■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Phcc Namespace

Send Feedback

Classes

Class	Description
♣ AnalogInputChangedEventArgs AnalogInp	AnalogInputChangedEventArgs objects hold data that the PHCC motherboard provides whenever an analog input value has changed. The AnalogInputChanged event provides AnalogInputChangedEventArgs eventargs objects during the raising of each event.
☆ <u>Device</u>	The <u>Device</u> class provides methods for communicating with the PHCC motherboard and any attached peripherals, via RS232. The PHCC USB interface also appears to Windows as a standard RS232 COM port.
♣ DigitalInputChangedEventArgs	DigitalInputChangedEventArgs objects hold data that the PHCC motherboard provides whenever a digital input value changes. The DigitalInputChanged event provides DigitalInputChangedEventArgs event- args objects during the raising of each event.
♣ I2CDataReceivedEventArgs	I2CDataReceivedEventArgs objects hold I2C data that is received when the PHCC motherboard signals that new I2C data has arrived. This data is provided by the I2CDataReceived event.

Interfaces

Interface Description → PhccEvents COM Event Source Interface

\blacksquare Delegates

Delegate	Description
<u>AnalogInputChangedEventHandler</u>	Event handler delegate for the AnalogInputChanged event.
<u>DigitalInputChangedEventHandler</u>	Event handler delegate for the DigitalInputChanged event.
IZC DataRecelvedEventHandler	Event handler delegate for the I2CDataReceived event.

Enumerations

		Enumeration	Description
0	===	LcdDataModes	Enumeration of LCD data modes.
0	===	MotorDirections	Enumeration of stepper motor directions.
0	===	<u>MotorStepTypes</u>	Enumeration of possible stepper motor step types.
0	= =	SevenSegmentBits	

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

AnalogInputChangedEventArgs Class

Members See Also Send Feedback

AnalogInputChangedEventArgs objects hold data that the PHCC motherboard provides whenever an analog input value has changed. The AnalogInputChanged event provides AnalogInputChangedEventArgs event-args objects during the raising of each event.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

<<u>ClassInterfaceAttribute(ClassInterfaceType</u>.AutoDual)> _ Public NotInheritable Class AnalogInputChangedEventArgs _ Inherits <u>EventArgs</u>

C#

[ClassInterfaceAttribute(ClassInterfaceType.AutoDual)]
public sealed class AnalogInputChangedEventArgs : EventArgs

Inheritance Hierarchy

System..:.Object

System.::.EventArgs
Phcc.::.AnalogInputChangedEventArgs

AnalogInputChangedEventArgs Members Phcc Namespace



Overload List

		Name	Description
			Creates an instance of the
	AnalogInputChangedEventArgs()()()	$\underline{AnalogInputChangedEventArgs}$	
		class.	
	AnalogInnutChangadErra	AnalogInnutChangadEventAuga(Dvta	Creates an instance of the
		<u>AnalogInputChangedEventArgs(Byte, Int16)</u>	$\underline{AnalogInputChangedEventArgs}$
	<u> </u>	111(10)	class.

AnalogInputChangedEventArgs Class AnalogInputChangedEventArgs Members Phcc Namespace

■ Visual Basic □ C#
Phcc Interface Library for .NET and COM v0.2.1.0 reference library
AnalogInputChangedEventArgs Constructor

AnalogInputChangedEventArgs Class See Also Send Feedback

Creates an instance of the $\underline{AnalogInputChangedEventArgs}$ class.

Namespace: Phcc **Assembly:** Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

Public Sub New

C#

public AnalogInputChangedEventArgs()

AnalogInputChangedEventArgs Class AnalogInputChangedEventArgs Overload Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library AnalogInputChangedEventArgs Constructor (Byte, Int16)

<u>AnalogInputChangedEventArgs Class See Also Send Feedback</u>

Creates an instance of the AnalogInputChangedEventArgs class.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

```
Public Sub New ( __ index As Byte, _ newValue As Short _ )

C#

public AnalogInputChangedEventArgs( byte index, short newValue )
```

Parameters

index

Type: <u>System..:.Byte</u>

The index of the analog input whose value has changed. The first 3 analog input indexes represent the prioritized analog inputs (ANP1-ANP3); the remaining 32 analog input indexes represent the standard non-prioritized analog inputs (AN1-AN32).

newValue

Type: <u>System..:.Int16</u>

The new value of the indicated analog input.

AnalogInputChangedEventArgs Class AnalogInputChangedEventArgs Overload Phcc Namespace

□ Visual Basic □ C#
□ Include Protected Members
□ Include Inherited Members
Phcc Interface Library for .NET and COM v0.2.1.0 reference library
AnalogInputChangedEventArgs Members
AnalogInputChangedEventArgs Class Constructors Methods Properties
See Also Send Feedback

The <u>AnalogInputChangedEventArgs</u> type exposes the following members.

Constructors

Name Description

AnalogInputChangedEventArgs Overloaded.

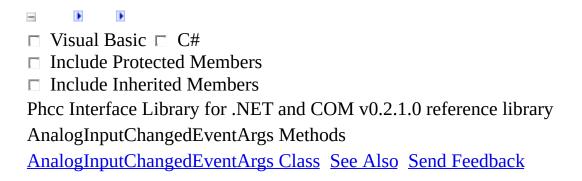
Methods

	Name	Description
=0	<u>Equals</u>	(Inherited from Object.)
<u></u>	<u>Finalize</u>	(Inherited from Object.)
=0	<u>GetHashCode</u>	(Inherited from Object.)
=0	<u>GetType</u>	(Inherited from Object.)
<u></u>	MemberwiseClone	(Inherited from Object.)
≡	<u>ToString</u>	(Inherited from Object.)

Properties

Name	Description
	Gets/sets the index of the analog input whose value has changed. The first 3 analog input indexes represent the
<u>Index</u>	prioritized analog inputs (ANP1-ANP3); the remaining 32 analog input indexes represent the standard analog non-prioritized inputs (AN1-AN32).
<u>NewValue</u>	Gets/sets the new value of the indicated analog input.

AnalogInputChangedEventArgs Class Phcc Namespace



The <u>AnalogInputChangedEventArgs</u> type exposes the following members.

Methods

	Name	Description
=0	<u>Equals</u>	(Inherited from Object.)
<u></u>	<u>Finalize</u>	(Inherited from Object.)
=0	<u>GetHashCode</u>	(Inherited from Object.)
=0	<u>GetType</u>	(Inherited from Object.)
<u></u>	MemberwiseClone	(Inherited from Object.)
≡	<u>ToString</u>	(Inherited from Object.)

AnalogInputChangedEventArgs Class Phcc Namespace



The <u>AnalogInputChangedEventArgs</u> type exposes the following members.

Properties

Name	Description
	Gets/sets the index of the analog input whose value has changed. The first 3 analog input indexes represent the
<u>Index</u>	prioritized analog inputs (ANP1-ANP3); the remaining 32 analog input indexes represent the standard analog non-prioritized inputs (AN1-AN32).
<u>NewValue</u>	Gets/sets the new value of the indicated analog input.

AnalogInputChangedEventArgs Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

AnalogInputChangedEventArgs..:..Index Property

AnalogInputChangedEventArgs Class See Also Send Feedback

Gets/sets the index of the analog input whose value has changed. The first 3 analog input indexes represent the prioritized analog inputs (ANP1-ANP3); the remaining 32 analog input indexes represent the standard analog non-prioritized inputs (AN1-AN32).

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

```
Public Property Index As Byte

C#

public byte Index { get; set; }
```

AnalogInputChangedEventArgs Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

AnalogInputChangedEventArgs..::.NewValue Property

AnalogInputChangedEventArgs Class See Also Send Feedback

Gets/sets the new value of the indicated analog input.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

```
Public Property NewValue As \underline{\mathsf{Short}}
```

C#

```
public short NewValue { get; set; }
```

AnalogInputChangedEventArgs Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

AnalogInputChangedEventHandler Delegate

See Also Send Feedback

Event handler delegate for the **AnalogInputChanged** event.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

about the event.

Visual Basic (Declaration)

```
<<u>ComVisibleAttribute(False)> _</u>
Public Delegate Sub AnalogInputChangedEventHandler ( _
         sender As <a href="Object">Object</a>, _
         e As <u>AnalogInputChangedEventArgs</u> _
)
                             C#
[ComVisibleAttribute(false)]
public delegate void AnalogInputChangedEventHandler(
         Object sender,
         <u>AnalogInputChangedEventArgs</u> e
)
Parameters
sender
    Type: System..:.Object
    the object raising the event.
e
    Type: Phcc..:.AnalogInputChangedEventArgs
    a AnalogInputChangedEventArgs object containing detailed information
```

Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device Class

Members See Also Send Feedback

The Device class provides methods for communicating with the PHCC motherboard and any attached peripherals, via RS232. The PHCC USB interface also appears to Windows as a standard RS232 COM port.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

C#

Inheritance Hierarchy

System..:.Object

System..::.MarshalByRefObject
System..::.ContextBoundObject
Phcc..::.Device

Device Members Phcc Namespace

Þ Þ □ Visual Basic □ C# ☐ Include Protected Members ☐ Include Inherited Members Phcc Interface Library for .NET and COM v0.2.1.0 reference library **Device Constructor**

Device Class See Also Send Feedback

Overload List

Name Description

- Device()()() Creates an instance of the <u>Device</u> class.
- Device(String) Creates an instance of the <u>Device</u> class.

Device Class
Device Members
Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device Constructor

Device Class See Also Send Feedback

Creates an instance of the **Device** class.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

Public Sub New

C#

public Device()

Device Class

Device Overload

Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device Constructor (String)

Device Class See Also Send Feedback

Creates an instance of the **Device** class.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

Parameters

```
portName
```

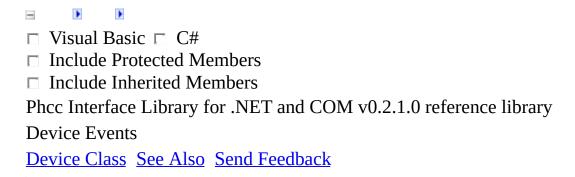
Type: <u>System..:.String</u>

The name of the COM port to use for communicating with the PHCC motherboard (i.e. "COM1", "COM2", etc.)

Device Class

Device Overload

Phcc Namespace



The **Device** type exposes the following members.

Events

Name	Description
AnalogInputChanged	The <u>AnalogInputChanged</u> event is raised when the PHCC motherboard detects that one of the analog inputs has changed values (i.e. whenever an analog input signal changes state).
DigitalInputChanged	The <u>DigitalInputChanged</u> event is raised when the PHCC motherboard detects that one of the digital inputs has changed (i.e. whenever a button that is wired into the digital input key matrix is pressed or released).
I2CDataReceived	The <u>I2CDataReceived</u> event is raised when the PHCC motherboard receives data from one of the attached I2C peripherals (if any).

Device Class
Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.AnalogInputChanged Event

Device Class See Also Send Feedback

The AnalogInputChanged event is raised when the PHCC motherboard detects that one of the analog inputs has changed values (i.e. whenever an analog input signal changes state).

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

\blacksquare Syntax

Visual Basic (Declaration)

Public Event AnalogInputChanged As <u>AnalogInputChangedEventHandler</u>

C#

public event AnalogInputChangedEventHandler AnalogInputChanged

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.DigitalInputChanged Event

Device Class See Also Send Feedback

The DigitalInputChanged event is raised when the PHCC motherboard detects that one of the digital inputs has changed (i.e. whenever a button that is wired into the digital input key matrix is pressed or released).

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

\blacksquare Syntax

Visual Basic (Declaration)

Public Event DigitalInputChanged As DigitalInputChangedEventHandler

C#

public event DigitalInputChanged

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.I2CDataReceived Event

Device Class See Also Send Feedback

The I2CDataReceived event is raised when the PHCC motherboard receives data from one of the attached I2C peripherals (if any).

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

\blacksquare Syntax

Visual Basic (Declaration)

Public Event I2CDataReceived As I2CDataReceivedEventHandler

C#

public event <u>I2CDataReceivedEventHandler</u> I2CDataReceived

Device Class Phcc Namespace

_	D .
□ Visua	al Basic □ C#
□ Inclu	de Protected Members
□ Inclu	de Inherited Members
Phcc Int	erface Library for .NET and COM v0.2.1.0 reference library
Device I	Members
Device (Class Constructors Methods Properties Events See Also Send
<u>Feedbac</u>	<u>k</u>

The <u>Device</u> type exposes the following members.

Constructors

Name Description

■ Device Overloaded.

Methods

	Name	Description
≡	CharTo7Seg	_
≟	<u>CreateObjRef</u>	(Inherited from MarshalByRefObject .)
= \tilde{\phi}	<u>Dispose</u>	Public implementation of IDisposable.Dispose(). Cleans up managed and unmanaged resources used by this object before allowing garbage collection
=	DoaSend40DO	Sends data to a DOA_40DO digital output daughtercard.
=	DoaSend7Seg	Sends data to a DOA_7Seg daughtercard to control the 7-segment LCDs (or individual LEDs) wired to the card.
=	DoaSend7Seg8774067	Sends data to a DOA_877_4067 daughtercard to control the 7-segment LCDs (or individual LEDs) wired to the card.
=	<u>DoaSend8ServoCalibration</u>	Sends data to a DOA_servo daughtercard to control the calibration of an individual servo wired to the card.
=	<u>DoaSend8ServoGain</u>	Sends data to a DOA_servo daughtercard to control the gain parameter of an individual servo wired to the card.
=0	DoaSend8ServoPosition	Sends data to a DOA_servo daughtercard to control the position of an individual servo wired to the card.
=♦	DoaSendAirCoreMotor	

∃	DoaSendAnOut1	Sends data to a DOA_AnOut1 analog output daughtercard, to control the RMS voltage (using PWM) being supplied by that channel.
≓	DoaSendAnOut1GainAllChannels	Sends data to a DOA_AnOut1 analog output daughtercard, to control the gain parameter which is in effect for all channels simultaneously.
≡	<u>DoaSendCharLcd</u>	Sends data to an individual HD44780-compatible character LCD display wired to a PHCC DOA_char_lcd character LCD driver daughtercard.
=0	<u>DoaSendRaw</u>	Sends data to a Digital Output Type A (DOA) peripheral attached to the PHCC motherboard.
≡	<u>DoaSendStepperMotor</u>	Sends data to a stepper motor daughtercard.
∃	<u>DobSendRaw</u>	Sends data to a Digital Output Type B (DOB) peripheral attached to the PHCC motherboard.
≡	<u>Equals</u>	(Inherited from Object.)
**	<u>Finalize</u>	(Inherited from Object.)
≡	<u>GetHashCode</u>	(Inherited from Object.)
≡	<u>GetLifetimeService</u>	(Inherited from MarshalByRefObject .)
≡	<u>GetType</u>	(Inherited from Object.)
≡	<u>I2CSend</u>	Sends data to an I2C peripheral attached to the PHCC motherboard.
=	<u>InitializeLifetimeService</u>	(Inherited from MarshalByRefObject.)
9	<u>MemberwiseClone</u>	Overloaded.
≅	Reset	Instructs the PHCC motherboard to perform a software reset on itself.
1		

SetIdle

Instructs the PHCC motherboard to enter the IDLE state.

Informs the PHCC motherboard to start sending automatic change notification events.

Informs the PHCC motherboard to stop sending change notification events

ToString (Inherited from Object.)

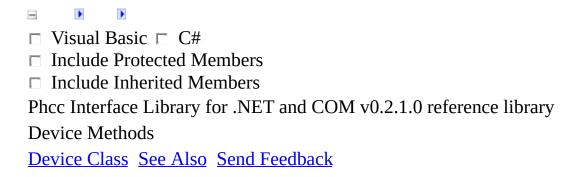
Properties

Name	Description
<u>AnalogInputs</u>	Gets an array of 16-bit signed integers containing the current values of all analog inputs. Only the low 10 bits contain information; the high 6 bits are always zero because the precision of the analog inputs is currently limited to 10 bits.
T Digitalinniits	Gets a bool array containing the current values of all digital inputs.
Hirmware Version	Gets a string containing the PHCC motherboard's firmware version.
<u>PortName</u>	Gets/sets the name of the COM port to use for communicating with the PHCC motherboard (i.e. "COM1", "COM2", etc.)
<u>SerialPort</u>	Gets the underlying SerialPort object, which allows direct communication with the PHCC motherboard via RS232.

Events

Name	Description
AnalogInputChanged	The <u>AnalogInputChanged</u> event is raised when the PHCC motherboard detects that one of the analog inputs has changed values (i.e. whenever an analog input signal changes state).
DigitalInputChanged	The <u>DigitalInputChanged</u> event is raised when the PHCC motherboard detects that one of the digital inputs has changed (i.e. whenever a button that is wired into the digital input key matrix is pressed or released).
I2CDataReceived	The <u>I2CDataReceived</u> event is raised when the PHCC motherboard receives data from one of the attached I2C peripherals (if any).

Device Class
Phcc Namespace



The **Device** type exposes the following members.

Methods

	Name	Description
≡	CharTo7Seg	_
≟	<u>CreateObjRef</u>	(Inherited from MarshalByRefObject .)
= \tilde{\phi}	Dispose	Public implementation of IDisposable.Dispose(). Cleans up managed and unmanaged resources used by this object before allowing garbage collection
=	DoaSend40DO	Sends data to a DOA_40DO digital output daughtercard.
=	DoaSend7Seg	Sends data to a DOA_7Seg daughtercard to control the 7-segment LCDs (or individual LEDs) wired to the card.
=	DoaSend7Seg8774067	Sends data to a DOA_877_4067 daughtercard to control the 7-segment LCDs (or individual LEDs) wired to the card.
=	<u>DoaSend8ServoCalibration</u>	Sends data to a DOA_servo daughtercard to control the calibration of an individual servo wired to the card.
=	<u>DoaSend8ServoGain</u>	Sends data to a DOA_servo daughtercard to control the gain parameter of an individual servo wired to the card.
=0	DoaSend8ServoPosition	Sends data to a DOA_servo daughtercard to control the position of an individual servo wired to the card.
=♦	DoaSendAirCoreMotor	

∃	DoaSendAnOut1	Sends data to a DOA_AnOut1 analog output daughtercard, to control the RMS voltage (using PWM) being supplied by that channel.
≓	DoaSendAnOut1GainAllChannels	Sends data to a DOA_AnOut1 analog output daughtercard, to control the gain parameter which is in effect for all channels simultaneously.
≡	<u>DoaSendCharLcd</u>	Sends data to an individual HD44780-compatible character LCD display wired to a PHCC DOA_char_lcd character LCD driver daughtercard.
=0	<u>DoaSendRaw</u>	Sends data to a Digital Output Type A (DOA) peripheral attached to the PHCC motherboard.
≡	<u>DoaSendStepperMotor</u>	Sends data to a stepper motor daughtercard.
∃	<u>DobSendRaw</u>	Sends data to a Digital Output Type B (DOB) peripheral attached to the PHCC motherboard.
≡	<u>Equals</u>	(Inherited from Object.)
**	<u>Finalize</u>	(Inherited from Object.)
≡	<u>GetHashCode</u>	(Inherited from Object.)
≡	<u>GetLifetimeService</u>	(Inherited from MarshalByRefObject .)
≡	<u>GetType</u>	(Inherited from Object.)
≡	<u>I2CSend</u>	Sends data to an I2C peripheral attached to the PHCC motherboard.
=	<u>InitializeLifetimeService</u>	(Inherited from MarshalByRefObject.)
9	<u>MemberwiseClone</u>	Overloaded.
≅	Reset	Instructs the PHCC motherboard to perform a software reset on itself.
1		

SetIdle

Instructs the PHCC motherboard to enter the IDLE state.

Informs the PHCC motherboard to start sending automatic change notification events.

Informs the PHCC motherboard to stop sending change notification events

ToString (Inherited from Object.)

Device Class
Phcc Namespace

-

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:.CharTo7Seg Method

Device Class See Also Send Feedback

Namespace: Phcc

Visual Basic (Declaration)

Parameters

charToConvert

Type: System..:.Char

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.Dispose Method

Device Class See Also Send Feedback

Public implementation of IDisposable.Dispose(). Cleans up managed and unmanaged resources used by this object before allowing garbage collection

Namespace: Phcc

Visual Basic (Declaration)

Public Sub Dispose

C#

public void Dispose()

Implements

IDisposable..:.Dispose()()()

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.DoaSend40DO Method

Device Class See Also Send Feedback

Sends data to a DOA_40DO digital output daughtercard.

Namespace: Phcc

Visual Basic (Declaration)

Parameters

deviceAddr

Type: <u>System..:.Byte</u>

The device address of the specific DOA_40DO daughtercard to send data to.

connectorNum

Type: <u>System..:.Byte</u>

The output connector number to send data to (3=CON3, 4=CON4, 5=CON5, 6=CON6, 7=CON7)

bits

Type: System....Byte

A byte, whose bits correspond to the pins on the specified connector. Each bit in this byte that is set to TRUE will result in a logic HIGH on the corresponding output pin on the specified connector.

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:.DoaSend7Seg Method

Device Class See Also Send Feedback

Sends data to a DOA_7Seg daughtercard to control the 7-segment LCDs (or individual LEDs) wired to the card.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DoaSend7Seg ( _ deviceAddr As Byte, _ displayNum As Byte, _ bits As Byte _ )

C#

public void DoaSend7Seg(
    byte deviceAddr,
    byte displayNum,
    byte bits
)
```

Parameters

deviceAddr

Type: System..:.Byte

The device address of the specific DOA $_7$ Seg daughtercard to send data to.

display Num

Type: <u>System..:.Byte</u>

The number of the 7-segment display (1-32), on the specified daughtercard, that the bits parameter will control.

bits

Type: <u>System..:.Byte</u>

A byte, whose bits correspond to individual segments of the specified 7-segment display (including the decimal point). Each bit in this byte that is set to will result in a logic HIGH being sent to the corresponding segment (or LED).

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:..DoaSend7Seg8774067 Method

Device Class See Also Send Feedback

Sends data to a DOA_877_4067 daughtercard to control the 7-segment LCDs (or individual LEDs) wired to the card.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DoaSend7Seg8774067 ( _ deviceAddr As Byte, _ displayNum As Byte, _ bits As Byte _ )

C#

public void DoaSend7Seg8774067(
    byte deviceAddr,
    byte displayNum,
    byte bits
)
```

Parameters

deviceAddr

Type: System..:.Byte

The device address of the specific DOA_877_4067 daughtercard to send data to.

display Num

Type: <u>System..:.Byte</u>

The number of the 7-segment display (1-48), on the specified daughtercard, that the bits parameter will control.

bits

Type: System....Byte

A byte, whose bits correspond to individual segments of the specified 7-segment display (including the decimal point). Each bit in this byte that is set to will result in a logic HIGH being sent to the corresponding segment (or LED).

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.DoaSend8ServoCalibration Method

Device Class See Also Send Feedback

Sends data to a DOA_servo daughtercard to control the calibration of an individual servo wired to the card.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DoaSend8ServoCalibration ( _ deviceAddr As Byte, _ servoNum As Byte, _ calibrationOffset As Short _ )

C#

public void DoaSend8ServoCalibration( byte deviceAddr, byte servoNum, short calibrationOffset )
```

Parameters

deviceAddr

Type: System..:.Byte

The device address of the specific DOA_servo daughtercard to send data to.

servoNum

Type: <u>System..:.Byte</u>

The number of the specific servo on the DOA_servo daughtercard, to which this calibration data will apply.

calibrationOffset

Type: System..::.Int16

The new 16-bit calibration offset value to use with this specific servo.

Device Class Phcc Namespace

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:..DoaSend8ServoGain Method

Device Class See Also Send Feedback

Sends data to a DOA_servo daughtercard to control the gain parameter of an individual servo wired to the card.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DoaSend8ServoGain ( _ deviceAddr As Byte, _ servoNum As Byte, _ gain As Byte _ )

C#

public void DoaSend8ServoGain(
    byte deviceAddr,
    byte servoNum,
    byte gain
)
```

Parameters

deviceAddr

Type: <u>System.::.Byte</u>

The device address of the specific DOA_servo daughtercard to send data to.

servoNum

Type: <u>System..:.Byte</u>

The number of the specific servo on the DOA_servo daughtercard, to which this gain parameter value will be applied.

gain

Type: <u>System..:.Byte</u>

The new gain value to use for the specified servo.

Device Class Phcc Namespace

☐ Visual Basic ☐ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:..DoaSend8ServoPosition Method

Device Class See Also Send Feedback

Sends data to a DOA_servo daughtercard to control the position of an individual servo wired to the card.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DoaSend8ServoPosition ( _ deviceAddr As Byte, _ servoNum As Byte, _ position As Byte _ )

C#

public void DoaSend8ServoPosition(
    byte deviceAddr,
    byte servoNum,
    byte position
)
```

Parameters

deviceAddr

Type: <u>System.::.Byte</u>

The device address of the specific DOA_servo daughtercard to send data to.

servoNum

Type: <u>System..:.Byte</u>

The number of the specific servo on the DOA_servo daughtercard, to which this position update will be sent.

position

Type: <u>System..:.Byte</u>

The position value to set this servo to.

Device Class Phcc Namespace

-

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

 $Device.....DoaS end Air Core Motor\ Method$

Device Class See Also Send Feedback

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DoaSendAirCoreMotor ( _
          deviceAddr As <a href="Byte">Byte</a>, _
          motorNum As <u>Byte</u>, _
          position As <u>Integer</u> _
)
                  C#
public void DoaSendAirCoreMotor(
          byte deviceAddr,
          byte motorNum,
          <u>int</u> position
)
Parameters
```

```
deviceAddr
      Type: <u>System..:.Byte</u>
motorNum
      Type: <a href="System.....Byte">System.....Byte</a>
position
      Type: System.::.Int32
```

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.DoaSendAnOut1 Method

Device Class See Also Send Feedback

Sends data to a DOA_AnOut1 analog output daughtercard, to control the RMS voltage (using PWM) being supplied by that channel.

Namespace: Phcc

Visual Basic (Declaration)

Parameters

deviceAddr

Type: System..:.Byte

The device address of the specific DOA_AnOut1 daughtercard to send data to.

channelNum

Type: <u>System..:.Byte</u>

The channel number of the channel on the DOA_AnOut1 daughtercard whose PWM output voltage is to be set.

value

Type: System....Byte

A byte whose integer value controls the PWM pulse width (delay time), which, in turn, dictates the RMS (average) voltage between the control pins on the specified channel.

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.DoaSendAnOut1GainAllChannels Method

Device Class See Also Send Feedback

Sends data to a DOA_AnOut1 analog output daughtercard, to control the gain parameter which is in effect for all channels simultaneously.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DoaSendAnOut1GainAllChannels ( _ deviceAddr As Byte, _ gain As Byte _ )

C#

public void DoaSendAnOut1GainAllChannels(
    byte deviceAddr,
    byte gain
)
```

Parameters

deviceAddr

Type: <u>System..:.Byte</u>

The device address of the specific DOA_AnOut1 daughtercard to send data to.

gain

Type: <u>System..:.Byte</u>

A byte whose integer value specifies the new value to set for the all-channels gain parameter.

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:.DoaSendCharLcd Method

Device Class See Also Send Feedback

Sends data to an individual HD44780-compatible character LCD display wired to a PHCC DOA_char_lcd character LCD driver daughtercard.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DoaSendCharLcd ( _ deviceAddr As Byte, _ displayNum As Byte, _ mode As LcdDataModes, _ data As Byte _ )

C#

public void DoaSendCharLcd( byte deviceAddr, byte displayNum, LcdDataModes mode, byte data )
```

Parameters

deviceAddr

Type: <u>System....Byte</u>

The device address of the specific DOA_char_lcd character LCD driver daughtercard to send data to.

displayNum

Type: System..:.Byte

The display number of the individual HD44780-compatible character LCD wired to the indicated DOA_char_lcd character LCD driver daughtercard, to which, the specified data will be sent.

mode

Type: Phcc..:.LcdDataModes

A value from the <u>LcdDataModes</u> enumeration, specifying whether the value contained in the data parameter is to be considered Display Data or Control Data.

data

Type: System..:.Byte
The actual data value to send to the indicated HD44780-compatible character LCD display.

Device Class Phcc Namespace

■ Visual Basic □ C#
Phcc Interface Library for .NET and COM v0.2.1.0 reference library
Device..:..DoaSendRaw Method

Sends data to a Digital Output Type A (DOA) peripheral attached to the PHCC motherboard.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Device Class See Also Send Feedback

Visual Basic (Declaration)

```
Public Sub DoaSendRaw ( _ addr As Byte, _ subAddr As Byte, _ data As Byte _ )

C#

public void DoaSendRaw(
    byte addr,
    byte subAddr,
    byte data
)
```

Parameters

```
addr
```

Type: <u>System.::.Byte</u>

The device address of the specific Digital Output Type A (DOA) peripheral to send data to.

subAddr

Type: System..:.Byte

The sub-address of the Digital Output Type A (DOA) peripheral to send data to.

data

Type: System....Byte

The data to send to the specified Output Type A (DOA) peripheral.

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.DoaSendStepperMotor Method

Device Class See Also Send Feedback

Sends data to a stepper motor daughtercard.

Namespace: Phcc

Visual Basic (Declaration)

Parameters

deviceAddr

Type: <u>System..:.Byte</u>

The device address of the specific stepper motor daughtercard to send data to.

motorNum

Type: <u>System..:.Byte</u>

The motor number (1-4) of the motor to control.

direction

Type: Phcc..::.MotorDirections

A value from the <u>MotorDirections</u> enumeration, indicating the direction (clockwise or counterclockwise) to move the motor (this ultimately depends on how the motor is wired to the card).

numSteps

Type: <u>System..:.Byte</u>

A byte, whose value (0-127) represents the number of discrete steps to command the stepper motor to move, in the indicated direction.

stepType

Type: Phcc.::.MotorStepTypes

A value from the <u>MotorStepTypes</u> enumeration, indicating whether to move the motor in full-steps or in half-steps.

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:..DobSendRaw Method

Device Class See Also Send Feedback

Sends data to a Digital Output Type B (DOB) peripheral attached to the PHCC motherboard.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub DobSendRaw ( _ addr As Byte, _ data As Byte _ )

C#

public void DobSendRaw(
    byte addr,
    byte data
)
```

Parameters

addr

Type: <u>System...:.Byte</u>

The address of the Digital Output Type B (DOB) peripheral to send data to.

data

Type: <u>System..:.Byte</u>

The data to send to the specified Digital Output Type B (DOB) peripheral.

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.I2CSend Method

Device Class See Also Send Feedback

Sends data to an I2C peripheral attached to the PHCC motherboard.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Sub I2CSend ( _ addr As Byte, _ subAddr As Byte, _ data As Byte _ )

C#

public void I2CSend(
    byte addr,
    byte subAddr,
    byte data
)
```

Parameters

```
addr
Type: System..::.Byte
The address of the I2C peripheral to send data to.

subAddr
Type: System..::.Byte
The sub-address of the I2C peripheral to send data to.

data
Type: System..::.Byte
The data to send to the specified I2C peripheral.
```

Device Class Phcc Namespace

☐ Visual Basic ☐ C#☐ Include Protected Members☐ Include Inherited Members☐ Include Inherited Members☐ Phcc Interface Library for .NET and COM v0.2.1.0 reference library☐ Device..::.MemberwiseClone Method☐ Device Class☐ See Also☐ Send Feedback☐

Overload List

Name Description

- MemberwiseClone()()() (Inherited from Object.)
- MemberwiseClone(Boolean) (Inherited from MarshalByRefObject.)

Device Class
Device Members
Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.Reset Method

Device Class See Also Send Feedback

Instructs the PHCC motherboard to perform a software reset on itself.

Namespace: Phcc

Visual Basic (Declaration)

Public Sub Reset

C#

public void Reset()

Device Class Phcc Namespace

-

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:.SetIdle Method

Device Class See Also Send Feedback

Instructs the PHCC motherboard to enter the IDLE state.

Namespace: Phcc

Visual Basic (Declaration)

Public Sub SetIdle

C#

public void SetIdle()

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.StartTalking Method

Device Class See Also Send Feedback

Informs the PHCC motherboard to start sending automatic change notification events.

Namespace: Phcc

Visual Basic (Declaration)

Public Sub StartTalking

C#

public void StartTalking()

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.StopTalking Method

Device Class See Also Send Feedback

Informs the PHCC motherboard to stop sending change notification events

Namespace: Phcc

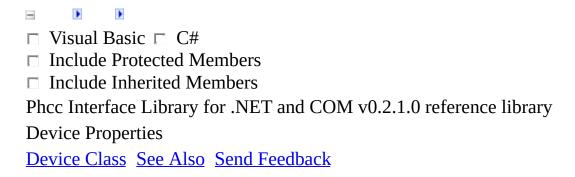
Visual Basic (Declaration)

Public Sub StopTalking

C#

public void StopTalking()

Device Class Phcc Namespace



The **Device** type exposes the following members.

Properties

Name	Description
<u>AnalogInputs</u>	Gets an array of 16-bit signed integers containing the current values of all analog inputs. Only the low 10 bits contain information; the high 6 bits are always zero because the precision of the analog inputs is currently limited to 10 bits.
T Digitalinniits	Gets a bool array containing the current values of all digital inputs.
Hirmware version	Gets a string containing the PHCC motherboard's firmware version.
PortName	Gets/sets the name of the COM port to use for communicating with the PHCC motherboard (i.e. "COM1", "COM2", etc.)
<u>SerialPort</u>	Gets the underlying SerialPort object, which allows direct communication with the PHCC motherboard via RS232.

Device Class
Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.AnalogInputs Property

Device Class See Also Send Feedback

Gets an array of 16-bit signed integers containing the current values of all analog inputs. Only the low 10 bits contain information; the high 6 bits are always zero because the precision of the analog inputs is currently limited to 10 bits.

Namespace: Phcc

Visual Basic (Declaration)

Return Value

An array of 16-bit signed integers containing the current values of all analog inputs. Only the low 10 bits in each array element contain useful information; the high 6 bits are always zero because the precision of the PHCC analog inputs is currently limited to 10 bits.

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.DigitalInputs Property

Device Class See Also Send Feedback

Gets a bool array containing the current values of all digital inputs.

Namespace: Phcc

Visual Basic (Declaration)

```
Public ReadOnly Property DigitalInputs As \underline{Boolean}() 
 C\# 
 public \underline{bool}[] DigitalInputs { get; }
```

Return Value

A bool array containing the current values of all digital inputs. Each value in the array represents a single discrete digital input, out of a total of 1024 inputs.

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.FirmwareVersion Property

Device Class See Also Send Feedback

Gets a string containing the PHCC motherboard's firmware version.

Namespace: Phcc

\blacksquare Syntax

Visual Basic (Declaration)

```
Public ReadOnly Property FirmwareVersion As \underline{\text{String}} \pmb{C\#} public \underline{\text{string}} FirmwareVersion { get; }
```

Return Value

A **String** containing the PHCC motherboard's firmware version.

Device Class Phcc Namespace

-

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..:.PortName Property

Device Class See Also Send Feedback

Gets/sets the name of the COM port to use for communicating with the PHCC motherboard (i.e. "COM1", "COM2", etc.)

Namespace: Phcc

Visual Basic (Declaration)

```
{\tt Public\ Property\ PortName\ As\ \underline{String}}
```

C#

public string PortName { get; set; }

Device Class Phcc Namespace

_

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

Device..::.SerialPort Property

Device Class See Also Send Feedback

Gets the underlying <u>SerialPort</u> object, which allows direct communication with the PHCC motherboard via RS232.

Namespace: Phcc

Visual Basic (Declaration)

```
Public ReadOnly Property SerialPort As <a href="SerialPort">SerialPort</a> As <a href="SerialPor
```

Device Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

DigitalInputChangedEventArgs Class

Members See Also Send Feedback

DigitalInputChangedEventArgs objects hold data that the PHCC motherboard provides whenever a digital input value changes. The DigitalInputChanged event provides DigitalInputChangedEventArgs event-args objects during the raising of each event.

Namespace: Phcc

Visual Basic (Declaration)

<<u>ClassInterfaceAttribute(ClassInterfaceType</u>.AutoDual)> _ Public NotInheritable Class DigitalInputChangedEventArgs _ Inherits <u>EventArgs</u>

C#

[ClassInterfaceAttribute(ClassInterfaceType.AutoDual)]
public sealed class DigitalInputChangedEventArgs : EventArgs

Inheritance Hierarchy

System..:.Object

System.::.EventArgs
Phcc.::.DigitalInputChangedEventArgs

<u>DigitalInputChangedEventArgs Members</u> <u>Phcc Namespace</u>



Overload List

	Name	Description
∃	<u>DigitalInputChangedEventArgs()()()</u>	Creates an instance of the
		$\underline{Digital Input Changed Event Args}$
		class.
≓∳	Roolean)	Creates an instance of the
		<u>DigitalInputChangedEventArgs</u>
		class.

<u>DigitalInputChangedEventArgs Class</u> <u>DigitalInputChangedEventArgs Members</u> <u>Phcc Namespace</u>

► Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

DigitalInputChangedEventArgs Constructor

DigitalInputChangedEventArgs Class See Also Send Feedback

Creates an instance of the DigitalInputChangedEventArgs class.

Namespace: Phcc

Visual Basic (Declaration)

Public Sub New

C#

public DigitalInputChangedEventArgs()

DigitalInputChangedEventArgs Class DigitalInputChangedEventArgs Overload Phcc Namespace

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library DigitalInputChangedEventArgs Constructor (Int16, Boolean)

<u>DigitalInputChangedEventArgs Class See Also Send Feedback</u>

Creates an instance of the DigitalInputChangedEventArgs class.

Namespace: Phcc

Visual Basic (Declaration)

Parameters

index

Type: <u>System..:.Int16</u>

The index of the digital input whose value has changed.

newValue

Type: System..:.Boolean

The new value of the digital input indicated by the Address parameter.

DigitalInputChangedEventArgs Class DigitalInputChangedEventArgs Overload Phcc Namespace

-	
Visual Basi	c □ C#
Include Pro	tected Members
Include Inh	erited Members
Phcc Interface	Library for .NET and COM v0.2.1.0 reference library
DigitalInputCl	nangedEventArgs Members
<u>DigitalInputCl</u>	nangedEventArgs Class Constructors Methods Properties
See Also Sen	<u>l Feedback</u>

The <u>DigitalInputChangedEventArgs</u> type exposes the following members.

Constructors

Name Description

DigitalInputChangedEventArgs Overloaded.

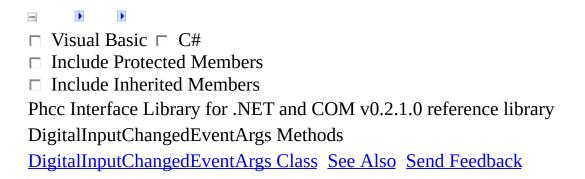
Methods

	Name	Description
=0	<u>Equals</u>	(Inherited from Object.)
<u></u>	<u>Finalize</u>	(Inherited from Object.)
=0	<u>GetHashCode</u>	(Inherited from Object.)
=0	<u>GetType</u>	(Inherited from Object.)
<u></u>	MemberwiseClone	(Inherited from Object.)
≡	<u>ToString</u>	(Inherited from Object.)

Properties

Name	Description
Index	Gets/sets the index of the digital input whose value has changed.
<u>NewValue</u>	Gets/sets the new value of the indicated digital input.

DigitalInputChangedEventArgs Class Phcc Namespace



The <u>DigitalInputChangedEventArgs</u> type exposes the following members.

Methods

	Name	Description
=0	<u>Equals</u>	(Inherited from Object.)
<u></u>	<u>Finalize</u>	(Inherited from Object.)
=0	<u>GetHashCode</u>	(Inherited from Object.)
=0	<u>GetType</u>	(Inherited from Object.)
<u></u>	MemberwiseClone	(Inherited from Object.)
≡	<u>ToString</u>	(Inherited from Object.)

DigitalInputChangedEventArgs Class Phcc Namespace



The <u>DigitalInputChangedEventArgs</u> type exposes the following members.

Properties

Name	Description
index	Gets/sets the index of the digital input whose value has changed.
<u>NewValue</u>	Gets/sets the new value of the indicated digital input.

DigitalInputChangedEventArgs Class Phcc Namespace

► Visual Basic

C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

DigitalInputChangedEventArgs..:..Index Property

DigitalInputChangedEventArgs Class See Also Send Feedback

Gets/sets the index of the digital input whose value has changed.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

```
Public Property Index As <a href="Short">Short</a>

C#

public <a href="short">short</a> Index { get; set; }
```

DigitalInputChangedEventArgs Class Phcc Namespace

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

DigitalInputChangedEventArgs..:.NewValue Property

DigitalInputChangedEventArgs Class See Also Send Feedback

Gets/sets the new value of the indicated digital input.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

```
Public Property NewValue As Boolean  \pmb{C\#}  public bool NewValue { get; set; }
```

DigitalInputChangedEventArgs Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

DigitalInputChangedEventHandler Delegate

See Also Send Feedback

Event handler delegate for the <u>DigitalInputChanged</u> event.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

```
<<u>ComVisibleAttribute(False)> _</u>
Public Delegate Sub DigitalInputChangedEventHandler ( _
         sender As <a href="Object">Object</a>, _
         e As <u>DigitalInputChangedEventArgs</u> _
)
                              C#
[ComVisibleAttribute(false)]
public delegate void DigitalInputChangedEventHandler(
         Object sender,
         <u>DigitalInputChangedEventArgs</u> e
)
Parameters
sender
    Type: System..:.Object
    the object raising the event.
e
```

a <u>DigitalInputChangedEventArgs</u> object containing detailed information

Type: Phcc..::.DigitalInputChangedEventArgs

about the event.

Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library I2CDataReceivedEventArgs Class

Members See Also Send Feedback

I2CDataReceivedEventArgs objects hold I2C data that is received when the PHCC motherboard signals that new I2C data has arrived. This data is provided by the I2CDataReceived event.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

C#

[ClassInterfaceAttribute(ClassInterfaceType.AutoDual)]
public sealed class I2CDataReceivedEventArgs : <u>EventArgs</u>

Inheritance Hierarchy

System..:.Object

System.::.EventArgs
Phcc.::.I2CDataReceivedEventArgs

I2CDataReceivedEventArgs Members Phcc Namespace

☐ Visual Basic ☐ C#☐ Include Protected Members☐ Include Inherited Members☐ Include Inherited Members☐ Phcc Interface Library for .NET and COM v0.2.1.0 reference library I2CDataReceivedEventArgs Constructor☐ I2CDataReceivedEventArgs Class☐ See Also☐ Send Feedback☐ Send F

Overload List

	Name	Description
≡	I/C DataReceivedEventArgs()()	Creates an instance of the I2CDataReceivedEventArgs class.
∈	I2CDataReceivedEventArgs(Int16, Byte)	Creates an instance of the I2CDataReceivedEventArgs class.

I2CDataReceivedEventArgs Class I2CDataReceivedEventArgs Members Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

I2CDataReceivedEventArgs Constructor

I2CDataReceivedEventArgs Class See Also Send Feedback

Creates an instance of the I2CDataReceivedEventArgs class.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

Public Sub New

C#

public I2CDataReceivedEventArgs()

I2CDataReceivedEventArgs Class
I2CDataReceivedEventArgs Overload
Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library I2CDataReceivedEventArgs Constructor (Int16, Byte)

I2CDataReceivedEventArgs Class See Also Send Feedback

Creates an instance of the I2CDataReceivedEventArgs class.

Namespace: Phcc

Assembly: Phcc (in Phcc.dll)

Syntax

Visual Basic (Declaration)

Parameters

address

Type: System.::.Int16

The address of the I2C device that is providing the data during this event.

data

Type: <u>System...:.Byte</u>

The data being provided by the I2C device during this event.

I2CDataReceivedEventArgs Class
I2CDataReceivedEventArgs Overload
Phcc Namespace

_	•			
	Visual	Basic □ C#		
	Include	Protected Members		
	Include	Inherited Members		
Ph	icc Inter	face Library for .NET and COM v0.2.1	.0 referenc	e library
I2	CDataR	eceivedEventArgs Members		
<u>I2</u>	<u>CDataR</u>	eceivedEventArgs Class Constructors	<u>Methods</u>	<u>Properties</u>
Se	e Also	Send Feedback		-

The <u>I2CDataReceivedEventArgs</u> type exposes the following members.

Constructors

Name Description

I2CDataReceivedEventArgs Overloaded.

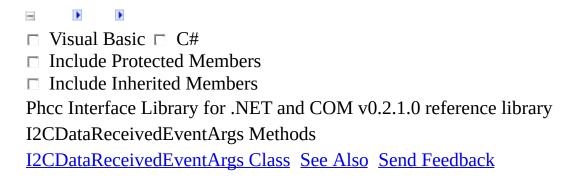
Methods

	Name	Description
=0	<u>Equals</u>	(Inherited from Object.)
<u></u>	<u>Finalize</u>	(Inherited from Object.)
=0	<u>GetHashCode</u>	(Inherited from Object.)
=0	<u>GetType</u>	(Inherited from Object.)
<u></u>	MemberwiseClone	(Inherited from Object.)
≡	<u>ToString</u>	(Inherited from Object.)

Properties

Name	Description
<u>Address</u>	Gets/sets the address of the I2C device that is providing the data during this event.
Data	Gets/sets the data being provided by the I2C device during this event.

I2CDataReceivedEventArgs Class Phcc Namespace

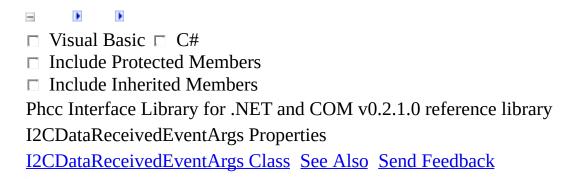


The I2CDataReceivedEventArgs type exposes the following members.

Methods

	Name	Description
=0	<u>Equals</u>	(Inherited from Object.)
<u></u>	<u>Finalize</u>	(Inherited from Object.)
=0	<u>GetHashCode</u>	(Inherited from Object.)
=0	<u>GetType</u>	(Inherited from Object.)
<u></u>	MemberwiseClone	(Inherited from Object.)
≡	<u>ToString</u>	(Inherited from Object.)

I2CDataReceivedEventArgs Class Phcc Namespace



The I2CDataReceivedEventArgs type exposes the following members.

Properties

Name	Description
<u>Address</u>	Gets/sets the address of the I2C device that is providing the data during this event.
Data	Gets/sets the data being provided by the I2C device during this event.

I2CDataReceivedEventArgs Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

I2CDataReceivedEventArgs..:..Address Property

I2CDataReceivedEventArgs Class See Also Send Feedback

Gets/sets the address of the I2C device that is providing the data during this event.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Property Address As <a href="Short">Short</a>
<a href="C#">C#</a>
<a href="public short">public short</a> Address { get; set; }</a>
```

I2CDataReceivedEventArgs Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

I2CDataReceivedEventArgs..::.Data Property

I2CDataReceivedEventArgs Class See Also Send Feedback

Gets/sets the data being provided by the I2C device during this event.

Namespace: Phcc

Visual Basic (Declaration)

```
Public Property Data As <a href="Byte">Byte</a>
C#
public <a href="byte">byte</a> Data { get; set; }
```

I2CDataReceivedEventArgs Class Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library I2CDataReceivedEventHandler Delegate

See Also Send Feedback

Event handler delegate for the I2CDataReceived event.

Namespace: Phcc

Visual Basic (Declaration)

```
<<u>ComVisibleAttribute</u>(False)> _
Public Delegate Sub I2CDataReceivedEventHandler ( _
          sender As <a href="Object">Object</a>, _
          e As <u>I2CDataReceivedEventArgs</u> _
)
                             C#
[ComVisibleAttribute(false)]
public delegate void I2CDataReceivedEventHandler(
          Object sender,
          <u>I2CDataReceivedEventArgs</u> e
)
Parameters
sender
     Type: System..:.Object
     the object raising the event.
e
     Type: Phcc..:.I2CDataReceivedEventArgs
     an <a href="I2CDataReceivedEventArgs">I2CDataReceivedEventArgs</a> object containing detailed information
     about the event.
```

Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

LcdDataModes Enumeration

See Also Send Feedback

Enumeration of LCD data modes.

Namespace: Phcc

Visual Basic (Declaration)

Public Enumeration LcdDataModes

C#

public enum LcdDataModes

Members

Member name	Description
DisplayData	Specifies that the data being sent to the LCD is to be considered as Display Data
ControlData	Specifies that the data being sent to the LCD is to be considered as Control Data

Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

MotorDirections Enumeration

See Also Send Feedback

Enumeration of stepper motor directions.

Namespace: Phcc

Visual Basic (Declaration)

Public Enumeration MotorDirections

C#

public enum MotorDirections

Members

Member name	Description
-------------	-------------

Specifies clockwise stepper motor movement. Clockwise

 $Counterclockwise \ Specifies \ counterclockwise \ stepper \ motor \\ movement.$

Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

MotorStepTypes Enumeration

See Also Send Feedback

Enumeration of possible stepper motor step types.

Namespace: Phcc

Visual Basic (Declaration)

Public Enumeration MotorStepTypes

C#

public enum MotorStepTypes

Members

Member name	Description
FullStep	Indicates that the step count refers to the number of full steps that the stepper motor should move.
HalfStep	Indicates that the step count refers to the number of half steps that the stepper motor should move.

Phcc Namespace

-

□ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library $\,$

PhccEvents Interface

Members See Also Send Feedback

COM Event Source Interface

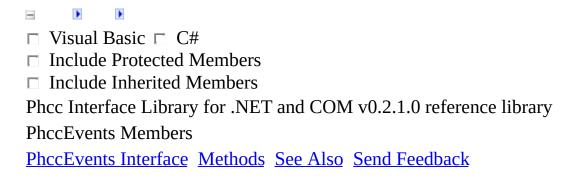
Namespace: Phcc

Visual Basic (Declaration)

```
<<u>ComVisibleAttribute</u>(True)> _
<<u>GuidAttribute</u>("8709CA5D-79FA-4a63-ACF4-C99475990BC3")> _
<<u>InterfaceTypeAttribute</u>(<u>ComInterfaceType</u>.InterfaceIsIDispatch)> _
Public Interface PhccEvents
```

[ComVisibleAttribute(true)]
[GuidAttribute("8709CA5D-79FA-4a63-ACF4-C99475990BC3")]
[InterfaceTypeAttribute(ComInterfaceType.InterfaceIsIDispatch)]
public interface PhccEvents

PhccEvents Members
Phcc Namespace

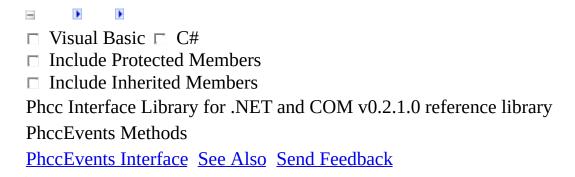


The **PhccEvents** type exposes the following members.

\blacksquare Methods

	Name	Description
≓©	<u>AnalogInputChanged</u>	The AnalogInputChanged(Object, AnalogInputChangedEventArgs) event is raised when the PHCC motherboard detects that one of the analog inputs has changed values (i.e. whenever an analog input signal changes state).
≕∳	<u>DigitalInputChanged</u>	The <u>DigitalInputChanged(Object</u> , <u>DigitalInputChangedEventArgs</u>) event is raised when the PHCC motherboard detects that one of the digital inputs has changed (i.e. whenever a button that is wired into the digital input key matrix is pressed or released).
≘©	<u>I2CDataReceived</u>	The I2CDataReceived(Object, I2CDataReceivedEventArgs) event is raised when the PHCC motherboard receives data from one of the attached I2C peripherals (if any).

PhccEvents Interface
Phcc Namespace



The **PhccEvents** type exposes the following members.

\blacksquare Methods

	Name	Description
≓©	<u>AnalogInputChanged</u>	The AnalogInputChanged(Object, AnalogInputChangedEventArgs) event is raised when the PHCC motherboard detects that one of the analog inputs has changed values (i.e. whenever an analog input signal changes state).
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PhccEvents Interface
Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

PhccEvents..::.AnalogInputChanged Method

PhccEvents Interface See Also Send Feedback

The AnalogInputChanged(Object, AnalogInputChangedEventArgs) event is raised when the PHCC motherboard detects that one of the analog inputs has changed values (i.e. whenever an analog input signal changes state).

Namespace: Phcc

Visual Basic (Declaration)

PhccEvents Interface
Phcc Namespace

► Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

PhccEvents..::.DigitalInputChanged Method

PhccEvents Interface See Also Send Feedback

The DigitalInputChanged(Object, DigitalInputChangedEventArgs) event is raised when the PHCC motherboard detects that one of the digital inputs has changed (i.e. whenever a button that is wired into the digital input key matrix is pressed or released).

Namespace: Phcc

Visual Basic (Declaration)

PhccEvents Interface
Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

PhccEvents..::.I2CDataReceived Method

PhccEvents Interface See Also Send Feedback

The I2CDataReceived(Object, I2CDataReceivedEventArgs) event is raised when the PHCC motherboard receives data from one of the attached I2C peripherals (if any).

Namespace: Phcc

Visual Basic (Declaration)

PhccEvents Interface
Phcc Namespace

■ Visual Basic □ C#

Phcc Interface Library for .NET and COM v0.2.1.0 reference library

SevenSegmentBits Enumeration

See Also Send Feedback

Namespace: Phcc

Visual Basic (Declaration)

```
<<u>FlagsAttribute</u>> _
<<u>ComVisibleAttribute</u>(True)> _
Public Enumeration SevenSegmentBits
```

C#

[FlagsAttribute]
[ComVisibleAttribute(true)]
public enum SevenSegmentBits

Members

Member name Description

None

SegmentA

SegmentB

SegmentC

SegmentD

SegmentE

SegmentF

SegmentG

SegmentDP

All

Phcc Namespace