | P5.1            |
| P4.2            | 28 | 78  | P5.2            |
| P4.3            | 29 | 79  | P5.3            |
| P4.4            | 30 | 80  | P5.4            |
| P4.5            | 31 | 81  | P5.5            |
| P4.6            | 32 | 82  | P5.6            |
| P4.7            | 33 | 83  | P5.7            |
| P4.COM (P4.GND) | 34 | 84  | P5.COM (P5.GND) |
| P4.VCC          | 35 | 85  | P5.VCC          |
| P4.VCC          | 36 | 86  | P5.VCC          |
| P4.VCC          | 37 | 87  | P5.VCC          |
| P6.0            | 38 | 88  | P7.0            |
| P6.1            | 39 | 89  | P7.1            |
| P6.2            | 40 | 90  | P7.2            |
| P6.3            | 41 | 91  | P7.3            |
| P6.4            | 42 | 92  | P7.4            |
| P6.5            | 43 | 93  | P7.5            |
| P6.6            | 44 | 94  | P7.6            |
| P6.7            | 45 | 95  | P7.7            |
| P6.COM (P6.GND) | 46 | 96  | P7.COM (P7.GND) |
| P6.VCC          | 47 | 97  | P7.VCC          |
| P6.VCC          | 48 | 98  | P7.VCC          |
| P6.VCC          | 49 | 99  | P7.VCC          |
| P6.+5V          | 50 | 100 | P7.+5V          |

## NI 6513

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                 |    |     |                 |
|-----------------|----|-----|-----------------|
| P0.0            | 1  | 51  | P1.0            |
| P0.1            | 2  | 52  | P1.1            |
| P0.2            | 3  | 53  | P1.2            |
| P0.3            | 4  | 54  | P1.3            |
| P0.4            | 5  | 55  | P1.4            |
| P0.5            | 6  | 56  | P1.5            |
| P0.6            | 7  | 57  | P1.6            |
| P0.7            | 8  | 58  | P1.7            |
| P0.COM (P0.VCC) | 9  | 59  | P1.COM (P1.VCC) |
| P0.GND          | 10 | 60  | P1.GND          |
| P0.GND          | 11 | 61  | P1.GND          |
| P0.GND          | 12 | 62  | P1.GND          |
| P2.0            | 13 | 63  | P3.0            |
| P2.1            | 14 | 64  | P3.1            |
| P2.2            | 15 | 65  | P3.2            |
| P2.3            | 16 | 66  | P3.3            |
| P2.4            | 17 | 67  | P3.4            |
| P2.5            | 18 | 68  | P3.5            |
| P2.6            | 19 | 69  | P3.6            |
| P2.7            | 20 | 70  | P3.7            |
| P2.COM (P2.VCC) | 21 | 71  | P3.COM (P3.VCC) |
| P2.GND          | 22 | 72  | P3.GND          |
| P2.GND          | 23 | 73  | P3.GND          |
| P2.GND          | 24 | 74  | P3.GND          |
| NC              | 25 | 75  | NC              |
| P4.0            | 26 | 76  | P5.0            |
| P4.1            | 27 | 77  | P5.1            |
| P4.2            | 28 | 78  | P5.2            |
| P4.3            | 29 | 79  | P5.3            |
| P4.4            | 30 | 80  | P5.4            |
| P4.5            | 31 | 81  | P5.5            |
| P4.6            | 32 | 82  | P5.6            |
| P4.7            | 33 | 83  | P5.7            |
| P4.COM (P4.VCC) | 34 | 84  | P5.COM (P5.VCC) |
| P4.GND          | 35 | 85  | P5.GND          |
| P4.GND          | 36 | 86  | P5.GND          |
| P4.GND          | 37 | 87  | P5.GND          |
| P6.0            | 38 | 88  | P7.0            |
| P6.1            | 39 | 89  | P7.1            |
| P6.2            | 40 | 90  | P7.2            |
| P6.3            | 41 | 91  | P7.3            |
| P6.4            | 42 | 92  | P7.4            |
| P6.5            | 43 | 93  | P7.5            |
| P6.6            | 44 | 94  | P7.6            |
| P6.7            | 45 | 95  | P7.7            |
| P6.COM (P6.VCC) | 46 | 96  | P7.COM (P7.VCC) |
| P6.GND          | 47 | 97  | P7.GND          |
| P6.GND          | 48 | 98  | P7.GND          |
| P6.GND          | 49 | 99  | P7.GND          |
| P6.+5V          | 50 | 100 | P7.+5V          |

## NI 6514

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                 |    |     |                 |
|-----------------|----|-----|-----------------|
| P0.0            | 1  | 51  | P1.0            |
| P0.1            | 2  | 52  | P1.1            |
| P0.2            | 3  | 53  | P1.2            |
| P0.3            | 4  | 54  | P1.3            |
| P0.4            | 5  | 55  | P1.4            |
| P0.5            | 6  | 56  | P1.5            |
| P0.6            | 7  | 57  | P1.6            |
| P0.7            | 8  | 58  | P1.7            |
| P0.COM          | 9  | 59  | P1.COM          |
| P0.COM          | 10 | 60  | P1.COM          |
| P0.COM          | 11 | 61  | P1.COM          |
| P0.COM          | 12 | 62  | P1.COM          |
| P2.0            | 13 | 63  | P3.0            |
| P2.1            | 14 | 64  | P3.1            |
| P2.2            | 15 | 65  | P3.2            |
| P2.3            | 16 | 66  | P3.3            |
| P2.4            | 17 | 67  | P3.4            |
| P2.5            | 18 | 68  | P3.5            |
| P2.6            | 19 | 69  | P3.6            |
| P2.7            | 20 | 70  | P3.7            |
| P2.COM          | 21 | 71  | P3.COM          |
| P2.COM          | 22 | 72  | P3.COM          |
| P2.COM          | 23 | 73  | P3.COM          |
| P2.COM          | 24 | 74  | P3.COM          |
| NC              | 25 | 75  | NC              |
| P4.0            | 26 | 76  | P5.0            |
| P4.1            | 27 | 77  | P5.1            |
| P4.2            | 28 | 78  | P5.2            |
| P4.3            | 29 | 79  | P5.3            |
| P4.4            | 30 | 80  | P5.4            |
| P4.5            | 31 | 81  | P5.5            |
| P4.6            | 32 | 82  | P5.6            |
| P4.7            | 33 | 83  | P5.7            |
| P4.COM (P4.GND) | 34 | 84  | P5.COM (P5.GND) |
| P4.VCC          | 35 | 85  | P5.VCC          |
| P4.VCC          | 36 | 86  | P5.VCC          |
| P4.VCC          | 37 | 87  | P5.VCC          |
| P6.0            | 38 | 88  | P7.0            |
| P6.1            | 39 | 89  | P7.1            |
| P6.2            | 40 | 90  | P7.2            |
| P6.3            | 41 | 91  | P7.3            |
| P6.4            | 42 | 92  | P7.4            |
| P6.5            | 43 | 93  | P7.5            |
| P6.6            | 44 | 94  | P7.6            |
| P6.7            | 45 | 95  | P7.7            |
| P6.COM (P6.GND) | 46 | 96  | P7.COM (P7.GND) |
| P6.VCC          | 47 | 97  | P7.VCC          |
| P6.VCC          | 48 | 98  | P7.VCC          |
| P6.VCC          | 49 | 99  | P7.VCC          |
| P6.+5V          | 50 | 100 | P7.+5V          |

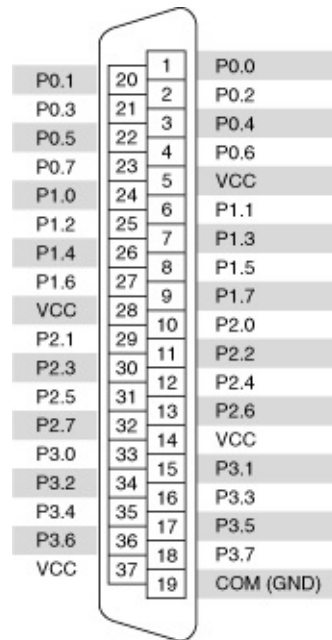
## NI 6515

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                 |    |     |                 |
|-----------------|----|-----|-----------------|
| P0.0            | 1  | 51  | P1.0            |
| P0.1            | 2  | 52  | P1.1            |
| P0.2            | 3  | 53  | P1.2            |
| P0.3            | 4  | 54  | P1.3            |
| P0.4            | 5  | 55  | P1.4            |
| P0.5            | 6  | 56  | P1.5            |
| P0.6            | 7  | 57  | P1.6            |
| P0.7            | 8  | 58  | P1.7            |
| P0.COM          | 9  | 59  | P1.COM          |
| P0.COM          | 10 | 60  | P1.COM          |
| P0.COM          | 11 | 61  | P1.COM          |
| P0.COM          | 12 | 62  | P1.COM          |
| P2.0            | 13 | 63  | P3.0            |
| P2.1            | 14 | 64  | P3.1            |
| P2.2            | 15 | 65  | P3.2            |
| P2.3            | 16 | 66  | P3.3            |
| P2.4            | 17 | 67  | P3.4            |
| P2.5            | 18 | 68  | P3.5            |
| P2.6            | 19 | 69  | P3.6            |
| P2.7            | 20 | 70  | P3.7            |
| P2.COM          | 21 | 71  | P3.COM          |
| P2.COM          | 22 | 72  | P3.COM          |
| P2.COM          | 23 | 73  | P3.COM          |
| P2.COM          | 24 | 74  | P3.COM          |
| NC              | 25 | 75  | NC              |
| P4.0            | 26 | 76  | P5.0            |
| P4.1            | 27 | 77  | P5.1            |
| P4.2            | 28 | 78  | P5.2            |
| P4.3            | 29 | 79  | P5.3            |
| P4.4            | 30 | 80  | P5.4            |
| P4.5            | 31 | 81  | P5.5            |
| P4.6            | 32 | 82  | P5.6            |
| P4.7            | 33 | 83  | P5.7            |
| P4.COM (P4.VCC) | 34 | 84  | P5.COM (P5.VCC) |
| P4.GND          | 35 | 85  | P5.GND          |
| P4.GND          | 36 | 86  | P5.GND          |
| P4.GND          | 37 | 87  | P5.GND          |
| P6.0            | 38 | 88  | P7.0            |
| P6.1            | 39 | 89  | P7.1            |
| P6.2            | 40 | 90  | P7.2            |
| P6.3            | 41 | 91  | P7.3            |
| P6.4            | 42 | 92  | P7.4            |
| P6.5            | 43 | 93  | P7.5            |
| P6.6            | 44 | 94  | P7.6            |
| P6.7            | 45 | 95  | P7.7            |
| P6.COM (P6.VCC) | 46 | 96  | P7.COM (P7.VCC) |
| P6.GND          | 47 | 97  | P7.GND          |
| P6.GND          | 48 | 98  | P7.GND          |
| P6.GND          | 49 | 99  | P7.GND          |
| P6.+5V          | 50 | 100 | P7.+5V          |

## NI 6516

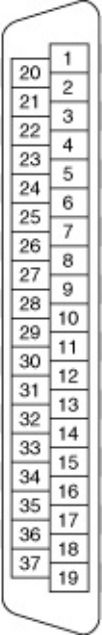
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.





## NI 6517

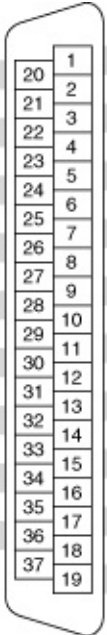
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



|      |    |    |           |
|------|----|----|-----------|
| P0.1 | 20 | 1  | P0.0      |
| P0.3 | 21 | 2  | P0.2      |
| P0.5 | 22 | 3  | P0.4      |
| P0.7 | 23 | 4  | P0.6      |
| P1.0 | 24 | 5  | GND       |
| P1.2 | 25 | 6  | P1.1      |
| P1.4 | 26 | 7  | P1.3      |
| P1.6 | 27 | 8  | P1.5      |
| P1.8 | 28 | 9  | P1.7      |
| GND  | 29 | 10 | P2.0      |
| P2.1 | 30 | 11 | P2.2      |
| P2.3 | 31 | 12 | P2.4      |
| P2.5 | 32 | 13 | P2.6      |
| P2.7 | 33 | 14 | GND       |
| P3.0 | 34 | 15 | P3.1      |
| P3.2 | 35 | 16 | P3.3      |
| P3.4 | 36 | 17 | P3.5      |
| P3.6 | 37 | 18 | P3.7      |
| GND  |    | 19 | COM (VCC) |

## NI 6518

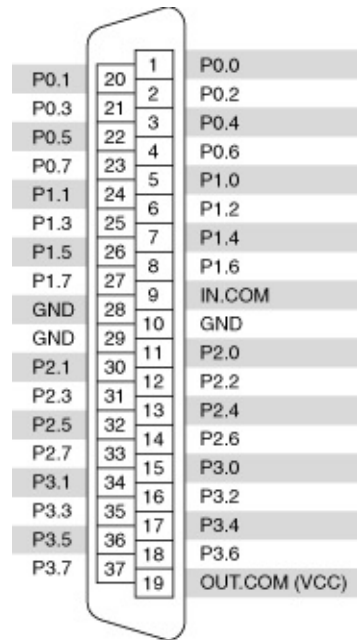
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



|      |    |    |               |
|------|----|----|---------------|
| P0.1 | 20 | 1  | P0.0          |
| P0.3 | 21 | 2  | P0.2          |
| P0.5 | 22 | 3  | P0.4          |
| P0.7 | 23 | 4  | P0.6          |
| P1.1 | 24 | 5  | P1.0          |
| P1.3 | 25 | 6  | P1.2          |
| P1.5 | 26 | 7  | P1.4          |
| P1.7 | 27 | 8  | P1.6          |
| VCC  | 28 | 9  | IN.COM        |
| VCC  | 29 | 10 | VCC           |
| P2.1 | 30 | 11 | P2.0          |
| P2.3 | 31 | 12 | P2.2          |
| P2.5 | 32 | 13 | P2.4          |
| P2.7 | 33 | 14 | P2.6          |
| P3.1 | 34 | 15 | P3.0          |
| P3.3 | 35 | 16 | P3.2          |
| P3.5 | 36 | 17 | P3.4          |
| P3.7 | 37 | 18 | P3.6          |
|      |    | 19 | OUT.COM (GND) |

## NI 6519

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

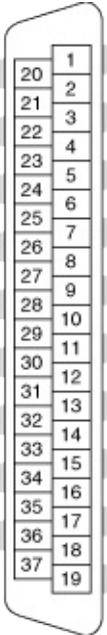


The diagram shows a 37-pin terminal block for the NI 6519. The pins are numbered 1 through 37. The signal names for each pin are listed in the table below.

|      |    |    |               |
|------|----|----|---------------|
| P0.1 | 20 | 1  | P0.0          |
| P0.3 | 21 | 2  | P0.2          |
| P0.5 | 22 | 3  | P0.4          |
| P0.7 | 23 | 4  | P0.6          |
| P1.1 | 24 | 5  | P1.0          |
| P1.3 | 25 | 6  | P1.2          |
| P1.5 | 26 | 7  | P1.4          |
| P1.7 | 27 | 8  | P1.6          |
| GND  | 28 | 9  | IN.COM        |
| GND  | 29 | 10 | GND           |
| P2.1 | 30 | 11 | P2.0          |
| P2.3 | 31 | 12 | P2.2          |
| P2.5 | 32 | 13 | P2.4          |
| P2.7 | 33 | 14 | P2.6          |
| P3.1 | 34 | 15 | P3.0          |
| P3.3 | 35 | 16 | P3.2          |
| P3.5 | 36 | 17 | P3.4          |
| P3.7 | 37 | 18 | P3.6          |
|      |    | 19 | OUT.COM (VCC) |

## NI 6520

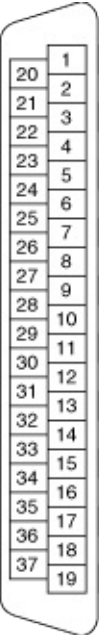
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



|            |    |    |            |
|------------|----|----|------------|
| P1.1NO     | 20 | 1  | P1.0NO     |
| P1.1COM    | 21 | 2  | P1.0COM    |
| P1.1NC     | 22 | 3  | P1.0NC     |
| P1.3NO     | 23 | 4  | P1.2NO     |
| P1.3COM    | 24 | 5  | P1.2COM    |
| P1.5NO     | 25 | 6  | P1.2NC     |
| P1.5COM    | 26 | 7  | P1.4NO     |
| P1.7NO     | 27 | 8  | P1.4COM    |
| P1.7COM    | 28 | 9  | P1.6NO     |
| NO CONNECT | 29 | 10 | P1.6COM    |
| P0.1+      | 30 | 11 | NO CONNECT |
| P0.1-      | 31 | 12 | P0.0+      |
| P0.3+      | 32 | 13 | P0.0-      |
| P0.3-      | 33 | 14 | P0.2+      |
| P0.5+      | 34 | 15 | P0.2-      |
| P0.5-      | 35 | 16 | P0.4+      |
| P0.7+      | 36 | 17 | P0.4-      |
| P0.7-      | 37 | 18 | P0.6+      |
|            |    | 19 | P0.6-      |

## NI 6521

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



|            |    |    |            |
|------------|----|----|------------|
| P1.1NO     | 20 | 1  | P1.0NO     |
| P1.1COM    | 21 | 2  | P1.0COM    |
| P1.1NC     | 22 | 3  | P1.0NC     |
| P1.3NO     | 23 | 4  | P1.2NO     |
| P1.3COM    | 24 | 5  | P1.2COM    |
| P1.5NO     | 25 | 6  | P1.2NC     |
| P1.5COM    | 26 | 7  | P1.4NO     |
| P1.7NO     | 27 | 8  | P1.4COM    |
| P1.7COM    | 28 | 9  | P1.6NO     |
| NO CONNECT | 29 | 10 | P1.6COM    |
| P0.1+      | 30 | 11 | NO CONNECT |
| P0.1-      | 31 | 12 | P0.0+      |
| P0.3+      | 32 | 13 | P0.0-      |
| P0.3-      | 33 | 14 | P0.2+      |
| P0.5+      | 34 | 15 | P0.2-      |
| P0.5-      | 35 | 16 | P0.4+      |
| P0.7+      | 36 | 17 | P0.4-      |
| P0.7-      | 37 | 18 | P0.6+      |
|            |    | 19 | P0.6-      |

## NI 6527

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|       |    |     |       |
|-------|----|-----|-------|
| P2.7+ | 1  | 51  | P5.7+ |
| P2.7- | 2  | 52  | P5.7- |
| P2.6+ | 3  | 53  | P5.6+ |
| P2.6- | 4  | 54  | P5.6- |
| P2.5+ | 5  | 55  | P5.5+ |
| P2.5- | 6  | 56  | P5.5- |
| P2.4+ | 7  | 57  | P5.4+ |
| P2.4- | 8  | 58  | P5.4- |
| P2.3+ | 9  | 59  | P5.3+ |
| P2.3- | 10 | 60  | P5.3- |
| P2.2+ | 11 | 61  | P5.2+ |
| P2.2- | 12 | 62  | P5.2- |
| P2.1+ | 13 | 63  | P5.1+ |
| P2.1- | 14 | 64  | P5.1- |
| P2.0+ | 15 | 65  | P5.0+ |
| P2.0- | 16 | 66  | P5.0- |
| P1.7+ | 17 | 67  | P4.7+ |
| P1.7- | 18 | 68  | P4.7- |
| P1.6+ | 19 | 69  | P4.6+ |
| P1.6- | 20 | 70  | P4.6- |
| P1.5+ | 21 | 71  | P4.5+ |
| P1.5- | 22 | 72  | P4.5- |
| P1.4+ | 23 | 73  | P4.4+ |
| P1.4- | 24 | 74  | P4.4- |
| P1.3+ | 25 | 75  | P4.3+ |
| P1.3- | 26 | 76  | P4.3- |
| P1.2+ | 27 | 77  | P4.2+ |
| P1.2- | 28 | 78  | P4.2- |
| P1.1+ | 29 | 79  | P4.1+ |
| P1.1- | 30 | 80  | P4.1- |
| P1.0+ | 31 | 81  | P4.0+ |
| P1.0- | 32 | 82  | P4.0- |
| P0.7+ | 33 | 83  | P3.7+ |
| P0.7- | 34 | 84  | P3.7- |
| P0.6+ | 35 | 85  | P3.6+ |
| P0.6- | 36 | 86  | P3.6- |
| P0.5+ | 37 | 87  | P3.5+ |
| P0.5- | 38 | 88  | P3.5- |
| P0.4+ | 39 | 89  | P3.4+ |
| P0.4- | 40 | 90  | P3.4- |
| P0.3+ | 41 | 91  | P3.3+ |
| P0.3- | 42 | 92  | P3.3- |
| P0.2+ | 43 | 93  | P3.2+ |
| P0.2- | 44 | 94  | P3.2- |
| P0.1+ | 45 | 95  | P3.1+ |
| P0.1- | 46 | 96  | P3.1- |
| P0.0+ | 47 | 97  | P3.0+ |
| P0.0- | 48 | 98  | P3.0- |
| +5 V  | 49 | 99  | +5 V  |
| GND   | 50 | 100 | GND   |

(Pins 1–50) Direction input—Ports 0, 1, and 2

(Pins 50–51) Direction output with readback—Ports 3, 4, and 5

## NI 6528

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|       |    |     |       |
|-------|----|-----|-------|
| P2.7+ | 1  | 51  | P5.7+ |
| P2.7- | 2  | 52  | P5.7- |
| P2.6+ | 3  | 53  | P5.6+ |
| P2.6- | 4  | 54  | P5.6- |
| P2.5+ | 5  | 55  | P5.5+ |
| P2.5- | 6  | 56  | P5.5- |
| P2.4+ | 7  | 57  | P5.4+ |
| P2.4- | 8  | 58  | P5.4- |
| P2.3+ | 9  | 59  | P5.3+ |
| P2.3- | 10 | 60  | P5.3- |
| P2.2+ | 11 | 61  | P5.2+ |
| P2.2- | 12 | 62  | P5.2- |
| P2.1+ | 13 | 63  | P5.1+ |
| P2.1- | 14 | 64  | P5.1- |
| P2.0+ | 15 | 65  | P5.0+ |
| P2.0- | 16 | 66  | P5.0- |
| P1.7+ | 17 | 67  | P4.7+ |
| P1.7- | 18 | 68  | P4.7- |
| P1.6+ | 19 | 69  | P4.6+ |
| P1.6- | 20 | 70  | P4.6- |
| P1.5+ | 21 | 71  | P4.5+ |
| P1.5- | 22 | 72  | P4.5- |
| P1.4+ | 23 | 73  | P4.4+ |
| P1.4- | 24 | 74  | P4.4- |
| P1.3+ | 25 | 75  | P4.3+ |
| P1.3- | 26 | 76  | P4.3- |
| P1.2+ | 27 | 77  | P4.2+ |
| P1.2- | 28 | 78  | P4.2- |
| P1.1+ | 29 | 79  | P4.1+ |
| P1.1- | 30 | 80  | P4.1- |
| P1.0+ | 31 | 81  | P4.0+ |
| P1.0- | 32 | 82  | P4.0- |
| P0.7+ | 33 | 83  | P3.7+ |
| P0.7- | 34 | 84  | P3.7- |
| P0.6+ | 35 | 85  | P3.6+ |
| P0.6- | 36 | 86  | P3.6- |
| P0.5+ | 37 | 87  | P3.5+ |
| P0.5- | 38 | 88  | P3.5- |
| P0.4+ | 39 | 89  | P3.4+ |
| P0.4- | 40 | 90  | P3.4- |
| P0.3+ | 41 | 91  | P3.3+ |
| P0.3- | 42 | 92  | P3.3- |
| P0.2+ | 43 | 93  | P3.2+ |
| P0.2- | 44 | 94  | P3.2- |
| P0.1+ | 45 | 95  | P3.1+ |
| P0.1- | 46 | 96  | P3.1- |
| P0.0+ | 47 | 97  | P3.0+ |
| P0.0- | 48 | 98  | P3.0- |
| +5 V  | 49 | 99  | +5 V  |
| GND   | 50 | 100 | GND   |

(Pins 1–50) Direction input—Ports 0, 1, and 2

(Pins 50–51) Direction output with readback—Ports 3, 4, and 5

## NI 6529

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|       |    |     |       |
|-------|----|-----|-------|
| P2.7+ | 1  | 51  | P5.7+ |
| P2.7- | 2  | 52  | P5.7- |
| P2.6+ | 3  | 53  | P5.6+ |
| P2.6- | 4  | 54  | P5.6- |
| P2.5+ | 5  | 55  | P5.5+ |
| P2.5- | 6  | 56  | P5.5- |
| P2.4+ | 7  | 57  | P5.4+ |
| P2.4- | 8  | 58  | P5.4- |
| P2.3+ | 9  | 59  | P5.3+ |
| P2.3- | 10 | 60  | P5.3- |
| P2.2+ | 11 | 61  | P5.2+ |
| P2.2- | 12 | 62  | P5.2- |
| P2.1+ | 13 | 63  | P5.1+ |
| P2.1- | 14 | 64  | P5.1- |
| P2.0+ | 15 | 65  | P5.0+ |
| P2.0- | 16 | 66  | P5.0- |
| P1.7+ | 17 | 67  | P4.7+ |
| P1.7- | 18 | 68  | P4.7- |
| P1.6+ | 19 | 69  | P4.6+ |
| P1.6- | 20 | 70  | P4.6- |
| P1.5+ | 21 | 71  | P4.5+ |
| P1.5- | 22 | 72  | P4.5- |
| P1.4+ | 23 | 73  | P4.4+ |
| P1.4- | 24 | 74  | P4.4- |
| P1.3+ | 25 | 75  | P4.3+ |
| P1.3- | 26 | 76  | P4.3- |
| P1.2+ | 27 | 77  | P4.2+ |
| P1.2- | 28 | 78  | P4.2- |
| P1.1+ | 29 | 79  | P4.1+ |
| P1.1- | 30 | 80  | P4.1- |
| P1.0+ | 31 | 81  | P4.0+ |
| P1.0- | 32 | 82  | P4.0- |
| P0.7+ | 33 | 83  | P3.7+ |
| P0.7- | 34 | 84  | P3.7- |
| P0.6+ | 35 | 85  | P3.6+ |
| P0.6- | 36 | 86  | P3.6- |
| P0.5+ | 37 | 87  | P3.5+ |
| P0.5- | 38 | 88  | P3.5- |
| P0.4+ | 39 | 89  | P3.4+ |
| P0.4- | 40 | 90  | P3.4- |
| P0.3+ | 41 | 91  | P3.3+ |
| P0.3- | 42 | 92  | P3.3- |
| P0.2+ | 43 | 93  | P3.2+ |
| P0.2- | 44 | 94  | P3.2- |
| P0.1+ | 45 | 95  | P3.1+ |
| P0.1- | 46 | 96  | P3.1- |
| P0.0+ | 47 | 97  | P3.0+ |
| P0.0- | 48 | 98  | P3.0- |
| +5 V  | 49 | 99  | +5 V  |
| GND   | 50 | 100 | GND   |

(Pins 1-100) Direction Input—Ports 0 through 5



## NI 653x

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| 68-Pin Connector |    |    |           | 50-Pin Connector |    |    |       |
|------------------|----|----|-----------|------------------|----|----|-------|
| P3.7             | 34 | 68 | D GND     | P3.1             | 1  | 2  | P3.4  |
| D GND            | 33 | 67 | P3.6      | P3.3             | 3  | 4  | P3.0  |
| P3.4             | 32 | 66 | P3.5      | P3.6             | 5  | 6  | P3.7  |
| P3.3             | 31 | 65 | D GND     | P3.2             | 7  | 8  | P3.5  |
| D GND            | 30 | 64 | P3.2      | P2.5             | 9  | 10 | P2.7  |
| P3.0             | 29 | 63 | P3.1      | P2.3             | 11 | 12 | P2.1  |
| P2.7             | 28 | 62 | D GND     | P2.2             | 13 | 14 | P2.0  |
| D GND            | 27 | 61 | P2.6      | P2.6             | 15 | 16 | P2.4  |
| P2.4             | 26 | 60 | P2.5      | GND              | 17 | 18 | PFI 7 |
| P2.3             | 25 | 59 | D GND     | GND              | 19 | 20 | PFI 1 |
| D GND            | 24 | 58 | P2.2      | GND              | 21 | 22 | PFI 5 |
| P2.0             | 23 | 57 | P2.1      | GND              | 23 | 24 | PFI 3 |
| P1.7             | 22 | 56 | R GND     | GND              | 25 | 26 | GND   |
| P1.6             | 21 | 55 | D GND     | PFI 6            | 27 | 28 | GND   |
| D GND            | 20 | 54 | P1.5      | PFI 0            | 29 | 30 | GND   |
| R GND            | 19 | 53 | P1.4      | PFI 4            | 31 | 32 | GND   |
| D GND            | 18 | 52 | P1.3      | PFI 2            | 33 | 34 | GND   |
| P1.1             | 17 | 51 | P1.2      | P0.4             | 35 | 36 | P0.6  |
| P1.0             | 16 | 50 | D GND     | P0.0             | 37 | 38 | P0.2  |
| P0.7             | 15 | 49 | D GND     | P0.1             | 39 | 40 | P0.3  |
| D GND            | 14 | 48 | P0.6      | P0.7             | 41 | 42 | P0.5  |
| P0.4             | 13 | 47 | P0.5      | P1.5             | 43 | 44 | P1.2  |
| P0.3             | 12 | 46 | D GND     | P1.7             | 45 | 46 | P1.6  |
| D GND            | 11 | 45 | P0.2      | P1.0             | 47 | 48 | P1.3  |
| P0.0             | 10 | 44 | P0.1      | P1.4             | 49 | 50 | P1.1  |
| PFI 3            | 9  | 43 | R GND     |                  |    |    |       |
| PFI 7            | 8  | 42 | D GND     |                  |    |    |       |
| PFI 1            | 7  | 41 | D GND     |                  |    |    |       |
| PFI 5            | 6  | 40 | CTRL PULL |                  |    |    |       |
| PFI 4            | 5  | 39 | D GND     |                  |    |    |       |
| PFI 0            | 4  | 38 | DATA PULL |                  |    |    |       |
| PFI 6            | 3  | 37 | D GND     |                  |    |    |       |
| PFI 2            | 2  | 36 | D GND     |                  |    |    |       |
| +5 V             | 1  | 35 | R GND     |                  |    |    |       |

NI 6536

|          |    |    |       |
|----------|----|----|-------|
| GND      | 68 | 34 | GND   |
| PFI 5    | 67 | 33 | PFI 4 |
| GND      | 66 | 32 | GND   |
| P0.0     | 65 | 31 | P0.1  |
| PFI 2    | 64 | 30 | PFI 3 |
| P0.2     | 63 | 29 | P0.3  |
| GND      | 62 | 28 | GND   |
| P0.4     | 61 | 27 | P0.5  |
| RESERVED | 60 | 26 | PFI 1 |
| P0.6     | 59 | 25 | P0.7  |
| GND      | 58 | 24 | GND   |
| P1.0     | 57 | 23 | P1.1  |
| GND      | 56 | 22 | GND   |
| P1.2     | 55 | 21 | P1.3  |
| GND      | 54 | 20 | GND   |
| P1.4     | 53 | 19 | P1.5  |
| PFI 0    | 52 | 18 | GND   |
| P1.6     | 51 | 17 | P1.7  |
| GND      | 50 | 16 | GND   |
| P2.0     | 49 | 15 | P2.1  |
| GND      | 48 | 14 | GND   |
| P2.2     | 47 | 13 | P2.3  |
| GND      | 46 | 12 | GND   |
| P2.4     | 45 | 11 | P2.5  |
| GND      | 44 | 10 | GND   |
| P2.6     | 43 | 9  | P2.7  |
| GND      | 42 | 8  | GND   |
| P3.0     | 41 | 7  | P3.1  |
| GND      | 40 | 6  | GND   |
| P3.2     | 39 | 5  | P3.3  |
| GND      | 38 | 4  | GND   |
| P3.4     | 37 | 3  | P3.5  |
| GND      | 36 | 2  | GND   |
| P3.6     | 35 | 1  | P3.7  |

# NI 6537

|          |    |    |       |
|----------|----|----|-------|
| GND      | 68 | 34 | GND   |
| PFI 5    | 67 | 33 | PFI 4 |
| GND      | 66 | 32 | GND   |
| P0.0     | 65 | 31 | P0.1  |
| PFI 2    | 64 | 30 | PFI 3 |
| P0.2     | 63 | 29 | P0.3  |
| GND      | 62 | 28 | GND   |
| P0.4     | 61 | 27 | P0.5  |
| RESERVED | 60 | 26 | PFI 1 |
| P0.6     | 59 | 25 | P0.7  |
| GND      | 58 | 24 | GND   |
| P1.0     | 57 | 23 | P1.1  |
| GND      | 56 | 22 | GND   |
| P1.2     | 55 | 21 | P1.3  |
| GND      | 54 | 20 | GND   |
| P1.4     | 53 | 19 | P1.5  |
| PFI 0    | 52 | 18 | GND   |
| P1.6     | 51 | 17 | P1.7  |
| GND      | 50 | 16 | GND   |
| P2.0     | 49 | 15 | P2.1  |
| GND      | 48 | 14 | GND   |
| P2.2     | 47 | 13 | P2.3  |
| GND      | 46 | 12 | GND   |
| P2.4     | 45 | 11 | P2.5  |
| GND      | 44 | 10 | GND   |
| P2.6     | 43 | 9  | P2.7  |
| GND      | 42 | 8  | GND   |
| P3.0     | 41 | 7  | P3.1  |
| GND      | 40 | 6  | GND   |
| P3.2     | 39 | 5  | P3.3  |
| GND      | 38 | 4  | GND   |
| P3.4     | 37 | 3  | P3.5  |
| GND      | 36 | 2  | GND   |
| P3.6     | 35 | 1  | P3.7  |

## NI 6601

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

The NI 6601 uses counters <0..3> only.

|                           |    |    |                         |
|---------------------------|----|----|-------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                   |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX  |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                   |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX  |
| NC                        | 28 | 62 | D GND                   |
| D GND                     | 27 | 61 | NC                      |
| NC                        | 26 | 60 | NC                      |
| NC                        | 25 | 59 | D GND                   |
| D GND                     | 24 | 58 | NC                      |
| NC                        | 23 | 57 | NC                      |
| NC                        | 22 | 56 | R GND                   |
| NC                        | 21 | 55 | D GND                   |
| D GND                     | 20 | 54 | NC                      |
| R GND                     | 19 | 53 | NC                      |
| D GND                     | 18 | 52 | NC                      |
| NC                        | 17 | 51 | NC                      |
| NC                        | 16 | 50 | D GND                   |
| PFI 7/P0.7                | 15 | 49 | D GND                   |
| D GND                     | 14 | 48 | PFI 6/P0.6              |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5              |
| PFI 3/P0.3                | 12 | 46 | D GND                   |
| D GND                     | 11 | 45 | PFI 2/P0.2              |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1              |
| PFI 32/CTR 1 OUT          | 9  | 43 | R GND                   |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                   |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                   |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX        |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                   |
| RESERVED                  | 4  | 38 | RESERVED                |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                   |
| +5 V                      | 1  | 35 | R GND                   |

NC = No Connect

## NI 6601 with the SH68-68-D1 Cable

|                           |    |    |                         |
|---------------------------|----|----|-------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                   |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX  |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                   |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX  |
| NC                        | 28 | 62 | D GND                   |
| D GND                     | 27 | 61 | NC                      |
| NC                        | 26 | 60 | NC                      |
| NC                        | 25 | 59 | D GND                   |
| D GND                     | 24 | 58 | NC                      |
| NC                        | 23 | 57 | NC                      |
| NC                        | 22 | 56 | RESERVED                |
| NC                        | 21 | 55 | D GND                   |
| D GND                     | 20 | 54 | NC                      |
| RESERVED                  | 19 | 53 | NC                      |
| D GND                     | 18 | 52 | NC                      |
| NC                        | 17 | 51 | NC                      |
| NC                        | 16 | 50 | D GND                   |
| PFI 7/P0.7                | 15 | 49 | D GND                   |
| D GND                     | 14 | 48 | PFI 6/P0.6              |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5              |
| PFI 3/P0.3                | 12 | 46 | D GND                   |
| D GND                     | 11 | 45 | PFI 2/P0.2              |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1              |
| PFI 32/CTR 1 OUT          | 9  | 43 | RESERVED                |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                   |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                   |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX        |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                   |
| RESERVED                  | 4  | 38 | RESERVED                |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                   |
| +5 V                      | 1  | 35 | RESERVED                |

NC = No Connect

## NI 6601 with the R6868 Cable

|                           |    |    |                         |
|---------------------------|----|----|-------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                   |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX  |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                   |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX  |
| NC                        | 28 | 62 | D GND                   |
| D GND                     | 27 | 61 | NC                      |
| NC                        | 26 | 60 | NC                      |
| NC                        | 25 | 59 | D GND                   |
| D GND                     | 24 | 58 | NC                      |
| NC                        | 23 | 57 | NC                      |
| NC                        | 22 | 56 | GND                     |
| NC                        | 21 | 55 | D GND                   |
| D GND                     | 20 | 54 | NC                      |
| GND                       | 19 | 53 | NC                      |
| D GND                     | 18 | 52 | NC                      |
| NC                        | 17 | 51 | NC                      |
| NC                        | 16 | 50 | D GND                   |
| PFI 7/P0.7                | 15 | 49 | D GND                   |
| D GND                     | 14 | 48 | PFI 6/P0.6              |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5              |
| PFI 3/P0.3                | 12 | 46 | D GND                   |
| D GND                     | 11 | 45 | PFI 2/P0.2              |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1              |
| PFI 32/CTR 1 OUT          | 9  | 43 | GND                     |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                   |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                   |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX        |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                   |
| RESERVED                  | 4  | 38 | RESERVED                |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                   |
| +5 V                      | 1  | 35 | GND                     |

NC = No Connect

## NI 6602

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                           |    |    |                           |
|---------------------------|----|----|---------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                     |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE   |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX    |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                     |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE   |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX    |
| PFI 23/P0.23/CTR 4 SOURCE | 28 | 62 | D GND                     |
| D GND                     | 27 | 61 | PFI 22/P0.22/CTR 4 GATE   |
| CTR 4 OUT/PFI 20/P0.20    | 26 | 60 | PFI 21/P0.21/CTR 4 AUX    |
| PFI 19/P0.19/CTR 5 SOURCE | 25 | 59 | D GND                     |
| D GND                     | 24 | 58 | PFI 18/P0.18/CTR 5 GATE   |
| CTR 5 OUT/PFI 16/P0.16    | 23 | 57 | PFI 17/P0.17/CTR 5 AUX    |
| PFI 15/P0.15/CTR 6 SOURCE | 22 | 56 | R GND                     |
| PFI 14/P0.14/CTR 6 GATE   | 21 | 55 | D GND                     |
| D GND                     | 20 | 54 | PFI 13/P0.13/CTR 6 AUX    |
| R GND                     | 19 | 53 | CTR 6 OUT/PFI 12/P0.12    |
| D GND                     | 18 | 52 | PFI 11/P0.11/CTR 7 SOURCE |
| PFI 9/P0.9/CTR 7 AUX      | 17 | 51 | PFI 10/P0.10/CTR 7 GATE   |
| CTR 7 OUT/PFI 8/P0.8      | 16 | 50 | D GND                     |
| PFI 7/P0.7                | 15 | 49 | D GND                     |
| D GND                     | 14 | 48 | PFI 6/P0.6                |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5                |
| PFI 3/P0.3                | 12 | 46 | D GND                     |
| D GND                     | 11 | 45 | PFI 2/P0.2                |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1                |
| PFI 32/CTR 1 OUT          | 9  | 43 | R GND                     |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                     |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                     |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX          |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                     |
| RESERVED                  | 4  | 38 | RESERVED                  |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                  |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                     |
| +5 V                      | 1  | 35 | R GND                     |

## NI 6602 with the SH68-68-D1 Cable

|                           |    |    |                           |
|---------------------------|----|----|---------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                     |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE   |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX    |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                     |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE   |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX    |
| PFI 23/P0.23/CTR 4 SOURCE | 28 | 62 | D GND                     |
| D GND                     | 27 | 61 | PFI 22/P0.22/CTR 4 GATE   |
| CTR 4 OUT/PFI 20/P0.20    | 26 | 60 | PFI 21/P0.21/CTR 4 AUX    |
| PFI 19/P0.19/CTR 5 SOURCE | 25 | 59 | D GND                     |
| D GND                     | 24 | 58 | PFI 18/P0.18/CTR 5 GATE   |
| CTR 5 OUT/PFI 16/P0.16    | 23 | 57 | PFI 17/P0.17/CTR 5 AUX    |
| PFI 15/P0.15/CTR 6 SOURCE | 22 | 56 | RESERVED                  |
| PFI 14/P0.14/CTR 6 GATE   | 21 | 55 | D GND                     |
| D GND                     | 20 | 54 | PFI 13/P0.13/CTR 6 AUX    |
| RESERVED                  | 19 | 53 | CTR 6 OUT/PFI 12/P0.12    |
| D GND                     | 18 | 52 | PFI 11/P0.11/CTR 7 SOURCE |
| PFI 9/P0.9/CTR 7 AUX      | 17 | 51 | PFI 10/P0.10/CTR 7 GATE   |
| CTR 7 OUT/PFI 8/P0.8      | 16 | 50 | D GND                     |
| PFI 7/P0.7                | 15 | 49 | D GND                     |
| D GND                     | 14 | 48 | PFI 6/P0.6                |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5                |
| PFI 3/P0.3                | 12 | 46 | D GND                     |
| D GND                     | 11 | 45 | PFI 2/P0.2                |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1                |
| PFI 32/CTR 1 OUT          | 9  | 43 | RESERVED                  |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                     |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                     |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX          |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                     |
| RESERVED                  | 4  | 38 | RESERVED                  |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                  |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                     |
| +5 V                      | 1  | 35 | RESERVED                  |



## NI 6602 with the R6868 Cable

|                           |    |    |                           |
|---------------------------|----|----|---------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                     |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE   |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX    |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                     |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE   |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX    |
| PFI 23/P0.23/CTR 4 SOURCE | 28 | 62 | D GND                     |
| D GND                     | 27 | 61 | PFI 22/P0.22/CTR 4 GATE   |
| CTR 4 OUT/PFI 20/P0.20    | 26 | 60 | PFI 21/P0.21/CTR 4 AUX    |
| PFI 19/P0.19/CTR 5 SOURCE | 25 | 59 | D GND                     |
| D GND                     | 24 | 58 | PFI 18/P0.18/CTR 5 GATE   |
| CTR 5 OUT/PFI 16/P0.16    | 23 | 57 | PFI 17/P0.17/CTR 5 AUX    |
| PFI 15/P0.15/CTR 6 SOURCE | 22 | 56 | GND                       |
| PFI 14/P0.14/CTR 6 GATE   | 21 | 55 | D GND                     |
| D GND                     | 20 | 54 | PFI 13/P0.13/CTR 6 AUX    |
| GND                       | 19 | 53 | CTR 6 OUT/PFI 12/P0.12    |
| D GND                     | 18 | 52 | PFI 11/P0.11/CTR 7 SOURCE |
| PFI 9/P0.9/CTR 7 AUX      | 17 | 51 | PFI 10/P0.10/CTR 7 GATE   |
| CTR 7 OUT/PFI 8/P0.8      | 16 | 50 | D GND                     |
| PFI 7/P0.7                | 15 | 49 | D GND                     |
| D GND                     | 14 | 48 | PFI 6/P0.6                |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5                |
| PFI 3/P0.3                | 12 | 46 | D GND                     |
| D GND                     | 11 | 45 | PFI 2/P0.2                |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1                |
| PFI 32/CTR 1 OUT          | 9  | 43 | GND                       |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                     |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                     |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX          |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                     |
| RESERVED                  | 4  | 38 | RESERVED                  |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                  |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                     |
| +5 V                      | 1  | 35 | GND                       |

## NI 6608

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                           |    |    |                           |
|---------------------------|----|----|---------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                     |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE   |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX    |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                     |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE   |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX    |
| PFI 23/P0.23/CTR 4 SOURCE | 28 | 62 | D GND                     |
| D GND                     | 27 | 61 | PFI 22/P0.22/CTR 4 GATE   |
| CTR 4 OUT/PFI 20/P0.20    | 26 | 60 | PFI 21/P0.21/CTR 4 AUX    |
| PFI 19/P0.19/CTR 5 SOURCE | 25 | 59 | D GND                     |
| D GND                     | 24 | 58 | PFI 18/P0.18/CTR 5 GATE   |
| CTR 5 OUT/PFI 16/P0.16    | 23 | 57 | PFI 17/P0.17/CTR 5 AUX    |
| PFI 15/P0.15/CTR 6 SOURCE | 22 | 56 | R GND                     |
| PFI 14/P0.14/CTR 6 GATE   | 21 | 55 | D GND                     |
| D GND                     | 20 | 54 | PFI 13/P0.13/CTR 6 AUX    |
| R GND                     | 19 | 53 | CTR 6 OUT/PFI 12/P0.12    |
| D GND                     | 18 | 52 | PFI 11/P0.11/CTR 7 SOURCE |
| PFI 9/P0.9/CTR 7 AUX      | 17 | 51 | PFI 10/P0.10/CTR 7 GATE   |
| CTR 7 OUT/PFI 8/P0.8      | 16 | 50 | D GND                     |
| PFI 7/P0.7                | 15 | 49 | D GND                     |
| D GND                     | 14 | 48 | PFI 6/P0.6                |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5                |
| PFI 3/P0.3                | 12 | 46 | D GND                     |
| D GND                     | 11 | 45 | PFI 2/P0.2                |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1                |
| PFI 32/CTR 1 OUT          | 9  | 43 | R GND                     |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                     |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                     |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX          |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                     |
| RESERVED                  | 4  | 38 | RESERVED                  |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                  |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                     |
| +5 V                      | 1  | 35 | R GND                     |

## NI 6608 with the SH68-68-D1 Cable

|                           |    |    |                           |
|---------------------------|----|----|---------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                     |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE   |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX    |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                     |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE   |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX    |
| PFI 23/P0.23/CTR 4 SOURCE | 28 | 62 | D GND                     |
| D GND                     | 27 | 61 | PFI 22/P0.22/CTR 4 GATE   |
| CTR 4 OUT/PFI 20/P0.20    | 26 | 60 | PFI 21/P0.21/CTR 4 AUX    |
| PFI 19/P0.19/CTR 5 SOURCE | 25 | 59 | D GND                     |
| D GND                     | 24 | 58 | PFI 18/P0.18/CTR 5 GATE   |
| CTR 5 OUT/PFI 16/P0.16    | 23 | 57 | PFI 17/P0.17/CTR 5 AUX    |
| PFI 15/P0.15/CTR 6 SOURCE | 22 | 56 | RESERVED                  |
| PFI 14/P0.14/CTR 6 GATE   | 21 | 55 | D GND                     |
| D GND                     | 20 | 54 | PFI 13/P0.13/CTR 6 AUX    |
| RESERVED                  | 19 | 53 | CTR 6 OUT/PFI 12/P0.12    |
| D GND                     | 18 | 52 | PFI 11/P0.11/CTR 7 SOURCE |
| PFI 9/P0.9/CTR 7 AUX      | 17 | 51 | PFI 10/P0.10/CTR 7 GATE   |
| CTR 7 OUT/PFI 8/P0.8      | 16 | 50 | D GND                     |
| PFI 7/P0.7                | 15 | 49 | D GND                     |
| D GND                     | 14 | 48 | PFI 6/P0.6                |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5                |
| PFI 3/P0.3                | 12 | 46 | D GND                     |
| D GND                     | 11 | 45 | PFI 2/P0.2                |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1                |
| PFI 32/CTR 1 OUT          | 9  | 43 | RESERVED                  |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                     |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                     |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX          |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                     |
| RESERVED                  | 4  | 38 | RESERVED                  |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                  |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                     |
| +5 V                      | 1  | 35 | RESERVED                  |

## NI 6608 with the R6868 Cable

|                           |    |    |                           |
|---------------------------|----|----|---------------------------|
| PFI 31/P0.31/CTR 2 SOURCE | 34 | 68 | D GND                     |
| D GND                     | 33 | 67 | PFI 30/P0.30/CTR 2 GATE   |
| PFI 28/P0.28/CTR 2 OUT    | 32 | 66 | PFI 29/P0.29/CTR 2 AUX    |
| PFI 27/P0.27/CTR 3 SOURCE | 31 | 65 | D GND                     |
| D GND                     | 30 | 64 | PFI 26/P0.26/CTR 3 GATE   |
| PFI 24/P0.24/CTR 3 OUT    | 29 | 63 | PFI 25/P0.25/CTR 3 AUX    |
| PFI 23/P0.23/CTR 4 SOURCE | 28 | 62 | D GND                     |
| D GND                     | 27 | 61 | PFI 22/P0.22/CTR 4 GATE   |
| CTR 4 OUT/PFI 20/P0.20    | 26 | 60 | PFI 21/P0.21/CTR 4 AUX    |
| PFI 19/P0.19/CTR 5 SOURCE | 25 | 59 | D GND                     |
| D GND                     | 24 | 58 | PFI 18/P0.18/CTR 5 GATE   |
| CTR 5 OUT/PFI 16/P0.16    | 23 | 57 | PFI 17/P0.17/CTR 5 AUX    |
| PFI 15/P0.15/CTR 6 SOURCE | 22 | 56 | GND                       |
| PFI 14/P0.14/CTR 6 GATE   | 21 | 55 | D GND                     |
| D GND                     | 20 | 54 | PFI 13/P0.13/CTR 6 AUX    |
| GND                       | 19 | 53 | CTR 6 OUT/PFI 12/P0.12    |
| D GND                     | 18 | 52 | PFI 11/P0.11/CTR 7 SOURCE |
| PFI 9/P0.9/CTR 7 AUX      | 17 | 51 | PFI 10/P0.10/CTR 7 GATE   |
| CTR 7 OUT/PFI 8/P0.8      | 16 | 50 | D GND                     |
| PFI 7/P0.7                | 15 | 49 | D GND                     |
| D GND                     | 14 | 48 | PFI 6/P0.6                |
| PFI 4/P0.4                | 13 | 47 | PFI 5/P0.5                |
| PFI 3/P0.3                | 12 | 46 | D GND                     |
| D GND                     | 11 | 45 | PFI 2/P0.2                |
| PFI 0/P0.0                | 10 | 44 | PFI 1/P0.1                |
| PFI 32/CTR 1 OUT          | 9  | 43 | GND                       |
| PFI 34/CTR 1 GATE         | 8  | 42 | D GND                     |
| PFI 35/CTR 1 SOURCE       | 7  | 41 | D GND                     |
| PFI 33/CTR 1 AUX          | 6  | 40 | PFI 37/CTR 0 AUX          |
| PFI 36/CTR 0 OUT          | 5  | 39 | D GND                     |
| RESERVED                  | 4  | 38 | RESERVED                  |
| PFI 38/CTR 0 GATE         | 3  | 37 | RESERVED                  |
| PFI 39/CTR 0 SOURCE       | 2  | 36 | D GND                     |
| +5 V                      | 1  | 35 | GND                       |

# NI 6624

|                      |    |     |                      |
|----------------------|----|-----|----------------------|
| PFI 39+/CTR 0 SRC+   | 1  | 51  | PFI 23+/CTR 4 SRC+   |
| PFI 39-/CTR 0 SRC-   | 2  | 52  | PFI 23-/CTR 4 SRC-   |
| PFI 38+/CTR 0 GATE+  | 3  | 53  | PFI 22+/CTR 4 GATE+  |
| PFI 38-/CTR 0 GATE-  | 4  | 54  | PFI 22-/CTR 4 GATE-  |
| PFI 37+/CTR 0 AUX+   | 5  | 55  | PFI 21+/CTR 4 AUX+   |
| PFI 37-/CTR 0 AUX-   | 6  | 56  | PFI 21-/CTR 4 AUX-   |
| PFI 36 Vdd/CTR 0 VDD | 7  | 57  | PFI 20 Vdd/CTR 4 VDD |
| PFI 36/CTR 0 VSS     | 8  | 58  | PFI 20 Vss/CTR 4 VSS |
| PFI 36/CTR 0 OUT     | 9  | 59  | PFI 20/CTR 4 OUT     |
| PFI 36/CTR 0 VSS     | 10 | 60  | PFI 20 Vss/CTR 4 VSS |
| PFI 35+/CTR 1 SRC+   | 11 | 61  | PFI 19+/CTR 5 SRC+   |
| PFI 35-/CTR 1 SRC-   | 12 | 62  | PFI 19-/CTR 5 SRC-   |
| PFI 34+/CTR 1 GATE+  | 13 | 63  | PFI 18+/CTR 5 GATE+  |
| PFI 34-/CTR 1 GATE-  | 14 | 64  | PFI 18-/CTR 5 GATE-  |
| PFI 33+/CTR 1 AUX+   | 15 | 65  | PFI 17+/CTR 5 AUX+   |
| PFI 33-/CTR 1 AUX-   | 16 | 66  | PFI 17-/CTR 5 AUX-   |
| PFI 32 Vdd/CTR 1 VDD | 17 | 67  | PFI 16 Vdd/CTR 5 VDD |
| PFI 32 Vss/CTR 1 VSS | 18 | 68  | PFI 16 Vss/CTR 5 VSS |
| PFI 32/CTR 1 OUT     | 19 | 69  | PFI 16/CTR 5 OUT     |
| PFI 32 Vss/CTR 1 VSS | 20 | 70  | PFI 16 Vss/CTR 5 VSS |
| PFI 31+/CTR 2 SRC+   | 21 | 71  | PFI 15+/CTR 6 SRC+   |
| PFI 31-/CTR 2 SRC-   | 22 | 72  | PFI 15-/CTR 6 SRC-   |
| PFI 30+/CTR 2 GATE+  | 23 | 73  | PFI 14+/CTR 6 GATE+  |
| PFI 30-/CTR 2 GATE-  | 24 | 74  | PFI 14-/CTR 6 GATE-  |
| PFI 29+/CTR 2 AUX+   | 25 | 75  | PFI 13+/CTR 6 AUX+   |
| PFI 29-/CTR 2 AUX-   | 26 | 76  | PFI 13-/CTR 6 AUX-   |
| PFI 28 Vdd/CTR 2 VDD | 27 | 77  | PFI 12 Vdd/CTR 6 VDD |
| PFI 28 Vss/CTR 2 VSS | 28 | 78  | PFI 12 Vss/CTR 6 VSS |
| PFI 28/CTR 2 OUT     | 29 | 79  | PFI 12/CTR 6 OUT     |
| PFI 28 Vss/CTR 2 VSS | 30 | 80  | PFI 12 Vss/CTR 6 VSS |
| PFI 27+/CTR 3 SRC+   | 31 | 81  | PFI 11+/CTR 7 SRC+   |
| PFI 27-/CTR 3 SRC-   | 32 | 82  | PFI 11-/CTR 7 SRC-   |
| PFI 26+/CTR 3 GATE+  | 33 | 83  | PFI 10+/CTR 7 GATE+  |
| PFI 26-/CTR 3 GATE-  | 34 | 84  | PFI 10-/CTR 7 GATE-  |
| PFI 25+/CTR 3 AUX+   | 35 | 85  | PFI 9+/CTR 7 AUX+    |
| PFI 25-/CTR 3 AUX-   | 36 | 86  | PFI 9-/CTR 7 AUX-    |
| PFI 24 Vdd/CTR 3 VDD | 37 | 87  | PFI 8 Vdd/CTR 7 VDD  |
| PFI 24 Vss/CTR 3 VSS | 38 | 88  | PFI 8 Vss/CTR 7 VSS  |
| PFI 24/CTR 3 OUT     | 39 | 89  | PFI 8/CTR 7 OUT      |
| PFI 24 Vss/CTR 3 VSS | 40 | 90  | PFI 8 Vss/CTR 7 VSS  |
| PFI 0+               | 41 | 91  | PFI 4+               |
| PFI 0-               | 42 | 92  | PFI 4-               |
| NC                   | 43 | 93  | NC                   |
| NC                   | 44 | 94  | NC                   |
| NC                   | 45 | 95  | NC                   |
| NC                   | 46 | 96  | NC                   |
| NC                   | 47 | 97  | NC                   |
| NC                   | 48 | 98  | NC                   |
| NC                   | 49 | 99  | NC                   |
| NC                   | 50 | 100 | NC                   |

## NI 6703

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|              |    |    |              |
|--------------|----|----|--------------|
| AO 0 (V)     | 34 | 68 | AO GND 0/16  |
| AO GND 1/17  | 33 | 67 | NC           |
| NC           | 32 | 66 | AO 1 (V)     |
| AO 2 (V)     | 31 | 65 | AO GND 2/18  |
| AO GND 3/19  | 30 | 64 | NC           |
| NC           | 29 | 63 | AO 3 (V)     |
| AO 4 (V)     | 28 | 62 | AO GND 4/20  |
| AO GND 5/21  | 27 | 61 | NC           |
| NC           | 26 | 60 | AO 5 (V)     |
| AO 6 (V)     | 25 | 59 | AO GND 6/22  |
| AO GND 7/23  | 24 | 58 | NC           |
| NC           | 23 | 57 | AO 7 (V)     |
| AO 8 (V)     | 22 | 56 | AO GND       |
| NC           | 21 | 55 | AO GND 8/24  |
| AO GND 9/25  | 20 | 54 | AO 9 (V)     |
| AO GND       | 19 | 53 | NC           |
| AO GND 10/26 | 18 | 52 | AO 10 (V)    |
| AO 11 (V)    | 17 | 51 | NC           |
| NC           | 16 | 50 | AO GND 11/27 |
| AO 12 (V)    | 15 | 49 | AO GND 12/28 |
| AO GND 13/29 | 14 | 48 | NC           |
| NC           | 13 | 47 | AO 13 (V)    |
| AO 14 (V)    | 12 | 46 | AO GND 14/30 |
| AO GND 15/31 | 11 | 45 | NC           |
| NC           | 10 | 44 | AO 15 (V)    |
| P0.7         | 9  | 43 | AO GND       |
| P0.6         | 8  | 42 | D GND        |
| P0.5         | 7  | 41 | D GND        |
| P0.4         | 6  | 40 | RESERVED     |
| P0.3         | 5  | 39 | D GND        |
| P0.2         | 4  | 38 | RESERVED     |
| P0.1         | 3  | 37 | D GND        |
| P0.0         | 2  | 36 | D GND        |
| +5 V         | 1  | 35 | D GND        |

|             |             |
|-------------|-------------|
| V = Voltage | I = Current |
|-------------|-------------|

## NI 6703 with the SH68-68-D1 Cable

|              |    |    |              |
|--------------|----|----|--------------|
| AO 0 (V)     | 34 | 68 | AO GND 0/16  |
| AO GND 1/17  | 33 | 67 | NC           |
| NC           | 32 | 66 | AO 1 (V)     |
| AO 2 (V)     | 31 | 65 | AO GND 2/18  |
| AO GND 3/19  | 30 | 64 | NC           |
| NC           | 29 | 63 | AO 3 (V)     |
| AO 4 (V)     | 28 | 62 | AO GND 4/20  |
| AO GND 5/21  | 27 | 61 | NC           |
| NC           | 26 | 60 | AO 5 (V)     |
| AO 6 (V)     | 25 | 59 | AO GND 6/22  |
| AO GND 7/23  | 24 | 58 | NC           |
| NC           | 23 | 57 | AO 7 (V)     |
| AO 8 (V)     | 22 | 56 | NC           |
| NC           | 21 | 55 | AO GND 8/24  |
| AO GND 9/25  | 20 | 54 | AO 9 (V)     |
| NC           | 19 | 53 | NC           |
| AO GND 10/26 | 18 | 52 | AO 10 (V)    |
| AO 11 (V)    | 17 | 51 | NC           |
| NC           | 16 | 50 | AO GND 11/27 |
| AO 12 (V)    | 15 | 49 | AO GND 12/28 |
| AO GND 13/29 | 14 | 48 | NC           |
| NC           | 13 | 47 | AO 13 (V)    |
| AO 14 (V)    | 12 | 46 | AO GND 14/30 |
| AO GND 15/31 | 11 | 45 | NC           |
| NC           | 10 | 44 | AO 15 (V)    |
| P0.7         | 9  | 43 | NC           |
| P0.6         | 8  | 42 | D GND        |
| P0.5         | 7  | 41 | D GND        |
| P0.4         | 6  | 40 | RESERVED     |
| P0.3         | 5  | 39 | D GND        |
| P0.2         | 4  | 38 | RESERVED     |
| P0.1         | 3  | 37 | D GND        |
| P0.0         | 2  | 36 | D GND        |
| +5 V         | 1  | 35 | NC           |

V = Voltage

I = Current

## NI 6704

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|              |    |    |              |
|--------------|----|----|--------------|
| AO 0 (V)     | 34 | 68 | AO GND 0/16  |
| AO GND 1/17  | 33 | 67 | AO 16 (I)    |
| AO 17 (I)    | 32 | 66 | AO 1 (V)     |
| AO 2 (V)     | 31 | 65 | AO GND 2/18  |
| AO GND 3/19  | 30 | 64 | AO 18 (I)    |
| AO 19 (I)    | 29 | 63 | AO 3 (V)     |
| AO 4 (V)     | 28 | 62 | AO GND 4/20  |
| AO GND 5/21  | 27 | 61 | AO 20 (I)    |
| AO 21 (I)    | 26 | 60 | AO 5 (V)     |
| AO 6 (V)     | 25 | 59 | AO GND 6/22  |
| AO GND 7/23  | 24 | 58 | AO 22 (I)    |
| AO 23 (I)    | 23 | 57 | AO 7 (V)     |
| AO 8 (V)     | 22 | 56 | AO GND       |
| AO 24 (I)    | 21 | 55 | AO GND 8/24  |
| AO GND 9/25  | 20 | 54 | AO 9 (V)     |
| AO GND       | 19 | 53 | AO 25 (I)    |
| AO GND 10/26 | 18 | 52 | AO 10 (V)    |
| AO 11 (V)    | 17 | 51 | AO 26 (I)    |
| AO 27 (I)    | 16 | 50 | AO GND 11/27 |
| AO 12 (V)    | 15 | 49 | AO GND 12/28 |
| AO GND 13/29 | 14 | 48 | AO 28 (I)    |
| AO 29 (I)    | 13 | 47 | AO 13 (V)    |
| AO 14 (V)    | 12 | 46 | AO GND 14/30 |
| AO GND 15/31 | 11 | 45 | AO 30 (I)    |
| AO 31 (I)    | 10 | 44 | AO 15 (V)    |
| P0.7         | 9  | 43 | AO GND       |
| P0.6         | 8  | 42 | D GND        |
| P0.5         | 7  | 41 | D GND        |
| P0.4         | 6  | 40 | RESERVED     |
| P0.3         | 5  | 39 | D GND        |
| P0.2         | 4  | 38 | RESERVED     |
| P0.1         | 3  | 37 | D GND        |
| P0.0         | 2  | 36 | D GND        |
| +5 V         | 1  | 35 | D GND        |

V = Voltage

I = Current



## NI 6704 with the SH68-68-D1 Cable

|              |    |    |              |
|--------------|----|----|--------------|
| AO 0 (V)     | 34 | 68 | AO GND 0/16  |
| AO GND 1/17  | 33 | 67 | AO 16 (I)    |
| AO 17 (I)    | 32 | 66 | AO 1 (V)     |
| AO 2 (V)     | 31 | 65 | AO GND 2/18  |
| AO GND 3/19  | 30 | 64 | AO 18 (I)    |
| AO 19 (I)    | 29 | 63 | AO 3 (V)     |
| AO 4 (V)     | 28 | 62 | AO GND 4/20  |
| AO GND 5/21  | 27 | 61 | AO 20 (I)    |
| AO 21 (I)    | 26 | 60 | AO 5 (V)     |
| AO 6 (V)     | 25 | 59 | AO GND 6/22  |
| AO GND 7/23  | 24 | 58 | AO 22 (I)    |
| AO 23 (I)    | 23 | 57 | AO 7 (V)     |
| AO 8 (V)     | 22 | 56 | NC           |
| AO 24 (I)    | 21 | 55 | AO GND 8/24  |
| AO GND 9/25  | 20 | 54 | AO 9 (V)     |
| NC           | 19 | 53 | AO 25 (I)    |
| AO GND 10/26 | 18 | 52 | AO 10 (V)    |
| AO 11 (V)    | 17 | 51 | AO 26 (I)    |
| AO 27 (I)    | 16 | 50 | AO GND 11/27 |
| AO 12 (V)    | 15 | 49 | AO GND 12/28 |
| AO GND 13/29 | 14 | 48 | AO 28 (I)    |
| AO 29 (I)    | 13 | 47 | AO 13 (V)    |
| AO 14 (V)    | 12 | 46 | AO GND 14/30 |
| AO GND 15/31 | 11 | 45 | AO 30 (I)    |
| AO 31 (I)    | 10 | 44 | AO 15 (V)    |
| P0.7         | 9  | 43 | NC           |
| P0.6         | 8  | 42 | D GND        |
| P0.5         | 7  | 41 | D GND        |
| P0.4         | 6  | 40 | RESERVED     |
| P0.3         | 5  | 39 | D GND        |
| P0.2         | 4  | 38 | RESERVED     |
| P0.1         | 3  | 37 | D GND        |
| P0.0         | 2  | 36 | D GND        |
| +5 V         | 1  | 35 | NC           |

V = Voltage

I = Current

## NI 6711

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                    |
|---------------------|----|----|--------------------|
| AO GND              | 34 | 68 | NC                 |
| NC                  | 33 | 67 | AO GND             |
| AO GND              | 32 | 66 | AO GND             |
| AO GND              | 31 | 65 | NC                 |
| NC                  | 30 | 64 | AO GND             |
| AO GND              | 29 | 63 | AO GND             |
| NC                  | 28 | 62 | NC                 |
| AO GND              | 27 | 61 | AO GND             |
| AO GND              | 26 | 60 | NC                 |
| AO 3                | 25 | 59 | AO GND             |
| AO GND              | 24 | 58 | AO GND             |
| AO GND              | 23 | 57 | AO 2               |
| AO 0                | 22 | 56 | AO GND             |
| AO 1                | 21 | 55 | AO GND             |
| AO EXT REF          | 20 | 54 | AO GND             |
| P0.4                | 19 | 53 | D GND              |
| D GND               | 18 | 52 | P0.0               |
| P0.1                | 17 | 51 | P0.5               |
| P0.6                | 16 | 50 | D GND              |
| D GND               | 15 | 49 | P0.2               |
| +5 V                | 14 | 48 | P0.7               |
| D GND               | 13 | 47 | P0.3               |
| D GND               | 12 | 46 | NC                 |
| PFI 0               | 11 | 45 | EXT STROBE         |
| PFI 1               | 10 | 44 | D GND              |
| D GND               | 9  | 43 | PFI 2              |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG | 5  | 39 | D GND              |
| D GND               | 4  | 38 | PFI 7              |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT           | 2  | 36 | D GND              |
| FREQ OUT            | 1  | 35 | D GND              |

NC = No Connect

## NI 6713

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                    |
|---------------------|----|----|--------------------|
| AO GND              | 34 | 68 | NC                 |
| NC                  | 33 | 67 | AO GND             |
| AO GND              | 32 | 66 | AO GND             |
| AO GND              | 31 | 65 | AO 7               |
| AO 6                | 30 | 64 | AO GND             |
| AO GND              | 29 | 63 | AO GND             |
| AO 5                | 28 | 62 | NC                 |
| AO GND              | 27 | 61 | AO GND             |
| AO GND              | 26 | 60 | AO 4               |
| AO 3                | 25 | 59 | AO GND             |
| AO GND              | 24 | 58 | AO GND             |
| AO GND              | 23 | 57 | AO 2               |
| AO 0                | 22 | 56 | AO GND             |
| AO 1                | 21 | 55 | AO GND             |
| AO EXT REF          | 20 | 54 | AO GND             |
| P0.4                | 19 | 53 | D GND              |
| D GND               | 18 | 52 | P0.0               |
| P0.1                | 17 | 51 | P0.5               |
| P0.6                | 16 | 50 | D GND              |
| D GND               | 15 | 49 | P0.2               |
| +5 V                | 14 | 48 | P0.7               |
| D GND               | 13 | 47 | P0.3               |
| D GND               | 12 | 46 | NC                 |
| PFI 0               | 11 | 45 | EXT STROBE         |
| PFI 1               | 10 | 44 | D GND              |
| D GND               | 9  | 43 | PFI 2              |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG | 5  | 39 | D GND              |
| D GND               | 4  | 38 | PFI 7              |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT           | 2  | 36 | D GND              |
| FREQ OUT            | 1  | 35 | D GND              |

NC = No Connect

## NI DAQCard-6715

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                    |
|---------------------|----|----|--------------------|
| AO GND              | 34 | 68 | NC                 |
| NC                  | 33 | 67 | AO GND             |
| AO GND              | 32 | 66 | AO GND             |
| AO GND              | 31 | 65 | AO 7               |
| AO 6                | 30 | 64 | AO GND             |
| AO GND              | 29 | 63 | AO GND             |
| AO 5                | 28 | 62 | NC                 |
| AO GND              | 27 | 61 | AO GND             |
| AO GND              | 26 | 60 | AO 4               |
| AO 3                | 25 | 59 | AO GND             |
| AO GND              | 24 | 58 | AO GND             |
| AO GND              | 23 | 57 | AO 2               |
| AO 0                | 22 | 56 | AO GND             |
| AO 1                | 21 | 55 | AO GND             |
| AO EXT REF          | 20 | 54 | AO GND             |
| P0.4                | 19 | 53 | D GND              |
| D GND               | 18 | 52 | P0.0               |
| P0.1                | 17 | 51 | P0.5               |
| P0.6                | 16 | 50 | D GND              |
| D GND               | 15 | 49 | P0.2               |
| +5 V                | 14 | 48 | P0.7               |
| D GND               | 13 | 47 | P0.3               |
| D GND               | 12 | 46 | NC                 |
| PFI 0               | 11 | 45 | EXT STROBE         |
| PFI 1               | 10 | 44 | D GND              |
| D GND               | 9  | 43 | PFI 2              |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG | 5  | 39 | D GND              |
| D GND               | 4  | 38 | PFI 7              |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT           | 2  | 36 | D GND              |
| FREQ OUT            | 1  | 35 | D GND              |

NC = No Connect

# NI 6722

|                     |    |    |                    |
|---------------------|----|----|--------------------|
| AO GND              | 34 | 68 | NC                 |
| NC                  | 33 | 67 | AO GND             |
| AO GND              | 32 | 66 | AO GND             |
| AO GND              | 31 | 65 | AO 7               |
| AO 6                | 30 | 64 | AO GND             |
| AO GND              | 29 | 63 | AO GND             |
| AO 5                | 28 | 62 | NC                 |
| AO GND              | 27 | 61 | AO GND             |
| AO GND              | 26 | 60 | AO 4               |
| AO 3                | 25 | 59 | AO GND             |
| AO GND              | 24 | 58 | AO GND             |
| AO GND              | 23 | 57 | AO 2               |
| AO 0                | 22 | 56 | AO GND             |
| AO 1                | 21 | 55 | AO GND             |
| CAL                 | 20 | 54 | AO GND             |
| P0.4                | 19 | 53 | D GND              |
| D GND               | 18 | 52 | P0.0               |
| P0.1                | 17 | 51 | P0.5               |
| P0.6                | 16 | 50 | D GND              |
| D GND               | 15 | 49 | P0.2               |
| +5 V                | 14 | 48 | P0.7               |
| D GND               | 13 | 47 | P0.3               |
| D GND               | 12 | 46 | NC                 |
| PFI 0               | 11 | 45 | EXT STROBE         |
| PFI 1               | 10 | 44 | D GND              |
| D GND               | 9  | 43 | PFI 2              |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG | 5  | 39 | D GND              |
| D GND               | 4  | 38 | PFI 7              |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT           | 2  | 36 | D GND              |
| FREQ OUT            | 1  | 35 | D GND              |

NC = No Connect

## NI 6723 (Extended AO Connector)

The NI 6723 has two 68-pin I/O connectors. The following figures show the pin assignments for both connectors on the NI 6723.

AO 0–7 & DIGITAL Connector

|                     |    |    |                    |
|---------------------|----|----|--------------------|
| AO GND              | 34 | 68 | NC                 |
| NC                  | 33 | 67 | AO GND             |
| AO GND              | 32 | 66 | AO GND             |
| AO GND              | 31 | 65 | AO 7               |
| AO 6                | 30 | 64 | AO GND             |
| AO GND              | 29 | 63 | AO GND             |
| AO 5                | 28 | 62 | NC                 |
| AO GND              | 27 | 61 | AO GND             |
| AO GND              | 26 | 60 | AO 4               |
| AO 3                | 25 | 59 | AO GND             |
| AO GND              | 24 | 58 | AO GND             |
| AO GND              | 23 | 57 | AO 2               |
| AO 0                | 22 | 56 | AO GND             |
| AO 1                | 21 | 55 | AO GND             |
| CAL                 | 20 | 54 | AO GND             |
| P0.4                | 19 | 53 | D GND              |
| D GND               | 18 | 52 | P0.0               |
| P0.1                | 17 | 51 | P0.5               |
| P0.6                | 16 | 50 | D GND              |
| D GND               | 15 | 49 | P0.2               |
| +5 V                | 14 | 48 | P0.7               |
| D GND               | 13 | 47 | P0.3               |
| D GND               | 12 | 46 | NC                 |
| PFI 0               | 11 | 45 | EXT STROBE         |
| PFI 1               | 10 | 44 | D GND              |
| D GND               | 9  | 43 | PFI 2              |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG | 5  | 39 | D GND              |
| D GND               | 4  | 38 | PFI 7              |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT           | 2  | 36 | D GND              |
| FREQ OUT            | 1  | 35 | D GND              |

AO 8–31 Connector

|        |    |    |        |
|--------|----|----|--------|
| AO GND | 34 | 68 | AO 8   |
| AO 9   | 33 | 67 | AO GND |
| AO 10  | 32 | 66 | AO GND |
| AO GND | 31 | 65 | AO 11  |
| AO 12  | 30 | 64 | AO GND |
| AO 13  | 29 | 63 | AO GND |
| AO GND | 28 | 62 | AO 14  |
| AO 15  | 27 | 61 | AO GND |
| AO 16  | 26 | 60 | AO GND |
| AO GND | 25 | 59 | AO 17  |
| AO 18  | 24 | 58 | AO GND |
| AO 19  | 23 | 57 | AO GND |
| NC     | 22 | 56 | NC     |
| AO GND | 21 | 55 | AO 20  |
| AO 21  | 20 | 54 | AO GND |
| AO 22  | 19 | 53 | AO GND |
| AO GND | 18 | 52 | AO 23  |
| AO 24  | 17 | 51 | AO GND |
| AO 25  | 16 | 50 | AO GND |
| AO GND | 15 | 49 | AO 26  |
| AO 27  | 14 | 48 | AO GND |
| AO 28  | 13 | 47 | AO GND |
| AO GND | 12 | 46 | AO 29  |
| AO 30  | 11 | 45 | AO GND |
| AO 31  | 10 | 44 | AO GND |
| NC     | 9  | 43 | NC     |
| NC     | 8  | 42 | NC     |
| NC     | 7  | 41 | NC     |
| NC     | 6  | 40 | NC     |
| NC     | 5  | 39 | NC     |
| NC     | 4  | 38 | NC     |
| NC     | 3  | 37 | NC     |
| NC     | 2  | 36 | NC     |
| NC     | 1  | 35 | NC     |

NC = No Connect

## NI 6731

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                    |
|---------------------|----|----|--------------------|
| AO GND              | 34 | 68 | NC                 |
| NC                  | 33 | 67 | AO GND             |
| AO GND              | 32 | 66 | AO GND             |
| AO GND              | 31 | 65 | NC                 |
| NC                  | 30 | 64 | AO GND             |
| AO GND              | 29 | 63 | AO GND             |
| NC                  | 28 | 62 | NC                 |
| AO GND              | 27 | 61 | AO GND             |
| AO GND              | 26 | 60 | NC                 |
| AO 3                | 25 | 59 | AO GND             |
| AO GND              | 24 | 58 | AO GND             |
| AO GND              | 23 | 57 | AO 2               |
| AO 0                | 22 | 56 | AO GND             |
| AO 1                | 21 | 55 | AO GND             |
| AO EXT REF          | 20 | 54 | AO GND             |
| P0.4                | 19 | 53 | D GND              |
| D GND               | 18 | 52 | P0.0               |
| P0.1                | 17 | 51 | P0.5               |
| P0.6                | 16 | 50 | D GND              |
| D GND               | 15 | 49 | P0.2               |
| +5 V                | 14 | 48 | P0.7               |
| D GND               | 13 | 47 | P0.3               |
| D GND               | 12 | 46 | NC                 |
| PFI 0               | 11 | 45 | EXT STROBE         |
| PFI 1               | 10 | 44 | D GND              |
| D GND               | 9  | 43 | PFI 2              |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG | 5  | 39 | D GND              |
| D GND               | 4  | 38 | PFI 7              |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT           | 2  | 36 | D GND              |
| FREQ OUT            | 1  | 35 | D GND              |

NC = No Connect

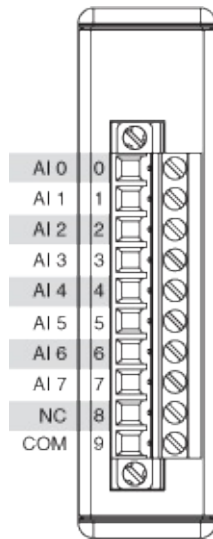
# NI 6733

|                     |    |    |                    |
|---------------------|----|----|--------------------|
| AO GND              | 34 | 68 | NC                 |
| NC                  | 33 | 67 | AO GND             |
| AO GND              | 32 | 66 | AO GND             |
| AO GND              | 31 | 65 | AO 7               |
| AO 6                | 30 | 64 | AO GND             |
| AO GND              | 29 | 63 | AO GND             |
| AO 5                | 28 | 62 | NC                 |
| AO GND              | 27 | 61 | AO GND             |
| AO GND              | 26 | 60 | AO 4               |
| AO 3                | 25 | 59 | AO GND             |
| AO GND              | 24 | 58 | AO GND             |
| AO GND              | 23 | 57 | AO 2               |
| AO 0                | 22 | 56 | AO GND             |
| AO 1                | 21 | 55 | AO GND             |
| AO EXT REF          | 20 | 54 | AO GND             |
| P0.4                | 19 | 53 | D GND              |
| D GND               | 18 | 52 | P0.0               |
| P0.1                | 17 | 51 | P0.5               |
| P0.6                | 16 | 50 | D GND              |
| D GND               | 15 | 49 | P0.2               |
| +5 V                | 14 | 48 | P0.7               |
| D GND               | 13 | 47 | P0.3               |
| D GND               | 12 | 46 | NC                 |
| PFI 0               | 11 | 45 | EXT STROBE         |
| PFI 1               | 10 | 44 | D GND              |
| D GND               | 9  | 43 | PFI 2              |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SOURCE |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE   |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT          |
| PFI 6/AO START TRIG | 5  | 39 | D GND              |
| D GND               | 4  | 38 | PFI 7              |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SOURCE |
| CTR 0 OUT           | 2  | 36 | D GND              |
| FREQ OUT            | 1  | 35 | D GND              |

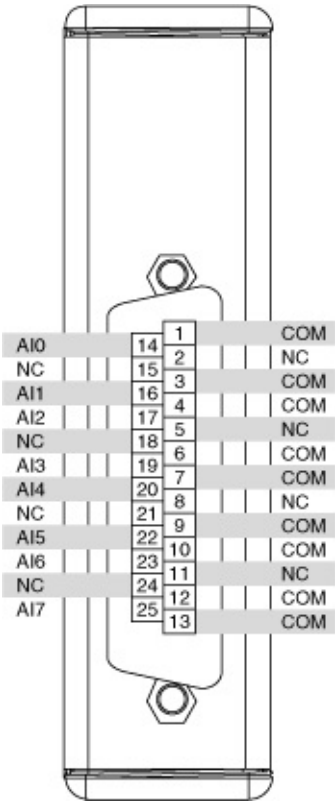
NC = No Connect



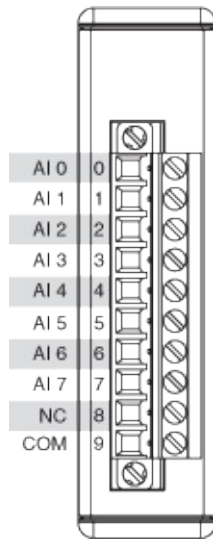
## NI 9201



NI 9201 (DSUB)



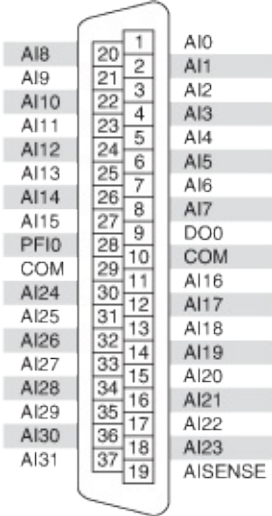
## NI 9203



NI 9205

|      |    |    |         |
|------|----|----|---------|
| AI0  | 1  | 19 | AI8     |
| AI1  | 2  | 20 | AI9     |
| AI2  | 3  | 21 | AI10    |
| AI3  | 4  | 22 | AI11    |
| AI4  | 5  | 23 | AI12    |
| AI5  | 6  | 24 | AI13    |
| AI6  | 7  | 25 | AI14    |
| AI7  | 8  | 26 | AI15    |
| AI16 | 9  | 27 | AI24    |
| AI17 | 10 | 28 | AI25    |
| AI18 | 11 | 29 | AI26    |
| AI19 | 12 | 30 | AI27    |
| AI20 | 13 | 31 | AI28    |
| AI21 | 14 | 32 | AI29    |
| AI22 | 15 | 33 | AI30    |
| AI23 | 16 | 34 | AI31    |
| COM  | 17 | 35 | AISENSE |
| DO0  | 18 | 36 | PFI0    |

NI 9205 (DSUB)



NI 9206

|      |    |    |         |
|------|----|----|---------|
| AI0  | 1  | 19 | AI8     |
| AI1  | 2  | 20 | AI9     |
| AI2  | 3  | 21 | AI10    |
| AI3  | 4  | 22 | AI11    |
| AI4  | 5  | 23 | AI12    |
| AI5  | 6  | 24 | AI13    |
| AI6  | 7  | 25 | AI14    |
| AI7  | 8  | 26 | AI15    |
| AI16 | 9  | 27 | AI24    |
| AI17 | 10 | 28 | AI25    |
| AI18 | 11 | 29 | AI26    |
| AI19 | 12 | 30 | AI27    |
| AI20 | 13 | 31 | AI28    |
| AI21 | 14 | 32 | AI29    |
| AI22 | 15 | 33 | AI30    |
| AI23 | 16 | 34 | AI31    |
| COM  | 17 | 35 | AISENSE |
| DO0  | 18 | 36 | PFI0    |

# NI 9211

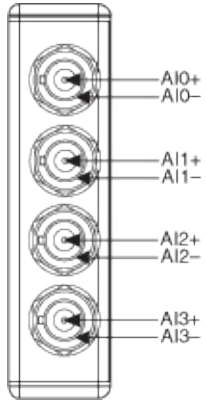
|   |               |
|---|---------------|
| 0 | AI 0+ (TC 0+) |
| 1 | AI 0- (TC 0-) |
| 2 | AI 1+ (TC 1+) |
| 3 | AI 1- (TC 1-) |
| 4 | AI 2+ (TC 2+) |
| 5 | AI 2- (TC 2-) |
| 6 | AI 3+ (TC 3+) |
| 7 | AI 3- (TC 3-) |
| 8 | NC            |
| 9 | COM           |

# NI 9215

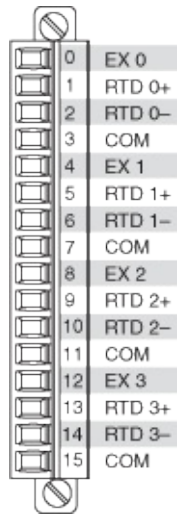
|   |               |
|---|---------------|
| 0 | AI 0+         |
| 1 | AI 0-         |
| 2 | AI 1+         |
| 3 | AI 1-         |
| 4 | AI 2+         |
| 5 | AI 2-         |
| 6 | AI 3+         |
| 7 | AI 3-         |
| 8 | No Connection |
| 9 | Common (COM)  |



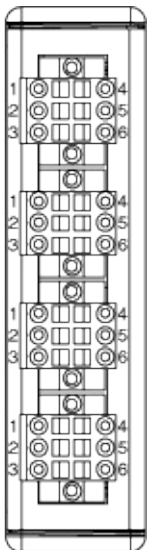
## NI 9215 (BNC)



## NI 9217



## NI 9219

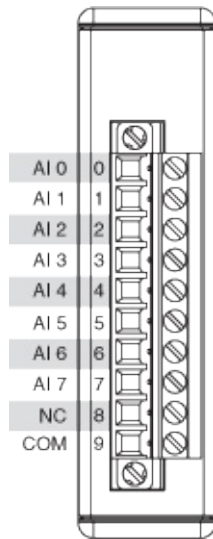
| Module                                                                            | Terminal | Signal Name         | Signal Descriptions                 |
|-----------------------------------------------------------------------------------|----------|---------------------|-------------------------------------|
|  | 1        | T+                  | TEDS Data                           |
|                                                                                   | 2        | T-                  | TEDS COM                            |
|                                                                                   | 3        | EX+/H <sup>1</sup>  | Positive excitation or input signal |
|                                                                                   | 4        | HI                  | Positive input signal               |
|                                                                                   | 5        | EX-/LO <sup>1</sup> | Negative excitation or input signal |
|                                                                                   | 6        | LO                  | Negative input signal               |

<sup>1</sup>Depending on the mode, terminals 3 and 5 are either the excitation or input signals.

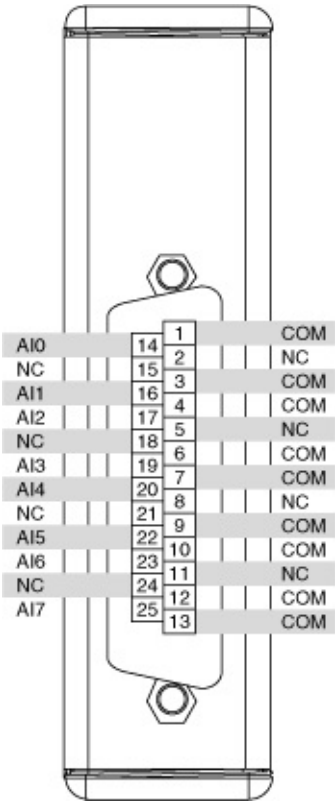
## Terminal Assignments

| Mode              | Terminal |    |     |    |     |    |
|-------------------|----------|----|-----|----|-----|----|
|                   | 1        | 2  | 3   | 4  | 5   | 6  |
| Voltage           | T+       | T- | —   | HI | LO  | —  |
| Current           | T+       | T- | HI  | —  | LO  | —  |
| 4-Wire Resistance | T+       | T- | EX+ | HI | EX- | LO |
| 2-Wire Resistance | T+       | T- | HI  | —  | LO  | —  |
| Thermocouple      | T+       | T- | —   | HI | LO  | —  |
| 4-Wire RTD        | T+       | T- | EX+ | HI | EX- | LO |
| 3-Wire RTD        | T+       | T- | EX+ | —  | EX- | LO |
| Quarter-Bridge    | T+       | T- | HI  | —  | LO  | —  |
| Half-Bridge       | T+       | T- | EX+ | HI | EX- | —  |
| Full-Bridge       | T+       | T- | EX+ | HI | EX- | LO |
| Digital In        | T+       | T- | —   | HI | LO  | —  |
| Contact           | T+       | T- | HI  | —  | LO  | —  |

## NI 9221

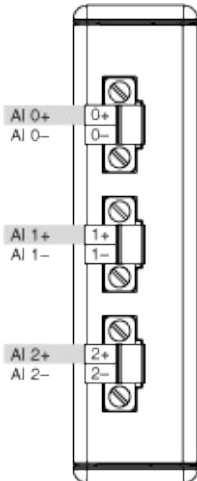


NI 9221 (DSUB)

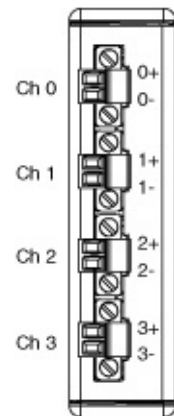


NI 9225

Terminal Assignments

| Module                                                                            | Channel | Terminal | Signal |
|-----------------------------------------------------------------------------------|---------|----------|--------|
|  | 0       | 0+       | AI 0+  |
|                                                                                   |         | 0-       | AI 0-  |
|                                                                                   | 1       | 1+       | AI 1+  |
|                                                                                   |         | 1-       | AI 1-  |
|                                                                                   | 2       | 2+       | AI 2+  |
|                                                                                   |         | 2-       | AI 2-  |

# NI 9229

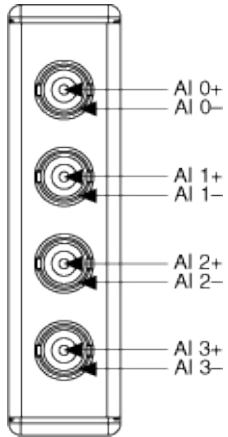




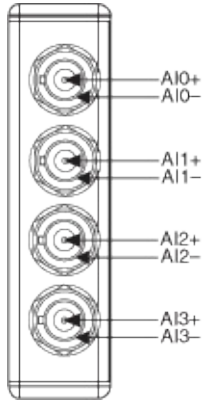
## Terminal Assignments

| Channel | Terminal | Signal |
|---------|----------|--------|
| 0       | 0+       | AI 0+  |
|         | 0-       | AI 0-  |
| 1       | 1+       | AI 1+  |
|         | 1-       | AI 1-  |
| 2       | 2+       | AI 2+  |
|         | 2-       | AI 2-  |
| 3       | 3+       | AI 3+  |
|         | 3-       | AI 3-  |

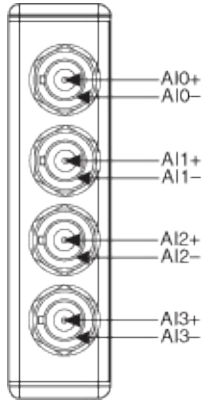
## NI 9229 (BNC)



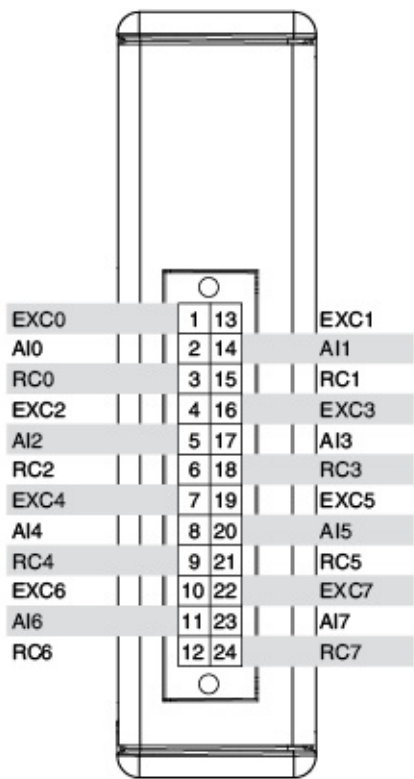
## NI 9233



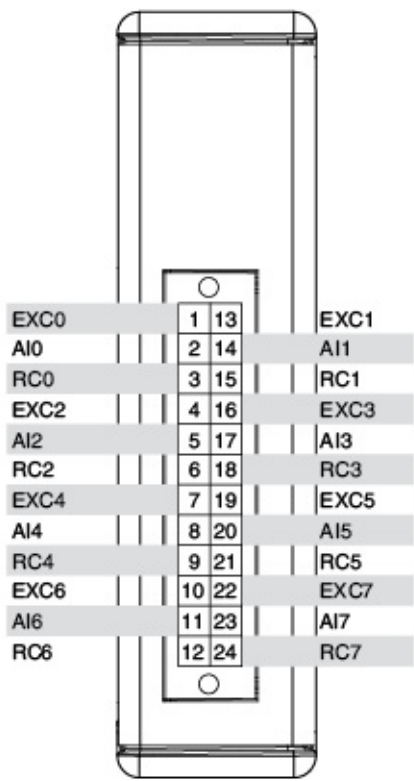
## NI 9234



NI 9235



NI 9236



## NI 9237

The following pin assignments appear on Channel 0-3.

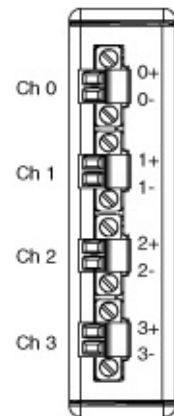
|    |     |
|----|-----|
| 1  | SC  |
| 2  | AI+ |
| 3  | AI- |
| 4  | RS+ |
| 5  | RS- |
| 6  | EX+ |
| 7  | EX- |
| 8  | T+  |
| 9  | T-  |
| 10 | SC  |

## External Excitation Voltage Pins

|     |  |  |
|-----|--|--|
| EX+ |  |  |
| EX- |  |  |



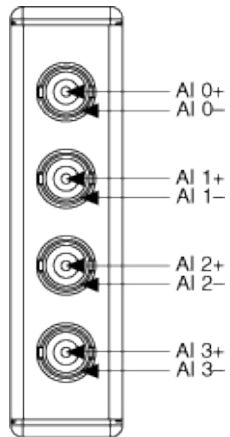
# NI 9239



## Terminal Assignments

| Channel | Terminal | Signal |
|---------|----------|--------|
| 0       | 0+       | AI 0+  |
|         | 0-       | AI 0-  |
| 1       | 1+       | AI 1+  |
|         | 1-       | AI 1-  |
| 2       | 2+       | AI 2+  |
|         | 2-       | AI 2-  |
| 3       | 3+       | AI 3+  |
|         | 3-       | AI 3-  |

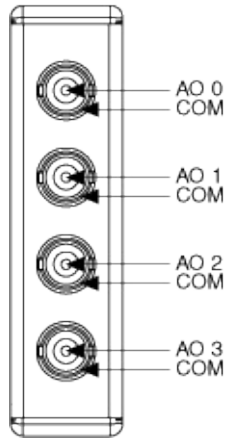
## NI 9239 (BNC)



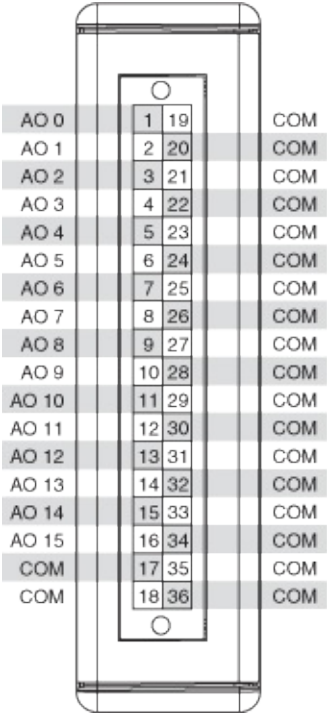
NI 9263

|   |     |
|---|-----|
| 0 | AO0 |
| 1 | COM |
| 2 | AO1 |
| 3 | COM |
| 4 | AO2 |
| 5 | COM |
| 6 | AO3 |
| 7 | COM |
| 8 | NC  |
| 9 | COM |

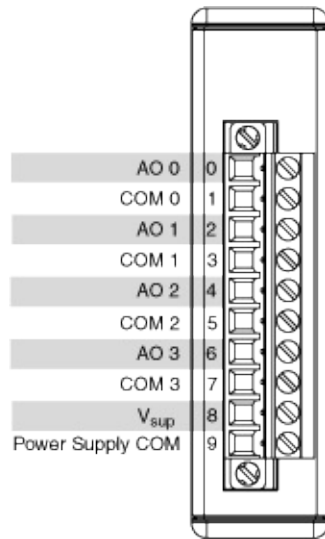
## NI 9263 (BNC)



NI 9264



# NI 9265



## NI 9401



The diagram shows a terminal block with 13 pins. The pins are numbered 1 through 13. The connections for each pin are as follows:

| Pin | Connection |
|-----|------------|
| 1   | COM        |
| 2   | NC         |
| 3   | COM        |
| 4   | COM        |
| 5   | NC         |
| 6   | COM        |
| 7   | COM        |
| 8   | NC         |
| 9   | COM        |
| 10  | COM        |
| 11  | NC         |
| 12  | COM        |
| 13  | COM        |

The following table shows the PFI and P0 connections for each pin:

| Pin | PFI | P0                      |
|-----|-----|-------------------------|
| 1   | COM | P0.0/PFI 0 <sup>1</sup> |
| 2   | NC  | NC                      |
| 3   | COM | P0.1/PFI 1 <sup>1</sup> |
| 4   | COM | P0.2/PFI 2 <sup>1</sup> |
| 5   | NC  | NC                      |
| 6   | COM | P0.3/PFI 3 <sup>1</sup> |
| 7   | COM | P0.4/PFI 4 <sup>1</sup> |
| 8   | NC  | NC                      |
| 9   | COM | P0.5/PFI 5 <sup>1</sup> |
| 10  | COM | P0.6/PFI 6 <sup>1</sup> |
| 11  | NC  | NC                      |
| 12  | COM | P0.7/PFI 7 <sup>1</sup> |
| 13  | COM |                         |

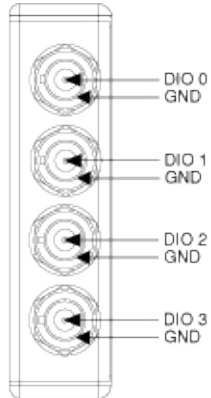
<sup>1</sup> PFI terminals are available when the device is installed in slot 5 or slot 6 of a NI cDAQ-9172 chassis.



## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 14                 | PFI 0       |
| CTR 0 GATE           | 16                 | PFI 1       |
| CTR 0 AUX            | 17                 | PFI 2       |
| CTR 0 OUT            | 19                 | PFI 3       |
| CTR 0 A              | 14                 | PFI 0       |
| CTR 0 Z              | 16                 | PFI 1       |
| CTR 0 B              | 17                 | PFI 2       |
| CTR 1 SRC            | 20                 | PFI 4       |
| CTR 1 GATE           | 22                 | PFI 5       |
| CTR 1 AUX            | 23                 | PFI 6       |
| CTR 1 OUT            | 25                 | PFI 7       |
| CTR 1 A              | 20                 | PFI 4       |
| CTR 1 Z              | 22                 | PFI 5       |
| CTR 1 B              | 23                 | PFI 6       |
| FREQ OUT             | 17                 | PFI 2       |

## NI 9402



**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of a NI cDAQ-9172 chassis.

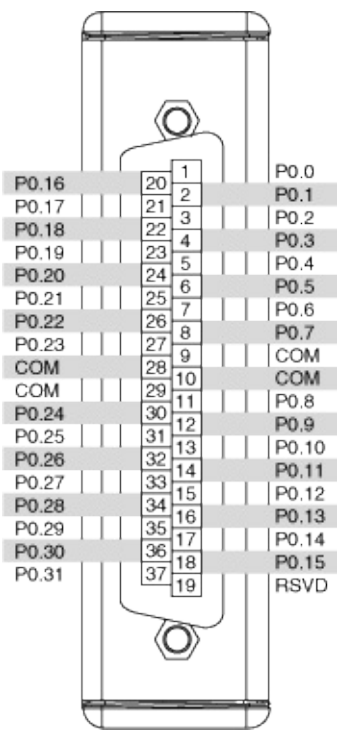
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 0                  | PFI 0       |
| CTR 0 GATE           | 1                  | PFI 1       |
| CTR 0 AUX            | 2                  | PFI 2       |
| CTR 0 OUT            | 0                  | PFI 0       |
| CTR 1 SRC            | 3                  | PFI 3       |
| CTR 1 GATE           | 2                  | PFI 2       |
| CTR 1 AUX            | 1                  | PFI 1       |
| CTR 1 OUT            | 3                  | PFI 3       |
| FREQ OUT             | 1                  | PFI 1       |

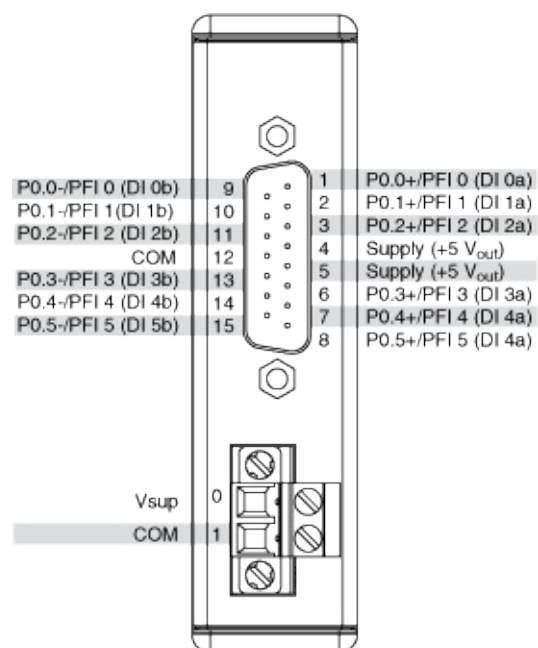


**Note** For more information about default NI-DAQmx counter inputs, refer to the *NI-DAQmx Help*.

NI 9403



# NI 9411

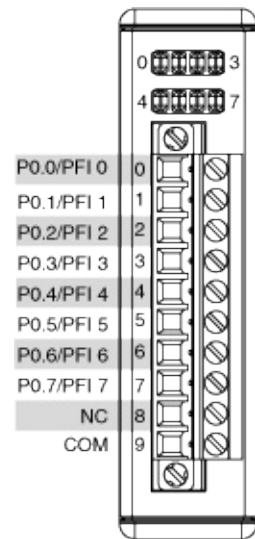


**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 1                  | PFI 0       |
| CTR 0 GATE           | 2                  | PFI 1       |
| CTR 0 AUX            | 3                  | PFI 2       |
| CTR 0 A              | 1                  | PFI 0       |
| CTR 0 Z              | 2                  | PFI 1       |
| CTR 0 B              | 3                  | PFI 2       |
| CTR 1 SRC            | 6                  | PFI 3       |
| CTR 1 GATE           | 7                  | PFI 4       |
| CTR 1 AUX            | 8                  | PFI 5       |
| CTR 1 A              | 6                  | PFI 3       |
| CTR 1 Z              | 7                  | PFI 4       |
| CTR 1 B              | 8                  | PFI 5       |

## NI 9421



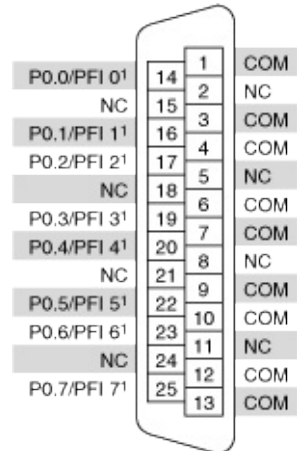
**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 0                  | PFI 0       |
| CTR 0 GATE           | 1                  | PFI 1       |
| CTR 0 AUX            | 2                  | PFI 2       |
| CTR 0 A              | 0                  | PFI 0       |
| CTR 0 Z              | 1                  | PFI 1       |
| CTR 0 B              | 2                  | PFI 2       |
| CTR 1 SRC            | 4                  | PFI 4       |
| CTR 1 GATE           | 5                  | PFI 5       |
| CTR 1 AUX            | 6                  | PFI 6       |
| CTR 1 A              | 4                  | PFI 4       |
| CTR 1 Z              | 5                  | PFI 5       |
| CTR 1 B              | 6                  | PFI 6       |



## NI 9421 (DSUB)

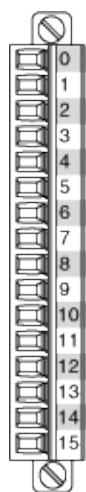


<sup>1</sup> PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 14                 | PFI 0       |
| CTR 0 GATE           | 16                 | PFI 1       |
| CTR 0 AUX            | 17                 | PFI 2       |
| CTR 0 A              | 14                 | PFI 0       |
| CTR 0 Z              | 16                 | PFI 1       |
| CTR 0 B              | 17                 | PFI 2       |
| CTR 1 SRC            | 20                 | PFI 4       |
| CTR 1 GATE           | 22                 | PFI 5       |
| CTR 1 AUX            | 23                 | PFI 6       |
| CTR 1 A              | 20                 | PFI 4       |
| CTR 1 Z              | 22                 | PFI 5       |
| CTR 1 B              | 23                 | PFI 6       |

## NI 9422



|    |                     |
|----|---------------------|
| 0  | P0.0+/PFI 0 (DI 0a) |
| 1  | P0.0-/PFI 0 (DI 0b) |
| 2  | P0.1+/PFI 1 (DI 1a) |
| 3  | P0.1-/PFI 1 (DI 1b) |
| 4  | P0.2+/PFI 2 (DI 2a) |
| 5  | P0.2-/PFI 2 (DI 2b) |
| 6  | P0.3+/PFI 3 (DI 3a) |
| 7  | P0.3-/PFI 3 (DI 3b) |
| 8  | P0.4+/PFI 4 (DI 4a) |
| 9  | P0.4-/PFI 4 (DI 4b) |
| 10 | P0.5+/PFI 5 (DI 5a) |
| 11 | P0.5-/PFI 5 (DI 5b) |
| 12 | P0.6+/PFI 6 (DI 6a) |
| 13 | P0.6-/PFI 6 (DI 6b) |
| 14 | P0.7+/PFI 7 (DI 7a) |
| 15 | P0.7-/PFI 7 (DI 7b) |

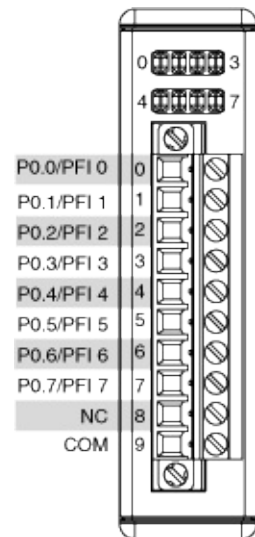


**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 0                  | PFI 0       |
| CTR 0 GATE           | 2                  | PFI 1       |
| CTR 0 AUX            | 4                  | PFI 2       |
| CTR 0 A              | 0                  | PFI 0       |
| CTR 0 Z              | 2                  | PFI 1       |
| CTR 0 B              | 4                  | PFI 2       |
| CTR 1 SRC            | 8                  | PFI 4       |
| CTR 1 GATE           | 10                 | PFI 5       |
| CTR 1 AUX            | 12                 | PFI 6       |
| CTR 1 A              | 8                  | PFI 4       |
| CTR 1 Z              | 10                 | PFI 5       |
| CTR 1 B              | 12                 | PFI 6       |

## NI 9423

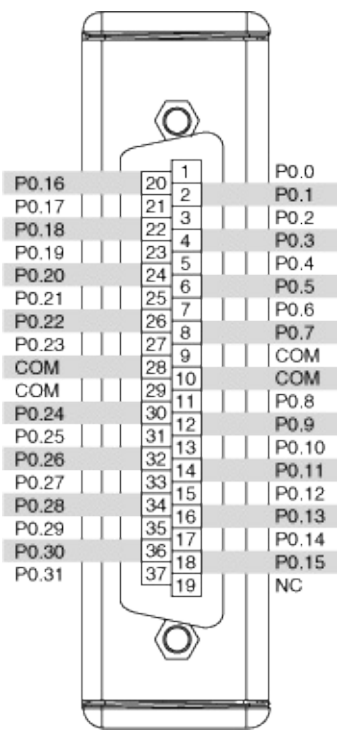


**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

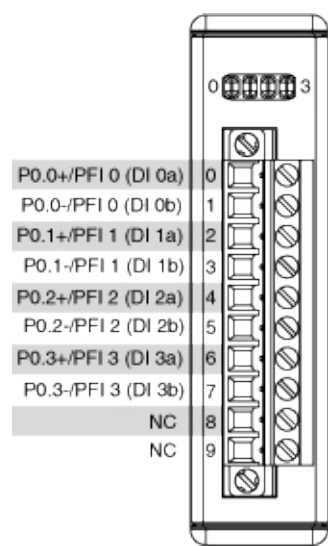
## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 0                  | PFI 0       |
| CTR 0 GATE           | 1                  | PFI 1       |
| CTR 0 AUX            | 2                  | PFI 2       |
| CTR 0 A              | 0                  | PFI 0       |
| CTR 0 Z              | 1                  | PFI 1       |
| CTR 0 B              | 2                  | PFI 2       |
| CTR 1 SRC            | 4                  | PFI 4       |
| CTR 1 GATE           | 5                  | PFI 5       |
| CTR 1 AUX            | 6                  | PFI 6       |
| CTR 1 A              | 4                  | PFI 4       |
| CTR 1 Z              | 5                  | PFI 5       |
| CTR 1 B              | 6                  | PFI 6       |

NI 9425



## NI 9435



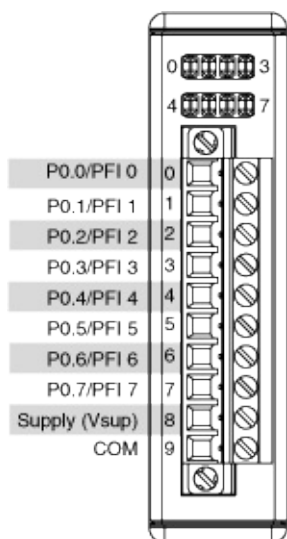
**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.



## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 SRC            | 0                  | PFI 0       |
| CTR 0 GATE           | 2                  | PFI 1       |
| CTR 0 AUX            | 4                  | PFI 2       |
| CTR 0 A              | 0                  | PFI 0       |
| CTR 0 Z              | 2                  | PFI 1       |
| CTR 0 B              | 4                  | PFI 2       |
| CTR 1 SRC            | 6                  | PFI 3       |
| CTR 1 GATE           | 4                  | PFI 2       |
| CTR 1 AUX            | 2                  | PFI 1       |
| CTR 1 A              | 6                  | PFI 3       |
| CTR 1 Z              | 4                  | PFI 2       |
| CTR 1 B              | 2                  | PFI 1       |

## NI 9472

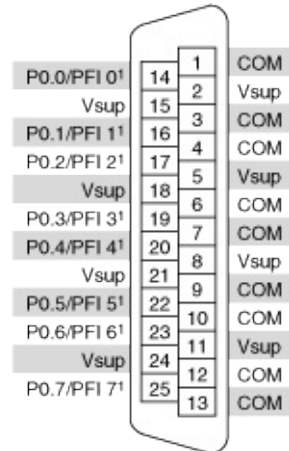


**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 OUT            | 3                  | PFI 3       |
| CTR 1 OUT            | 7                  | PFI 7       |
| FREQ OUT             | 2                  | PFI 2       |

## NI 9472 (DSUB)

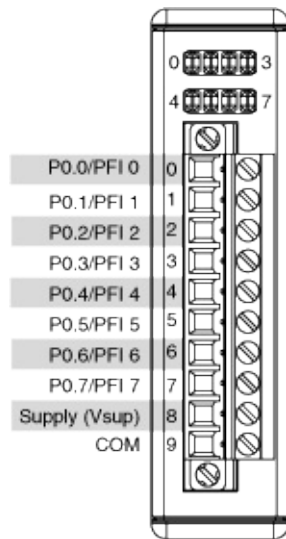


<sup>1</sup> PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 OUT            | 19                 | PFI 3       |
| CTR 1 OUT            | 25                 | PFI 7       |
| FREQ OUT             | 17                 | PFI 2       |

## NI 9474

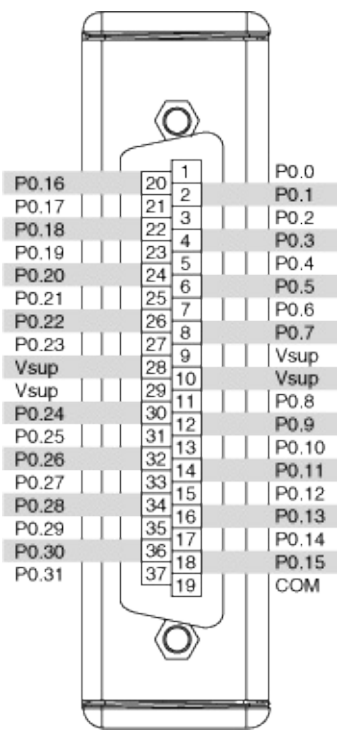


**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

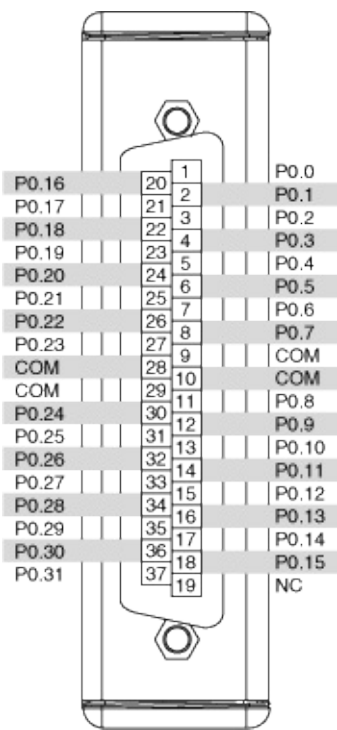
| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 OUT            | 3                  | PFI 3       |
| CTR 1 OUT            | 7                  | PFI 7       |
| FREQ OUT             | 2                  | PFI 2       |

NI 9476





NI 9477



## NI 9481

|   |                                   |
|---|-----------------------------------|
| 0 | P0.0 NO/PFI0 <sup>1</sup> (CH0a)  |
| 1 | P0.0 COM/PFI0 <sup>1</sup> (CH0b) |
| 2 | P0.1 NO/PFI1 <sup>1</sup> (CH1a)  |
| 3 | P0.1 COM/PFI1 <sup>1</sup> (CH1b) |
| 4 | P0.2 NO/PFI2 <sup>1</sup> (CH2a)  |
| 5 | P0.2 COM/PFI2 <sup>1</sup> (CH2b) |
| 6 | P0.3 NO/PFI3 <sup>1</sup> (CH3a)  |
| 7 | P0.3 COM/PFI3 <sup>1</sup> (CH3b) |
| 8 | NC                                |
| 9 | NC                                |

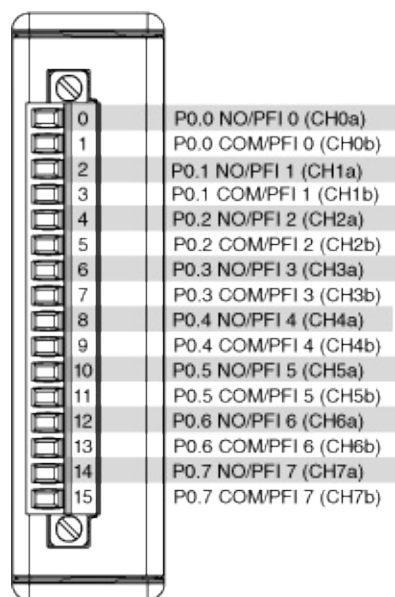
NO=Normally Open

<sup>1</sup> PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 OUT            | 0                  | PFI 0       |
| CTR 1 OUT            | 3                  | PFI 3       |

## NI 9485



NO = Normally Open



**Note** PFI terminals are available when the device is installed in slot 5 or slot 6 of an NI cDAQ-9172 chassis.

## Default NI-DAQmx Counter Terminals

| Counter/Timer Signal | Default Pin Number | Signal Name |
|----------------------|--------------------|-------------|
| CTR 0 OUT            | 6                  | PFI 3       |
| CTR 1 OUT            | 14                 | PFI 7       |

## NI DAQCard-DIO-24

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|        |    |
|--------|----|
| SHIELD | 26 |
| P2.7   | 1  |
| P2.6   | 2  |
| P2.5   | 3  |
| P2.4   | 4  |
| P2.3   | 5  |
| P2.2   | 6  |
| P2.1   | 7  |
| P2.0   | 8  |
| P1.7   | 9  |
| P1.6   | 10 |
| P1.5   | 11 |
| P1.4   | 12 |
| P1.3   | 13 |
| P1.2   | 14 |
| P1.1   | 15 |
| P1.0   | 16 |
| P0.7   | 17 |
| P0.6   | 18 |
| P0.5   | 19 |
| P0.4   | 20 |
| P0.3   | 21 |
| P0.2   | 22 |
| P0.1   | 23 |
| P0.0   | 24 |
| +5 V   | 25 |
| GND    | 27 |

## NI PCI-DIO-96

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

|      |    |     |       |
|------|----|-----|-------|
| P2.7 | 1  | 51  | P8.7  |
| P5.7 | 2  | 52  | P11.7 |
| P2.6 | 3  | 53  | P8.6  |
| P5.6 | 4  | 54  | P11.6 |
| P2.5 | 5  | 55  | P8.5  |
| P5.5 | 6  | 56  | P11.5 |
| P2.4 | 7  | 57  | P8.4  |
| P5.4 | 8  | 58  | P11.4 |
| P2.3 | 9  | 59  | P8.3  |
| P5.3 | 10 | 60  | P11.3 |
| P2.2 | 11 | 61  | P8.2  |
| P5.2 | 12 | 62  | P11.2 |
| P2.1 | 13 | 63  | P8.1  |
| P5.1 | 14 | 64  | P11.1 |
| P2.0 | 15 | 65  | P8.0  |
| P5.0 | 16 | 66  | P11.0 |
| P1.7 | 17 | 67  | P7.7  |
| P4.7 | 18 | 68  | P10.7 |
| P1.6 | 19 | 69  | P7.6  |
| P4.6 | 20 | 70  | P10.6 |
| P1.5 | 21 | 71  | P7.5  |
| P4.5 | 22 | 72  | P10.5 |
| P1.4 | 23 | 73  | P7.4  |
| P4.4 | 24 | 74  | P10.4 |
| P1.3 | 25 | 75  | P7.3  |
| P4.3 | 26 | 76  | P10.3 |
| P1.2 | 27 | 77  | P7.2  |
| P4.2 | 28 | 78  | P10.2 |
| P1.1 | 29 | 79  | P7.1  |
| P4.1 | 30 | 80  | P10.1 |
| P1.0 | 31 | 81  | P7.0  |
| P4.0 | 32 | 82  | P10.0 |
| P0.7 | 33 | 83  | P6.7  |
| P3.7 | 34 | 84  | P9.7  |
| P0.6 | 35 | 85  | P6.6  |
| P3.6 | 36 | 86  | P9.6  |
| P0.5 | 37 | 87  | P6.5  |
| P3.5 | 38 | 88  | P9.5  |
| P0.4 | 39 | 89  | P6.4  |
| P3.4 | 40 | 90  | P9.4  |
| P0.3 | 41 | 91  | P6.3  |
| P3.3 | 42 | 92  | P9.3  |
| P0.2 | 43 | 93  | P6.2  |
| P3.2 | 44 | 94  | P9.2  |
| P0.1 | 45 | 95  | P6.1  |
| P3.1 | 46 | 96  | P9.1  |
| P0.0 | 47 | 97  | P6.0  |
| P3.0 | 48 | 98  | P9.0  |
| +5 V | 49 | 99  | +5 V  |
| GND  | 50 | 100 | GND   |



## NI PCI-MIO-16E-1 (NI 6070E)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

## NI PCI-MIO-16E-4 (NI 6040E)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

## NI PCI-MIO-16XE-10 (NI 6030E)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

## NI PCI-MIO-16XE-50 (NI 6011E)



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

|                     |    |    |                   |
|---------------------|----|----|-------------------|
| AI 8                | 34 | 68 | AI 0              |
| AI 1                | 33 | 67 | AI GND            |
| AI GND              | 32 | 66 | AI 9              |
| AI 10               | 31 | 65 | AI 2              |
| AI 3                | 30 | 64 | AI GND            |
| AI GND              | 29 | 63 | AI 11             |
| AI 4                | 28 | 62 | AI SENSE          |
| AI GND              | 27 | 61 | AI 12             |
| AI 13               | 26 | 60 | AI 5              |
| AI 6                | 25 | 59 | AI GND            |
| AI GND              | 24 | 58 | AI 14             |
| AI 15               | 23 | 57 | AI 7              |
| AO 0                | 22 | 56 | AI GND            |
| AO 1                | 21 | 55 | AO GND            |
| AO EXT REF          | 20 | 54 | AO GND            |
| P0.4                | 19 | 53 | D GND             |
| D GND               | 18 | 52 | P0.0              |
| P0.1                | 17 | 51 | P0.5              |
| P0.6                | 16 | 50 | D GND             |
| D GND               | 15 | 49 | P0.2              |
| +5 V                | 14 | 48 | P0.7              |
| D GND               | 13 | 47 | P0.3              |
| D GND               | 12 | 46 | AI HOLD COMP      |
| PFI 0/AI START TRIG | 11 | 45 | EXT STROBE        |
| PFI 1/AI REF TRIG   | 10 | 44 | D GND             |
| D GND               | 9  | 43 | PFI 2/AI CONV CLK |
| +5 V                | 8  | 42 | PFI 3/CTR 1 SRC   |
| D GND               | 7  | 41 | PFI 4/CTR 1 GATE  |
| PFI 5/AO SAMP CLK   | 6  | 40 | CTR 1 OUT         |
| PFI 6/AO START TRIG | 5  | 39 | D GND             |
| D GND               | 4  | 38 | PFI 7/AI SAMP CLK |
| PFI 9/CTR 0 GATE    | 3  | 37 | PFI 8/CTR 0 SRC   |
| CTR 0 OUT           | 2  | 36 | D GND             |
| FREQ OUT            | 1  | 35 | D GND             |

# NI USB-6008

|            |    |    |        |
|------------|----|----|--------|
| GND        | 1  | 17 | P0.0   |
| AI 0/AI 0+ | 2  | 18 | P0.1   |
| AI 4/AI 0- | 3  | 19 | P0.2   |
| GND        | 4  | 20 | P0.3   |
| AI 1/AI 1+ | 5  | 21 | P0.4   |
| AI 5/AI 1- | 6  | 22 | P0.5   |
| GND        | 7  | 23 | P0.6   |
| AI 2/AI 2+ | 8  | 24 | P0.7   |
| AI 6/AI 2- | 9  | 25 | P1.0   |
| GND        | 10 | 26 | P1.1   |
| AI 3/AI 3+ | 11 | 27 | P1.2   |
| AI 7/AI 3- | 12 | 28 | P1.3   |
| GND        | 13 | 29 | PFI 0  |
| AO 0       | 14 | 30 | +2.5 V |
| AO 1       | 15 | 31 | +5 V   |
| GND        | 16 | 32 | GND    |

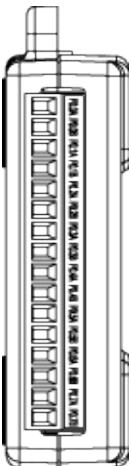
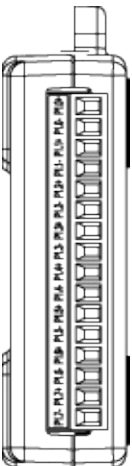
# NI USB-6009

|            |    |    |        |
|------------|----|----|--------|
| GND        | 1  | 17 | P0.0   |
| AI 0/AI 0+ | 2  | 18 | P0.1   |
| AI 4/AI 0- | 3  | 19 | P0.2   |
| GND        | 4  | 20 | P0.3   |
| AI 1/AI 1+ | 5  | 21 | P0.4   |
| AI 5/AI 1- | 6  | 22 | P0.5   |
| GND        | 7  | 23 | P0.6   |
| AI 2/AI 2+ | 8  | 24 | P0.7   |
| AI 6/AI 2- | 9  | 25 | P1.0   |
| GND        | 10 | 26 | P1.1   |
| AI 3/AI 3+ | 11 | 27 | P1.2   |
| AI 7/AI 3- | 12 | 28 | P1.3   |
| GND        | 13 | 29 | PFI 0  |
| AO 0       | 14 | 30 | +2.5 V |
| AO 1       | 15 | 31 | +5 V   |
| GND        | 16 | 32 | GND    |

# NI USB-6501

|      |    |    |      |
|------|----|----|------|
| GND  | 1  | 17 | P0.0 |
| +5 V | 2  | 18 | P0.1 |
| P1.7 | 3  | 19 | P0.2 |
| P1.6 | 4  | 20 | P0.3 |
| P1.5 | 5  | 21 | P0.4 |
| P1.4 | 6  | 22 | P0.5 |
| GND  | 7  | 23 | P0.6 |
| GND  | 8  | 24 | P0.7 |
| P2.7 | 9  | 25 | GND  |
| P2.6 | 10 | 26 | GND  |
| P2.5 | 11 | 27 | P1.0 |
| P2.4 | 12 | 28 | P1.1 |
| P2.3 | 13 | 29 | P1.2 |
| P2.2 | 14 | 30 | P1.3 |
| P2.1 | 15 | 31 | +5 V |
| P2.0 | 16 | 32 | GND  |

## NI USB-6525

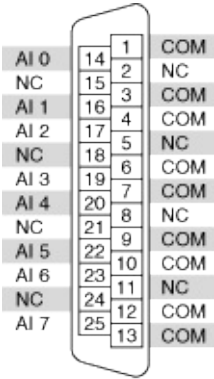
| Module                                                                            | Terminal | Signal | Module                                                                            | Terminal | Signal       |
|-----------------------------------------------------------------------------------|----------|--------|-----------------------------------------------------------------------------------|----------|--------------|
|  | 1        | P0.0A  |  | 17       | P1.0+        |
|                                                                                   | 2        | P0.0B  |                                                                                   | 18       | P1.0–        |
|                                                                                   | 3        | P0.1A  |                                                                                   | 19       | P1.1+        |
|                                                                                   | 4        | P0.1B  |                                                                                   | 20       | P1.1–        |
|                                                                                   | 5        | P0.2A  |                                                                                   | 21       | P1.2+        |
|                                                                                   | 6        | P0.2B  |                                                                                   | 22       | P1.2–        |
|                                                                                   | 7        | P0.3A  |                                                                                   | 23       | P1.3+        |
|                                                                                   | 8        | P0.3B  |                                                                                   | 24       | P1.3–        |
|                                                                                   | 9        | P0.4A  |                                                                                   | 25       | P1.4+        |
|                                                                                   | 10       | P0.4B  |                                                                                   | 26       | P1.4–        |
|                                                                                   | 11       | P0.5A  |                                                                                   | 27       | P1.5+        |
|                                                                                   | 12       | P0.5B  |                                                                                   | 28       | P1.5–        |
|                                                                                   | 13       | P0.6A  |                                                                                   | 29       | P1.6+        |
|                                                                                   | 14       | P0.6B  |                                                                                   | 30       | P1.6–        |
|                                                                                   | 15       | P0.7A  |                                                                                   | 31       | P1.7+/PFI 0+ |
|                                                                                   | 16       | P0.7B  |                                                                                   | 32       | P1.7–/PFI 0– |



# NI USB-9201

|   |               |
|---|---------------|
| 0 | AI 0          |
| 1 | AI 1          |
| 2 | AI 2          |
| 3 | AI 3          |
| 4 | AI 4          |
| 5 | AI 5          |
| 6 | AI 6          |
| 7 | AI 7          |
| 8 | No Connection |
| 9 | Common (COM)  |

NI USB-9201 (DSUB)



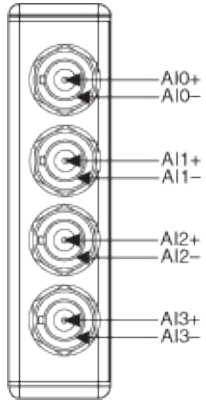
# NI USB-9211A

|   |               |
|---|---------------|
| 0 | AI 0+ (TC 0+) |
| 1 | AI 0- (TC 0-) |
| 2 | AI 1+ (TC 1+) |
| 3 | AI 1- (TC 1-) |
| 4 | AI 2+ (TC 2+) |
| 5 | AI 2- (TC 2-) |
| 6 | AI 3+ (TC 3+) |
| 7 | AI 3- (TC 3-) |
| 8 | NC            |
| 9 | COM           |

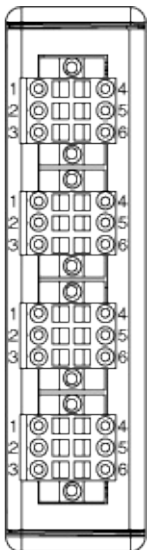
# NI USB-9215A

|   |               |
|---|---------------|
| 0 | AI 0+         |
| 1 | AI 0-         |
| 2 | AI 1+         |
| 3 | AI 1-         |
| 4 | AI 2+         |
| 5 | AI 2-         |
| 6 | AI 3+         |
| 7 | AI 3-         |
| 8 | No Connection |
| 9 | Common (COM)  |

## NI USB-9215A (BNC)



## NI 9219

| Module                                                                            | Terminal | Signal Name         | Signal Descriptions                 |
|-----------------------------------------------------------------------------------|----------|---------------------|-------------------------------------|
|  | 1        | T+                  | TEDS Data                           |
|                                                                                   | 2        | T-                  | TEDS COM                            |
|                                                                                   | 3        | EX+/H <sup>1</sup>  | Positive excitation or input signal |
|                                                                                   | 4        | HI                  | Positive input signal               |
|                                                                                   | 5        | EX-/LO <sup>1</sup> | Negative excitation or input signal |
|                                                                                   | 6        | LO                  | Negative input signal               |

<sup>1</sup>Depending on the mode, terminals 3 and 5 are either the excitation or input signals.

## Terminal Assignments

| Mode              | Terminal |    |     |    |     |    |
|-------------------|----------|----|-----|----|-----|----|
|                   | 1        | 2  | 3   | 4  | 5   | 6  |
| Voltage           | T+       | T- | —   | HI | LO  | —  |
| Current           | T+       | T- | HI  | —  | LO  | —  |
| 4-Wire Resistance | T+       | T- | EX+ | HI | EX- | LO |
| 2-Wire Resistance | T+       | T- | HI  | —  | LO  | —  |
| Thermocouple      | T+       | T- | —   | HI | LO  | —  |
| 4-Wire RTD        | T+       | T- | EX+ | HI | EX- | LO |
| 3-Wire RTD        | T+       | T- | EX+ | —  | EX- | LO |
| Quarter-Bridge    | T+       | T- | HI  | —  | LO  | —  |
| Half-Bridge       | T+       | T- | EX+ | HI | EX- | —  |
| Full-Bridge       | T+       | T- | EX+ | HI | EX- | LO |
| Digital In        | T+       | T- | —   | HI | LO  | —  |
| Contact           | T+       | T- | HI  | —  | LO  | —  |

# NI USB-9221

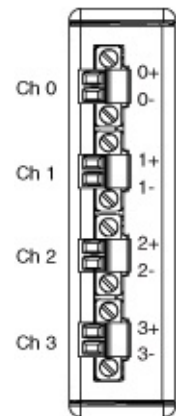
|   |               |
|---|---------------|
| 0 | AI 0          |
| 1 | AI 1          |
| 2 | AI 2          |
| 3 | AI 3          |
| 4 | AI 4          |
| 5 | AI 5          |
| 6 | AI 6          |
| 7 | AI 7          |
| 8 | No Connection |
| 9 | Common (COM)  |



# NI USB-9221 (DSUB)

|      |    |    |     |
|------|----|----|-----|
|      |    | 1  | COM |
| AI 0 | 14 | 2  | NC  |
| NC   | 15 | 3  | COM |
| AI 1 | 16 | 4  | COM |
| AI 2 | 17 | 5  | NC  |
| NC   | 18 | 6  | COM |
| AI 3 | 19 | 7  | COM |
| AI 4 | 20 | 8  | NC  |
| NC   | 21 | 9  | COM |
| AI 5 | 22 | 10 | COM |
| AI 6 | 23 | 11 | NC  |
| NC   | 24 | 12 | COM |
| AI 7 | 25 | 13 | COM |

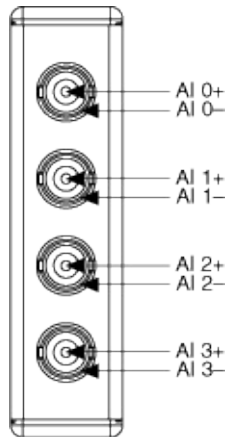
## NI USB-9229



## Terminal Assignments

| Channel | Terminal | Signal |
|---------|----------|--------|
| 0       | 0+       | AI 0+  |
|         | 0-       | AI 0-  |
| 1       | 1+       | AI 1+  |
|         | 1-       | AI 1-  |
| 2       | 2+       | AI 2+  |
|         | 2-       | AI 2-  |
| 3       | 3+       | AI 3+  |
|         | 3-       | AI 3-  |

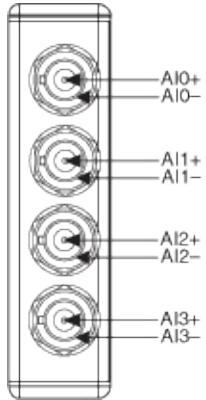
## NI USB-9229 (BNC)



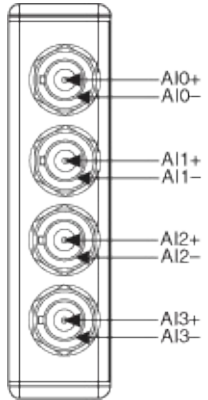
## Terminal Assignments

| Channel | Terminal | Signal |
|---------|----------|--------|
| 0       | 0+       | AI 0+  |
|         | 0-       | AI 0-  |
| 1       | 1+       | AI 1+  |
|         | 1-       | AI 1-  |
| 2       | 2+       | AI 2+  |
|         | 2-       | AI 2-  |
| 3       | 3+       | AI 3+  |
|         | 3-       | AI 3-  |

## NI USB-9233



## NI USB-9234



## NI USB-9237

The following pin assignments appear on Channel 0-3.

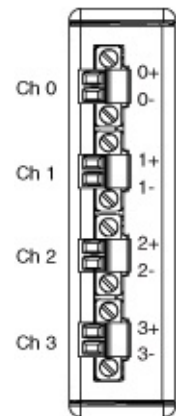
|    |     |
|----|-----|
| 1  | SC  |
| 2  | AI+ |
| 3  | AI- |
| 4  | RS+ |
| 5  | RS- |
| 6  | EX+ |
| 7  | EX- |
| 8  | T+  |
| 9  | T-  |
| 10 | SC  |



## External Excitation Voltage Pins

|     |  |  |
|-----|--|--|
| EX+ |  |  |
| EX- |  |  |

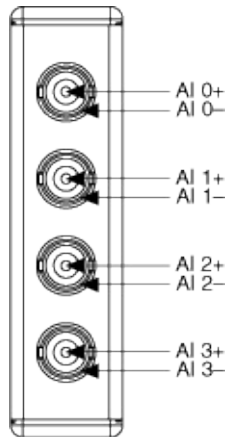
## NI USB-9239



## Terminal Assignments

| Channel | Terminal | Signal |
|---------|----------|--------|
| 0       | 0+       | AI 0+  |
|         | 0-       | AI 0-  |
| 1       | 1+       | AI 1+  |
|         | 1-       | AI 1-  |
| 2       | 2+       | AI 2+  |
|         | 2-       | AI 2-  |
| 3       | 3+       | AI 3+  |
|         | 3-       | AI 3-  |

## NI USB-9239 (BNC)



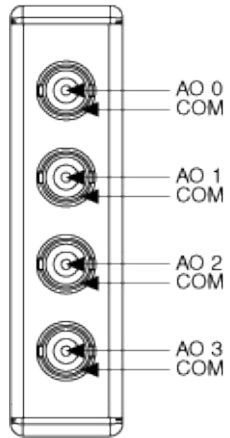
## Terminal Assignments

| Channel | Terminal | Signal |
|---------|----------|--------|
| 0       | 0+       | AI 0+  |
|         | 0-       | AI 0-  |
| 1       | 1+       | AI 1+  |
|         | 1-       | AI 1-  |
| 2       | 2+       | AI 2+  |
|         | 2-       | AI 2-  |
| 3       | 3+       | AI 3+  |
|         | 3-       | AI 3-  |

# NI USB-9263

|   |     |
|---|-----|
| 0 | AO0 |
| 1 | COM |
| 2 | AO1 |
| 3 | COM |
| 4 | AO2 |
| 5 | COM |
| 6 | AO3 |
| 7 | COM |
| 8 | NC  |
| 9 | COM |

## NI USB-9263 (BNC)



# NI USB-9421

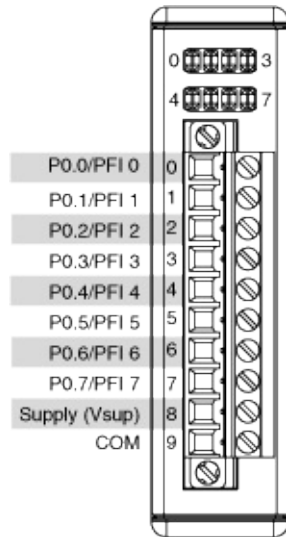
|   |      |
|---|------|
| 0 | P0.0 |
| 1 | P0.1 |
| 2 | P0.2 |
| 3 | P0.3 |
| 4 | P0.4 |
| 5 | P0.5 |
| 6 | P0.6 |
| 7 | P0.7 |
| 8 | NC   |
| 9 | COM  |



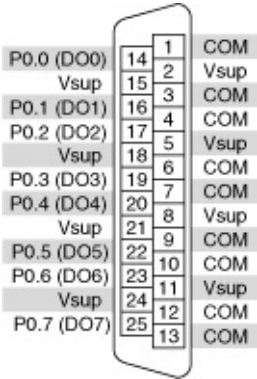
# NI USB-9421 (DSUB)

|      |    |    |     |
|------|----|----|-----|
|      |    | 1  | COM |
| P0.0 | 14 | 2  | NC  |
| NC   | 15 | 3  | COM |
| P0.1 | 16 | 4  | COM |
| P0.2 | 17 | 5  | NC  |
| NC   | 18 | 6  | COM |
| P0.3 | 19 | 7  | COM |
| P0.4 | 20 | 8  | NC  |
| NC   | 21 | 9  | COM |
| P0.5 | 22 | 10 | COM |
| P0.6 | 23 | 11 | NC  |
| NC   | 24 | 12 | COM |
| P0.7 | 25 | 13 | COM |

# NI USB-9472



# NI USB-9472 (DSUB)



## NI USB-9481

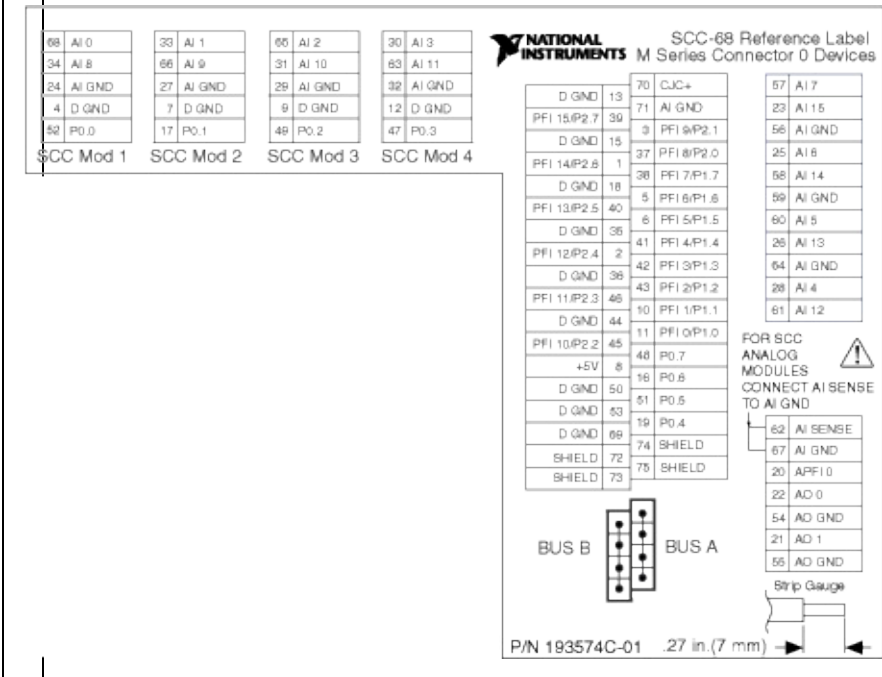
|   |                 |
|---|-----------------|
| 0 | P0.0 NO (CH0a)  |
| 1 | P0.0 COM (CH0b) |
| 2 | P0.1 NO (CH1a)  |
| 3 | P0.1 COM (CH1b) |
| 4 | P0.2 NO (CH2a)  |
| 5 | P0.2 COM (CH2b) |
| 6 | P0.3 NO (CH3a)  |
| 7 | P0.3 COM (CH3b) |
| 8 | NC              |
| 9 | NC              |

NO=Normally Open

## **SCC-68**

Signals available on the SCC-68 vary depending on the DAQ device you are connected to. Refer to the SCC-68 reference guide that corresponds to the DAQ device you are using.

# M Series 68-Pin Devices using Connector 0



**SCC-68 Reference Label M Series Connector 1 Devices**

| SCC Mod 1 | SCC Mod 2 | SCC Mod 3 | SCC Mod 4 |
|-----------|-----------|-----------|-----------|
| 68 AI 16  | 33 AI 17  | 60 AI 18  | 30 AI 19  |
| 34 AI 24  | 66 AI 25  | 31 AI 26  | 63 AI 27  |
| 24 AI GND | 27 AI GND | 29 AI GND | 32 AI GND |
| 4 D GND   | 7 D GND   | 9 D GND   | 12 D GND  |
| 52 P0.8   | 17 P0.9   | 48 P0.10  | 47 P0.11  |

|       |    |           |
|-------|----|-----------|
| D GND | 13 | 70 CJC+   |
| P0.31 | 30 | 71 AI GND |
| D GND | 15 | 3 P0.25   |
| P0.30 | 1  | 37 P0.24  |
| D GND | 18 | 38 P0.23  |
| P0.29 | 40 | 5 P0.22   |
| D GND | 36 | 6 P0.21   |
| P0.27 | 46 | 41 P0.20  |
| D GND | 44 | 42 P0.19  |
| P0.26 | 2  | 43 P0.18  |
| D GND | 36 | 10 P0.17  |
| P0.25 | 1  | 11 P0.16  |
| D GND | 44 | 48 P0.15  |
| P0.24 | 40 | 50 P0.14  |
| D GND | 36 | 51 P0.13  |
| P0.23 | 40 | 19 P0.12  |
| D GND | 44 | 74 SHIELD |
| P0.22 | 40 | 72 SHIELD |
| D GND | 44 | 73 SHIELD |
| P0.21 | 40 |           |
| D GND | 44 |           |
| P0.20 | 40 |           |
| D GND | 44 |           |
| P0.19 | 40 |           |
| D GND | 44 |           |
| P0.18 | 40 |           |
| D GND | 44 |           |
| P0.17 | 40 |           |
| D GND | 44 |           |
| P0.16 | 40 |           |
| D GND | 44 |           |
| P0.15 | 40 |           |
| D GND | 44 |           |
| P0.14 | 40 |           |
| D GND | 44 |           |
| P0.13 | 40 |           |
| D GND | 44 |           |
| P0.12 | 40 |           |
| D GND | 44 |           |
| P0.11 | 40 |           |
| D GND | 44 |           |
| P0.10 | 40 |           |
| D GND | 44 |           |
| P0.9  | 40 |           |
| D GND | 44 |           |
| P0.8  | 40 |           |
| D GND | 44 |           |
| P0.7  | 40 |           |
| D GND | 44 |           |
| P0.6  | 40 |           |
| D GND | 44 |           |
| P0.5  | 40 |           |
| D GND | 44 |           |
| P0.4  | 40 |           |
| D GND | 44 |           |
| P0.3  | 40 |           |
| D GND | 44 |           |
| P0.2  | 40 |           |
| D GND | 44 |           |
| P0.1  | 40 |           |
| D GND | 44 |           |
| P0.0  | 40 |           |
| D GND | 44 |           |

**FOR SCC ANALOG MODULES CONNECT AI SENSE TO AI GND**

|               |
|---------------|
| 62 AI SENSE 2 |
| 67 AI GND     |
| 20 APF1 1     |
| 22 AO 2"      |
| 54 AO GND     |
| 21 AO 3"      |
| 55 AO GND     |

**BUS B** **BUS A**

**Strip Gauge**

**27 in. (7 mm)**

**\* NC on some devices**

**SCC-68 Reference Label E Series Devices**

| SCC Mod 1 | SCC Mod 2 | SCC Mod 3 | SCC Mod 4 |
|-----------|-----------|-----------|-----------|
| 68 AI 0   | 33 AI 1   | 66 AI 2   | 30 AI 3   |
| 34 AI 8   | 66 AI 9   | 31 AI 10  | 63 AI 11  |
| 24 AI GND | 27 AI GND | 29 AI GND | 32 AI GND |
| 4 D GND   | 7 D GND   | 9 D GND   | 12 D GND  |
| 52 P0.0   | 17 P0.1   | 48 P0.2   | 47 P0.3   |

|              |    |                        |                                                   |
|--------------|----|------------------------|---------------------------------------------------|
| D GND        | 13 | 70 CJC+                | 57 AI 7                                           |
| D GND        | 30 | 71 AI GND              | 23 AI 15                                          |
| D GND        | 15 | 3 PFI 6/CTR 0 GATE     | 56 AI GND                                         |
| FREQ OUT     | 1  | 37 PFI 8/CTR 0 SRC     | 25 AI 6                                           |
| D GND        | 18 | 38 PFI 7/AI SAMP CLK   | 58 AI 14                                          |
| CTR 1 OUT    | 40 | 5 PFI 6/AO START TRIG  | 56 AI GND                                         |
| D GND        | 36 | 6 PFI 5/AO SAMP CLK    | 60 AI 5                                           |
| CTR 0 OUT    | 2  | 41 PFI 4/CTR 1 GATE    | 26 AI 13                                          |
| D GND        | 36 | 42 PFI 3/CTR 1 SRC     | 64 AI GND                                         |
| A1 HOLD COMP | 46 | 43 PFI 2/AI CONV CLK   | 26 AI 4                                           |
| D GND        | 44 | 10 PFI 1/AI REF TRIG   | 61 AI 12                                          |
| EXT STROBE   | 45 | 11 PFI 0/AI START TRIG | FOR SCC ANALOG MODULES CONNECT AI SENSE TO AI GND |
| +5V          | 8  | 48 P0.7                | 62 AI SENSE                                       |
| D GND        | 50 | 16 P0.6                | 67 AI GND                                         |
| D GND        | 53 | 51 P0.5                | 22 AO 0*                                          |
| D GND        | 60 | 19 P0.4                | 54 AO GND                                         |
| SHIELD       | 72 | 74 SHIELD              | 21 AO 1*                                          |
| SHIELD       | 73 | 75 SHIELD              | 55 AO GND                                         |

**BUS B** **BUS A**

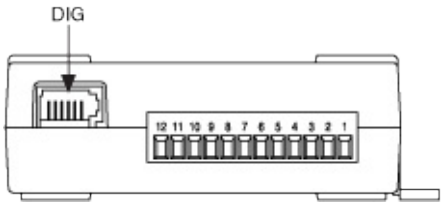
27 in. (7 mm)

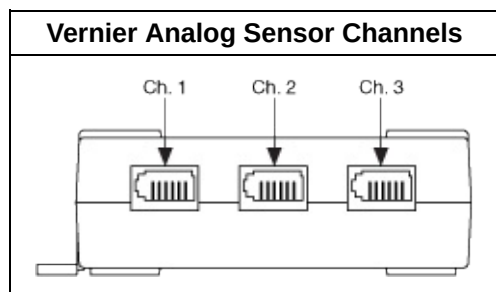
\* NC on some devices

Strip Gauge



# SensorDAQ

| Vernier Digital Sensor Channel and 12-pin Screw Terminal Connector                | Screw Terminal | Signal Names | Description                       |
|-----------------------------------------------------------------------------------|----------------|--------------|-----------------------------------|
|  | 1              | P0.0         | Digital port 0, line 0            |
|                                                                                   | 2              | P0.1         | Digital port 0, line 1            |
|                                                                                   | 3              | P0.2         | Digital port 0, line 2            |
|                                                                                   | 4              | P0.3         | Digital port 0, line 3            |
|                                                                                   | 5, 8, 10       | GND          | Ground (analog and digital)       |
|                                                                                   | 6              | +5V          | +5 V power source                 |
|                                                                                   | 7              | PFI 0        | Digital trigger or counter signal |
|                                                                                   | 9              | AO 0         | Analog output channel             |
|                                                                                   | 11, 12         | AI 0, AI 1   | Analog input channels             |



## Signal Conditioning

This help file includes signal names for signal conditioning devices supported in NI-DAQmx. Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names. Refer to the device documentation for specifics regarding terminal configurations.

# NI PXI-4200 Front and Rear Connector

## Front Connector

| Front Connector Diagram                                                                                                                                                                                                                                                                                                                                                                    | Pin Number                       | Signal Name                      | Pin Number                   | Signal Name                  |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------------------------------|------------------------------|------------------------------|----|----|----|----|----|----|----|----|----|----|----|---|---|---|---|---|---|---|---|---|----|----------------------------------|----|------------------------------|
| <table><tr><td>24</td><td>23</td></tr><tr><td>22</td><td>21</td></tr><tr><td>20</td><td>19</td></tr><tr><td>18</td><td>17</td></tr><tr><td>16</td><td>15</td></tr><tr><td>14</td><td>13</td></tr><tr><td>12</td><td>11</td></tr><tr><td>10</td><td>9</td></tr><tr><td>8</td><td>7</td></tr><tr><td>6</td><td>5</td></tr><tr><td>4</td><td>3</td></tr><tr><td>2</td><td>1</td></tr></table> | 24                               | 23                               | 22                           | 21                           | 20 | 19 | 18 | 17 | 16 | 15 | 14 | 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 24 | Channel H Non-Inverting (AI 7 +) | 23 | Channel H Inverting (AI 7 −) |
|                                                                                                                                                                                                                                                                                                                                                                                            | 24                               | 23                               |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 22                               | 21                               |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 20                               | 19                               |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 18                               | 17                               |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 16                               | 15                               |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 14                               | 13                               |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 12                               | 11                               |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 10                               | 9                                |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 8                                | 7                                |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 6                                | 5                                |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 4                                | 3                                |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 2                                | 1                                |                              |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
|                                                                                                                                                                                                                                                                                                                                                                                            | 22                               | Channel G Non-Inverting (AI 6 +) | 21                           | Channel G Inverting (AI 6 −) |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 20                                                                                                                                                                                                                                                                                                                                                                                         | General Purpose (X 6)            | 19                               | General Purpose (X 7)        |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 18                                                                                                                                                                                                                                                                                                                                                                                         | Channel F Non-Inverting (AI 5 +) | 17                               | Channel F Inverting (AI 5 −) |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 16                                                                                                                                                                                                                                                                                                                                                                                         | Channel E Non-Inverting (AI 4 +) | 15                               | Channel E Inverting (AI 4 −) |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 14                                                                                                                                                                                                                                                                                                                                                                                         | General Purpose (X 4)            | 13                               | General Purpose (X 5)        |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 12                                                                                                                                                                                                                                                                                                                                                                                         | Channel D Non-Inverting (AI 3 +) | 11                               | Channel D Inverting (AI 3 −) |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 10                                                                                                                                                                                                                                                                                                                                                                                         | Channel C Non-Inverting (AI 2 +) | 9                                | Channel C Inverting (AI 2 −) |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 8                                                                                                                                                                                                                                                                                                                                                                                          | General Purpose (X 2)            | 7                                | General Purpose (X 3)        |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 6                                                                                                                                                                                                                                                                                                                                                                                          | Channel B Non-Inverting (AI 1 +) | 5                                | Channel B Inverting (AI 1)   |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 4                                                                                                                                                                                                                                                                                                                                                                                          | Channel A Non-Inverting (AI 0 +) | 3                                | Channel A Inverting (AI 0 −) |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |
| 2                                                                                                                                                                                                                                                                                                                                                                                          | General Purpose (X 0)            | 1                                | General Purpose (X 1)        |                              |    |    |    |    |    |    |    |    |    |    |    |   |   |   |   |   |   |   |   |   |    |                                  |    |                              |

## Rear Connector

| Rear Connector Diagram                                                             |    |    | Pin Number | Signal Name            | Pin Number | Signal Name        |
|------------------------------------------------------------------------------------|----|----|------------|------------------------|------------|--------------------|
|  | 1  | 2  | 1          | EXT STROBE-/SPI CLK    | 2          | PodID(0)           |
|                                                                                    | 3  | 4  | 3          | RESET-                 | 4          | PodID(1)           |
|                                                                                    | 5  | 6  | 5          | DIO(4)/MISO            | 6          | PodID(2)           |
|                                                                                    | 7  | 8  | 7          | DIO(0)/MOSI            | 8          | PodID(3)           |
|                                                                                    | 9  | 10 | 9          | DIO(1)/Add(0)-         | 10         | PodID(4)           |
|                                                                                    | 11 | 12 | 11         | DIO(2)/Add(1)          | 12         | PodID(5)           |
|                                                                                    | 13 | 14 | 13         | PodID(7)               | 14         | PodID(6)           |
|                                                                                    | 15 | 16 | 15         | D GND                  | 16         | D GND              |
|                                                                                    | 17 | 18 | 17         | —                      | 18         | —                  |
|                                                                                    | 19 | 20 | 19         | +5.5VPOD               | 20         | -5.5VPOD           |
|                                                                                    | 21 | 22 | 21         | —                      | 22         | —                  |
|                                                                                    | 23 | 24 | 23         | + 15 V                 | 24         | - 15 V             |
|                                                                                    | 25 | 26 | 25         | A GND                  | 26         | A GND              |
|                                                                                    | 27 | 28 | 27         | PFI 1/HOLDUSER*        | 28         | HOLD -             |
|                                                                                    | 29 | 30 | 29         | + 2.5 V REF            | 30         | TEST+              |
|                                                                                    | 31 | 32 | 31         | A GND/Outpod Reference | 32         | TEST-              |
|                                                                                    | 33 | 34 | 33         | AI 3/Outpod(3) (D)     | 34         | AI 7/Outpod(7) (H) |
|                                                                                    | 35 | 36 | 35         | AI 2/Outpod(2) (C)     | 36         | AI 6/Outpod(6) (G) |
|                                                                                    | 37 | 38 | 37         | AI 1/Outpod(1) (B)     | 38         | AI 5/Outpod(5) (F) |
|                                                                                    | 39 | 40 | 39         | AI 0/Outpod(0) (A)     | 40         | AI 4/Outpod(4) (E) |

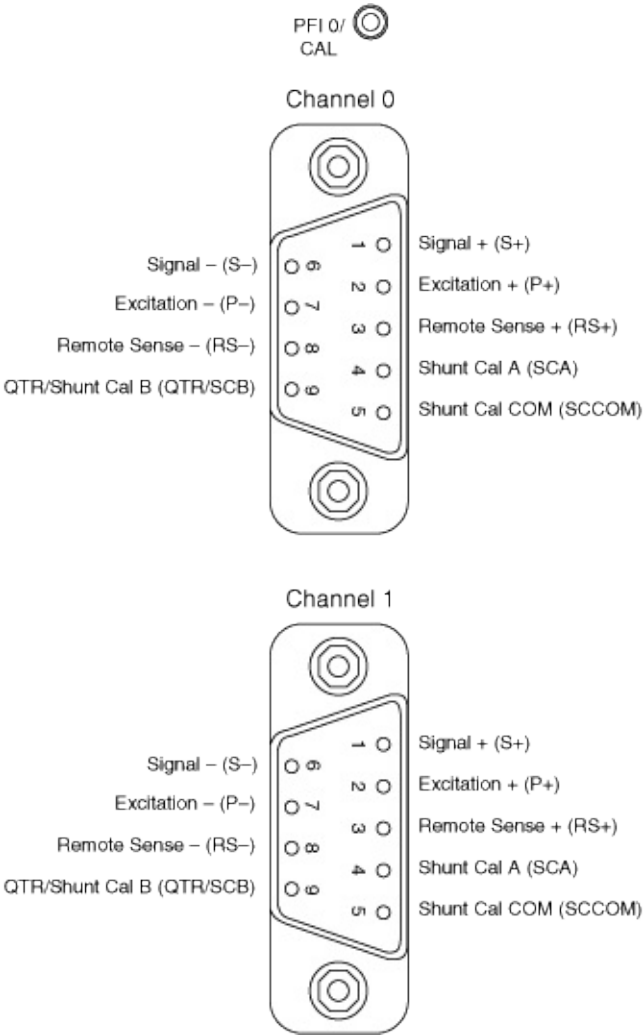
# NI PXI-4204 Front Connector

PFI 0/  
CAL

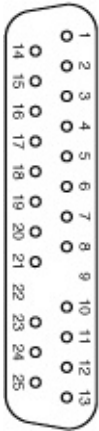


|        |    |
|--------|----|
| AI 0 + | 1  |
| AI 0 - | 2  |
| AI 1 + | 3  |
| AI 1 - | 4  |
| AI 2 + | 5  |
| AI 2 - | 6  |
| AI 3 + | 7  |
| AI 3 - | 8  |
| AI 4 + | 9  |
| AI 4 - | 10 |
| AI 5 + | 11 |
| AI 5 - | 12 |
| AI 6 + | 13 |
| AI 6 - | 14 |
| AI 7 + | 15 |
| AI 7 - | 16 |

# NI PXI-4220 Front Connector



## NI PXI-4224 Front Connector

| Front Connector Diagram                                                                                       | Pin Number | Signal Names | Pin Number | Signal Names |
|---------------------------------------------------------------------------------------------------------------|------------|--------------|------------|--------------|
|  <p>NC means no connect.</p> | 14         | AI 0 –       | 1          | AI 0 +       |
|                                                                                                               | 15         | AI 1 –       | 2          | AI 1 +       |
|                                                                                                               | 16         | AI 2 –       | NC         | AI 2 +       |
|                                                                                                               | 17         | AI 3 –       | 4          | AI 3 +       |
|                                                                                                               | 18         | AI 4 –       | 5          | AI 4 +       |
|                                                                                                               | 19         | AI 5 –       | 6          | AI 5 +       |
|                                                                                                               | 20         | AI 6 –       | 7          | AI 6 +       |
|                                                                                                               | 21         | AI 7 –       | 8          | AI 7 +       |
|                                                                                                               | 22         | NO PIN       | 9          | NO PIN       |
|                                                                                                               | 23         | NC           | 10         | D GND        |
|                                                                                                               | 24         | SPI CLK      | 11         | MISO         |
|                                                                                                               | 25         | SELECT       | 12         | MOSI         |
|                                                                                                               | N/A        | N/A          | 13         | + 5 V        |

## SC-2345 Carrier

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

The following image shows the locations of the digital signals on the SC-2345 and SC-2350 terminal block when using an E Series or M Series connector 0. Refer to the *M Series User Manual* for specific pinout descriptions for M Series devices when using connector 1.

| A                   |    | B        |    | C                   |    |
|---------------------|----|----------|----|---------------------|----|
| Not Used            |    | Not Used |    | Not Used            |    |
| Not Used            |    | D GND    | 35 | AI SENSE            | 62 |
| PFI 14/FREQ OUT     | 1  | D GND    | 4  | PFI 10/EXTSTROBE*   | 45 |
| PFI 12/CTR 0 OUT    | 2  | D GND    | 36 | PFI 13/CTR 1 OUT    | 40 |
| PFI 8/CTR 0 SOURCE  | 37 | D GND    | 39 | PFI 9/CTR 0 GATE    | 3  |
| PFI 6/AO START TRIG | 5  | D GND    | 7  | PFI 7/AI SAMP CLK   | 38 |
| PFI 4/CTR 1 GATE    | 41 | D GND    | 9  | PFI 5/AO SAMPLE CLK | 6  |
| PFI 2/AI CONV CLK   | 43 | D GND    | 44 | PFI 3/CTR 1 SOURCE  | 42 |
| PFI 0/AI START TRIG | 11 | D GND    | 12 | PFI 1/AI REF TRIG   | 10 |
| + 5 V               | 14 | D GND    | 13 | PFI 11/AI HOLD COMP | 46 |
| P0.6                | 16 | D GND    | 15 | P0.7                | 48 |
| P0.4                | 19 | D GND    | 50 | P0.5                | 51 |
| P0.2                | 49 | D GND    | 18 | P0.3                | 47 |
| P0.0                | 52 | D GND    | 53 | P0.1                | 17 |

NC = No Connect



## SC-2350 Carrier

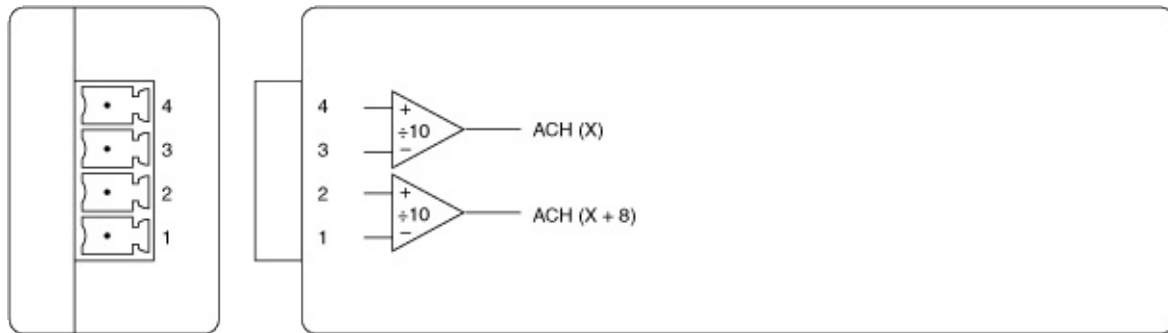
| Connector Diagram for Socket J35                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |    | Signal Name       | Pin Number       | Pin Number | Signal Name |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----|-------------------|------------------|------------|-------------|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-------------------|---|---|------------------|
| <table><tr><td>1</td><td>2</td></tr><tr><td>3</td><td>4</td></tr><tr><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td></tr><tr><td>9</td><td>10</td></tr><tr><td>11</td><td>12</td></tr><tr><td>13</td><td>14</td></tr><tr><td>15</td><td>16</td></tr><tr><td>17</td><td>18</td></tr><tr><td>19</td><td>20</td></tr><tr><td>21</td><td>22</td></tr><tr><td>23</td><td>24</td></tr><tr><td>25</td><td>26</td></tr><tr><td>27</td><td>28</td></tr><tr><td>29</td><td>30</td></tr><tr><td>31</td><td>32</td></tr><tr><td>33</td><td>34</td></tr><tr><td>35</td><td>36</td></tr><tr><td>37</td><td>38</td></tr><tr><td>39</td><td>40</td></tr><tr><td>41</td><td>42</td></tr><tr><td>43</td><td>44</td></tr><tr><td>45</td><td>46</td></tr><tr><td>47</td><td>48</td></tr><tr><td>49</td><td>50</td></tr></table> | 1                 | 2  | 3                 | 4                | 5          | 6           | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | AI TEDS CHDATA(0) | 1 | 2 | AI TEDS CHRTN(0) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1                 | 2  |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 3                 | 4  |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 5                 | 6  |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7                 | 8  |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 9                 | 10 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 11                | 12 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 13                | 14 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 15                | 16 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 17                | 18 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 19                | 20 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 21                | 22 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 23                | 24 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 25                | 26 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 27                | 28 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 29                | 30 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 31                | 32 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 33                | 34 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 35                | 36 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 37                | 38 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 39                | 40 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 41                | 42 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 43                | 44 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 45                | 46 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 47                | 48 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 49                | 50 |                   |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | AI TEDS CHDATA(8) | 3  | 4                 | AI TEDS CHRTN(8) |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | AI TEDS CHDATA(1) | 5  | 6                 | AI TEDS CHRTN(1) |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | AI TEDS CHDATA(9) | 7  | 8                 | AI TEDS CHRTN(9) |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | AI TEDS CHDATA(2) | 9  | 10                | AI TEDS CHRTN(2) |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(10)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 11                | 12 | AI TEDS CHRTN(10) |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(3)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 13                | 14 | AI TEDS CHRTN(3)  |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(11)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 15                | 16 | AI TEDS CHRTN(11) |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 17                | 18 | AI TEDS CHRTN(4)  |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(12)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 19                | 20 | AI TEDS CHRTN(12) |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(5)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 21                | 22 | AI TEDS CHRTN(5)  |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(13)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 23                | 24 | AI TEDS CHRTN(13) |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(6)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 25                | 26 | AI TEDS CHRTN(6)  |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(14)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 27                | 28 | AI TEDS CHRTN(14) |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(7)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 29                | 30 | AI TEDS CHRTN(7)  |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AI TEDS CHDATA(15)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 31                | 32 | AI TEDS CHRTN(15) |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AO TEDS CHDATA(0)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 33                | 34 | AO TEDS CHRTN(0)  |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| AO TEDS CHDATA(1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 35                | 36 | AO TEDS CHRTN(1)  |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 37                | 38 | NC                |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 39                | 40 | NC                |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 41                | 42 | NC                |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 43                | 44 | NC                |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |
| NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 45                | 46 | NC                |                  |            |             |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |                   |   |   |                  |

|                 |    |    |    |    |
|-----------------|----|----|----|----|
|                 | NC | 47 | 48 | NC |
| NC = No Connect | NC | 49 | 50 | NC |

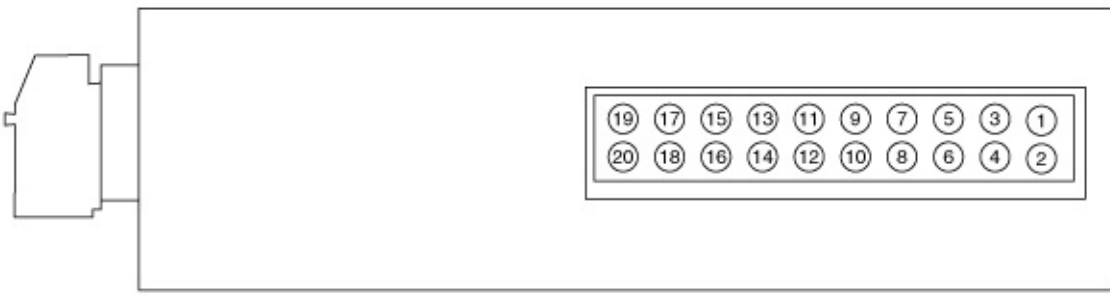
## SCC-A10

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



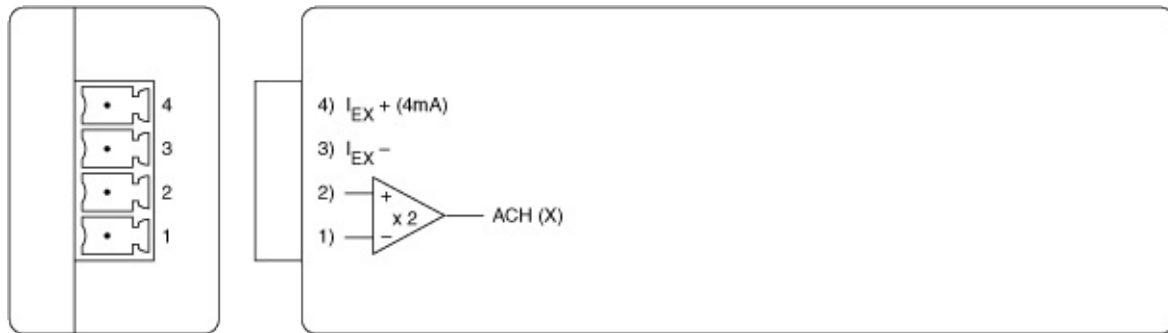
## Rear Connector Pin Assignments

|  |                     |
|------------------------------------------------------------------------------------|---------------------|
| Pin Number                                                                         | Signal              |
| 1                                                                                  | DAQ Device AI (X)   |
| 2                                                                                  | DAQ Device AI GND   |
| 3                                                                                  | —                   |
| 4                                                                                  | DAQ Device AI (X+8) |
| 5                                                                                  | —                   |
| 6                                                                                  | DAQ Device AI GND   |
| 7                                                                                  | —                   |
| 8                                                                                  | DAQ Device AI GND   |
| 9                                                                                  | —                   |
| 10                                                                                 | —                   |
| 11                                                                                 | A GND               |
| 12                                                                                 | —                   |
| 13                                                                                 | + 15 V              |
| 14                                                                                 | – 15 V              |
| 15                                                                                 | —                   |
| 16                                                                                 | —                   |
| 17                                                                                 | —                   |
| 18                                                                                 | —                   |
| 19                                                                                 | —                   |
| 20                                                                                 | —                   |

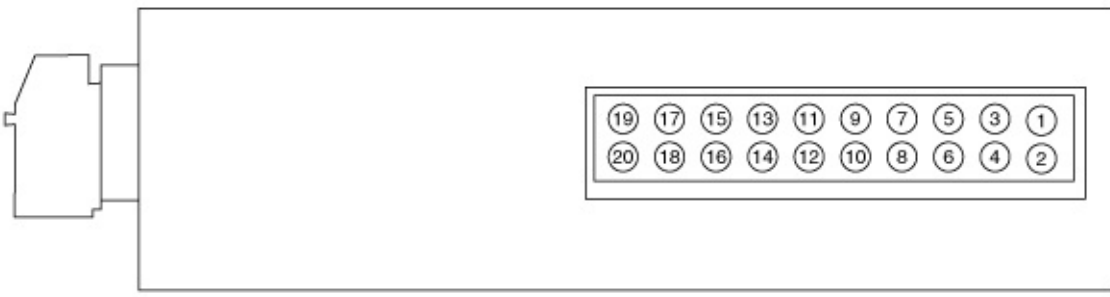
## SCC-ACC01

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



## Rear Connector Pin Assignments

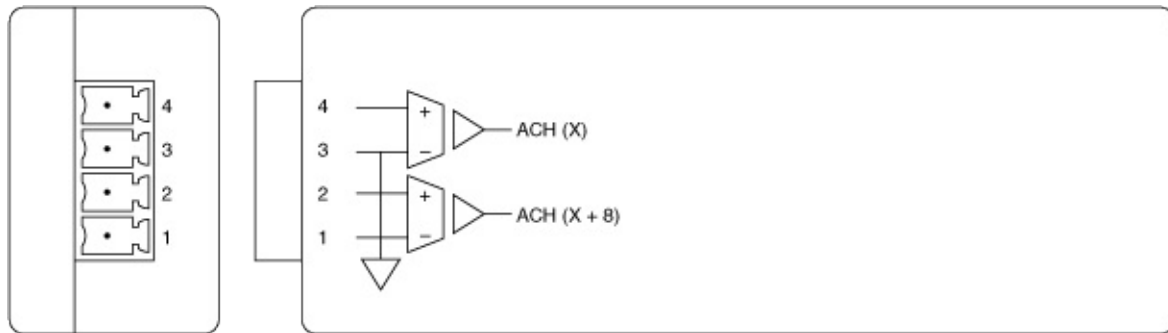
|  |                   |
|------------------------------------------------------------------------------------|-------------------|
| Pin Number                                                                         | Signal            |
| 1                                                                                  | DAQ Device AI (X) |
| 2                                                                                  | DAQ Device AI GND |
| 3                                                                                  | —                 |
| 4                                                                                  | —                 |
| 5                                                                                  | —                 |
| 6                                                                                  | DAQ Device AI GND |
| 7                                                                                  | —                 |
| 8                                                                                  | DAQ Device AI GND |
| 9                                                                                  | + 5 V             |
| 10                                                                                 | GND               |
| 11                                                                                 | A GND             |
| 12                                                                                 | —                 |
| 13                                                                                 | + 15 V            |
| 14                                                                                 | – 15 V            |
| 15                                                                                 | —                 |
| 16                                                                                 | —                 |
| 17                                                                                 | —                 |
| 18                                                                                 | —                 |
| 19                                                                                 | —                 |
| 20                                                                                 | —                 |



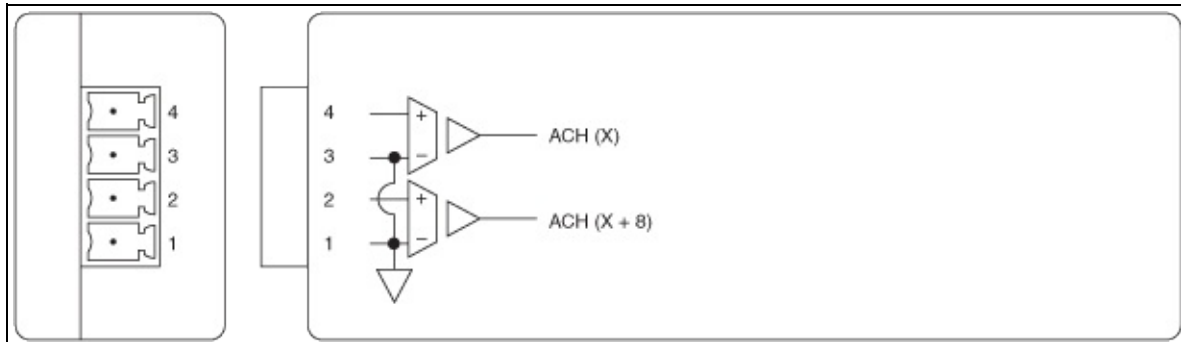
## SCC-AI Series

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



## Rear Connector Pin Assignments



| Pin Number | Signal              |
|------------|---------------------|
| 1          | DAQ Device AI (X)   |
| 2          | DAQ Device AI GND   |
| 3          | —                   |
| 4          | DAQ Device AI (X+8) |
| 5          | —                   |
| 6          | DAQ Device AI GND   |
| 7          | —                   |
| 8          | DAQ Device AI GND   |
| 9          | + 5 V               |
| 10         | GND                 |
| 11         | A GND               |
| 12         | REF 5 V             |
| 13         | + 15 V              |
| 14         | – 15 V              |
| 15         | —                   |
| 16         | —                   |
| 17         | —                   |
| 18         | —                   |
| 19         | —                   |
| 20         | —                   |

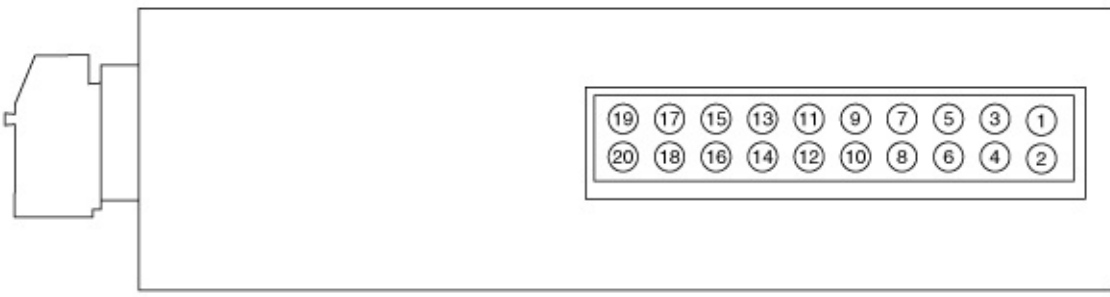
## SCC-AO10

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



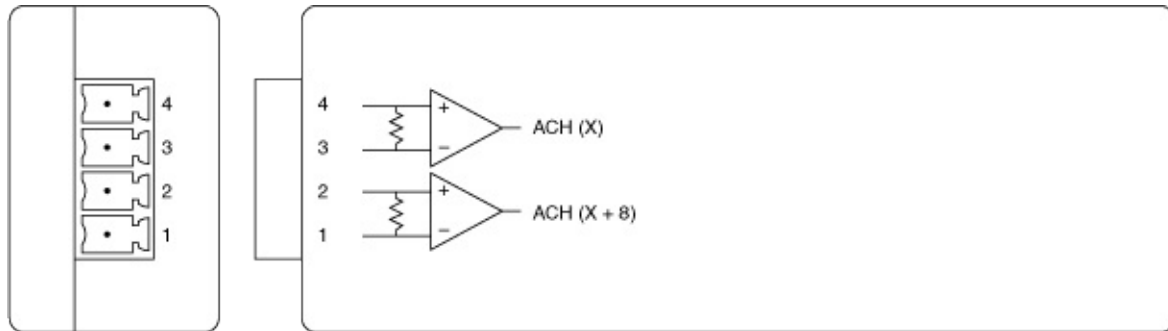
## Rear Connector Pin Assignments

|  |                   |
|------------------------------------------------------------------------------------|-------------------|
| Pin Number                                                                         | Signal            |
| 1                                                                                  | DAQ Device AO (X) |
| 2                                                                                  | DAQ Device AO GND |
| 3                                                                                  | —                 |
| 4                                                                                  | —                 |
| 5                                                                                  | —                 |
| 6                                                                                  | —                 |
| 7                                                                                  | —                 |
| 8                                                                                  | —                 |
| 9                                                                                  | + 5 V             |
| 10                                                                                 | GND               |
| 11                                                                                 | —                 |
| 12                                                                                 | REF5V             |
| 13                                                                                 | + 15 V            |
| 14                                                                                 | – 15 V            |
| 15                                                                                 | —                 |
| 16                                                                                 | —                 |
| 17                                                                                 | —                 |
| 18                                                                                 | —                 |
| 19                                                                                 | —                 |
| 20                                                                                 | —                 |

## SCC-CI20

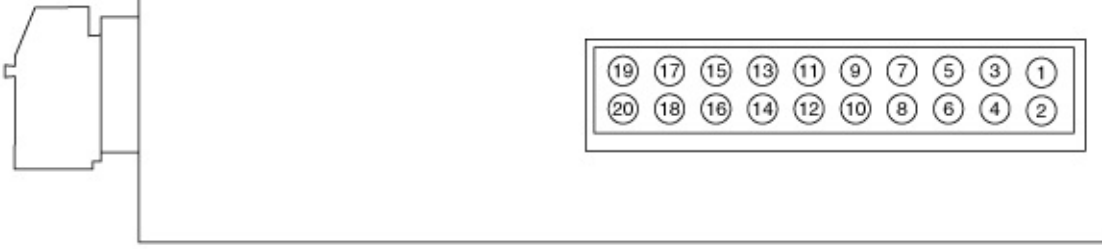
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments





## Rear Connector Pin Assignments

|  |                               |
|------------------------------------------------------------------------------------|-------------------------------|
| Pin Number                                                                         | Signal                        |
| 1                                                                                  | DAQ Device AI (X)             |
| 2                                                                                  | DAQ Device AI GND             |
| 3                                                                                  | —                             |
| 4                                                                                  | DAQ Device AI (X+8)           |
| 5                                                                                  | —                             |
| 6                                                                                  | DAQ Device AI GND             |
| 7                                                                                  | —                             |
| 8                                                                                  | DAQ Device AI GND             |
| 9                                                                                  | —                             |
| 10                                                                                 | —                             |
| 11                                                                                 | DAQ Device A GND              |
| 12                                                                                 | REF 5 V                       |
| 13                                                                                 | + 15 V                        |
| 14                                                                                 | – 15 V                        |
| 15                                                                                 | —                             |
| 16                                                                                 | —                             |
| 17                                                                                 | AI (X) – (from first stage)   |
| 18                                                                                 | AI (X+8) + (from first stage) |
| 19                                                                                 | AI (X) + (from first stage)   |
| 20                                                                                 | AI (X+8) – (from first stage) |

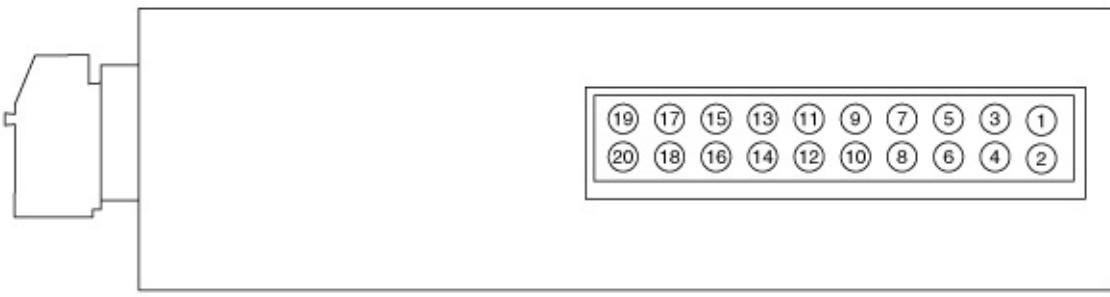
## SCC-CO20

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



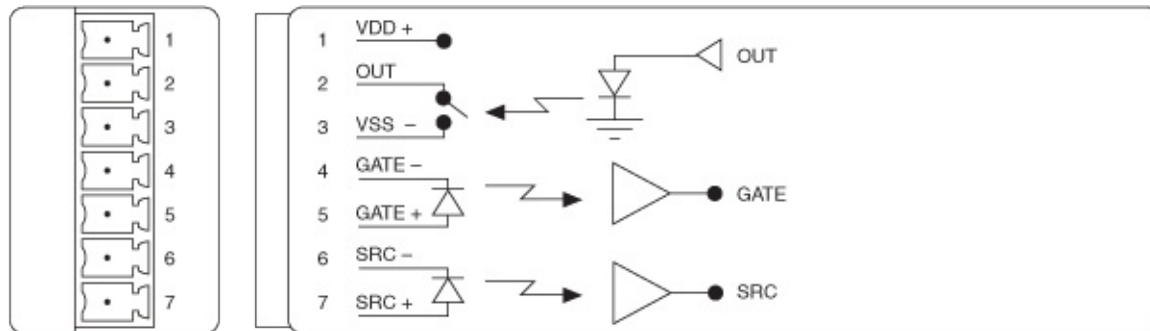
## Rear Connector Pin Assignments

|  |                   |
|------------------------------------------------------------------------------------|-------------------|
| Pin Number                                                                         | Signal            |
| 1                                                                                  | DAQ Device AO (X) |
| 2                                                                                  | DAQ Device AO GND |
| 3                                                                                  | —                 |
| 4                                                                                  | —                 |
| 5                                                                                  | —                 |
| 6                                                                                  | —                 |
| 7                                                                                  | —                 |
| 8                                                                                  | —                 |
| 9                                                                                  | + 5 V             |
| 10                                                                                 | GND               |
| 11                                                                                 | —                 |
| 12                                                                                 | REF5V             |
| 13                                                                                 | + 15 V            |
| 14                                                                                 | – 15 V            |
| 15                                                                                 | —                 |
| 16                                                                                 | —                 |
| 17                                                                                 | —                 |
| 18                                                                                 | —                 |
| 19                                                                                 | —                 |
| 20                                                                                 | —                 |

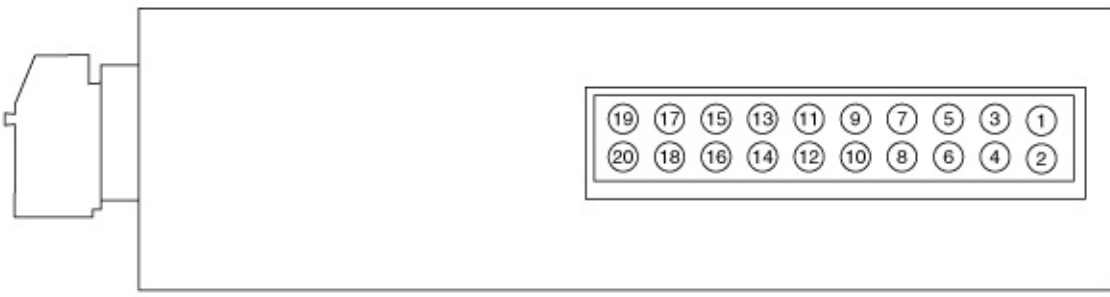
## SCC-CTR01

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



## Rear Connector Pin Assignments

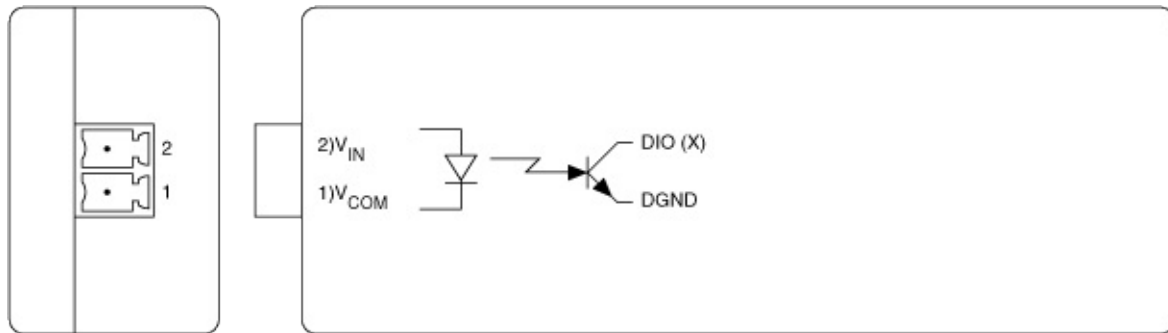
|  |                    |                    |
|------------------------------------------------------------------------------------|--------------------|--------------------|
| Pin Number                                                                         | J19—20: GPCTR 0    | J19—20: GPCTR 1    |
| 1                                                                                  | CTR 0 OUT          | CTR 1 OUT          |
| 2                                                                                  | —                  | —                  |
| 3                                                                                  | PFI 9/CTR 0 GATE   | PFI 4/CTR 1 GATE   |
| 4                                                                                  | —                  | —                  |
| 5                                                                                  | PFI 8/CTR 0 SOURCE | PFI 3/CTR 1 SOURCE |
| 6                                                                                  | —                  | —                  |
| 7                                                                                  | —                  | —                  |
| 8                                                                                  | —                  | —                  |
| 9                                                                                  | + 5 V              | + 5 V              |
| 10                                                                                 | GND                | GND                |
| 11                                                                                 | —                  | —                  |
| 12                                                                                 | —                  | —                  |
| 13                                                                                 | —                  | —                  |
| 14                                                                                 | —                  | —                  |
| 15                                                                                 | —                  | —                  |
| 16                                                                                 | —                  | —                  |
| 17                                                                                 | —                  | —                  |
| 18                                                                                 | —                  | —                  |
| 19                                                                                 | —                  | —                  |
| 20                                                                                 | —                  | —                  |

## SCC-DI01

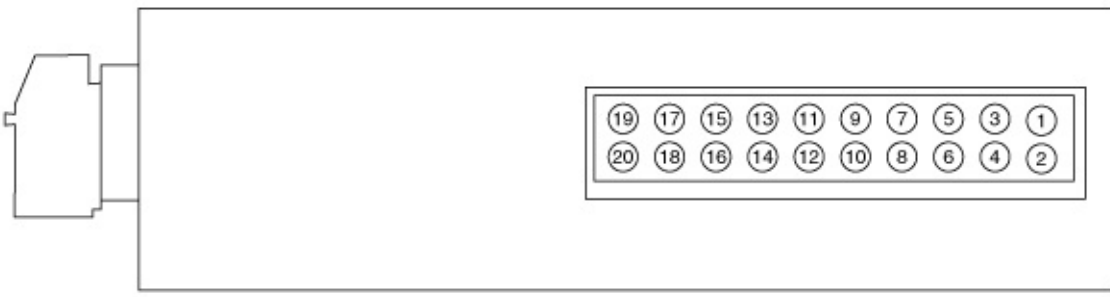
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



## Terminal Connector Input Pin Assignments



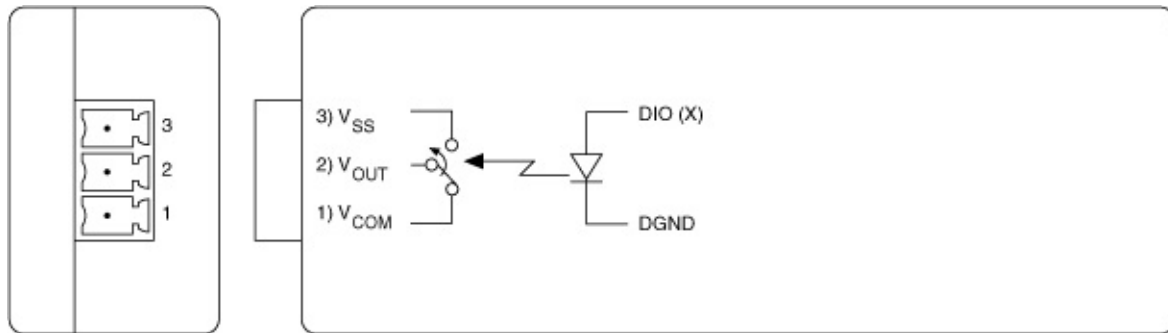
## Rear Connector Pin Assignments

|  |        |
|------------------------------------------------------------------------------------|--------|
| Pin Number                                                                         | Signal |
| 1                                                                                  | —      |
| 2                                                                                  | —      |
| 3                                                                                  | —      |
| 4                                                                                  | —      |
| 5                                                                                  | —      |
| 6                                                                                  | —      |
| 7                                                                                  | P0.(X) |
| 8                                                                                  | —      |
| 9                                                                                  | + 5 V  |
| 10                                                                                 | GND    |
| 11                                                                                 | —      |
| 12                                                                                 | —      |
| 13                                                                                 | —      |
| 14                                                                                 | —      |
| 15                                                                                 | —      |
| 16                                                                                 | —      |
| 17                                                                                 | —      |
| 18                                                                                 | —      |
| 19                                                                                 | —      |
| 20                                                                                 | —      |

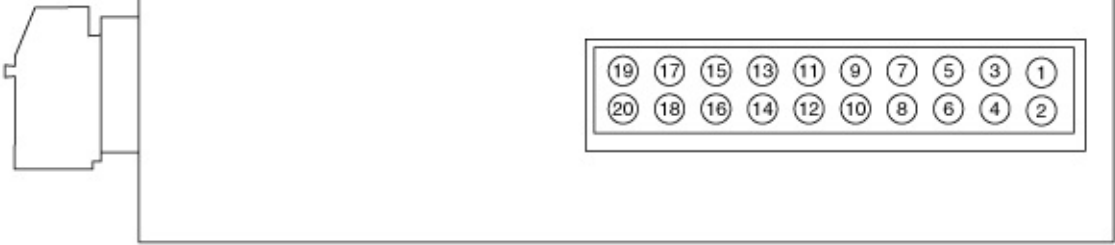
## SCC-DO01

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



## Rear Connector Pin Assignments

|  |        |
|------------------------------------------------------------------------------------|--------|
| Pin Number                                                                         | Signal |
| 1                                                                                  | —      |
| 2                                                                                  | —      |
| 3                                                                                  | —      |
| 4                                                                                  | —      |
| 5                                                                                  | —      |
| 6                                                                                  | —      |
| 7                                                                                  | P0.(X) |
| 8                                                                                  | —      |
| 9                                                                                  | + 5 V  |
| 10                                                                                 | GND    |
| 11                                                                                 | —      |
| 12                                                                                 | —      |
| 13                                                                                 | —      |
| 14                                                                                 | —      |
| 15                                                                                 | —      |
| 16                                                                                 | —      |
| 17                                                                                 | —      |
| 18                                                                                 | —      |
| 19                                                                                 | —      |
| 20                                                                                 | —      |

## SCC-FT01

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



The following table shows the signals available if you plug the SCC-FT01 into AI single-stage SCC sockets J1-J8 or AO SCC sockets J17 and J18.

| Screw Terminal Number | Screw Terminal Label | AI Single-Stage SCC Socket J1-J8 | AO SCC Socket J17 | AO SCC Socket J18 |
|-----------------------|----------------------|----------------------------------|-------------------|-------------------|
| 6                     | CH+                  | AI                               | AO 0              | AO 1              |
| 5                     | CH-                  | AI +8                            | AO GND            | AO GND            |
| 4                     | AI GND               | AI GND                           | PFI 5             | PFI 5             |
| 3                     | AI SENSE             | AI SENSE                         | AO 1              | AO 0              |
| 2                     | EXT REF              | —                                | EXT REF           | EXT REF           |
| 1                     | NC                   | —                                | —                 | —                 |



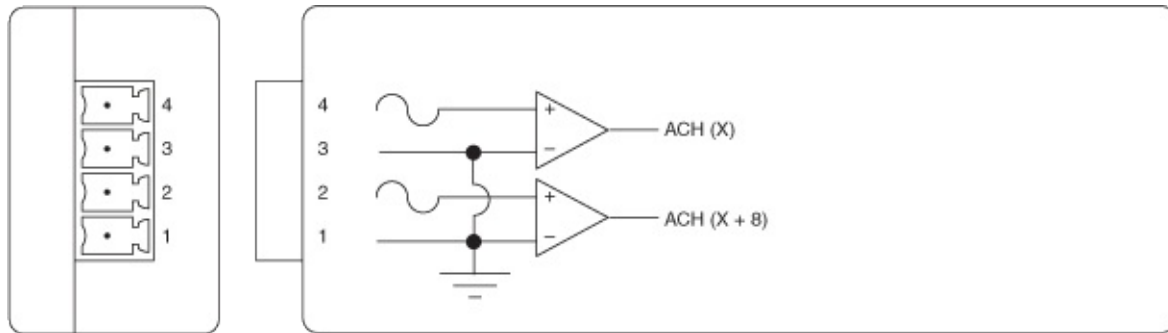
**Note** These are the default signals. Refer to the *SCC-FT01 User Manual* for details about custom configurations.

## SCC-FV01

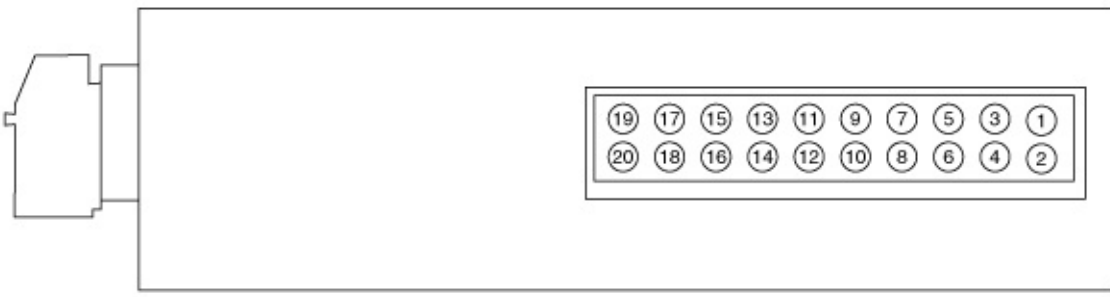
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



## Terminal Connector Input Pin Assignments



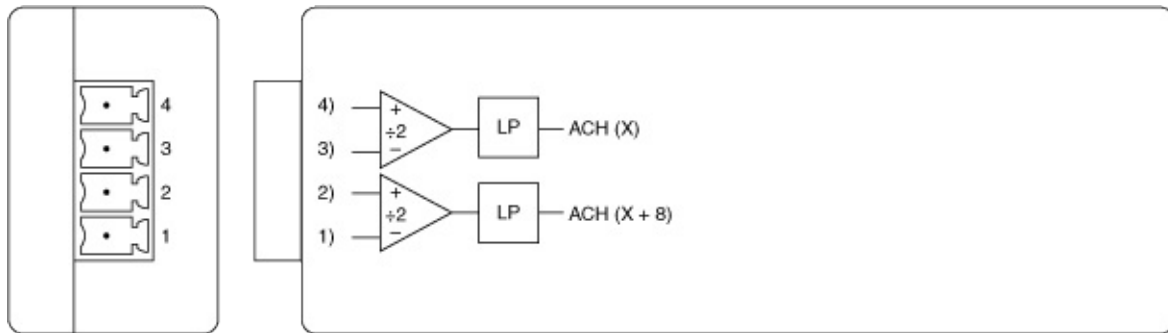
## Rear Connector Pin Assignments

|  |                               |
|------------------------------------------------------------------------------------|-------------------------------|
| Pin Number                                                                         | Signal                        |
| 1                                                                                  | DAQ Device AI (X)             |
| 2                                                                                  | DAQ Device AI GND             |
| 3                                                                                  | —                             |
| 4                                                                                  | DAQ Device AI (X+8)           |
| 5                                                                                  | —                             |
| 6                                                                                  | DAQ Device AI GND             |
| 7                                                                                  | —                             |
| 8                                                                                  | DAQ Device AI GND             |
| 9                                                                                  | —                             |
| 10                                                                                 | —                             |
| 11                                                                                 | A GND                         |
| 12                                                                                 | REF 5 V                       |
| 13                                                                                 | + 15 V                        |
| 14                                                                                 | – 15 V                        |
| 15                                                                                 | —                             |
| 16                                                                                 | —                             |
| 17                                                                                 | AI (X) – (from first stage)   |
| 18                                                                                 | AI (X+8) + (from first stage) |
| 19                                                                                 | AI (X) + (from first stage)   |
| 20                                                                                 | AI (X+8) – (from first stage) |

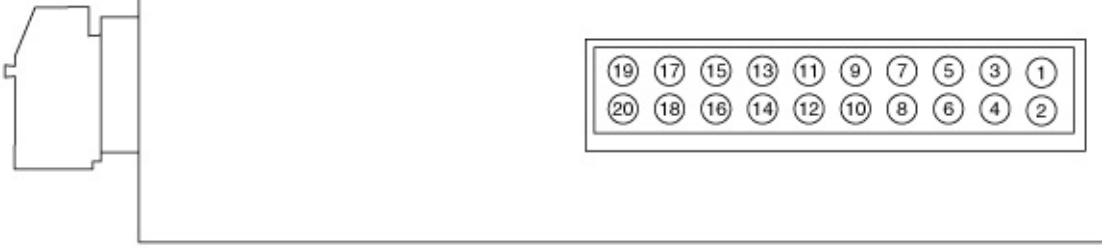
## SCC-LP Series

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



## Rear Connector Pin Assignments

|  |                               |
|------------------------------------------------------------------------------------|-------------------------------|
| Pin Number                                                                         | Signal                        |
| 1                                                                                  | DAQ Device AI (X)             |
| 2                                                                                  | DAQ Device AI GND             |
| 3                                                                                  | —                             |
| 4                                                                                  | DAQ Device AI (X+8)           |
| 5                                                                                  | —                             |
| 6                                                                                  | DAQ Device AI GND             |
| 7                                                                                  | —                             |
| 8                                                                                  | DAQ Device AI GND             |
| 9                                                                                  | —                             |
| 10                                                                                 | —                             |
| 11                                                                                 | A GND                         |
| 12                                                                                 | —                             |
| 13                                                                                 | + 15 V                        |
| 14                                                                                 | – 15 V                        |
| 15                                                                                 | —                             |
| 16                                                                                 | —                             |
| 17                                                                                 | AI (X) – (from first stage)   |
| 18                                                                                 | AI (X+8) + (from first stage) |
| 19                                                                                 | AI (X) + (from first stage)   |
| 20                                                                                 | AI (X+8) – (from first stage) |

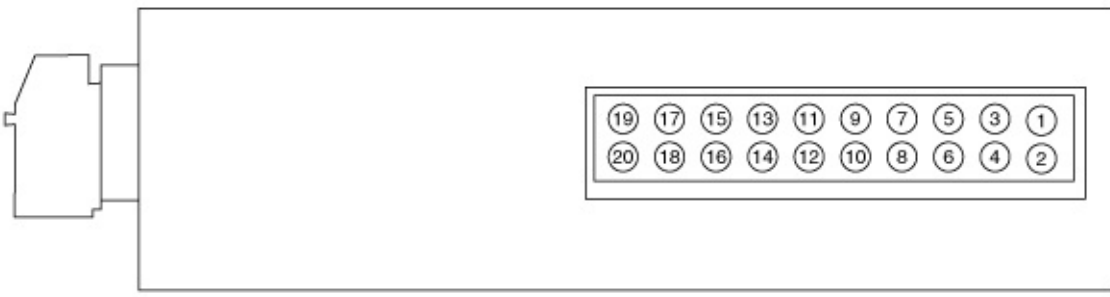
## SCC-RLY01

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



## Rear Connector Pin Assignments

|  |        |
|------------------------------------------------------------------------------------|--------|
| Pin Number                                                                         | Signal |
| 1                                                                                  | —      |
| 2                                                                                  | —      |
| 3                                                                                  | —      |
| 4                                                                                  | —      |
| 5                                                                                  | —      |
| 6                                                                                  | —      |
| 7                                                                                  | P0.(X) |
| 8                                                                                  | —      |
| 9                                                                                  | + 5 V  |
| 10                                                                                 | GND    |
| 11                                                                                 | —      |
| 12                                                                                 | —      |
| 13                                                                                 | —      |
| 14                                                                                 | —      |
| 15                                                                                 | —      |
| 16                                                                                 | —      |
| 17                                                                                 | —      |
| 18                                                                                 | —      |
| 19                                                                                 | —      |
| 20                                                                                 | —      |



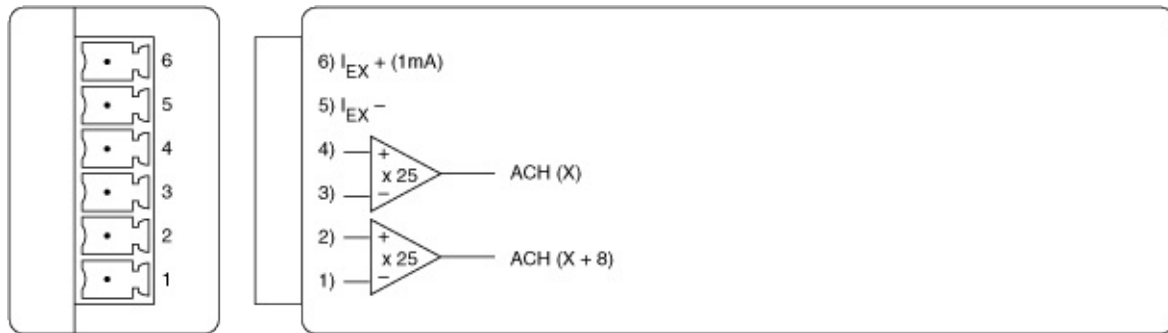
**Caution** When connecting signals greater than 60 VDC to the SCC-RLY01 module in the SCC-68, you must use the high-voltage backshell.



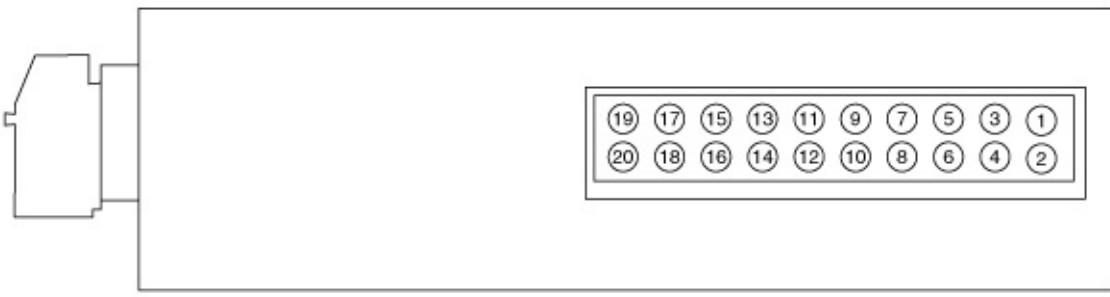
## SCC-RTD01

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

## Terminal Connector Input Pin Assignments



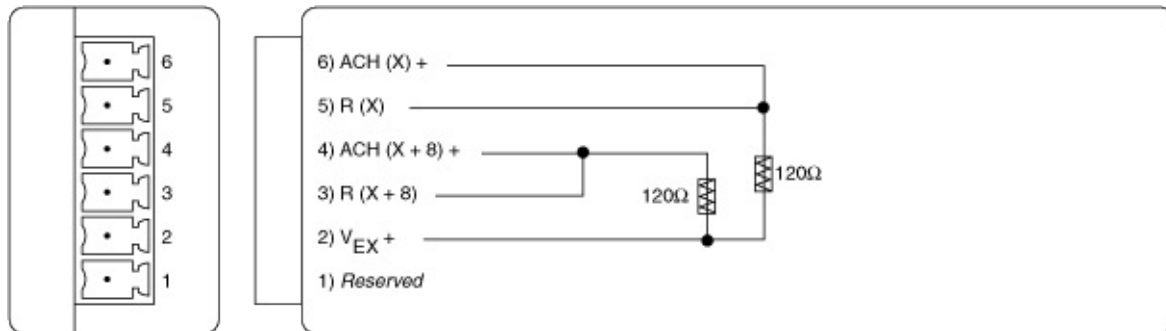
## Rear Connector Pin Assignments

|  |                     |
|------------------------------------------------------------------------------------|---------------------|
| Pin Number                                                                         | Signal              |
| 1                                                                                  | DAQ Device AI (X)   |
| 2                                                                                  | DAQ Device AI GND   |
| 3                                                                                  | —                   |
| 4                                                                                  | DAQ Device AI (X+8) |
| 5                                                                                  | —                   |
| 6                                                                                  | DAQ Device AI GND   |
| 7                                                                                  | —                   |
| 8                                                                                  | DAQ Device AI GND   |
| 9                                                                                  | + 5 V               |
| 10                                                                                 | GND                 |
| 11                                                                                 | A GND               |
| 12                                                                                 | —                   |
| 13                                                                                 | + 15 V              |
| 14                                                                                 | – 15 V              |
| 15                                                                                 | —                   |
| 16                                                                                 | —                   |
| 17                                                                                 | —                   |
| 18                                                                                 | —                   |
| 19                                                                                 | —                   |
| 20                                                                                 | —                   |

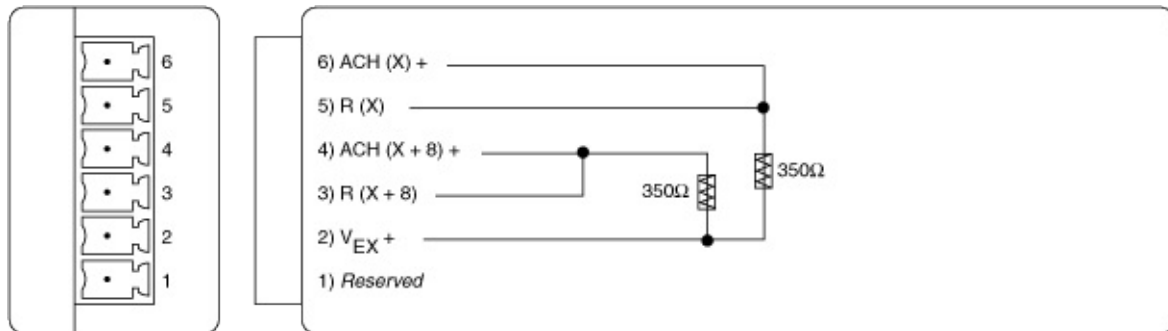
## SCC-SG Series

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

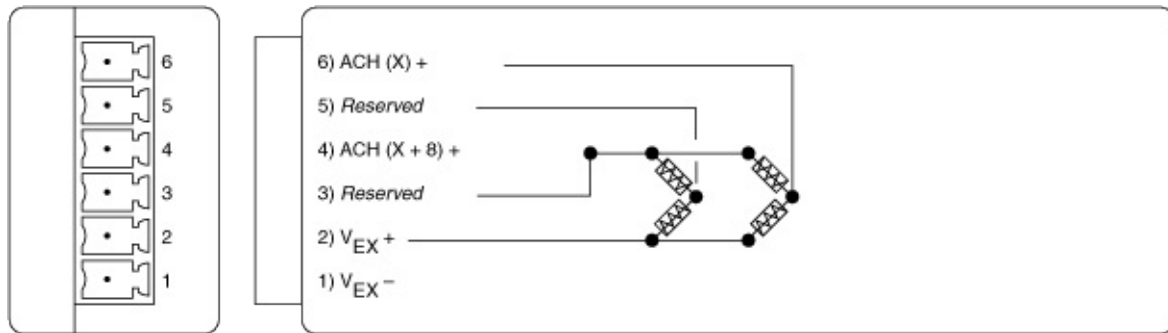
## Terminal Connector Pin Assignments for the SCC-SG01



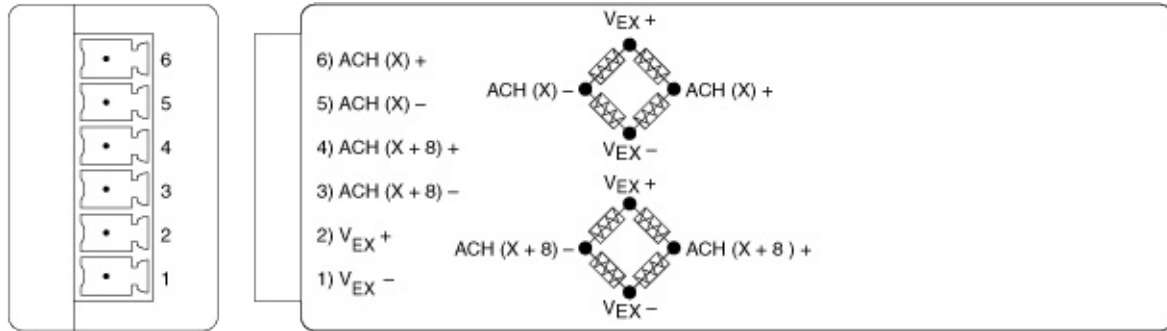
## Terminal Connector Pin Assignments for the SCC-SG02



## Terminal Connector Pin Assignments for the SCC-SG03

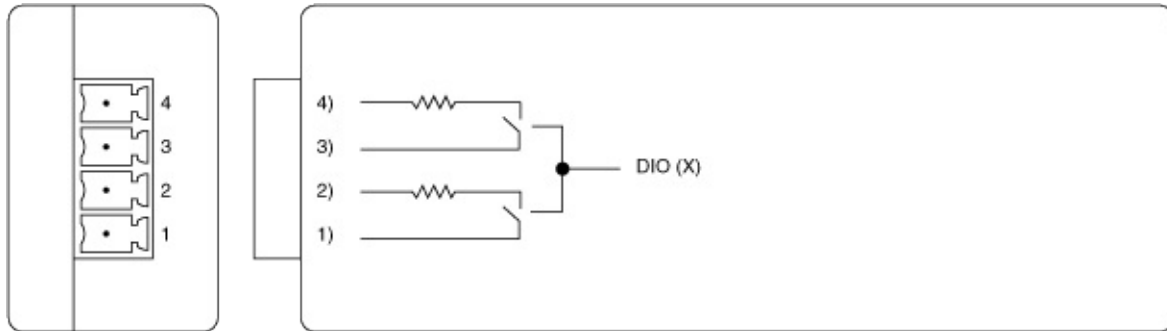


# Terminal Connector Pin Assignments for the SCC-SG04 and the SCC-SG24

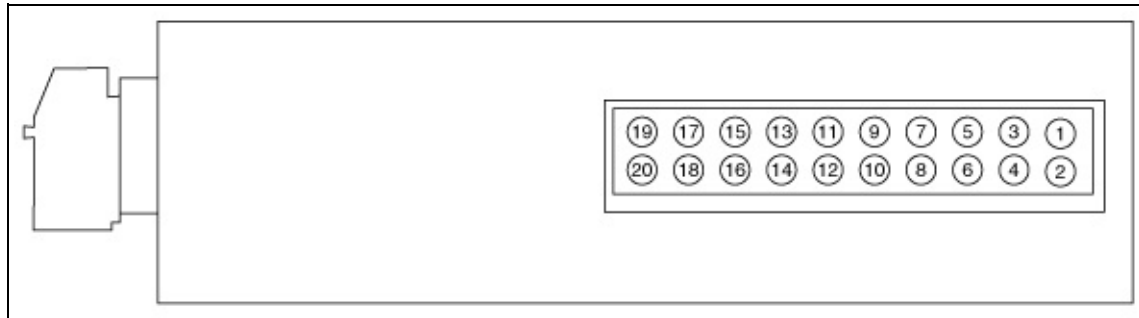




## Terminal Connector Pin Assignments for the SCC-SG11



## Rear Connector Pin Assignments for the SCC-SG Series



| Pin Number | SG Series Signal              | SG11 Signal       |
|------------|-------------------------------|-------------------|
| 1          | DAQ Device AI (X)             | —                 |
| 2          | —                             | —                 |
| 3          | —                             | —                 |
| 4          | DAQ Device AI (X+8)           | —                 |
| 5          | —                             | —                 |
| 6          | DAQ Device AI GND             | —                 |
| 7          | —                             | DAQ Device P0.(X) |
| 8          | —                             | —                 |
| 9          | + 5 V                         | + 5 V             |
| 10         | GND                           | GND               |
| 11         | A GND                         | A GND             |
| 12         | REF 5 V                       | —                 |
| 13         | + 15 V                        | + 15 V            |
| 14         | – 15 V                        | + 15 V            |
| 15         | —                             | —                 |
| 16         | —                             | —                 |
| 17         | AI (X) – (from first stage)   | —                 |
| 18         | AI (X+8) + (from first stage) | —                 |
| 19         | AI (X) + (from first stage)   | —                 |
| 20         | AI (X+8) – (from first stage) | —                 |

## SCC-TC Series

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

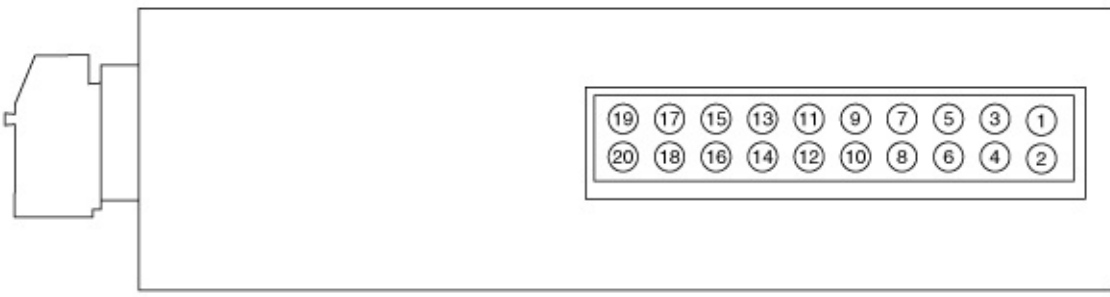
## Terminal Connector Input Pin Assignments for the SCC-TC01



## Terminal Connector Input Pin Assignments for the SCC-TC02

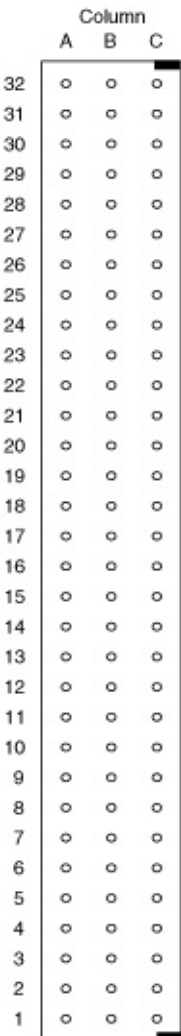


## Rear Connector Pin Assignments for the SCC-TC Series

|  |                   |
|------------------------------------------------------------------------------------|-------------------|
| Pin Number                                                                         | Signal            |
| 1                                                                                  | AI (X)            |
| 2                                                                                  | —                 |
| 3                                                                                  | —                 |
| 4                                                                                  | AI (X+8)          |
| 5                                                                                  | —                 |
| 6                                                                                  | DAQ Device AI GND |
| 7                                                                                  | —                 |
| 8                                                                                  | —                 |
| 9                                                                                  | —                 |
| 10                                                                                 | —                 |
| 11                                                                                 | A GND             |
| 12                                                                                 | REF 5 V           |
| 13                                                                                 | + 15 V            |
| 14                                                                                 | – 15 V            |
| 15                                                                                 | —                 |
| 16                                                                                 | —                 |
| 17                                                                                 | —                 |
| 18                                                                                 | —                 |
| 19                                                                                 | —                 |
| 20                                                                                 | —                 |

## SCXI-1100 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram                                                            | Pin Number | Column A | Column B | Column C |
|------------------------------------------------------------------------------------|------------|----------|----------|----------|
|  | 32         | C GND    | CH 0 –   | CH 0 +   |
|                                                                                    | 31         | NC       | CH 1 –   | CH 1 +   |
|                                                                                    | 30         | NC       | CH 2 –   | CH 2 +   |
|                                                                                    | 29         | NC       | CH 3 –   | CH 3 +   |
|                                                                                    | 28         | NC       | CH 4 –   | CH 4 +   |
|                                                                                    | 27         | NC       | CH 5 –   | CH 5 +   |
|                                                                                    | 26         | NC       | CH 6 –   | CH 6 +   |
|                                                                                    | 25         | NC       | CH 7 –   | CH 7 +   |
|                                                                                    | 24         | C GND    | CH 8 –   | CH 8 +   |
|                                                                                    | 23         | NC       | CH 9 –   | CH 9 +   |
|                                                                                    | 22         | NC       | CH 10 –  | CH 10 +  |
|                                                                                    | 21         | NC       | CH 11 –  | CH 11 +  |
|                                                                                    | 20         | NC       | CH 12 –  | CH 12 +  |
|                                                                                    | 19         | NC       | CH 13 –  | CH 13 +  |
|                                                                                    | 18         | NC       | CH 14 –  | CH 14 +  |
|                                                                                    | 17         | NC       | CH 15 –  | CH 15 +  |
|                                                                                    | 16         | C GND    | CH 16 –  | CH 16 +  |
|                                                                                    | 15         | NC       | CH 17 –  | CH 17 +  |
|                                                                                    | 14         | NC       | CH 18 –  | CH 18 +  |
|                                                                                    | 13         | NC       | CH 19 –  | CH 19 +  |
|                                                                                    | 12         | NC       | CH 20 –  | CH 20 +  |
|                                                                                    | 11         | NC       | CH 21 –  | CH 21 +  |
|                                                                                    | 10         | NC       | CH 22 –  | CH 22 +  |
|                                                                                    | 9          | NC       | CH 23 –  | CH 23 +  |
|                                                                                    | 8          | OUTPUT   | CH 24 –  | CH 24 +  |
|                                                                                    | 7          | AO REF   | CH 25 –  | CH 26 +  |
|                                                                                    | 6          | GUARD    | CH 26 –  | CH 26 +  |
|                                                                                    | 5          | C GND    | CH 27 –  | CH 27 +  |
|                                                                                    | 4          | D TEMP   | CH 28 –  | CH 28 +  |
|                                                                                    | 3          | M TEMP   | CH 29 –  | CH 29 +  |
|                                                                                    | 2          | C GND    | CH 30 –  | CH 30 +  |
| NC means no connection                                                             | 1          | + 5 V    | CH 31 –  | CH 31 +  |





## SCXI-1102/B/C Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram | Pin Number | Column A  | Column B | Column C |
|-------------------------|------------|-----------|----------|----------|
|                         | 32         | C GND     | CH 0 –   | CH 0 +   |
|                         | 31         | NC        | CH 1 –   | CH 1 +   |
|                         | 30         | NC        | CH 2 –   | CH 2 +   |
|                         | 29         | NC        | CH 3 –   | CH 3 +   |
|                         | 28         | NC        | CH 4 –   | CH 4 +   |
|                         | 27         | NC        | CH 5 –   | CH 5 +   |
|                         | 26         | NC        | CH 6 –   | CH 6 +   |
|                         | 25         | NC        | CH 7 –   | CH 7 +   |
|                         | 24         | C GND     | CH 8 –   | CH 8 +   |
|                         | 23         | NC        | CH 9 –   | CH 9 +   |
|                         | 22         | NC        | CH 10 –  | CH 10 +  |
|                         | 21         | NC        | CH 11 –  | CH 11 +  |
|                         | 20         | NC        | CH 12 –  | CH 12 +  |
|                         | 19         | NC        | CH 13 –  | CH 13 +  |
|                         | 18         | NC        | CH 14 –  | CH 14 +  |
|                         | 17         | NC        | CH 15 –  | CH 15 +  |
|                         | 16         | C GND     | CH 16 –  | CH 16 +  |
|                         | 15         | NC        | CH 17 –  | CH 17 +  |
|                         | 14         | NC        | CH 18 –  | CH 18 +  |
|                         | 13         | NC        | CH 19 –  | CH 19 +  |
|                         | 12         | NC        | CH 20 –  | CH 20 +  |
|                         | 11         | NC        | CH 21 –  | CH 21 +  |
|                         | 10         | NC        | CH 22 –  | CH 22 +  |
|                         | 9          | NC        | CH 23 –  | CH 23 +  |
|                         | 8          | NC        | CH 24 –  | CH 24 +  |
|                         | 7          | NC        | CH 25 –  | CH 26 +  |
|                         | 6          | NC        | CH 26 –  | CH 26 +  |
|                         | 5          | C GND     | CH 27 –  | CH 27 +  |
|                         | 4          | CJ SENSOR | CH 28 –  | CH 28 +  |
|                         | 3          | CJ SENSOR | CH 29 –  | CH 29 +  |
|                         | 2          | C GND     | CH 30 –  | CH 30 +  |
| NC means no connection  | 1          | + 5 V     | CH 31 –  | CH 31 +  |



## SCXI-1104/C Front Connector

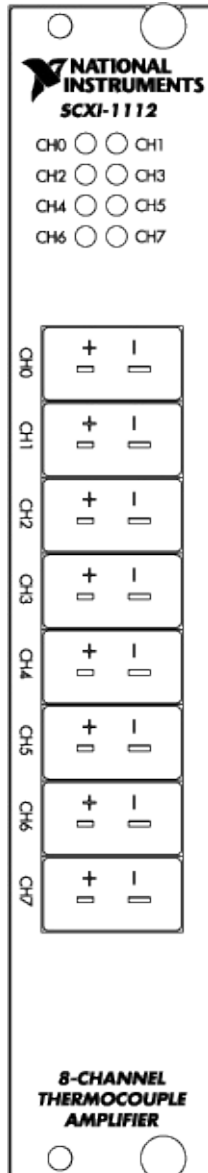
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram | Pin Number | Column A | Column B | Column C |
|-------------------------|------------|----------|----------|----------|
|                         | 32         | C GND    | CH 0 –   | CH 0 +   |
|                         | 31         | NC       | CH 1 –   | CH 1 +   |
|                         | 30         | NC       | CH 2 –   | CH 2 +   |
|                         | 29         | NC       | CH 3 –   | CH 3 +   |
|                         | 28         | NC       | CH 4 –   | CH 4 +   |
|                         | 27         | NC       | CH 5 –   | CH 5 +   |
|                         | 26         | NC       | CH 6 –   | CH 6 +   |
|                         | 25         | NC       | CH 7 –   | CH 7 +   |
|                         | 24         | C GND    | CH 8 –   | CH 8 +   |
|                         | 23         | NC       | CH 9 –   | CH 9 +   |
|                         | 22         | NC       | CH 10 –  | CH 10 +  |
|                         | 21         | NC       | CH 11 –  | CH 11 +  |
|                         | 20         | NC       | CH 12 –  | CH 12 +  |
|                         | 19         | NC       | CH 13 –  | CH 13 +  |
|                         | 18         | NC       | CH 14 –  | CH 14 +  |
|                         | 17         | NC       | CH 15 –  | CH 15 +  |
|                         | 16         | C GND    | CH 16 –  | CH 16 +  |
|                         | 15         | NC       | CH 17 –  | CH 17 +  |
|                         | 14         | NC       | CH 18 –  | CH 18 +  |
|                         | 13         | NC       | CH 19 –  | CH 19 +  |
|                         | 12         | NC       | CH 20 –  | CH 20 +  |
|                         | 11         | NC       | CH 21 –  | CH 21 +  |
|                         | 10         | NC       | CH 22 –  | CH 22 +  |
|                         | 9          | NC       | CH 23 –  | CH 23 +  |
|                         | 8          | NC       | CH 24 –  | CH 24 +  |
|                         | 7          | NC       | CH 25 –  | CH 26 +  |
|                         | 6          | NC       | CH 26 –  | CH 26 +  |
|                         | 5          | C GND    | CH 27 –  | CH 27 +  |
|                         | 4          | RSVD     | CH 28 –  | CH 28 +  |
|                         | 3          | RSVD     | CH 29 –  | CH 29 +  |
| RSVD means reserved.    | 2          | C GND    | CH 30 –  | CH 30 +  |
| NC means no connection. | 1          | + 5 V    | CH 31 –  | CH 31 +  |



## SCXI-1112

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



## SCXI-1120/D Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram  | Pin Number | Column A | Column B | Column C |
|--------------------------|------------|----------|----------|----------|
|                          | 32         | CH 0 +   | —        | CH 0 –   |
|                          | 31         | —        | —        | —        |
|                          | 30         | CH 1 +   | —        | CH 1 –   |
|                          | 29         | —        | —        | —        |
|                          | 28         | NC       | —        | NC       |
|                          | 27         | —        | —        | —        |
|                          | 26         | CH 2 +   | —        | CH 2 –   |
|                          | 25         | —        | —        | —        |
|                          | 24         | CH 3 +   | —        | CH 3 –   |
|                          | 23         | —        | —        | —        |
|                          | 22         | NC       | —        | NC       |
|                          | 21         | —        | —        | —        |
|                          | 20         | CH 4 +   | —        | CH 4 –   |
|                          | 19         | —        | —        | —        |
|                          | 18         | CH 5 +   | —        | CH 5 –   |
|                          | 17         | —        | —        | —        |
|                          | 16         | NC       | —        | NC       |
|                          | 15         | —        | —        | —        |
|                          | 14         | CH 6 +   | —        | CH 6 –   |
|                          | 13         | —        | —        | —        |
|                          | 12         | CH 7 +   | —        | CH 7 –   |
|                          | 11         | —        | —        | —        |
|                          | 10         | NC       | —        | NC       |
|                          | 9          | —        | —        | —        |
|                          | 8          | NC       | —        | RSVD     |
|                          | 7          | —        | —        | —        |
|                          | 6          | RSVD     | —        | RSVD     |
|                          | 5          | —        | —        | —        |
|                          | 4          | + 5 V    | —        | M TEMP   |
| RSVD means reserved.     | 3          | —        | —        | —        |
| NC means no connection.  | 2          | CHS GND  | —        | D TEMP   |
| — means no physical pin. | 1          | —        | —        | —        |



## SCXI-1121 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram | Pin Number | Column A | Column B | Column C |
|-------------------------|------------|----------|----------|----------|
|                         | 32         | CH 0 +   | —        | CH 0 –   |
|                         | 31         | —        | —        | —        |
|                         | 30         | EX 0 +   | —        | EX 0 –   |
|                         | 29         | —        | —        | —        |
|                         | 28         | E GND 0  | —        | NC       |
|                         | 27         | —        | —        | —        |
|                         | 26         | CH 1 +   | —        | CH 1 –   |
|                         | 25         | —        | —        | —        |
|                         | 24         | EX 1 +   | —        | EX 1 –   |
|                         | 23         | —        | —        | —        |
|                         | 22         | E GND 1  | —        | NC       |
|                         | 21         | —        | —        | —        |
|                         | 20         | CH 2 +   | —        | CH 2 –   |
|                         | 19         | —        | —        | —        |
|                         | 18         | EX 2 +   | —        | EX 2 –   |
|                         | 17         | —        | —        | —        |
|                         | 16         | E GND 2  | —        | NC       |
|                         | 15         | —        | —        | —        |
|                         | 14         | CH 3 +   | —        | CH 3 –   |
|                         | 13         | —        | —        | —        |
|                         | 12         | EX 3 +   | —        | EX 3 –   |
|                         | 11         | —        | —        | —        |
|                         | 10         | E GND 3  | —        | NC       |
|                         | 9          | —        | —        | —        |
|                         | 8          | NC       | —        | RSVD     |
|                         | 7          | —        | —        | —        |
|                         | 6          | SCAL     | —        | RSVD     |
|                         | 5          | —        | —        | —        |
|                         | 4          | + 5 V    | —        | M TEMP   |
| RSVD means reserved.    | 3          | —        | —        | —        |
| NC means no connection  | 2          | C GND    | —        | D TEMP   |
| — means no physical pin | 1          | —        | —        | —        |





## SCXI-1122 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram                                                     | Pin Number | Column A | Column B | Column C |
|-----------------------------------------------------------------------------|------------|----------|----------|----------|
|                                                                             | 32         | —        | CH 0 +   | —        |
|                                                                             | 31         | RSVD     | —        | CH 0 –   |
|                                                                             | 30         | —        | CH 1 +   | —        |
|                                                                             | 29         | NC       | —        | CH 1 –   |
|                                                                             | 28         | —        | CH 2 +   | —        |
|                                                                             | 27         | NC       | —        | CH 2 –   |
|                                                                             | 26         | —        | CH 3 +   | —        |
|                                                                             | 25         | NC       | —        | CH 3 –   |
|                                                                             | 24         | —        | CH 4 +   | —        |
|                                                                             | 23         | IEX +    | —        | CH 4 –   |
|                                                                             | 22         | —        | CH 5 +   | —        |
|                                                                             | 21         | IEX –    | —        | CH 5 –   |
|                                                                             | 20         | —        | CH 6 +   | —        |
|                                                                             | 19         | VEX +    | —        | CH 6 –   |
|                                                                             | 18         | —        | CH 7 +   | —        |
|                                                                             | 17         | SENSE +  | —        | CH 7 –   |
|                                                                             | 16         | —        | CH 8 +   | —        |
|                                                                             | 15         | SENSE –  | —        | CH 8 –   |
|                                                                             | 14         | —        | CH 9 +   | —        |
|                                                                             | 13         | VEX –    | —        | CH 9 –   |
| RSVD means reserved.<br>NC means no connection.<br>— means no physical pin. | 12         | —        | CH 10 +  | —        |
|                                                                             | 11         | VEX/2    | —        | CH 10 –  |
|                                                                             | 10         | —        | CH 11 +  | —        |
|                                                                             | 9          | NC       | —        | CH 11 –  |
|                                                                             | 8          | —        | CH 12 +  | —        |
|                                                                             | 7          | + 5 V    | —        | CH 12 –  |
|                                                                             | 6          | —        | CH 13 +  | —        |
|                                                                             | 5          | NC       | —        | CH 13 –  |
|                                                                             | 4          | —        | CH 14 +  | —        |
|                                                                             | 3          | TEMP +   | —        | CH 14 –  |
|                                                                             | 2          | —        | CH 15 +  | —        |
|                                                                             | 1          | TEMP –   | —        | CH 15 –  |



## SCXI-1124 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram  | Pin Number | Column A | Column B | Column C |
|--------------------------|------------|----------|----------|----------|
|                          | 32         | —        | —        | —        |
|                          | 31         | —        | —        | —        |
|                          | 30         | SUPPLY 0 | I SINK 0 | NC       |
|                          | 29         | V OUT 0  | GND 0    | NC       |
|                          | 28         | —        | —        | —        |
|                          | 27         | —        | —        | —        |
|                          | 26         | SUPPLY 1 | I SINK 1 | NC       |
|                          | 25         | V OUT 1  | GND 1    | NC       |
|                          | 24         | —        | —        | —        |
|                          | 23         | —        | —        | —        |
|                          | 22         | SUPPLY 2 | I SINK 2 | NC       |
|                          | 21         | V OUT 2  | GND 2    | NC       |
|                          | 20         | —        | —        | —        |
|                          | 19         | —        | —        | —        |
|                          | 18         | SUPPLY 3 | I SINK 3 | NC       |
|                          | 17         | V OUT 3  | GND 3    | NC       |
|                          | 16         | —        | —        | —        |
|                          | 15         | —        | —        | —        |
|                          | 14         | SUPPLY 4 | I SINK 4 | NC       |
|                          | 13         | V OUT 4  | GND 4    | NC       |
|                          | 12         | —        | —        | —        |
|                          | 11         | —        | —        | —        |
|                          | 10         | SUPPLY 5 | I SINK 5 | NC       |
|                          | 9          | V OUT 5  | GND 5    | NC       |
|                          | 8          | —        | —        | —        |
|                          | 7          | —        | —        | —        |
|                          | 6          | NC       | NC       | NC       |
|                          | 5          | NC       | NC       | NC       |
|                          | 4          | —        | —        | —        |
|                          | 3          | —        | —        | —        |
| NC means no connection.  | 2          | NC       | NC       | NC       |
| — means no physical pin. | 1          | NC       | NC       | CHS GND  |



## SCXI-1125 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram  | Pin Number | Column A | Column B | Column C |
|--------------------------|------------|----------|----------|----------|
|                          | 32         | CH 0 +   | —        | CH 0 –   |
|                          | 31         | —        | —        | —        |
|                          | 30         | CH 1 +   | —        | CH 1 –   |
|                          | 29         | —        | —        | —        |
|                          | 28         | NC       | —        | NC       |
|                          | 27         | —        | —        | —        |
|                          | 26         | CH 2 +   | —        | CH 2 –   |
|                          | 25         | —        | —        | —        |
|                          | 24         | CH 3 +   | —        | CH 3 –   |
|                          | 23         | —        | —        | —        |
|                          | 22         | NC       | —        | NC       |
|                          | 21         | —        | —        | —        |
|                          | 20         | CH 4 +   | —        | CH 4 –   |
|                          | 19         | —        | —        | —        |
|                          | 18         | CH 5 +   | —        | CH 5 –   |
|                          | 17         | —        | —        | —        |
|                          | 16         | NC       | —        | NC       |
|                          | 15         | —        | —        | —        |
|                          | 14         | CH 6 +   | —        | CH 6 –   |
|                          | 13         | —        | —        | —        |
|                          | 12         | CH 7 +   | —        | CH 7 –   |
|                          | 11         | —        | —        | —        |
|                          | 10         | NC       | —        | NC       |
|                          | 9          | —        | —        | —        |
|                          | 8          | RSVD     | —        | RSVD     |
|                          | 7          | —        | —        | —        |
|                          | 6          | RSVD     | —        | RSVD     |
|                          | 5          | —        | —        | —        |
|                          | 4          | + 5 V    | —        | CJ TEMP  |
| RSVD means reserved.     | 3          | —        | —        | —        |
| NC means no connection.  | 2          | CHS GND  | —        | RSVD     |
| — means no physical pin. | 1          | —        | —        | —        |



**Caution** Pins A2, A4, A8, C2, C4, C6, and C8 on the front signal connector are not isolated and do not have the same protection circuitry as do the positive and negative analog input pairs. Connecting external signals to these pins can damage your SCXI-1125 module.

## SCXI-1126 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

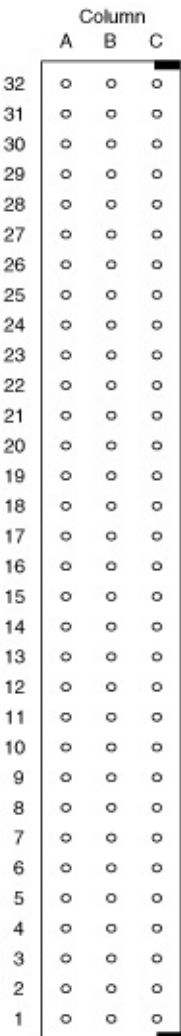
| Front Connector Diagram | Pin Number | Column A | Column B | Column C |
|-------------------------|------------|----------|----------|----------|
|                         | 32         | CH 0 +   | —        | CH 0 –   |
|                         | 31         | —        | —        | —        |
|                         | 30         | CH 1 +   | —        | CH 1 –   |
|                         | 29         | —        | —        | —        |
|                         | 28         | NC       | —        | NC       |
|                         | 27         | —        | —        | —        |
|                         | 26         | CH 2 +   | —        | CH 2 –   |
|                         | 25         | —        | —        | —        |
|                         | 24         | CH 3 +   | —        | CH 3 –   |
|                         | 23         | —        | —        | —        |
|                         | 22         | NC       | —        | NC       |
|                         | 21         | —        | —        | —        |
|                         | 20         | CH 4 +   | —        | CH 4 –   |
|                         | 19         | —        | —        | —        |
|                         | 18         | CH 5 +   | —        | CH 5 –   |
|                         | 17         | —        | —        | —        |
|                         | 16         | NC       | —        | NC       |
|                         | 15         | —        | —        | —        |
|                         | 14         | CH 6 +   | —        | CH 6 –   |
|                         | 13         | —        | —        | —        |
|                         | 12         | CH 7 +   | —        | CH 7 –   |
|                         | 11         | —        | —        | —        |
|                         | 10         | NC       | —        | NC       |
|                         | 9          | —        | —        | —        |
|                         | 8          | NC       | —        | NC       |
|                         | 7          | —        | —        | —        |
|                         | 6          | NC       | —        | NC       |
|                         | 5          | —        | —        | —        |
|                         | 4          | NC       | —        | NC       |
|                         | 3          | —        | —        | —        |
| NC means no connection  | 2          | CHS GND  | —        | NC       |
| — means no physical pin | 1          | —        | —        | —        |





## SCXI-1140 Front Connector

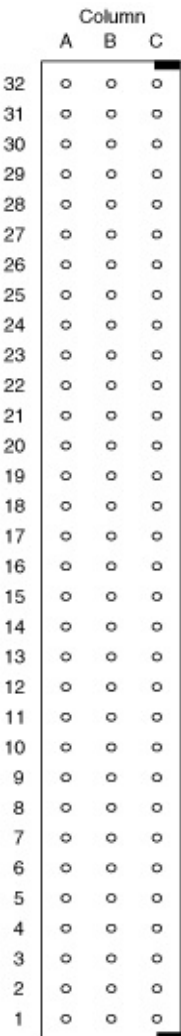
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram                                                            | Pin Number | Column A  | Column B | Column C |
|------------------------------------------------------------------------------------|------------|-----------|----------|----------|
|  | 32         | AI 0 +    | NC       | AI 0 –   |
|                                                                                    | 31         | NC        | NC       | NC       |
|                                                                                    | 30         | AI 1 +    | NC       | AI 1 –   |
|                                                                                    | 29         | NC        | NC       | NC       |
|                                                                                    | 28         | A GND     | NC       | A GND    |
|                                                                                    | 27         | NC        | NC       | NC       |
|                                                                                    | 26         | AI 2 +    | NC       | AI 2 –   |
|                                                                                    | 25         | NC        | NC       | NC       |
|                                                                                    | 24         | AI 3 +    | NC       | AI 3 –   |
|                                                                                    | 23         | NC        | NC       | NC       |
|                                                                                    | 22         | A GND     | NC       | A GND    |
|                                                                                    | 21         | NC        | NC       | NC       |
|                                                                                    | 20         | AI 4 +    | NC       | AI 4 –   |
|                                                                                    | 19         | NC        | NC       | NC       |
|                                                                                    | 18         | AI 5 +    | NC       | AI 5 –   |
|                                                                                    | 17         | NC        | NC       | NC       |
|                                                                                    | 16         | A GND     | NC       | A GND    |
|                                                                                    | 15         | NC        | NC       | NC       |
|                                                                                    | 14         | AI 6 +    | NC       | AI 6 –   |
|                                                                                    | 13         | NC        | NC       | NC       |
|                                                                                    | 12         | AI 7 +    | NC       | AI 7 –   |
|                                                                                    | 11         | NC        | NC       | NC       |
|                                                                                    | 10         | NC        | NC       | NC       |
|                                                                                    | 9          | NC        | NC       | NC       |
|                                                                                    | 8          | D GND     | NC       | D GND    |
|                                                                                    | 7          | NC        | NC       | NC       |
|                                                                                    | 6          | HOLD TRIG | NC       | D GND    |
|                                                                                    | 5          | NC        | NC       | NC       |
|                                                                                    | 4          | + 5 V     | NC       | NC       |
|                                                                                    | 3          | NC        | NC       | NC       |
|                                                                                    | 2          | D GND     | NC       | NC       |
| NC means no connection.                                                            | 1          | NC        | NC       | NC       |



## SCXI-1141/1142/1143 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram                                                            | Pin Number | Column A | Column B | Column C |
|------------------------------------------------------------------------------------|------------|----------|----------|----------|
|  | 32         | AI 0 +   | NC       | AI 0 –   |
|                                                                                    | 31         | NC       | NC       | NC       |
|                                                                                    | 30         | AI 1 +   | NC       | AI 1 –   |
|                                                                                    | 29         | NC       | NC       | NC       |
|                                                                                    | 28         | A GND    | NC       | A GND    |
|                                                                                    | 27         | NC       | NC       | NC       |
|                                                                                    | 26         | AI 2 +   | NC       | AI 2 –   |
|                                                                                    | 25         | NC       | NC       | NC       |
|                                                                                    | 24         | AI 3 +   | NC       | AI 3 –   |
|                                                                                    | 23         | NC       | NC       | NC       |
|                                                                                    | 22         | A GND    | NC       | A GND    |
|                                                                                    | 21         | NC       | NC       | NC       |
|                                                                                    | 20         | AI 4 +   | NC       | AI 4 –   |
|                                                                                    | 19         | NC       | NC       | NC       |
|                                                                                    | 18         | AI 5 +   | NC       | AI 5 –   |
|                                                                                    | 17         | NC       | NC       | NC       |
|                                                                                    | 16         | A GND    | NC       | A GND    |
|                                                                                    | 15         | NC       | NC       | NC       |
|                                                                                    | 14         | AI 6 +   | NC       | AI 6 –   |
|                                                                                    | 13         | NC       | NC       | NC       |
|                                                                                    | 12         | AI 7 +   | NC       | AI 7 –   |
|                                                                                    | 11         | NC       | NC       | NC       |
|                                                                                    | 10         | NC       | NC       | NC       |
|                                                                                    | 9          | NC       | NC       | NC       |
|                                                                                    | 8          | RSVD     | NC       | RSVD     |
|                                                                                    | 7          | NC       | NC       | NC       |
|                                                                                    | 6          | RSVD     | NC       | RSVD     |
|                                                                                    | 5          | NC       | NC       | NC       |
|                                                                                    | 4          | RSVD     | NC       | EXT CLK  |
|                                                                                    | 3          | NC       | NC       | NC       |
| NC means no connection.                                                            | 2          | D GND    | NC       | OUT CLK  |
| RSVD means reserved.                                                               | 1          | NC       | NC       | NC       |



## SCXI-1162 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram                                                                                                                                                                                                                           | Pin Number | Column A | Column B | Column C        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|----------|-----------------|
| <p>Column<br/>A B C</p> <p>32<br/>31<br/>30<br/>29<br/>28<br/>27<br/>26<br/>25<br/>24<br/>23<br/>22<br/>21<br/>20<br/>19<br/>18<br/>17<br/>16<br/>15<br/>14<br/>13<br/>12<br/>11<br/>10<br/>9<br/>8<br/>7<br/>6<br/>5<br/>4<br/>3<br/>2<br/>1</p> | 32         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 31         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 30         | In 1     | In 0     | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 29         | In 3     | In 2     | NC              |
|                                                                                                                                                                                                                                                   | 28         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 27         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 26         | In 5     | In 4     | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 25         | In 7     | In 6     | NC              |
|                                                                                                                                                                                                                                                   | 24         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 23         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 22         | In 9     | In 8     | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 21         | In 11    | In 10    | NC              |
|                                                                                                                                                                                                                                                   | 20         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 19         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 18         | In 13    | In 12    | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 17         | In 15    | In 14    | NC              |
|                                                                                                                                                                                                                                                   | 16         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 15         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 14         | In 18    | In 19    | NC              |
|                                                                                                                                                                                                                                                   | 13         | In 16    | In 17    | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 12         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 11         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 10         | In 22    | In 23    | NC              |
|                                                                                                                                                                                                                                                   | 9          | In 20    | In 21    | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 8          | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 7          | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 6          | In 26    | In 27    | NC              |
|                                                                                                                                                                                                                                                   | 5          | In 24    | In 25    | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 4          | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 3          | —        | —        | —               |
| NC means no connection                                                                                                                                                                                                                            | 2          | In 30    | In 31    | NC              |

|                         |   |       |       |                 |
|-------------------------|---|-------|-------|-----------------|
| — means no physical pin | 1 | In 28 | In 29 | V <sub>CC</sub> |
|-------------------------|---|-------|-------|-----------------|

## SCXI-1162HV Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram | Pin Number | Column A | Column B | Column C |
|-------------------------|------------|----------|----------|----------|
|                         | 32         | —        | —        | —        |
|                         | 31         | —        | —        | —        |
|                         | 30         | In 1     | In 0     | NC       |
|                         | 29         | In 3     | In 2     | GND      |
|                         | 28         | —        | —        | —        |
|                         | 27         | —        | —        | —        |
|                         | 26         | In 5     | In 4     | NC       |
|                         | 25         | In 7     | In 6     | GND      |
|                         | 24         | —        | —        | —        |
|                         | 23         | —        | —        | —        |
|                         | 22         | In 9     | In 8     | NC       |
|                         | 21         | In 11    | In 10    | GND      |
|                         | 20         | —        | —        | —        |
|                         | 19         | —        | —        | —        |
|                         | 18         | In 13    | In 12    | NC       |
|                         | 17         | In 15    | In 14    | GND      |
|                         | 16         | —        | —        | —        |
|                         | 15         | —        | —        | —        |
|                         | 14         | In 18    | In 19    | GND      |
|                         | 13         | In 16    | In 17    | NC       |
|                         | 12         | —        | —        | —        |
|                         | 11         | —        | —        | —        |
|                         | 10         | In 22    | In 23    | GND      |
|                         | 9          | In 20    | In 21    | NC       |
|                         | 8          | —        | —        | —        |
|                         | 7          | —        | —        | —        |
|                         | 6          | In 26    | In 27    | GND      |
|                         | 5          | In 24    | In 25    | NC       |
|                         | 4          | —        | —        | —        |
|                         | 3          | —        | —        | —        |
| NC means no connection  | 2          | In 30    | In 31    | GND      |
| — means no physical pin | 1          | In 28    | In 29    | NC       |





## SCXI-1163 Front Connector

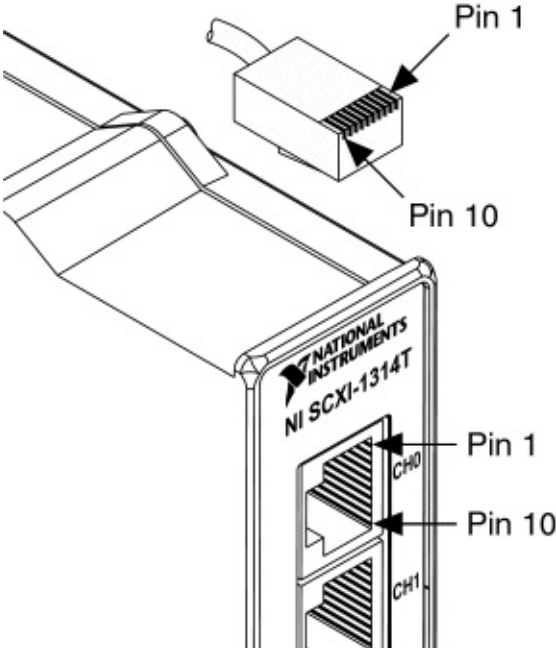
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram                                                                                                                                                                                                                           | Pin Number | Column A | Column B | Column C        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|----------|-----------------|
| <p>Column<br/>A B C</p> <p>32<br/>31<br/>30<br/>29<br/>28<br/>27<br/>26<br/>25<br/>24<br/>23<br/>22<br/>21<br/>20<br/>19<br/>18<br/>17<br/>16<br/>15<br/>14<br/>13<br/>12<br/>11<br/>10<br/>9<br/>8<br/>7<br/>6<br/>5<br/>4<br/>3<br/>2<br/>1</p> | 32         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 31         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 30         | In 1     | In 0     | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 29         | In 3     | In 2     | NC              |
|                                                                                                                                                                                                                                                   | 28         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 27         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 26         | In 5     | In 4     | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 25         | In 7     | In 6     | NC              |
|                                                                                                                                                                                                                                                   | 24         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 23         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 22         | In 9     | In 8     | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 21         | In 11    | In 10    | NC              |
|                                                                                                                                                                                                                                                   | 20         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 19         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 18         | In 13    | In 12    | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 17         | In 15    | In 14    | NC              |
|                                                                                                                                                                                                                                                   | 16         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 15         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 14         | In 18    | In 19    | NC              |
|                                                                                                                                                                                                                                                   | 13         | In 16    | In 17    | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 12         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 11         | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 10         | In 22    | In 23    | NC              |
|                                                                                                                                                                                                                                                   | 9          | In 20    | In 21    | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 8          | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 7          | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 6          | In 26    | In 27    | NC              |
|                                                                                                                                                                                                                                                   | 5          | In 24    | In 25    | V <sub>CC</sub> |
|                                                                                                                                                                                                                                                   | 4          | —        | —        | —               |
|                                                                                                                                                                                                                                                   | 3          | —        | —        | —               |
| NC means no connection                                                                                                                                                                                                                            | 2          | In 30    | In 31    | NC              |

|                         |   |       |       |                 |
|-------------------------|---|-------|-------|-----------------|
| — means no physical pin | 1 | In 28 | In 29 | V <sub>CC</sub> |
|-------------------------|---|-------|-------|-----------------|

## SCXI-1314T

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| RJ-50 (10p10c) Modular Plug and SCXI-1314T Receptacle Pin Numbers                  | Pin | Signal Name | Signal Description           |
|------------------------------------------------------------------------------------|-----|-------------|------------------------------|
|  | 1   | SCA         | Shunt calibration            |
|                                                                                    | 2   | AI +        | Positive input signal        |
|                                                                                    | 3   | AI –        | Negative input signal        |
|                                                                                    | 4   | RS +        | Positive remote sense signal |
|                                                                                    | 5   | RS -        | Negative remote sense signal |
|                                                                                    | 6   | EX +        | Positive excitation signal   |
|                                                                                    | 7   | EX –        | Negative excitation signal   |
|                                                                                    | 8   | T +         | TEDS data                    |
|                                                                                    | 9   | T –         | TEDS ground                  |
|                                                                                    | 10  | SCA         | Shunt calibration            |

## SCXI-1346 Shielded Multichassis Cable Adapter

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| 50-Pin Connector<br>Pin Numbers | Multifunction DAQ<br>Signal Names | 68-Pin Previous Chassis<br>DAQ Device/<br>Connector Pin Numbers | 68-Pin Next Chassis<br>Connector Pin Numbers |
|---------------------------------|-----------------------------------|-----------------------------------------------------------------|----------------------------------------------|
| 1                               | AI GND                            | 24*                                                             | 24*                                          |
| 2                               | AI GND                            | 24*                                                             | 24*                                          |
| 3                               | AI 0                              | 68                                                              | —                                            |
| 4                               | AI 8                              | 34                                                              | —                                            |
| 5                               | AI 1                              | 33                                                              | 68                                           |
| 6                               | AI 9                              | 66                                                              | 34                                           |
| 7                               | AI 2                              | 65                                                              | 33                                           |
| 8                               | AI 10                             | 31                                                              | 66                                           |
| 9                               | AI 3                              | 30                                                              | 65                                           |
| 10                              | AI 11                             | 63                                                              | 31                                           |
| 11                              | AI 4                              | 28                                                              | 30                                           |
| 12                              | AI 12                             | 61                                                              | 63                                           |
| 13                              | AI 5                              | 60                                                              | 28                                           |
| 14                              | AI 13                             | 26                                                              | 61                                           |
| 15                              | AI 6                              | 25                                                              | 60                                           |
| 16                              | AI 14                             | 58                                                              | 26                                           |
| 17                              | AI 7                              | 57                                                              | 25                                           |
| 18                              | AI 15                             | 23                                                              | 58                                           |
| 19                              | AI SENSE                          | 62                                                              | 62                                           |
| 20                              | AO 0                              | 22                                                              | 22                                           |
| 21                              | AO 1                              | 21                                                              | 21                                           |
| 22                              | AO EXT REF                        | 20                                                              | 20                                           |
| 23                              | AO GND                            | 54, 55                                                          | 54, 55                                       |
| 24                              | DIG GND                           | 4**                                                             | 4**                                          |
| 25                              | P0.0                              | 52                                                              | 52                                           |
| 26                              | P0.4                              | 19                                                              | 19                                           |
| 27                              | P0.1                              | 17                                                              | 17                                           |
| 28                              | P0.5                              | 51                                                              | 51                                           |
| 29                              | P0.2                              | 49                                                              | 49                                           |
| 30                              | P0.6                              | 16                                                              | 16                                           |
|                                 |                                   |                                                                 |                                              |

|                                                                           |                  |       |       |
|---------------------------------------------------------------------------|------------------|-------|-------|
| 31                                                                        | P0.3             | 47    | 47    |
| 32                                                                        | P0.7             | 48    | 48    |
| 33                                                                        | DIG GND          | 4**   | 4**   |
| 34                                                                        | + 5 V            | 8, 14 | 8, 14 |
| 35                                                                        | + 5 V            | 8, 14 | 8, 14 |
| 36                                                                        | AI HOLD COMP     | 46    | 46    |
| 37                                                                        | EXT STROBE*      | 45    | 45    |
| 38                                                                        | PFI 0/AI START   | 11    | 11    |
| 39                                                                        | PFI 1/REF TRIG   | 10    | 10    |
| 40                                                                        | PFI2/AI CONV     | 43    | 43    |
| 41                                                                        | PFI 3/CTR 1 SRC  | 42    | 42    |
| 42                                                                        | PFI 4/CTR 1 GATE | 41    | 41    |
| 43                                                                        | CTR 1 OUT        | 40    | 40    |
| 44                                                                        | PFI 5/AO SAMP    | 6     | 6     |
| 45                                                                        | PFI6/AO START    | 5     | 5     |
| 46                                                                        | PFI 7/AI SAMP    | 38    | 38    |
| 47                                                                        | PFI 8/CTR 0 SRC  | 37    | 37    |
| 48                                                                        | PFI 9/CTR 0 GATE | 3     | 3     |
| 49                                                                        | CTR 0 OUT        | 2     | 2     |
| 50                                                                        | F OUT            | 1     | 1     |
| * Also connects to pins 27, 29, 32, 56, 59, 64, and 67                    |                  |       |       |
| ** Also connects to pins 7, 9, 12, 13, 15, 18, 35, 36, 39, 44, 50, and 53 |                  |       |       |



**Note** The 50-pin connectors for this device are the MIO 50-Pin Connector, the 50-Pin Breakout Connector, and the 50-Pin Module Connector.

## SCXI-1349

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| 50-Pin Connector<br>Pin Numbers | DAQ Device Multifunction<br>DAQ Terminal Names | SCXI Signal Names | 68-Pin Connector<br>Pin Numbers                 |
|---------------------------------|------------------------------------------------|-------------------|-------------------------------------------------|
| 1, 2                            | AI GND                                         |                   | 24, 27, 29, 32, 56, 59, 64, 67                  |
| 3                               | AI 0                                           |                   | 68                                              |
| 4                               | AI 8                                           |                   | 34                                              |
| 5                               | AI 1                                           |                   | 33                                              |
| 6                               | AI 9                                           |                   | 66                                              |
| 7                               | AI 2                                           |                   | 65                                              |
| 8                               | AI 10                                          |                   | 31                                              |
| 9                               | AI 3                                           |                   | 30                                              |
| 10                              | AI 11                                          |                   | 63                                              |
| 11                              | AI 4                                           |                   | 28                                              |
| 12                              | AI 12                                          |                   | 61                                              |
| 13                              | AI 5                                           |                   | 60                                              |
| 14                              | AI 13                                          |                   | 26                                              |
| 15                              | AI 6                                           |                   | 25                                              |
| 16                              | AI 14                                          |                   | 58                                              |
| 17                              | AI 7                                           |                   | 57                                              |
| 18                              | AI 15                                          |                   | 23                                              |
| 19                              | AI SENSE                                       |                   | 62                                              |
| 20                              | AO 0                                           |                   | 22                                              |
| 21                              | AO 1                                           |                   | 21                                              |
| 22                              | AO EXT REF                                     |                   | 20                                              |
| 23                              | AO GND                                         |                   | 54, 55                                          |
| 24, 33                          | D GND                                          | DIG GND           | 4, 7, 9, 12, 13, 15, 18, 35, 36, 39, 44, 50, 53 |
| 25                              | P0.0                                           | SER DAT IN        | 52                                              |
| 26                              | P0.4                                           | SER DAT OUT       | 19                                              |
| 27                              | P0.1                                           | DAQ D*/A          | 17                                              |
| 28                              | P0.5                                           |                   | 51                                              |
| 29                              | P0.2                                           | SLOT SEL*         | 49                                              |
| 30                              | P0.6                                           |                   | 16                                              |

|        |                  |           |       |
|--------|------------------|-----------|-------|
| 31     | P0.3             |           | 47    |
| 32     | P0.7             |           | 48    |
| 34, 35 | + 5 V            |           | 8, 14 |
| 36     | AI HOLD COMP     | SCAN CLK  | 46    |
| 37     | EXT STROBE       | SERCLK    | 45    |
| 38     | PFI 0/AI START   |           | 11    |
| 39     | PFI 1/REF TRIG   |           | 10    |
| 40     | PFI 2/AI CONV    |           | 43    |
| 41     | PFI 3/CTR 1 SRC  |           | 42    |
| 42     | PFI 4/CTR 1 GATE |           | 41    |
| 43     | CTR 1 OUT        |           | 40    |
| 44     | PFI 5/AO SAMP    |           | 6     |
| 45     | PFI 6/AO START   |           | 5     |
| 46     | PFI 7/AI SAMP    | HOLD TRIG | 38    |
| 47     | PFI 8/CTR 0 SRC  |           | 37    |
| 48     | PFI 9/CTR 0 GATE |           | 3     |
| 49     | CTR 0 OUT        |           | 2     |
| 50     | F OUT            |           | 1     |



## SCXI-1502 Front Connector

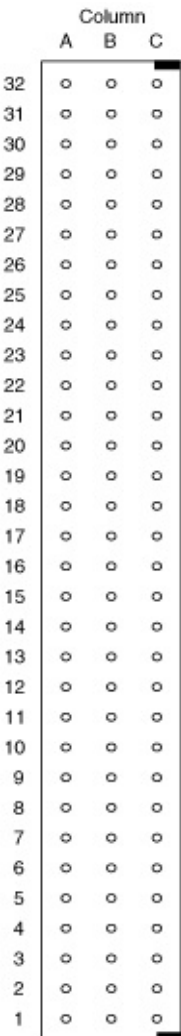
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram | Pin Number | Column A  | Column B | Column C |
|-------------------------|------------|-----------|----------|----------|
|                         | 32         | GND       | CH 0 –   | CH 0 +   |
|                         | 31         | GND       | CH 1 –   | CH 1 +   |
|                         | 30         | GND       | CH 2 –   | CH 2 +   |
|                         | 29         | GND       | CH 3 –   | CH 3 +   |
|                         | 28         | RSVD      | CH 4 –   | CH 4 +   |
|                         | 27         | RSVD      | CH 5 –   | CH 5 +   |
|                         | 26         | RSVD      | CH 6 –   | CH 6 +   |
|                         | 25         | RSVD      | CH 7 –   | CH 7 +   |
|                         | 24         | GND       | CH 8 –   | CH 8 +   |
|                         | 23         | GND       | CH 9 –   | CH 9 +   |
|                         | 22         | GND       | CH 10 –  | CH 10 +  |
|                         | 21         | GND       | CH 11 –  | CH 11 +  |
|                         | 20         | RSVD      | CH 12 –  | CH 12 +  |
|                         | 19         | RSVD      | CH 13 –  | CH 13 +  |
|                         | 18         | NC        | CH 14 –  | CH 14 +  |
|                         | 17         | NC        | CH 15 –  | CH 15 +  |
|                         | 16         | GND       | CH 16 –  | CH 16 +  |
|                         | 15         | GND       | CH 17 –  | CH 17 +  |
|                         | 14         | GND       | CH 18 –  | CH 18 +  |
|                         | 13         | GND       | CH 19 –  | CH 19 +  |
|                         | 12         | NC        | CH 20 –  | CH 20 +  |
|                         | 11         | NC        | CH 21 –  | CH 21 +  |
|                         | 10         | NC        | CH 22 –  | CH 22 +  |
|                         | 9          | NC        | CH 23 –  | CH 23 +  |
|                         | 8          | GND       | CH 24 –  | CH 24 +  |
|                         | 7          | GND       | CH 25 –  | CH 25 +  |
|                         | 6          | GND       | CH 26 –  | CH 26 +  |
|                         | 5          | GND       | CH 27 –  | CH 27 +  |
|                         | 4          | CJ SENSOR | CH 28 –  | CH 28 +  |
|                         | 3          | CJ SENSOR | CH 29 –  | CH 29 +  |
| NC means no connection. | 2          | GND       | CH 30 –  | CH 30 +  |
| RSVD means reserved.    | 1          | +5 V      | CH 31 –  | CH 31 +  |



## SCXI-1503 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram                                                            | Pin Number | Column A  | Column B | Column C |
|------------------------------------------------------------------------------------|------------|-----------|----------|----------|
|  | 32         | GND       | AI 0 –   | AI 0 +   |
|                                                                                    | 31         | GND       | AI 1 –   | AI 1 +   |
|                                                                                    | 30         | GND       | AI 2 –   | AI 2 +   |
|                                                                                    | 29         | GND       | AI 3 –   | AI 3 +   |
|                                                                                    | 28         | RSVD      | AI 4 –   | AI 4 +   |
|                                                                                    | 27         | RSVD      | AI 5 –   | AI 5 +   |
|                                                                                    | 26         | RSVD      | AI 6 –   | AI 6 +   |
|                                                                                    | 25         | RSVD      | AI 7 –   | AI 7 +   |
|                                                                                    | 24         | GND       | IEX 0 –  | IEX 0 +  |
|                                                                                    | 23         | GND       | IEX 1 –  | IEX 1 +  |
|                                                                                    | 22         | GND       | IEX 2 –  | IEX 2 +  |
|                                                                                    | 21         | GND       | IEX 3 –  | IEX 3 +  |
|                                                                                    | 20         | RSVD      | IEX 4 –  | IEX 4 +  |
|                                                                                    | 19         | RSVD      | IEX 5 –  | IEX 5 +  |
|                                                                                    | 18         | NC        | IEX 6 –  | IEX 6 +  |
|                                                                                    | 17         | NC        | IEX 7 –  | IEX 7 +  |
|                                                                                    | 16         | GND       | AI 8 –   | AI 8 +   |
|                                                                                    | 15         | GND       | AI 9 –   | AI 9 +   |
|                                                                                    | 14         | GND       | AI 10 –  | AI 10 +  |
|                                                                                    | 13         | GND       | AI 11 –  | AI 11 +  |
|                                                                                    | 12         | NC        | AI 12 –  | AI 12 +  |
|                                                                                    | 11         | NC        | AI 13 –  | AI 13 +  |
|                                                                                    | 10         | NC        | AI 14 –  | AI 14 +  |
|                                                                                    | 9          | NC        | AI 15 –  | AI 15 +  |
|                                                                                    | 8          | GND       | IEX 8 –  | IEX 8 +  |
|                                                                                    | 7          | GND       | IEX 9 –  | IEX 9 +  |
|                                                                                    | 6          | GND       | IEX 10 – | IEX 10 + |
|                                                                                    | 5          | GND       | IEX 11 – | IEX 11 + |
|                                                                                    | 4          | CJ SENSOR | IEX 12 – | IEX 12 + |
|                                                                                    | 3          | CJ SENSOR | IEX 13 – | IEX 13 + |
| NC means no connection.                                                            | 2          | GND       | IEX 14 – | IEX 14 + |
| RSVD means reserved.                                                               | 1          | +5 V      | IEX 15 – | IEX 15 + |



## SCXI-1520 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram | Pin Number | Column A | Column B | Column C |
|-------------------------|------------|----------|----------|----------|
|                         | 32         | SCB 0    | S0 –     | S0 +     |
|                         | 31         | SCB 0    | RS 0 –   | RS 0 +   |
|                         | 30         | SCB 1    | P0 –     | P0 +     |
|                         | 29         | SCB 1    | SCA 0    | SCA 0    |
|                         | 28         | RSVD     | S 1 –    | S 1 +    |
|                         | 27         | RSVD     | RS 1 –   | RS 1 +   |
|                         | 26         | RSVD     | P 1 –    | P 1 +    |
|                         | 25         | RSVD     | SCA 1    | SCA 1    |
|                         | 24         | SCB 2    | S 2 –    | S 2 +    |
|                         | 23         | SCB 2    | RS 2 –   | RS 2 +   |
|                         | 22         | SCB 3    | P 2 –    | P 2 +    |
|                         | 21         | SCB 3    | SCA 2    | SCA 2    |
|                         | 20         | RSVD     | S 3 –    | S 3 +    |
|                         | 19         | RSVD     | RS 3 –   | RS 3 +   |
|                         | 18         | RSVD     | P 3 –    | P 3 +    |
|                         | 17         | RSVD     | SCA 3    | SCA 3    |
|                         | 16         | SCB 4    | S 4 –    | S 4 +    |
|                         | 15         | SCB 4    | RS 4 –   | RS 4 +   |
|                         | 14         | SCB 5    | P 4 –    | P 4 +    |
|                         | 13         | SCB 5    | SCA 4    | SCA 4    |
|                         | 12         | RSVD     | S 5 –    | S 5 +    |
|                         | 11         | RSVD     | RS 5 –   | RS 5 +   |
|                         | 10         | RSVD     | P 5 –    | P 5 +    |
|                         | 9          | RSVD     | SCA 5    | SCA 5    |
|                         | 8          | SCB 6    | S 6 –    | S 6 +    |
|                         | 7          | SCB 6    | RS 6 –   | RS 6 +   |
|                         | 6          | SCB 7    | P 6 –    | P 6 +    |
|                         | 5          | SCB 7    | SCA 6    | SCA 6    |
|                         | 4          | RSVD     | S 7 –    | S 7 +    |
|                         | 3          | RSVD     | RS 7 –   | RS 7 +   |
|                         | 2          | RSVD     | P 7 –    | P 7 +    |
| RSVD means reserved.    | 1          | RSVD     | SCA 7    | SCA 7    |



## SCXI-1521/B Front Connector

| Front Connector Diagram | Pin Number | Column A | Column B | Column C |
|-------------------------|------------|----------|----------|----------|
|                         | 32         | EX + 0   | QTR 0    | AI 0     |
|                         | 31         | EX + 1   | QTR 1    | AI 1     |
|                         | 30         | EX + 2   | QTR 2    | AI 2     |
|                         | 29         | EX + 3   | QTR 3    | AI 3     |
|                         | 28         | RSVD     | QTR 4    | AI 4     |
|                         | 27         | RSVD     | QTR 5    | AI 5     |
|                         | 26         | RSVD     | EX + 4   | RSVD     |
|                         | 25         | RSVD     | EX + 5   | RSVD     |
|                         | 24         | EX + 6   | QTR 6    | AI 6     |
|                         | 23         | EX + 7   | QTR 7    | AI 7     |
|                         | 22         | EX + 8   | QTR 8    | AI 8     |
|                         | 21         | EX + 9   | QTR 9    | AI 9     |
|                         | 20         | RSVD     | QTR 10   | AI 10    |
|                         | 19         | RSVD     | QTR 11   | AI 11    |
|                         | 18         | RSVD     | EX + 10  | RSVD     |
|                         | 17         | RSVD     | EX + 11  | RSVD     |
|                         | 16         | EX + 12  | QTR 12   | AI 12    |
|                         | 1          | EX + 13  | QTR 13   | AI 13    |
|                         | 14         | EX + 14  | QTR 14   | AI 14    |
|                         | 13         | EX + 15  | QTR 15   | AI 15    |
|                         | 12         | RSVD     | QTR 16   | AI 16    |
|                         | 11         | RSVD     | QTR 17   | AI 17    |
|                         | 10         | RSVD     | EX + 16  | RSVD     |
|                         | 9          | RSVD     | EX + 17  | RSVD     |
|                         | 8          | EX + 18  | QTR 18   | AI 18    |
|                         | 7          | EX + 19  | QTR 19   | AI 19    |
|                         | 6          | EX + 20  | QTR 20   | AI 20    |
|                         | 5          | EX + 21  | QTR 21   | AI 21    |
|                         | 4          | RSVD     | QTR 22   | AI 22    |
|                         | 3          | RSVD     | QTR 23   | AI 23    |
|                         | 2          | RSVD     | EX + 22  | RSVD     |
| RSVD means reserved.    | 1          | RSVD     | EX + 23  | RSVD     |

## SCXI-1540 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

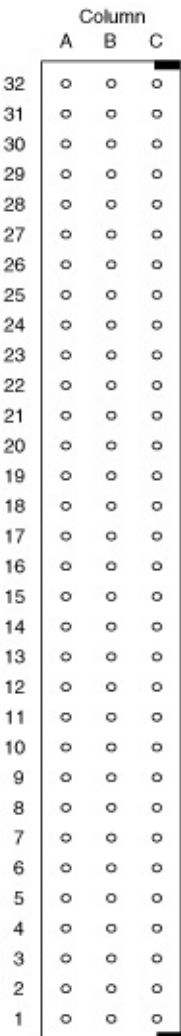
| Front Connector Diagram | Pin Number | Column A | Column B | Column C |
|-------------------------|------------|----------|----------|----------|
|                         | 32         | RSVD     | CH 0 –   | CH 0 +   |
|                         | 31         | RSVD     | GND      | SYNC 0   |
|                         | 30         | RSVD     | EX 0 –   | EX 0 +   |
|                         | 29         | RSVD     | GND      | PO       |
|                         | 28         | RSVD     | CH 1 –   | CH 1 +   |
|                         | 27         | RSVD     | GND      | SYNC 1   |
|                         | 26         | RSVD     | EX 1 –   | EX 1 +   |
|                         | 25         | RSVD     | GND      | P 1      |
|                         | 24         | RSVD     | CH 2 –   | CH 2 +   |
|                         | 23         | RSVD     | GND      | SYNC 2   |
|                         | 22         | RSVD     | EX 2 –   | EX 2 +   |
|                         | 21         | RSVD     | GND      | P 2      |
|                         | 20         | RSVD     | CH 3 –   | CH 3 +   |
|                         | 19         | RSVD     | GND      | SYNC 3   |
|                         | 18         | RSVD     | EX 3 –   | EX 3 +   |
|                         | 17         | RSVD     | GND      | P 3      |
|                         | 16         | RSVD     | CH 4 –   | CH 4 +   |
|                         | 15         | RSVD     | GND      | SYNC 4   |
|                         | 14         | RSVD     | EX 4 –   | EX 4 +   |
|                         | 13         | RSVD     | GND      | P 4      |
|                         | 12         | RSVD     | CH 5 –   | CH 5 +   |
|                         | 11         | RSVD     | GND      | SYNC 5   |
|                         | 10         | RSVD     | EX 5 –   | EX 5 +   |
|                         | 9          | RSVD     | GND      | P 5      |
|                         | 8          | RSVD     | CH 6 –   | CH 6 +   |
|                         | 7          | RSVD     | GND      | SYNC 6   |
|                         | 6          | RSVD     | EX 6 –   | EX 6 +   |
|                         | 5          | RSVD     | GND      | P 6      |
|                         | 4          | RSVD     | CH 7 –   | CH 7 +   |
|                         | 3          | RSVD     | GND      | SYNC 7   |
|                         | 2          | RSVD     | EX 7 –   | EX 7 +   |
| RSVD means reserved.    | 1          | RSVD     | GND      | P 7      |





## SCXI-1581 Front Connector

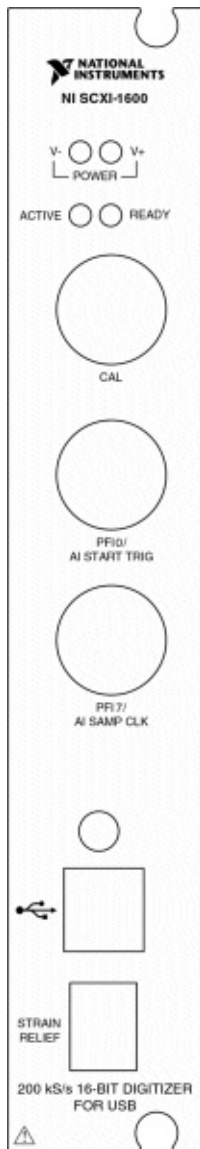
Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.

| Front Connector Diagram                                                            | Pin Number | Column A | Column B | Column C |
|------------------------------------------------------------------------------------|------------|----------|----------|----------|
|  | 32         | NC       | EX 0 –   | EX 0 +   |
|                                                                                    | 31         | NC       | EX 1 –   | EX 1 +   |
|                                                                                    | 30         | NC       | EX 2 –   | EX 2 +   |
|                                                                                    | 29         | NC       | EX 3 –   | EX 3 +   |
|                                                                                    | 28         | RSVD     | EX 4 –   | EX 4 +   |
|                                                                                    | 27         | RSVD     | EX 5 –   | EX 5 +   |
|                                                                                    | 26         | RSVD     | EX 6 –   | EX 6 +   |
|                                                                                    | 25         | RSVD     | EX 7 –   | EX 7 +   |
|                                                                                    | 24         | NC       | EX 8 –   | EX 8 +   |
|                                                                                    | 23         | NC       | EX 9 –   | EX 9 +   |
|                                                                                    | 22         | NC       | EX 10 –  | EX 10 +  |
|                                                                                    | 21         | NC       | EX 11 –  | EX 11 +  |
|                                                                                    | 20         | RSVD     | EX 12 –  | EX 12 +  |
|                                                                                    | 19         | RSVD     | EX 13 –  | EX 13 +  |
|                                                                                    | 18         | NC       | EX 14 –  | EX 14 +  |
|                                                                                    | 17         | NC       | EX 15 –  | EX 15 +  |
|                                                                                    | 16         | NC       | EX 16 –  | EX 16 +  |
|                                                                                    | 15         | NC       | EX 17 –  | EX 17 +  |
|                                                                                    | 14         | NC       | EX 18 –  | EX 18 +  |
|                                                                                    | 13         | NC       | EX 19 –  | EX 19 +  |
|                                                                                    | 12         | NC       | EX 20 –  | EX 20 +  |
|                                                                                    | 11         | NC       | EX 21 –  | EX 21 +  |
|                                                                                    | 10         | NC       | EX 22 –  | EX 22 +  |
|                                                                                    | 9          | NC       | EX 23 –  | EX 23 +  |
|                                                                                    | 8          | NC       | EX 24 –  | EX 24 +  |
|                                                                                    | 7          | NC       | EX 25 –  | EX 25 +  |
|                                                                                    | 6          | NC       | EX 26 –  | EX 26 +  |
|                                                                                    | 5          | NC       | EX 27 –  | EX 27 +  |
|                                                                                    | 4          | NC       | EX 28 –  | EX 28 +  |
|                                                                                    | 3          | NC       | EX 29 –  | EX 29 +  |
| NC means no connection.                                                            | 2          | C GND    | EX 30 –  | EX 30 +  |
| RSVD means reserved.                                                               | 1          | RSVD     | EX 31 –  | EX 31 +  |



## SCXI-1600 Front Connector

Some hardware accessories may not yet reflect the NI-DAQmx terminal names shown here. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for the Traditional NI-DAQ (Legacy) signal names.



## Switch Modules

Refer to the *NI Switches Help*.

## Terminal Name Equivalents

With NI-DAQmx, National Instruments has revised its terminal names so they are easier to understand and more consistent among National Instruments hardware and software products. The revised terminal names used in this document are usually similar to the names they replace. Refer to the following table for NI-DAQmx equivalents for some Traditional NI-DAQ (Legacy) terminal names.

| Traditional NI-DAQ (Legacy) | NI-DAQmx                  |
|-----------------------------|---------------------------|
| ACH#                        | AI #                      |
| ACH# +                      | AI # +                    |
| ACH# –                      | AI # –                    |
| ACHGND                      | AI GND                    |
| ACK#                        | PFI #                     |
| AIGND                       | AI GND                    |
| AISENSE                     | AI SENSE                  |
| AISENSE2                    | AI SENSE 2                |
| AOGND                       | AO GND                    |
| CONVERT*                    | AI CONV CLK or AI CONV    |
| DAC0OUT                     | AO 0                      |
| DAC1OUT                     | AO 1                      |
| DGND                        | D GND                     |
| DIO_#                       | P0.#                      |
| DIO#                        | P0.#                      |
| DIOA#, DIOB#, DIOC#...      | P0.#, P1.#, P2.#...       |
| EXTREF                      | AO EXT REF or EXT REF     |
| EXT_STROBE                  | EXT STROBE                |
| EXT_TRIG                    | EXT TRIG                  |
| EXT_CONV                    | EXT CONV                  |
| FREQ_OUT                    | FREQ OUT or F OUT         |
| GPCTR0_GATE                 | CTR 0 GATE                |
| GPCTR0_OUT                  | CTR 0 OUT                 |
| GPCTR0_SOURCE               | CTR 0 SOURCE or CTR 0 SRC |
| GPCTR1_GATE                 | CTR 1 GATE                |
| GPCTR1_OUT                  | CTR 1 OUT                 |
| GPCTR1_SOURCE               | CTR 1 SOURCE or CTR 1 SRC |
| PA#, PB#, PC#...            | P0.#, P1.#, P2.#...       |
| PFI#                        | PFI #                     |
|                             |                           |

|           |                           |
|-----------|---------------------------|
| PFI_#     | PFI #                     |
| PCLK#     | PFI #                     |
| REQ#      | PFI #                     |
| SCANCLK   | AI HOLD COMP or AI HOLD   |
| SISOURCE  | AI Sample Clock Timebase  |
| STARTSCAN | AI SAMP CLK or AI SAMP    |
| STOPTRIG# | PFI #                     |
| TRIG1     | AI START TRIG or AI START |
| TRIG2     | AI REF TRIG or REF TRIG   |
| UISOURCE  | AO Sample Clock Timebase  |
| UPDATE    | AO SAMP CLK or AO SAMP    |
| WFTRIG    | AO START TRIG or AO START |

## 100-68-68-Pin Extended DIO I/O Connector Pinout

When you use an NI 6025E with an SH1006868 cable, the I/O signals appear on two 68-pin connector. The following figures show the pin assignments of the two 68-pin connectors.



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

| MIO-16 Connector        |    |    | Extended I/O Connector |    |    |       |
|-------------------------|----|----|------------------------|----|----|-------|
| AI 8                    | 34 | 68 | AI 0                   |    |    |       |
| AI 1                    | 33 | 67 | AI GND                 |    |    |       |
| AI GND                  | 32 | 66 | AI 9                   |    |    |       |
| AI 10                   | 31 | 65 | AI 2                   |    |    |       |
| AI 3                    | 30 | 64 | AI GND                 |    |    |       |
| AI GND                  | 29 | 63 | AI 11                  |    |    |       |
| AI 4                    | 28 | 62 | AI SENSE               |    |    |       |
| AI GND                  | 27 | 61 | AI 12                  |    |    |       |
| AI 13                   | 26 | 60 | AI 5                   |    |    |       |
| AI 6                    | 25 | 59 | AI GND                 |    |    |       |
| AI GND                  | 24 | 58 | AI 14                  |    |    |       |
| AI 15                   | 23 | 57 | AI 7                   |    |    |       |
| AO 0 <sup>1</sup>       | 22 | 56 | AI GND                 |    |    |       |
| AO 1 <sup>1</sup>       | 21 | 55 | AO GND                 |    |    |       |
| AO EXT REF <sup>1</sup> | 20 | 54 | AO GND                 |    |    |       |
| P0.4                    | 19 | 53 | D GND                  |    |    |       |
| D GND                   | 18 | 52 | P0.0                   |    |    |       |
| P0.1                    | 17 | 51 | P0.5                   |    |    |       |
| P0.6                    | 16 | 50 | D GND                  |    |    |       |
| D GND                   | 15 | 49 | P0.2                   |    |    |       |
| +5 V                    | 14 | 48 | P0.7                   |    |    |       |
| D GND                   | 13 | 47 | P0.3                   |    |    |       |
| D GND                   | 12 | 46 | AI HOLD COMP           |    |    |       |
| PFI 0/AI START TRIG     | 11 | 45 | EXT STROBE             |    |    |       |
| PFI 1/AI REF TRIG       | 10 | 44 | D GND                  |    |    |       |
| D GND                   | 9  | 43 | PFI 2/AI CONV CLK      |    |    |       |
| +5 V                    | 8  | 42 | PFI 3/CTR 1 SRC        |    |    |       |
| D GND                   | 7  | 41 | PFI 4/CTR 1 GATE       |    |    |       |
| PFI 5/AO SAMP CLK       | 6  | 40 | CTR 1 OUT              |    |    |       |
| PFI 6/AO START TRIG     | 5  | 39 | D GND                  |    |    |       |
| D GND                   | 4  | 38 | PFI 7/AI SAMP CLK      |    |    |       |
| PFI 9/CTR 0 GATE        | 3  | 37 | PFI 8/CTR 0 SRC        |    |    |       |
| CTR 0 OUT               | 2  | 36 | D GND                  |    |    |       |
| FREQ OUT                | 1  | 35 | D GND                  |    |    |       |
|                         |    |    |                        |    |    |       |
|                         |    |    | D GND                  | 34 | 68 | P3.7  |
|                         |    |    | P3.6                   | 33 | 67 | D GND |
|                         |    |    | P3.5                   | 32 | 66 | D GND |
|                         |    |    | D GND                  | 31 | 65 | P3.4  |
|                         |    |    | P3.3                   | 30 | 64 | D GND |
|                         |    |    | P3.2                   | 29 | 63 | D GND |
|                         |    |    | D GND                  | 28 | 62 | P3.1  |
|                         |    |    | P3.0                   | 27 | 61 | D GND |
|                         |    |    | P2.7                   | 26 | 60 | D GND |
|                         |    |    | D GND                  | 25 | 59 | P2.6  |
|                         |    |    | P2.5                   | 24 | 58 | D GND |
|                         |    |    | P2.4                   | 23 | 57 | D GND |
|                         |    |    | D GND                  | 22 | 56 | P2.3  |
|                         |    |    | D GND                  | 21 | 55 | P2.2  |
|                         |    |    | P2.1                   | 20 | 54 | D GND |
|                         |    |    | P2.0                   | 19 | 53 | D GND |
|                         |    |    | D GND                  | 18 | 52 | P1.7  |
|                         |    |    | P1.6                   | 17 | 51 | D GND |
|                         |    |    | P1.5                   | 16 | 50 | D GND |
|                         |    |    | D GND                  | 15 | 49 | P1.4  |
|                         |    |    | P1.3                   | 14 | 48 | D GND |
|                         |    |    | P1.2                   | 13 | 47 | D GND |
|                         |    |    | D GND                  | 12 | 46 | P1.1  |
|                         |    |    | P1.0                   | 11 | 45 | D GND |
|                         |    |    | +5 V                   | 10 | 44 | D GND |
|                         |    |    | NC                     | 9  | 43 | NC    |
|                         |    |    | NC                     | 8  | 42 | NC    |
|                         |    |    | NC                     | 7  | 41 | NC    |
|                         |    |    | NC                     | 6  | 40 | NC    |
|                         |    |    | NC                     | 5  | 39 | NC    |
|                         |    |    | NC                     | 4  | 38 | NC    |
|                         |    |    | NC                     | 3  | 37 | NC    |
|                         |    |    | NC                     | 2  | 36 | NC    |
|                         |    |    | NC                     | 1  | 35 | NC    |

NC = No connect

NC = No connect

<sup>1</sup>No connects appear on pins 20 through 22 of devices that do not support AO or use an external reference.



## 100-50-50-Pin Extended DIO I/O Connector Pinout

When you use the NI 6025E with an R1005050 cable assembly, the signals appear on two 50-pin connectors. The following figures show the pin assignments of the 50-pin connectors.



**Note** Some hardware accessories may not yet reflect the revised terminal names. If you are using a device in Traditional NI-DAQ (Legacy), refer to the [Terminal Name Equivalents](#) table for information on Traditional NI-DAQ (Legacy) signal names.

| Positions 1–50 Connector |    |    |                         | Positions 51–100 Connector |    |    |       |
|--------------------------|----|----|-------------------------|----------------------------|----|----|-------|
| AI GND                   | 1  | 2  | AI GND                  | P3.7                       | 1  | 2  | D GND |
| AI 0                     | 3  | 4  | AI 8                    | P3.6                       | 3  | 4  | D GND |
| AI 1                     | 5  | 6  | AI 9                    | P3.5                       | 5  | 6  | D GND |
| AI 2                     | 7  | 8  | AI 10                   | P3.4                       | 7  | 8  | D GND |
| AI 3                     | 9  | 10 | AI 11                   | P3.3                       | 9  | 10 | D GND |
| AI 4                     | 11 | 12 | AI 12                   | P3.2                       | 11 | 12 | D GND |
| AI 5                     | 13 | 14 | AI 13                   | P3.1                       | 13 | 14 | D GND |
| AI 6                     | 15 | 16 | AI 14                   | P3.0                       | 15 | 16 | D GND |
| AI 7                     | 17 | 18 | AI 15                   | P2.7                       | 17 | 18 | D GND |
| AI SENSE                 | 19 | 20 | AO 0 <sup>1</sup>       | P2.6                       | 19 | 20 | D GND |
| AO 1 <sup>1</sup>        | 21 | 22 | AO EXT REF <sup>1</sup> | P2.5                       | 21 | 22 | D GND |
| AO GND <sup>1</sup>      | 23 | 24 | D GND                   | P2.4                       | 23 | 24 | D GND |
| P0.0                     | 25 | 26 | P0.4                    | P2.3                       | 25 | 26 | D GND |
| P0.1                     | 27 | 28 | P0.5                    | P2.2                       | 27 | 28 | D GND |
| P0.2                     | 29 | 30 | P0.6                    | P2.1                       | 29 | 30 | D GND |
| P0.3                     | 31 | 32 | P0.7                    | P2.0                       | 31 | 32 | D GND |
| D GND                    | 33 | 34 | +5 V                    | P1.7                       | 33 | 34 | D GND |
| +5 V                     | 35 | 36 | AI HOLD COMP            | P1.6                       | 35 | 36 | D GND |
| EXT STROBE               | 37 | 38 | PFI 0/AI START TRIG     | P1.5                       | 37 | 38 | D GND |
| PFI 1/AI REF TRIG        | 39 | 40 | PFI 2/AI CONV CLK       | P1.4                       | 39 | 40 | D GND |
| PFI 3/CTR 1 SRC          | 41 | 42 | PFI 4/CTR 1 GATE        | P1.3                       | 41 | 42 | D GND |
| CTR 1 OUT                | 43 | 44 | PFI 5/AI SAMP CLK       | P1.2                       | 43 | 44 | D GND |
| PFI 6/AO START TRIG      | 45 | 46 | PFI 7/AI SAMP CLK       | P1.1                       | 45 | 46 | D GND |
| PFI 8/CTR 0 SRC          | 47 | 48 | PFI 9/CTR 0 GATE        | P1.0                       | 47 | 48 | D GND |
| CTR 0 OUT                | 49 | 50 | FREQ OUT                | +5 V                       | 49 | 50 | D GND |

<sup>1</sup>No connects appear on pins 20 through 23 of devices that do not support AO or use an external reference.