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Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

CMcsUsbListEntryNet McsUsbListEntryNet identifies a connected device Class to handle a list of connected MCS USB devices **CMcsUsbListNet**

Base class to handle MCS USB devices. All device classes are derived from

this class. Functionality that is provided by all MCS devices is handled by **CMcsUsbNet**

this class

CMcsUsbPointerContainer

CStg200xBasicNet Base class for the Stg200x

CStg200xDownloadBasicNet Base class for the STG200x series download mode

CStg200xDownloadNet Main class for the STG download mode CStg200xStreamingNet Main class for the STG streaming mode

CUsbExceptionNet Exception class that is thrown in case of an USB error

Device Id DeviceIdNet

DriverVersionNet Class gives firmware versions of the device's firmware destinations

Firmware Destination Names

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- Mcs
- Usb
- CMcsUsbListEntryNet

Public Member Functions | Properties

CMcsUsbListEntryNet Class Reference

McsUsbListEntryNet identifies a connected device. More...

List of all members.

Public Member Functions

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CMcsUsbListEntryNet ()
Initializes a new instance of the CMcsUsbListEntryNet class.

virtual bool Equals (Object^ obj) override
Checks weather two CMcsUsbListEntryNet represent the same USB device.

void SetStringFormat (String^ format)
Specify the text the CMcsUsbListEntryNet.ToString() function should return. The special code N expands to the device name and S expands to the serial number of the device.

virtual
String^ ToString () override

Properties

String[^] Manufacturer

The Manufacturer ID of the device represented by this CMcsUsbListEntryNet.

String[^] Product

The Product ID of the device represented by this CMcsUsbListEntryNet.

String[^] DeviceName

The device name of the device represented by this CMcsUsbListEntryNet.

String[^] SerialNumber

The serial number of the device represented by this CMcsUsbListEntryNet.

String[^] HwVersion

The hardware revision of the device represented by this CMcsUsbListEntryNet.

String[^] DevicePath

The DevicePath of the device represented by this CMcsUsbListEntryNet.

DeviceIdNet^

DeviceId

Detailed Description

McsUsbListEntryNet identifies a connected device.

Constructor & Destructor Documentation

CMcsUsbListEntryNet()

Initializes a new instance of the CMcsUsbListEntryNet class.

Member Function Documentation

virtual bool Equals (Object^ obj) [override, virtual]

Checks weather two CMcsUsbListEntryNet represent the same USB device.

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Parameters:

obj The <u>CMcsUsbListEntryNet</u> to compare with.

```
void <u>SetStringFormat</u> ( String^ format )
```

Specify the text the <u>CMcsUsbListEntryNet.ToString()</u> function should return. The special code N expands to the device name and S expands to the serial number of the device.

Parameters:

format A String containing the format template. Default is "%N (%S)".

```
virtual String ^ ToString() [override, virtual]
```

Property Documentation

DeviceIdNet^ DeviceId

String[^] DeviceName

The device name of the device represented by this CMcsUsbListEntryNet.

String[^] DevicePath

The DevicePath of the device represented by this CMcsUsbListEntryNet.

String[^] HwVersion

The hardware revision of the device represented by this CMcsUsbListEntryNet.

String[^] Manufacturer

The Manufacturer ID of the device represented by this CMcsUsbListEntryNet.

String[^] Product

The Product ID of the device represented by this CMcsUsbListEntryNet.

String[^] SerialNumber

The serial number of the device represented by this CMcsUsbListEntryNet.

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Main Page

Namespaces

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- CMcsUsbListNet

Public Member Functions | Properties | Events

CMcsUsbListNet Class Reference

Class to handle a list of connected MCS USB devices. More...

List of all members.

Public Member Functions

CMcsUsbListNet ()

Initializes a new instance of CMcsUsbListNet class.

CMcsUsbListNet (OnDeviceArrivalRemoval^ devArrival,

OnDeviceArrivalRemoval^ devRemoval)

Initializes a new instance of CMcsUsbListNet class.

~CMcsUsbListNet()

Destructor: called by Dispose()

!CMcsUsbListNet ()

Finalizer: called by GC before collecting.

void Initialize (DeviceEnumNet McsUsbDevice)

Initialize/Update the list of devices which are currently connected to the computer.

void Initialize (array< DeviceIdNet^ >^DeviceIdList)

Initialize/Update the list of devices which are currently connected to the computer.

void SetStringFormat (String^ format)

Specify the text the <u>CMcsUsbListEntryNet.ToString()</u> function should return. The special code N expands to the device name and S expands to the serial number of the device.

uint32 t GetNumberOfDevices ()

Gets the number of devices currently in the list.

CMcsUsbListEntryNet[^] GetUsbListEntry (unsigned int index)

Returns one <u>CMcsUsbListEntryNet</u> from the list of USB Devices connected to the computer.

array<

CMcsUsbListEntryNet^ >^ GetUsbListEntries ()

Returns all entries from the list of USB Devices connected to the computer.

bool <u>IsDeviceTypeOf</u> (<u>CMcsUsbListEntryNet</u>^ entry, DeviceEnumNet McsUsbDevice)

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Properties

uint32_t Count [get]

Gets the number of devices currently in the list.

Events

```
OnDeviceArrivalRemoval^ DeviceArrival OnDeviceArrivalRemoval^ DeviceRemoval
```

Detailed Description

Class to handle a list of connected MCS USB devices.

Constructor & Destructor Documentation

```
CMcsUsbListNet ( )

Initializes a new instance of CMcsUsbListNet class.

CMcsUsbListNet ( OnDeviceArrivalRemoval^ devArrival, OnDeviceArrivalRemoval^ devRemoval
```

Initializes a new instance of CMcsUsbListNet class.

Parameters:

devArrival Callback to call when a new device is attached to the bus. devRemoval Callback to call when a device is removed from the bus.

```
~<u>CMcsUsbListNet</u>()
```

Destructor: called by Dispose()

!CMcsUsbListNet()

Finalizer: called by GC before collecting.

Member Function Documentation

```
uint32_t GetNumberOfDevices ( )
```

Gets the number of devices currently in the list.

Class List Page 6 of 86

```
array<CMcsUsbListEntryNet^> ^ GetUsbListEntries ( )
```

Returns all entries from the list of USB Devices connected to the computer.

```
CMcsUsbListEntryNet ^ GetUsbListEntry (unsigned int index )
```

Returns one CMcsUsbListEntryNet from the list of USB Devices connected to the computer.

Parameters:

index number of the entry to use.

```
void <a href="Initialize">Initialize</a> ( DeviceEnumNet McsUsbDevice )
```

Initialize/Update the list of devices which are currently connected to the computer.

Parameters:

McsUsbDevice Specifies the type of devices to look for.

```
void <u>Initialize</u> ( array< <u>DeviceIdNet</u>^ >^ DeviceIdList )
```

Initialize/Update the list of devices which are currently connected to the computer.

Parameters:

DeviceIdList Specifies a list of devices to look for.

Specify the text the <u>CMcsUsbListEntryNet.ToString(</u>) function should return. The special code N expands to the device name and S expands to the serial number of the device.

Parameters:

format A String containing the format template. Default is "%N (%S)".

Property Documentation

```
uint32 t Count [get]
```

Gets the number of devices currently in the list.

Event Documentation

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OnDeviceArrivalRemoval^ DeviceArrival OnDeviceArrivalRemoval^ DeviceRemoval

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<u>Public Member Functions</u> | <u>Static Public Member Functions</u> | <u>Static Public Attributes</u> | <u>Package Attributes</u> | <u>Properties</u>

CMcsUsbNet Class Reference

Base class to handle MCS USB devices. All device classes are derived from this class. Functionality that is provided by all MCS devices is handled by this class. More...

Inheritance diagram for CMcsUsbNet:



List of all members.

Public Member Functions

CMcsUsbNet ()

Initializes a new instance of the base class to handle MCS USB devices.

CMcsUsbNet (McsBusTypeEnumNet bustype)

Initializes a new instance of the base class to handle MCS USB devices.

virtual ~CMcsUsbNet()

!CMcsUsbNet()

DeviceEnumNet GetDeviceEnum()

virtual uint32 t Connect (CMcsUsbListEntryNet^ entry)

Opens a connection to the device.

virtual uint32 t Connect (CMcsUsbListEntryNet^ entry, unsigned int LockMask)

Opens a connection to the device.

virtual uint32 t GetStatus ([System::Runtime::InteropServices::Out]uint32 t% iStatus)

virtual bool IsConnected ()

Check if a device is Connected.

virtual void Disconnect ()

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Disconnect from a device. CMcsUsbListEntryNet[^] GetUsbListEntry() virtual String[^] GetSerialNumber () Query the Serial Number of the device. DriverVersionNet^ GetVersion() <u>DriverVersionNet^</u> <u>GetVersion</u> (CFirmwareDestinationNet dest) DeviceIdNet[^] GetDeviceId() uint32 t GetIdent ([System::Runtime::InteropServices::Out]String^ %Answer) array< BYTE >^ GetSoftwareKey (unsigned int index) void SetSoftwareKey (unsigned int index, array< BYTE >^buffer) void RemoveSoftwareKey (unsigned int index) void AddSoftwareKey (String^ key) bool ValidKey (String^ key) bool ValidKey (String^ key, const BYTE ProgrammID, const BYTE majorversion) bool HasSoftwareKey (const BYTE ProgrammID, const BYTE majorversion) bool HasSoftwareKey (SoftwareKeyProgrammIdsNet::ProgrammIdsNet ProgrammID, const BYTE majorversion) String GetSoftwareKeyString (const BYTE ProgrammID, const BYTE majorversion) String[^] GetSoftwareKeyString (SoftwareKeyProgrammIdsNet::ProgrammIdsNet ProgrammID, const BYTE majorversion) bool IsDeviceHighSpeedCapable () bool <u>IsDeviceHighSpeed</u>() BYTE GetDeviceCapableSpeed () BYTE GetDeviceSpeed () Query the Connection Speed of the device. unsigned int TxnTestMemoryWrite (unsigned short index) unsigned int TxnTestMemoryReadAndCheck (unsigned short index) void <u>TxnSetSerialNumber</u> (unsigned int number) unsigned int TxnGetSerialNumber () unsigned int ReadRegister (unsigned int reg) unsigned int ReadRegisterTimeSlot (unsigned int reg, int TimeSlot) void WriteRegister (unsigned int reg, unsigned int value) void WriteRegister (unsigned int reg, array< unsigned int >^values) void WriteRegisterTimeSlot (unsigned int reg, unsigned int value, int TimeSlot) void WriteRegisterTimeSlot (unsigned int reg, array< unsigned int >^values, int TimeSlot) bool ReadEepromRegisterPreconfig (unsigned int TargetOffset, unsigned int DeviceOffset, unsigned int DMA reg,[System::Runtime::InteropServices::Out] unsigned int% DMA value) void WriteEepromRegisterPreconfig (unsigned int TargetOffset, unsigned int DeviceOffset, unsigned int DMA reg, unsigned int DMA value) void EraseEepromRegisterPreconfig (unsigned int TargetOffset, unsigned int DeviceOffset, unsigned int DMA reg) unsigned int GetLastUSBError ()

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```
uint32_t IfStatusGetLastUSBError (uint32_t status)

void ThrowCUsbExceptionNet (uint32_t status)

unsigned int GetRFConnectionStatus ()

unsigned int GetImplantatVoltage ()

String^ GetHardwareRevision ()

unsigned int GetFirmwareVersion (CFirmwareDestinationNet destination)

UCHAR GetConfiguration ()

void SetConfiguration (UCHAR config)
```

Static Public Member Functions

static String[^] GetErrorText (unsigned int Status)

Gets the error text string that belongs to a status number.

Static Public Attributes

```
static const uint32 t Status Crc = (0xE0100001L)
static const uint32 t Status Btstuff = (0xE0100002L)
static const uint32 t Status DataToggleMismatch = (0xE0100003L)
static const uint32 t Status Stall = (0xE0100004L)
static const uint32 t Status DevNotResponding = (0xE0100005L)
static const uint32 t Status PidCheckFailure = (0xE0100006L)
static const uint32 t Status UnexpectedPid = (0xE0100007L)
static const uint32 t Status DataOverrun = (0xE0100008L)
static const uint32 t Status DataUnderrun = (0xE0100009L)
static const uint32 t Status BufferOverrun = (0xE010000CL)
static const uint32_t Status BufferUnderrun = (0xE010000DL)
static const uint32 t Status NotAccessed = (0xE010000FL)
static const uint32 t Status Fifo = (0xE0100010L)
static const uint32 t Status EndpointHalted = (0xE0100030L)
static const uint32 t Status NoMemory = (0xE0100100L)
static const uint32 t Status InvalidUrbFunction = (0xE0100200L)
static const uint32 t Status InvalidParameter = (0xE0100300L)
static const uint32 t Status ErrorBusy = (0xE0100400L)
static const uint32 t Status RequestFailed = (0xE0100500L)
static const uint32 t Status InvalidPipeHandle = (0xE0100600L)
static const uint32 t Status NoBandwidth = (0xE0100700L)
static const uint32 t Status InternalHcError = (0xE0100800L)
static const uint32 t Status ErrorShortTransfer = (0xE0100900L)
static const uint32 t Status BadStartFrame = (0xE0100A00L)
static const uint32 t Status IsochRequestFailed = (0xE0100B00L)
static const uint32 t Status FrameControlOwned = (0xE0100C00L)
static const uint32 t Status ControlNotOwned = (0xE0100D00L)
static const uint32 t Status Canceled = (0xE0110000L)
static const uint32 t Status Canceling = (0xE0120000L)
static const uint32 t Status AlreadyConfigured = (0xE0110001L)
```

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```
static const uint32_t Status_NoSuchDevice = (0xE01F0002L)

static const uint32_t Status_DeviceNotFound = (0xE01F0003L)

static const uint32_t Status_NotSupported = (0xE01F0005L)

static const uint32_t Status_IoPending = (0xE01F0006L)

static const uint32_t Status_IoTimeout = (0xE01F0007L)

static const uint32_t Status_DeviceRemoved = (0xE01F0008L)

static const uint32_t Status_DeviceRemoved = (0xE01F0009L)

static const uint32_t Status_PipeNotLinked = (0xE01F0009L)

static const uint32_t Status_DeviceLocked = (0xE01F0000AL)

static const uint32_t Status_DeviceLocked = (0xE01F0010L)

static const uint32_t Status_DeviceLocked = (0xE01F0010L)
```

Package Attributes

CMcsUsb * m pMcsUsb

Properties

virtual String[^] SerialNumber [get]

Detailed Description

Base class to handle MCS USB devices. All device classes are derived from this class. Functionality that is provided by all MCS devices is handled by this class.

Constructor & Destructor Documentation

```
CMcsUsbNet ( )
```

Initializes a new instance of the base class to handle MCS USB devices.

```
CMcsUsbNet ( McsBusTypeEnumNet bustype )
```

Initializes a new instance of the base class to handle MCS USB devices.

Parameters:

bustype Type of device to use, either USB or PCI.

```
virtual ~ CMcsUsbNet() [virtual]
!CMcsUsbNet()
```

Member Function Documentation

```
void AddSoftwareKey (String^ key )
```

Class List Page 11 of 86

```
virtual uint32 t Connect ( CMcsUsbListEntryNet^ entry ) [virtual]
```

Opens a connection to the device.

Parameters:

entry The Device List Entry for the device to be connected.

Returns:

Error Status. 0 on success.

Opens a connection to the device.

Parameters:

```
entry The Device List Entry for the device to be connected. LockMask The Lock Mask for this connection.
```

Returns:

```
Error Status. 0 on success.
```

```
virtual void Disconnect() [virtual]
```

Disconnect from a device.

```
void <a href="mailto:EraseEepromRegisterPreconfig">EraseEepromRegisterPreconfig</a> (unsigned int *TargetOffset*, unsigned int *DeviceOffset*, unsigned int *DMA_reg*)

UCHAR <a href="mailto:GetConfiguration">GetConfiguration</a> ()

BYTE <a href="mailto:GetDeviceCapableSpeed">GetDeviceCapableSpeed</a> ()

DeviceIdNet ^ <a href="mailto:GetDeviceEnum">GetDeviceEnum</a> ()

BYTE <a href="mailto:GetDeviceId">GetDeviceId</a> ()

BYTE <a href="mailto:GetDeviceSpeed">GetDeviceSpeed</a> ()
```

Query the Connection Speed of the device.

Returns:

```
0 for Low-Speed, 1 for Full-Speed, 2 for High-Speed and 3 for SuperSpeed.
```

```
static String ^ GetErrorText (unsigned int Status) [static]
```

Gets the error text string that belongs to a status number.

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Parameters:

[in] Status the status number you want the text for

Returns:

Error text string that belongs to the status number

```
unsigned int GetFirmwareVersion (CFirmwareDestinationNet destination )

String ^ GetHardwareRevision ()

uint32_t GetIdent ([System::Runtime::InteropServices::Out] String^ % Answer )

unsigned int GetImplantatVoltage ()

unsigned int GetLastUSBError ()

unsigned int GetRFConnectionStatus ()

virtual String ^ GetSerialNumber () [virtual]
```

Query the Serial Number of the device.

Returns:

The Serial Number.

```
array<BYTE> ^ GetSoftwareKey (unsigned int index )
String ^ GetSoftwareKeyString (const BYTE ProgrammID,
                              const BYTE majorversion
String \(^\) GetSoftwareKeyString (\) SoftwareKeyProgrammIdsNet::ProgrammIdsNet \(ProgrammID\),
                              const BYTE
                                                                            majorversion
virtual uint32 t GetStatus ([System::Runtime::InteropServices::Out] uint32 t% iStatus ) [virtual]
CMcsUsbListEntryNet ^ GetUsbListEntry ( )
DriverVersionNet ^ GetVersion ( )
DriverVersionNet ^ GetVersion ( CFirmwareDestinationNet dest )
bool HasSoftwareKey (const BYTE ProgrammID,
                      const BYTE majorversion
bool HasSoftwareKey (SoftwareKeyProgrammIdsNet::ProgrammIdsNet ProgrammID,
                      const BYTE
                                                                    majorversion
                    )
uint32 t IfStatusGetLastUSBError (uint32 t status )
virtual bool IsConnected ( ) [virtual]
```

Check if a device is Connected.

Returns:

true if the device is connected.

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```
bool <u>IsDeviceHighSpeed</u> ( )
bool IsDeviceHighSpeedCapable ( )
bool
                                   (unsigned int
                                                                                           TargetOffset,
ReadEepromRegisterPreconfig
                                                                                           DeviceOffset,
                                    unsigned int
                                    unsigned int
                                                                                           DMA\_reg,
                                    [System::Runtime::InteropServices::Out] unsigned
                                                                                           DMA value
                                    int%
unsigned int ReadRegister (unsigned int reg)
unsigned int ReadRegisterTimeSlot (unsigned int reg,
                                                  TimeSlot
                                    int
void <u>RemoveSoftwareKey</u> (unsigned int index )
void SetConfiguration (UCHAR config )
void SetSoftwareKey (unsigned int
                                        index.
                       array< BYTE >^ buffer
void <u>ThrowCUsbExceptionNet</u> ( uint32_t status )
unsigned int <u>TxnGetSerialNumber</u>()
void <u>TxnSetSerialNumber</u> (unsigned int number )
unsigned int <u>TxnTestMemoryReadAndCheck</u> (unsigned short index )
unsigned int <u>TxnTestMemoryWrite</u> (unsigned short index )
bool ValidKey (String key)
bool ValidKey (String^
                             key,
                const BYTE ProgrammID,
                const BYTE majorversion
void <u>WriteEepromRegisterPreconfig</u> (unsigned int TargetOffset,
                                     unsigned int DeviceOffset,
                                     unsigned int DMA reg,
                                     unsigned int DMA value
void WriteRegister (unsigned int reg,
                    unsigned int value
void WriteRegister (unsigned int
                                           reg,
                    array< unsigned int >^ values
void WriteRegisterTimeSlot (unsigned int reg,
                             unsigned int value,
```

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```
int TimeSlot
)

void WriteRegisterTimeSlot ( unsigned int reg, array< unsigned int >^ values, int TimeSlot
)
```

Member Data Documentation

```
CMcsUsb* m pMcsUsb [package]
const uint32 t Status AlreadyConfigured = (0xE0110001L) [static]
const uint32 t Status BadStartFrame = (0xE0100A00L) [static]
const uint32 t Status Btstuff = (0xE0100002L) [static]
const uint32 t Status BufferOverrun = (0xE010000CL) [static]
const uint32 t Status BufferUnderrun = (0xE010000DL) [static]
const uint32 t Status Canceled = (0xE0110000L) [static]
const uint32 t Status Canceling = (0xE0120000L) [static]
const uint32 t Status ConnectedPipes = (0xE01F000AL) [static]
const uint32 t Status ControlNotOwned = (0xE0100D00L) [static]
const uint32 t Status Crc = (0xE0100001L) [static]
const uint32 t Status DataOverrun = (0xE0100008L) [static]
const uint32 t Status DataToggleMismatch = (0xE0100003L) [static]
const uint32 t Status DataUnderrun = (0xE0100009L) [static]
const uint32 t Status DeviceLocked = (0xE01F0010L) [static]
const uint32 t Status DeviceNotFound = (0xE01F0003L) [static]
const uint32 t Status DeviceRemoved = (0xE01F0008L) [static]
const uint32 t Status DevNotResponding = (0xE0100005L) [static]
const uint32 t Status EndpointHalted = (0xE0100030L) [static]
const \ uint32_t \ \underline{Status} \ \underline{ErrorBusy} = (0xE0100400L) \ [static]
const uint32 t Status ErrorShortTransfer = (0xE0100900L) [static]
const uint32 t Status Fifo = (0xE0100010L) [static]
const uint32 t Status FrameControlOwned = (0xE0100C00L) [static]
const uint32 t Status InternalHcError = (0xE0100800L) [static]
const uint32 t Status InvalidParameter = (0xE0100300L) [static]
const uint32 t Status InvalidPipeHandle = (0xE0100600L) [static]
const uint32 t Status InvalidUrbFunction = (0xE0100200L) [static]
const uint32 t Status IoPending = (0xE01F0006L) [static]
const uint32 t Status IoTimeout = (0xE01F0007L) [static]
```

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```
const uint32_t Status IsochRequestFailed = (0xE0100B00L) [static]
const uint32_t Status NoBandwidth = (0xE0100700L) [static]
const uint32_t Status NoMemory = (0xE0100100L) [static]
const uint32_t Status NoSuchDevice = (0xE01F0002L) [static]
const uint32_t Status NotAccessed = (0xE010000FL) [static]
const uint32_t Status NotSupported = (0xE01F0005L) [static]
const uint32_t Status PidCheckFailure = (0xE0100006L) [static]
const uint32_t Status PipeNotLinked = (0xE01F0009L) [static]
const uint32_t Status RequestFailed = (0xE0100500L) [static]
const uint32_t Status Stall = (0xE0100004L) [static]
const uint32_t Status Unconfigured = (0xE0110002L) [static]
const uint32_t Status Unconfigured = (0xE0100007L) [static]
const uint32_t Status UnexpectedPid = (0xE0100007L) [static]
const uint32_t Status UnexpectedPid = (0xE0100007L) [static]
const uint32_t Status UnexpectedPid = (0xE0100007L) [static]
```

Property Documentation

virtual String^ SerialNumber [get]

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Package Functions | Package Attributes

CMcsUsbPointerContainer Class Reference

List of all members.

Package Functions

CMcsUsbPointerContainer (CMcsUsb *pMcsUsb)

Package Attributes

CMcsUsb * Pointer

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Constructor & Destructor Documentation

CMcsUsbPointerContainer (CMcsUsb * pMcsUsb) [package]

Member Data Documentation

CMcsUsb* Pointer [package]

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Public Member Functions

CStg200xBasicNet Class Reference

Base class for the Stg200x. More...

Inheritance diagram for CStg200xBasicNet:



List of all members.

Public Member Functions

virtual CCStg200xBasicNet ()
The destructor.

void SetOutputRate (uint32_t rate)
Change the output rate of the STG. Valid rates are from 1000 Hz to 50000 Hz.

uint32_t GetOutputRate ()
Queries the output rate of the STG. Valid rates are from 1000 Hz to 50000 Hz.

void SendStart (uint32_t triggermap)
Start (Trigger) the STG. The startup delay is in the range of a few ms.

void SendStop (uint32_t triggermap)
Stop some or all triggers of the STG.

void SendStop (uint32_t triggermap), int options)

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Stop some or all triggers of the STG. void GetStgVersionInfo ([Out]String^ %SwVersion,[Out]String^ %HwVersion) Queries software and hardware version. void GetAnalogRanges (int channel, Out]int% URange, Out]int% IRange) Gets the range of the analog outputs. void <u>GetAnalogResolution</u> (int channel, [Out]int% URes, [Out]int% IRes) Gets the resolution of the analog outputs. virtual int32_t GetDACResolution () Gets number of bits of the DAC resolution. virtual int32 t GetVoltageRangeInMicroVolt (uint32 t channel) Gets the Voltage Range of the specified channel in Microvolts. virtual int32 t GetVoltageResolutionInMicroVolt (uint32 t channel) Gets the Voltage Resolution of the specified channel in Microvolts. virtual int32 t GetCurrentRangeInNanoAmp (uint32 t channel) Gets the Current Range of the specified channel in Nanoamps. virtual int32 t GetCurrentResolutionInNanoAmp (uint32 t channel) Gets the Current Resolution of the specified channel in Nanoamps. void GetStgProgramInfo (bool% IsProgrammed, System::Runtime::InteropServices::ComTypes::FILETIME% timestamp, String^ %filename, Guid% guid) Queries Download information from the STG. void GetStgProgramInfo (bool% IsProgrammed, DateTime% timestamp, String^ % filename, Guid% guid) Queries Download information from the STG. void <u>SetStgProgramInfo</u> (DateTime timestamp, String^ filename, Guid guid) Store Download information in the STG. uint32 t GetMemory () Gets the amount of memory available in the currently selected segment of the STG. uint32 t GetTotalMemory () Gets the total amount of memory available on the STG (all segments). virtual uint32 t GetNumberOfAnalogChannels () Gets the Number of available analog channels of the device. virtual uint32 t GetNumberOfSyncoutChannels () Gets the Number of available syncout channels of the device. virtual uint32 t GetNumberOfTriggerInputs () Gets the Number of trigger inputs of the device. virtual uint32 t GetNumberOfHWDACPaths () Gets the Number of HW Stimulation DACs of the device. virtual void SetVoltageMode (unsigned int channel) Sets a channel to voltage mode (STG3008-FA and STG400x only). virtual void SetCurrentMode (unsigned int channel) Sets a channel to current mode (STG3008-FA and STG400x only).

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virtual void SetVoltageMode () Sets all channels to voltage mode (STG3008-FA and STG400x only). virtual void SetCurrentMode () Sets all channels to current mode (STG3008-FA and STG400x only). virtual void <u>SetMeasurementMode</u> (unsigned int channel) Sets a channel to measurement mode (STG3008-FA). virtual void <u>SetFAAmplification</u> (unsigned int amplification) virtual uint32 t GetFAAmplification () virtual void SetAutocalibrationDisabled (unsigned int channel, bool enable) virtual bool GetAutocalibrationDisabled (unsigned int channel) virtual void SetElectrodeMode (uint32 t electrode, array< ElectrodeModeEnumNet >^mode) Puts an electrode in either automatic or manual mode. virtual void SetElectrodeMode (uint32 t electrode, ElectrodeModeEnumNet mode) virtual uint32 t GetElectrodeMode (uint32 t electrode) Gets the mode an electrode is in. virtual void SetElectrodeDacMux (uint32 t electrode, uint32 t index, array< uint32 t >^dac) Defines the DAC to use for an electrode. virtual void <u>SetElectrodeDacMux</u> (uint32 t electrode, uint32 t index, uint32 t dac) virtual uint32_t GetElectrodeDacMux (uint32_t electrode, uint32_t index) Gets the DAC which is used for an electrode. virtual void SetElectrodeEnable (uint32 t electrode, uint32 t index, array< bool >^enable) Enables or disables the stimulation switch for an electrode. virtual void SetElectrodeEnable (uint32 t electrode, uint32 t index, bool enable) virtual bool GetElectrodeEnable (uint32 t electrode, uint32 t index) Gets weather an electrode is enabled or disabled for stimulation. virtual void SetBlankingEnable (unsigned int electrode, bool enable) Defines whether an electrode should be blanked while stimulation is in progress. virtual void SetBlankingEnable (unsigned int electrode, array bool >^enable) virtual bool GetBlankingEnable (unsigned int electrode) Gets whether an electrode should be blanked while stimulation is in progress. virtual void <u>SetEnableAmplifierProtectionSwitch</u> (unsigned int electrode, bool enable) Defines whether the Amplifier Protection Switch is openend while stimulation is in progress. virtual void SetEnableAmplifierProtectionSwitch (unsigned int electrode, array< bool >^enable) virtual bool GetEnableAmplifierProtectionSwitch (unsigned int electrode) Gets whether the Amplifier Protection Switch is openend while stimulation is in progress. virtual uint32 t GetNumberOfStimulationElectrodes () virtual void <u>SetTriggerSource</u> (unsigned int triggernum, TriggerSourceEnumNet triggersource, int bitnum offset)

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virtual void SetTriggerSource (unsigned int triggernum, TriggerSourceEnumNet triggersource) virtual TriggerSourceEnumNet GetTriggerSource (unsigned int triggernum) virtual void SetListmodeIndexRange (unsigned int Sideband, unsigned int StartIndex, unsigned int EndIndex, unsigned int Mode) virtual void GetListmodeIndexRange (unsigned int Sideband, unsigned int &StartIndex, unsigned int &EndIndex, unsigned int &Mode) virtual void SetListmodeTriggerSource (unsigned int Sideband, TriggerSourceEnumNet Triggersource, int bitnum offset) virtual void SetListmodeTriggerSource (unsigned int Sideband, TriggerSourceEnumNet Triggersource) virtual TriggerSourceEnumNet GetListmodeTriggerSource (unsigned int Sideband) virtual void <u>ListModeSendStart</u> (unsigned int SidebandMask) virtual void <u>ListModeSendStop</u> (unsigned int SidebandMask) virtual void <u>SetHeadstage</u> (unsigned int headstage) virtual uint32 t GetHeadstage () virtual void <u>SetDacAmplificationFactor</u> (uint32 t DacNumber, double Factor)

Detailed Description

Base class for the Stg200x.

From this class all STG related classes are derived: UsbNetDll::CStg200xDownloadBasicNet UsbNetDll::CStg200xDownloadNet for Download Mode and UsbNetDll::CStg200xStreamingNet for Streaming Mode. CStg200xBasicNet is the base class to control MCS STG device.

Set the amplification factor for a DAC. virtual double GetDacAmplificationFactor (uint32_t DacNumber)
Get the amplification factor for a DAC.

Constructor & Destructor Documentation

virtual ~CStg200xBasicNet() [virtual]

The destructor.

Member Function Documentation

void GetAnalogRanges (int channel, [Out] int% URange,

Class List Page 20 of 86

```
[Out] int% IRange
```

Gets the range of the analog outputs.

Parameters:

```
channel The channel which is queried.
URange The Voltage range in mV.
IRange The Current range in uA.
```

```
void GetAnalogResolution ( int channel, [Out] int% URes, [Out] int% IRes
```

Gets the resolution of the analog outputs.

Parameters:

channel The channel which is queried.

<param name="URes> The Voltage resolution in mV.</param> <param name="IRes> The Current
resolution in uA.

```
virtual bool <u>GetAutocalibrationDisabled</u> (unsigned int channel) [virtual] virtual bool <u>GetBlankingEnable</u> (unsigned int electrode) [virtual]
```

Gets whether an electrode should be blanked while stimulation is in progress.

Parameters:

electrode The electrode number.

Returns:

true if blanking is enabled while stimulation is in progress.

```
virtual int32_t GetCurrentRangeInNanoAmp ( uint32_t channel ) [virtual]
```

Gets the Current Range of the specified channel in Nanoamps.

Parameters:

channel Channel which is queried.

Returns:

The Current Range of the specified channel in Nanoamps.

```
virtual int32_t GetCurrentResolutionInNanoAmp ( uint32 t channel ) [virtual]
```

Gets the Current Resolution of the specified channel in Nanoamps.

Class List Page 21 of 86

Parameters:

channel Channel which is queried.

Returns:

The Current Resolution of the specified channel in Nanoamps.

```
virtual double <a href="GetDacAmplificationFactor">GetDacAmplificationFactor</a> (uint32 t DacNumber) [virtual]
```

Get the amplification factor for a DAC.

Parameters:

DacNumber The number of the DAC.

Returns:

the amplification factor for the DAC queried, range is from -1.99999 to +1.99999.

```
virtual int32 t GetDACResolution() [virtual]
```

Gets number of bits of the DAC resolution.

Returns:

The DAC resolution in bits.

```
virtual uint32_t <a href="mailto:GetElectrodeDacMux">GetElectrodeDacMux</a> ( uint32_t <a href="mailto:electrode">electrode</a>, uint32_t <a href="mailto:index">index</a> ) [virtual]
```

Gets the DAC which is used for an electrode.

Parameters:

electrode The electrode number.

index The index for listmode.

Returns:

The DAC in use, can be 1, 2 or 3. If the electrode is grounded 0 is returned.

```
virtual bool <a href="Mailto:GetElectrodeEnable">GetElectrodeEnable</a> ( uint32_t electrode, uint32_t index
) [virtual]
```

Gets weather an electrode is enabled or disabled for stimulation.

Parameters:

electrode The electrode number.

index The index for listmode.

Returns:

true if the electrode is enabled, false if it is disabled.

Class List Page 22 of 86

```
virtual uint32 t GetElectrodeMode ( uint32 t electrode ) [virtual]
```

Gets the mode an electrode is in.

Parameters:

electrode The electrode number.

Returns:

0 for automatic and 3 for manual mode.

```
virtual bool <a href="Methode">GetEnableAmplifierProtectionSwitch</a> (unsigned int electrode) [virtual]
```

Gets whether the Amplifier Protection Switch is openend while stimulation is in progress.

Parameters:

electrode The electrode number.

Returns:

true if the switch is to be opened, false if it is closed while stimulation is in progress.

Gets the amount of memory available in the currently selected segment of the STG.

Returns:

The memory available in the currently selected segment in bytes.

```
virtual uint32 t GetNumberOfAnalogChannels() [virtual]
```

Gets the Number of available analog channels of the device.

Returns:

The number of analog channels.

```
virtual uint32 t GetNumberOfHWDACPaths() [virtual]
```

Gets the Number of HW Stimulation DACs of the device.

Returns:

Class List Page 23 of 86

The number of independent HW Stimulation outputs.

```
virtual uint32_t GetNumberOfStimulationElectrodes ( ) [virtual]
virtual uint32 t GetNumberOfSyncoutChannels ( ) [virtual]
```

Gets the Number of available syncout channels of the device.

Returns:

The number of analog channels.

```
virtual uint32 t GetNumberOfTriggerInputs() [virtual]
```

Gets the Number of trigger inputs of the device.

Returns:

The number of trigger inputs.

```
uint32 t GetOutputRate ( )
```

Queries the output rate of the STG. Valid rates are from 1000 Hz to 50000 Hz.

Returns:

Returns the current output rate in Hz.

Queries Download information from the STG.

If download information was stored by the use of CStg200xBasic::SetStgProgramInfo, this function can be used to query the timestamp and filename of the last download.

Parameters:

```
[out] IsProgrammed flag wether download information is valid
[out] timestamp timestamp of last download
[out] filename filename of the downlaoded waveform

void GetStgProgramInfo (bool% IsProgrammed,
DateTime% timestamp,
String^ % filename,
Guid% guid
```

Queries Download information from the STG.

Class List Page 24 of 86

If download information was stored by the use of CStg200xBasic::SetStgProgramInfo, this function can be used to query the timestamp and filename of the last download.

Parameters:

```
[out] IsProgrammed flag wether download information is valid
[out] timestamp timestamp of last download
[out] filename filename of the downlaoded waveform

void GetStgVersionInfo ( [Out] String^ % SwVersion,
[Out] String^ % HwVersion
)
```

Queries software and hardware version.

Parameters:

SwVersion The current Software Version of the STG. HwVersion The Hardware Revision of the STG.

```
uint32_t GetTotalMemory ( )
```

Gets the total amount of memory available on the STG (all segments).

Returns:

The total memory available on the STG in bytes.

```
virtual TriggerSourceEnumNet <u>GetTriggerSource</u> (unsigned int triggernum ) [virtual] virtual int32 t <u>GetVoltageRangeInMicroVolt</u> (uint32 t channel ) [virtual]
```

Gets the Voltage Range of the specified channel in Microvolts.

Parameters:

channel Channel which is queried.

Returns:

The Voltage Range of the specified channel in Microvolts.

```
virtual int32 t GetVoltageResolutionInMicroVolt (uint32 t channel) [virtual]
```

Gets the Voltage Resolution of the specified channel in Microvolts.

Parameters:

channel Channel which is queried.

Returns:

The Voltage Resolution of the specified channel in Microvolts.

```
virtual void <u>ListModeSendStart</u> (unsigned int SidebandMask) [virtual]
```

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```
virtual void ListModeSendStop ( unsigned int SidebandMask ) [virtual]
void SendStart ( uint32_t triggermap )
```

Start (Trigger) the STG. The startup delay is in the range of a few ms.

Parameters:

triggermap A bitmap of triggers which will be started.

```
void SendStop (uint32 t triggermap)
```

Stop some or all triggers of the STG.

Parameters:

triggermap A bitmap of triggers which will be stopped.

```
void SendStop ( uint32_t triggermap, int options )
```

Stop some or all triggers of the STG.

Parameters:

triggermap A bitmap of triggers which will be stopped.

options

bitmap of options, currently only STOP_OPTION_SAVESTOP (0x80) is defined, which bypasses the stop commands when a syncout assossiated with a given sync-out has bit 1 (0x02) set. Can be used e.g. to prevent a stop while a biphasic stimulation pulse is active..

```
virtual void SetAutocalibrationDisabled (unsigned int channel, bool enable
) [virtual]
virtual void SetBlankingEnable (unsigned int electrode,
```

bool enable
) [virtual]

Defines whether an electrode should be blanked while stimulation is in progress.

Parameters:

```
electrode The electrode number.
```

enable True if the switch is to be opened, false if it is to remain closed while stimulation is in progress.

Class List Page 26 of 86

Sets a channel to current mode (STG3008-FA and STG400x only).

Parameters:

channel The channel to change.

```
virtual void SetCurrentMode ( ) [virtual]
```

Sets all channels to current mode (STG3008-FA and STG400x only).

```
virtual void SetDacAmplificationFactor ( uint32_t DacNumber, double Factor
) [virtual]
```

Set the amplification factor for a DAC.

Parameters:

DacNumber The number of the DAC.

Factor the amplification factor for that DAC, range is from -1.99999 to +1.99999.

Defines the DAC to use for an electrode.

Parameters:

```
electrode The electrode number.
```

```
dac The DAC to use, can be 1, 2 or 3. To ground an electrode, use 0.
```

Enables or disables the stimulation switch for an electrode.

Parameters:

```
electrode The electrode number.
```

index The index for listmode.

enable 1 to enable the electrode, 0 to disable.

Class List Page 27 of 86

Puts an electrode in either automatic or manual mode.

Parameters:

```
electrode The electrode number.

mode 0 for automatic and 3 for manual mode.

virtual void SetElectrodeMode ( uint32_t electrode,

ElectrodeModeEnumNet mode

) [virtual]

virtual void SetEnableAmplifierProtectionSwitch ( unsigned int electrode,

bool enable

) [virtual]
```

Defines whether the Amplifier Protection Switch is openend while stimulation is in progress.

Parameters:

```
electrode The electrode number.
                True if the switch is to be opened, false if it is to remain closed while stimulation is in
      enable
                progress.
virtual void SetEnableAmplifierProtectionSwitch (unsigned int
                                                                    electrode.
                                                    arrav< bool >^ enable
                                                                     [virtual]
virtual void <a href="SetFAAmplification">SetFAAmplification</a> (unsigned int amplification) [virtual]
virtual void <a>SetHeadstage</a> (unsigned int headstage) [virtual]
virtual void SetListmodeIndexRange (unsigned int Sideband,
                                       unsigned int StartIndex,
                                       unsigned int EndIndex,
                                       unsigned int Mode
                                                     [virtual]
virtual void SetListmodeTriggerSource (unsigned int
                                                                   Sideband,
                                          TriggerSourceEnumNet Triggersource,
                                          int
                                                                   bitnum offset
                                                                    [virtual]
virtual void SetListmodeTriggerSource (unsigned int
                                                                   Sideband,
```

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```
\label{thm:control_trigger} TriggerSource EnumNet \begin{tabular}{ll} \it TriggerSource \\ \it ) & [virtual] \\ \it virtual void \begin{tabular}{ll} \it SetMeasurementMode (unsigned int \it channel ) [virtual] \\ \it virtual \end{tabular}
```

Sets a channel to measurement mode (STG3008-FA).

Parameters:

channel The channel to change.

```
void SetOutputRate ( uint32 t rate )
```

Change the output rate of the STG. Valid rates are from 1000 Hz to 50000 Hz.

Parameters:

rate The new output rate in Hz.

```
void SetStgProgramInfo ( DateTime timestamp, String^ filename, Guid guid )
```

Store Download information in the STG.

This function can be used to store the filename and timestamp of the last download for later query. It has no effect on the output of the waveform.

Parameters:

```
[in] timestamp timestamp of download
```

[in] filename of the downloaded waveform.

```
virtual void SetTriggerSource (unsigned int triggernum,

TriggerSourceEnumNet triggersource,
int bitnum_offset
) [virtual]

virtual void SetTriggerSource (unsigned int triggernum,
TriggerSourceEnumNet triggersource
) [virtual]

virtual void SetVoltageMode (unsigned int channel) [virtual]
```

Sets a channel to voltage mode (STG3008-FA and STG400x only).

Parameters:

channel The channel to change.

```
virtual void <u>SetVoltageMode() [virtual]</u>
```

Class List Page 29 of 86

Sets all channels to voltage mode (STG3008-FA and STG400x only).

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- CStg200xDownloadBasicNet

Public Member Functions | Properties

CStg200xDownloadBasicNet Class Reference

Base class for the STG200x series download mode. More...

Inheritance diagram for CStg200xDownloadBasicNet:



List of all members.

Public Member Functions

```
virtual void <u>SetupTrigger</u> (uint32 t first trigger, array< uint32 t >^channelmap, array<
             uint32 t >^syncoutmap, array< uint32 t >^repeat)
             Configures the trigger settings for the STG. Note that all memory segments have
             their own trigger setting.
       void GetTrigger (array< uint32 t > \%channelmap, array< uint32 t > \%syncoutmap,
             array < uint32 t > ^wrepeat)
             Queries the trigger settings for the STG. Note that all memory segments have
            their own trigger setting.
      void GetSweepCount (array< uint32 t >^%sweeps, array< uint32 t >^%triggers)
             Get the sweep and trigger count of the STG.
      void ForceStatusEvent()
             Force a status event.
      void ResetStatus (uint32 t triggermap)
             Reset the status flag.
       void <a href="SetCapacity">SetCapacity</a> (array< uint32_t >^channelCapacity, array< uint32_t
            >^syncCapacity)
             Configures the memory layout of the current segment in download mode.
       void
             GetCapacity ([Out] array< uint32 t > \%channelCapacity, [Out] array< uint32 t
```

Class List Page 30 of 86

```
>^%syncCapacity)
            Queries the memory layout of the current segment in download mode.
virtual void <a href="ClearSyncData">ClearSyncData</a> (uint32_t channel)
            Delete a SyncOut pattern from STG memory.
virtual void SendSyncData (uint32 t channel, array< WORD >^pData, array< uint64 t
            >^tData)
            Uploads sync output data to the STG.
virtual void ClearChannelData (uint32 t channel)
            Delete a Stimulus Pattern from STG memory.
virtual void SendChannelData (uint32_t channel, array< WORD >^pData, array< uint64 t
            >^tData)
            Uploads analog data (stimulus patterns) to the STG.
virtual void EnableAutoReset ()
            Enable AutoReset of the STG Status.
virtual void DisableAutoReset ()
            Disable AutoReset of the STG Status.
virtual void SetupRetriggerMode (int8 t trigger, RetriggerActionEnumNet same trigger,
            RetriggerActionEnumNet other trigger)
            Define the action on triggers while the STG is running.
virtual void SetupRetriggerMode (RetriggerActionEnumNet same trigger,
            RetriggerActionEnumNet other trigger)
            Define the action on triggers while the STG is running.
```

Properties

CStimulusFunctionNet^

Stimulus [get]

Detailed Description

Base class for the STG200x series download mode.

Member Function Documentation

virtual void <u>ClearChannelData</u> (uint32 t channel) [virtual]

Delete a Stimulus Pattern from STG memory.

Parameters:

[in] channel specifies the channel to clear.

virtual void ClearSyncData (uint32 t channel) [virtual]

Delete a SyncOut pattern from STG memory.

Class List Page 31 of 86

Parameters:

[in] channel specifies the syncout channel to clear.

```
virtual void DisableAutoReset() [virtual]
```

Disable AutoReset of the STG Status.

If autoreset is disabled, the STG status switches to FINISHED after the defined number of sweeps is finished. To switch back to the IDLE status, use CStg200xDownload::ResetStatus()

```
virtual void EnableAutoReset() [virtual]
```

Enable AutoReset of the STG Status.

This is the default on power up. If autoreset is enabled, the STG status switches to FINISHED only for one poll cycle after this, it switches to IDLE automatically.

```
void ForceStatusEvent ( )
```

Force a status event.

Force the DLL to create a PollMessage event and to call the pPollCallback function, even if no new status information is available.

Queries the memory layout of the current segment in download mode.

For each segment, the memory layout has to be defined. Each channel and sync output can be given an individual amount of memory space as needed by the application.

Parameters:

```
[in] channelCapacity is a list of memeory sizes, with one entry per channel
```

[in] syncCapacity is a list of memeory sizes, with one entry per syncout

Get the sweep and trigger count of the STG.

- The triggercount tells how many times each trigger was active and is reset to zero on download of new channel data.
 - o The sweepcount tells how many times each trigger was already repeated. This count is set to zero on trigger and counts up to repeat in CStg200xDownloadBasicNet::SetupTrigger.

Class List Page 32 of 86

Parameters:

[out] sweeps on return contains the number of sweeps for each trigger [out] triggers on return contains the number of trigger events seen for each trigger

Queries the trigger settings for the STG. Note that all memory segments have their own trigger setting.

Parameters:

channelmap For each trigger, a bitmap of channels that belong to this trigger.

syncoutmap For each trigger, a bitmap of syncouts that belong to this trigger.

repeat For each trigger, define the number of times this trigger should be repeated.

```
void ResetStatus ( uint32 t triggermap )
```

Reset the status flag.

Parameters:

[in] triggermap bitmap of trigger for which to reset the status

```
virtual void SendChannelData ( uint32_t channel, array< WORD >^ pData, array< uint64_t >^ tData
) [virtual]
```

Uploads analog data (stimulus patterns) to the STG.

Sends datapoints to a given channel on the STG. The list of datapoints will be sent to the selected channel. Data previously sent to the channel is overwritten.

Each datapoint is represented by an integer value in the range from 0 to 4095 (bit 0 to 11), its sign is taken from bit 12, 0 is for positive amplitude, and 1 for negative amplitude Bits 13 to 15 have to be zero.

The duration is given as a list of 64 bit integers. Durations are given in units of μ s. The STG has a resolution of 20 μ s. If your application cannot handle 64 bit integers, use the STG200x SendChannelData32() call instead.

Parameters:

```
[in] channel specifies the channel to append the data to.
```

[in] pData a list of datapoints

[in] tData a list of durations as int64 t. The time is given in units of μs.

```
virtual void SendSyncData (uint32 t channel,
```

Class List Page 33 of 86

Uploads sync output data to the STG.

Sends sync output data to a given channel on the STG. The list of datapoints will be sent to the selected sync output channel. Sync output data previously sent to the channel is overwritten.

Each datapoint is represented by an integer value and can be either 0 or 1.

The duration is given as a list of 64 bit integers. Durations are given in units of μ s. The STG has a resolution of 20 μ s. If your application can not handle 64 bit integers, use the STG200x_SendSyncData32() call instead.

Parameters:

```
    [in] channel specifies the sync output channel to append the data to
    [in] pData a list of datapoints
    [in] tData a list of durations as int64_t. The time is given in units of μs.
    void SetCapacity (array< uint32_t >^ channelCapacity, array< uint32_t >^ syncCapacity
```

Configures the memory layout of the current segment in download mode.

For each segment, the memory layout has to be defined. Each channel and sync output can be given an individual amount of memory space as needed by the application. Make sure the sum does not exceed the memory which is assigned to the currently selected segment.

Parameters:

Define the action on triggers while the STG is running.

The STG has three options how to handle a successive trigger while a trigger is active.

- stop this trigger (default action)
- restart this trigger
- ignore the signal

Parameters:

Class List Page 34 of 86

```
[in] trigger The trigger to change.

[in] same_trigger Action for successive triggers in Normal Mode, and for triggers to the currently selected segment in Multi-File Mode.

[in] other_trigger Action for successive triggers in Multi-File Mode for a trigger on a segment not currently selected. Not used in Normal Mode.

virtual void SetupRetriggerMode (RetriggerActionEnumNet same_trigger,

RetriggerActionEnumNet other_trigger

) [virtual]
```

Define the action on triggers while the STG is running.

The STG has three options how to handle a successive trigger while a trigger is active.

- stop this trigger (default action)
- restart this trigger
- ignore the signal

Parameters:

Configures the trigger settings for the STG. Note that all memory segments have their own trigger setting.

[virtual]

Parameters:

```
first_trigger The number of the first trigger to change.

channelmap For each trigger, a bitmap of channels that belong to this trigger.

syncoutmap For each trigger, a bitmap of syncouts that belong to this trigger.

repeat For each trigger, define the number of times this trigger should be repeated.
```

Property Documentation

CStimulusFunctionNet^ Stimulus [get]

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CStg200xDownloadNet Class Reference

Main class for the STG download mode. More...

Inheritance diagram for CStg200xDownloadNet:



List of all members.

Public Member Functions

CStg200xDownloadNet()

CStg200xDownloadNet (OnStg200xPollStatus^ pollStatus)

Use this constructor if you want to use the status callback.

~CStg200xDownloadNet()

void PrepareAndSendData (uint32_t channel, array< int32_t >^Amplitude, array<

uint64_t >^Duration, STG_DestinationEnumNet dest_type)

Prepare and send data to a given channel on the STG.

void SendSegmentDefine (array< uint32 t >^segment list)

Defines the segment memory layout of the STG.

void <u>SendSegmentStart</u> (uint32_t triggermap, uint32_t segment, uint32_t segmentflags)

Switchs segment and starts trigger.

void <u>SendSegmentSelect</u> (uint32_t segment, uint32_t segmentflags)

Switchs segment.

void EnableMultiFileMode (uint32 t submode)

Enable the Multi-File mode of the STG.

void <u>DisableMultiFileMode</u> ()

Disable the Multi-File mode of the STG.

uint32 t QueryTriggerstatus ()

void <u>SetOutputMap</u> (uint32 t ChannelLayout[])

int32 t GetModuleTemp (unsigned int channel)

uint32_t GetModuleCurrent (unsigned int channel)

Events

Class List Page 36 of 86

OnStg200xPollStatus^

Stg200xPollStatusEvent

OnMwPollStatus^ MwPollStatusEvent

Detailed Description

Main class for the STG download mode.

This class implements the STG download mode interface

Constructor & Destructor Documentation

<u>CStg200xDownloadNet</u> ()

CStg200xDownloadNet (OnStg200xPollStatus^ pollStatus)

Use this constructor if you want to use the status callback.

~<u>CStg200xDownloadNet</u>()

Member Function Documentation

void DisableMultiFileMode ()

Disable the Multi-File mode of the STG.

Switch the STG back to normal mode. In this mode, trigger inputs are assigned to channels, not to segments.

void EnableMultiFileMode (uint32 t submode)

Enable the Multi-File mode of the STG.

In Multi-File mode, the trigger inputs switch between segments. To use this mode, define four segments (number 0 to 3) and fill each segment with a stimulus pattern.

Now a trigger on trigger input 1 switches the STG to the first segment and starts all triggers in this segment. Likewise, a trigger on trigger input 2, 3 and 4 selects the respective segment and start all triggers in this segment So the Multi-File Mode can be used to predefine up to four different stimuli which can be selected without the need for a computer connection.

Parameters:

submode The submode.

Class List Page 37 of 86

Prepare and send data to a given channel on the STG.

Each datapoint is represented by an signed 32bit integer value. When using voltage stimulation, the values are in multiple of 1 uV, thus the possible range is += 2000 V. When using current stimulation, the values are in multiple of 1 nA, this the possible range is += 2000 mA.

The duration is given as a list of 64 bit integers. Durations are given in units of μ s. The STG has a resolution of 20 μ s.

Parameters:

channel The channel number to send data to.

Amplitude A list of datapoints as int32.

Duration A list of durations as uint 64. The time is given in units of μ s.

dest_type specifies wheather the data is for syncout, current or voltage stimulation.

```
uint32_t QueryTriggerstatus ( )
void SendSegmentDefine ( array< uint32 t >^ segment list )
```

Defines the segment memory layout of the STG.

On reset, the STG has one segment containing all available memory.

With this command, the STG memory can be devided into several segments. Each segment can be filled with stimulus data.

Parameters:

```
segment_list The List of memory sizes (one per segment).

void <u>SendSegmentSelect</u> ( uint32_t segment, uint32_t segmentflags
```

Switchs segment.

Parameters:

```
segment The number of the segment to select. segmentflags A bitmap of flags, bit 1: assign all channels to the trigger number equal to the segment.
```

Class List Page 38 of 86

```
void <u>SendSegmentStart</u> ( uint32_t triggermap, uint32_t segment, uint32_t segmentflags
```

Switchs segment and starts trigger.

Parameters:

triggermap A bitmap of triggers that will be started.

segment The number of the segment to select.

segmentflags A bitmap of flags, bit 1: assign all channels to the trigger number equal to the segment.

void SetOutputMap (uint32 t ChannelLayout[])

Event Documentation

OnMwPollStatus^ MwPollStatusEvent
OnStg200xPollStatus^ Stg200xPollStatusEvent

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Public Member Functions | Events

CStg200xStreamingNet Class Reference

Main class for the STG streaming mode. More...

Inheritance diagram for CStg200xStreamingNet:



List of all members.

Public Member Functions

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CStg200xStreamingNet (uint32 t ringbuffer size) Constructor. <u>CStg200xStreamingNet</u> (uint32_t ringbuffer_size, <u>OnStg200xDataHandler</u>^ dataHandler, OnStg200xErrorHandler^ errorHandler) Constructor. ~CStg200xStreamingNet () Destructor. void EnableContinousMode () Enable the continous mode of the STG. void DisableContinousMode () Disable the continous mode of the STG. uint32 t GetFramesDone () Queries the number of frames sent to the STG. uint32 t GetFramesBuffered (uint32 t trigger) Queries the number of frames currently buffered in STG Memory. uint32 t GetCurrentRate (uint32 t trigger) Queries the rate at which frames are currently sent to the STG. void <u>SetupTrigger</u> (array< uint32 t >^channelmap, array< uint32 t >^syncoutmap, array< uint32 t >^digoutmap, array< uint32 t >^autostart, array< uint32 t >^callback threshold) Configures the trigger settings for the STG. void GetTrigger ([Out]array< uint32 t>^%channelmap,[Out]array< uint32 t>^% syncoutmap, [Out] array $< uint32 \ t > \%$ digoutmap, [Out] array $< uint32 \ t > \%$ autostart) Queries the trigger settings for the STG. void SetCapacity (array< uint32 t >^dwTriggerCapacity) Configures the memory layout for the streaming mode of the STG. void GetCapacity ([Out]array< uint32 t >^%dwTriggerCapacity) Queries the memory layout for the streaming mode of the STG. uint32 t EnqueueData (uint32 t channel, array< short >^data) Sends data to the STG for a given channel. uint32_t GetDataQueueSpace (uint32_t channel) Queries the space availabe in the PC memory for a given data channel. uint32 t EnqueueSyncout (uint32 t channel, array< WORD >^data) Sends syncout data to the STG for a given channel. uint32 t GetSyncoutQueueSpace (uint32 t channel) Queries the space availabe in the PC memory for a given syncout channel. void StartLoop () Starts the streaming mode. void StopLoop () Stops the streaming mode.

Events

OnStg200xDataHandler^

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 $\frac{OnStg200xDataHandlerEvent}{OnStg200xErrorHandler}^{onStg200xErrorHandler}$

Detailed Description

Main class for the STG streaming mode.

This class implements the STG streaming mode interface

Constructor & Destructor Documentation

```
<u>CStg200xStreamingNet</u> ( uint32_t ringbuffer_size )
```

Constructor.

Parameters:

```
ringbuffer size The ringbuffer size size of the ringbuffer in PC memory.
```

Constructor.

Parameters:

```
ringbuffer_size The ringbuffer_size size of the ringbuffer in PC memory.
dataHandler The data Handler callback.
errorHandler The error Handler callback.
```

```
~CStg200xStreamingNet()
```

Destructor.

Member Function Documentation

```
void <u>DisableContinousMode</u>( )
```

Disable the continous mode of the STG.

Defines how the STG handles buffer underruns. If continous mode is switched off, the triggers are stopped

Class List Page 41 of 86

automatically when a buffer runs empty.

```
void EnableContinousMode ( )
```

Enable the continous mode of the STG.

Defines how the STG handles buffer underruns. buffer runs empty. If continous mode is switched off, the triggers are stopped automatically when a buffer runs empty.

Sends data to the STG for a given channel.

Parameters:

channel The channel number to send data to. data A pointer to the data.

Returns:

Returns the number of enqueued bytes.

```
uint32_t EnqueueSyncout ( uint32_t channel, array< WORD >^ data
)
```

Sends syncout data to the STG for a given channel.

Parameters:

channel The channel number to send data to. data A pointer to the data.

Returns:

Returns 0 on success.

```
void GetCapacity ([Out] array< uint32 t>^0% dwTriggerCapacity)
```

Queries the memory layout for the streaming mode of the STG.

In streaming mode, each trigger can be given an individual amount of memory space as needed by the application.

Parameters:

dwTriggerCapacity A list of memory sizes in bytes, one with entry for each trigger.

```
uint32_t GetCurrentRate ( uint32_t trigger )
```

Queries the rate at which frames are currently sent to the STG.

Class List Page 42 of 86

Parameters:

trigger The trigger number to query.

Returns:

Returns the rate at which frames are sent in frames 1/8 ms times 2^14 .

```
uint32 t GetDataQueueSpace (uint32 t channel)
```

Queries the space availabe in the PC memory for a given data channel.

Parameters:

channel The channel number to query.

Returns:

Returns number of data points for which there is space.

```
uint32 t GetFramesBuffered (uint32 t trigger)
```

Queries the number of frames currently buffered in STG Memory.

Parameters:

trigger The trigger number to query.

Returns:

Returns the number of frames currently buffered in STG memory.

```
uint32 t GetFramesDone ( )
```

Queries the number of frames sent to the STG.

Returns:

Returns the number of frames already sent to the STG.

```
uint32 t GetSyncoutQueueSpace (uint32 t channel)
```

Queries the space availabe in the PC memory for a given syncout channel.

Parameters:

channel The channel number to query.

Returns:

Returns number of data points for which there is space.

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Queries the trigger settings for the STG.

Parameters:

channelmap For each trigger, a bitmap of channels which belong to this trigger. syncoutmap For each trigger, a bitmap of syncout which belong to this trigger. digoutmap For each trigger, a bitmap of digout which belong to this trigger. autostart For each trigger, define whether this trigger should autostart.

```
void SetCapacity ( array< uint32 t >^ dwTriggerCapacity )
```

Configures the memory layout for the streaming mode of the STG.

In streaming mode, each trigger can be given an individual amount of memory space as needed by the application. Make sure the sum does not exceed the total memory available.

Parameters:

dwTriggerCapacity A list of memory sizes in bytes, one with entry for each trigger.

Configures the trigger settings for the STG.

Parameters:

channelmap For each trigger, a bitmap of channels which belong to this trigger.

For each trigger, a bitmap of syncout which belong to this trigger digoutmap For each trigger, a bitmap of digout which belong to this trigger.

For each trigger, define whether this trigger should autostart.

callback_threshold The callback_threshold for each trigger, when the data handler should be called in precent of the buffer level.

```
void StartLoop ( )
```

Starts the streaming mode.

```
void StopLoop ( )
```

Stops the streaming mode.

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Event Documentation

OnStg200xDataHandler^ OnStg200xDataHandlerEvent OnStg200xErrorHandler^ OnStg200xErrorHandlerEvent

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Public Member Functions | Properties

CUsbExceptionNet Class Reference

Exception class that is thrown in case of an USB error. More...

List of all members.

Public Member Functions

CUsbExceptionNet (uint32_t status)

Constructor of a CUsbException.

CUsbExceptionNet (uint32 t status, String^ message)

Properties

uint32 t Status [get]

Detailed Description

Exception class that is thrown in case of an USB error.

Constructor & Destructor Documentation

CUsbExceptionNet (uint32_t status)

Constructor of a CUsbException.

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Parameters:

```
status the status number
```

Property Documentation

```
uint32 t Status [get]
```

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Public Member Functions | Public Attributes

DeviceIdNet Struct Reference

Device Id. More...

List of all members.

Public Member Functions

DeviceIdNet ()

DeviceIdNet (VendorIdEnumNet vendor, ProductIdEnumNet product, int bcd,

McsBusTypeEnumNet bustype)

<u>DeviceIdNet</u> (<u>DeviceIdNet</u>% deviceId)

<u>DeviceIdNet</u> <u>operator=</u> (<u>DeviceIdNet</u>% deviceId)

Public Attributes

VendorIdEnumNet IdVendor

ProductIdEnumNet IdProduct

int BcdDevice

McsBusTypeEnumNet BusType

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Detailed Description

Device Id.

Constructor & Destructor Documentation

Member Function Documentation

<u>DeviceIdNet</u> operator= (<u>DeviceIdNet</u>% deviceId)

Member Data Documentation

int **BcdDevice**

McsBusTypeEnumNet <u>BusType</u> ProductIdEnumNet <u>IdProduct</u>

 $VendorIdEnumNet\ \underline{IdVendor}$



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Public Member Functions | Static Public Member Functions

DriverVersionNet Class Reference

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Class gives firmware versions of the device's firmware destinations. More...

List of all members.

Public Member Functions

<u>DriverVersionNet</u>()

Contructor.

~DriverVersionNet ()

Destructor.

unsigned int GetStatus (CFirmwareDestinationNet dest)

Get status of firmware destination.

unsigned int GetStatus (unsigned int index)

Get status of firmware destination.

unsigned int GetVersionInt (CFirmwareDestinationNet dest)

Get the version number of firmware destination (major in high word, minor in low word)

unsigned int GetVersionInt (unsigned int index)

Get the version number of firmware destination (major in high word, minor in low word)

unsigned int GetMajor (CFirmwareDestinationNet dest)

Get the major version number of firmware destination.

unsigned int GetMajor (unsigned int index)

Get the major version number of firmware destination.

unsigned int GetMinor (CFirmwareDestinationNet dest)

Get the minor version number of firmware destination.

unsigned int GetMinor (unsigned int index)

Get the minor version number of firmware destination.

unsigned int GetNumEntries ()

Get the number of available firmware destinations.

String[^] GetVersionString (CFirmwareDestinationNet dest)

Get the version as a string in the format Major.Minor.

String[^] GetVersionString (unsigned int index)

Get the version as a string in the format Major.Minor.

CFirmwareDestinationNet GetDestinationCode (unsigned int index)

Get CFirmwareDestinationNet.

String[^] GetDestinationName (CFirmwareDestinationNet dest)

Get firmware destination name.

String[^] GetDestinationName (unsigned int index)

Get firmware destination name.

Static Public Member Functions

static String[^] DriverVersionNet::FormatVersion (unsigned int v)

Class List Page 48 of 86

Detailed Description

Class gives firmware versions of the device's firmware destinations.

Constructor & Destructor Documentation

<u>DriverVersionNet</u>()
Contructor.

~<u>DriverVersionNet</u>()

Destructor.

Member Function Documentation

static String $^$ DriverVersionNet::FormatVersion (unsigned int v) [static] CFirmwareDestinationNet <u>GetDestinationCode</u> (unsigned int *index*)

Get CFirmwareDestinationNet.

Parameters:

index by index of firmware destination

String \(^{\text{GetDestinationName}}\) (CFirmwareDestinationNet \(dest\))

Get firmware destination name.

Parameters:

dest by CFirmwareDestionationNet

String \(^\) GetDestinationName (unsigned int index)

Get firmware destination name.

Parameters:

index by index of firmware destination

unsigned int GetMajor (CFirmwareDestinationNet dest)

Get the major version number of firmware destination.

Parameters:

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```
dest by CFirmwareDestionationNet
unsigned int <u>GetMajor</u> (unsigned int index )
Get the major version number of firmware destination.
Parameters:
      index by index of firmware destination
unsigned int GetMinor ( CFirmwareDestinationNet dest )
Get the minor version number of firmware destination.
Parameters:
      dest by CFirmwareDestionationNet
unsigned int GetMinor (unsigned int index)
Get the minor version number of firmware destination.
Parameters:
      index by index of firmware destination
unsigned int GetNumEntries ( )
Get the number of available firmware destinations.
unsigned int GetStatus ( CFirmwareDestinationNet dest )
Get status of firmware destination.
Parameters:
      dest by CFirmwareDestionationNet
unsigned int GetStatus (unsigned int index)
Get status of firmware destination.
Parameters:
      index by index of firmware destination
unsigned int GetVersionInt ( CFirmwareDestinationNet dest )
```

Get the version number of firmware destination (major in high word, minor in low word)

Parameters:

dest by CFirmwareDestionationNet

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```
unsigned int GetVersionInt (unsigned int index)
```

Get the version number of firmware destination (major in high word, minor in low word)

Parameters:

index by index of firmware destination

```
String \(^{\text{GetVersionString}}\) (CFirmwareDestinationNet \(dest\))
```

Get the version as a string in the format Major.Minor.

Parameters:

dest by CFirmwareDestionationNet

```
String \(^{\text{GetVersionString}}\) (unsigned int index )
```

Get the version as a string in the format Major.Minor.

Parameters:

index by index of firmware

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Static Public Attributes

FirmwareDestinationNames Class Reference

List of all members.

Static Public Attributes

```
static String^ DSP = genew String( "DSP" )
static String^ USB = genew String( "USB" )
static String^ MCU1 = genew String( "MCU1" )
static String^ MCSBUS1 = genew String( "McsBus1" )
static String^ MCSBUS2 = genew String( "McsBus2" )
```

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```
static String<sup>^</sup> MCSBUS3 = genew String("McsBus3")
static String<sup>^</sup> MCSBUS4 = genew String( "McsBus4" )
static String^ MCSBUS5 = gcnew String( "McsBus5" )
static String^ MCSBUS6 = genew String( "McsBus6" )
static String^ MCSBUS7 = genew String( "McsBus7" )
static String^ MCSBUS8 = genew String( "McsBus8")
static String^ MCSBUS9 = genew String( "McsBus9")
static String^ MCSBUS10 = gcnew String( "McsBus10" )
static String^ MCSBUS11 = genew String( "McsBus11" )
static String^ MCSBUS12 = gcnew String( "McsBus12" )
static String^ MCSBUS13 = gcnew String( "McsBus13" )
static String^ BUS1 MCSBUS1 = genew String("Bus1McsBus1")
static String\(^{\text{Pus1}}\) MCSBUS2 = gcnew String("Bus1McsBus2")
static String^ PIC = genew String( "PIC" )
static String^ PIC2 = genew String( "PIC2" )
static String^ PIC3 = genew String( "PIC3" )
static String^ PIC4 = genew String( "PIC4" )
static String^ Altera = gcnew String( "Altera" )
static String<sup>^</sup> FPGA2 = genew String( "FPGA2" )
static String<sup>^</sup> FPGA3 = genew String("FPGA3")
static String<sup>^</sup> FPGA4 = genew String( "FPGA4" )
static String<sup>^</sup> FPGA5 = genew String( "FPGA5" )
static String<sup>^</sup> FPGA6 = genew String( "FPGA6" )
```

Member Data Documentation

```
String ^ Altera = gcnew String( "Altera") [static]
String ^ BUS1 MCSBUS1 = gcnew String( "Bus1McsBus1") [static]
String ^ BUS1 MCSBUS2 = gcnew String( "Bus1McsBus2") [static]
String ^ DSP = gcnew String( "DSP") [static]
String ^ FPGA2 = gcnew String( "FPGA2") [static]
String ^ FPGA3 = gcnew String( "FPGA3") [static]
String ^ FPGA4 = gcnew String( "FPGA4") [static]
String ^ FPGA5 = gcnew String( "FPGA5") [static]
String ^ FPGA6 = gcnew String( "FPGA6") [static]
String ^ MCSBUS1 = gcnew String( "McsBus1") [static]
String ^ MCSBUS10 = gcnew String( "McsBus10") [static]
String ^ MCSBUS11 = gcnew String( "McsBus11") [static]
String ^ MCSBUS12 = gcnew String( "McsBus12") [static]
String ^ MCSBUS13 = gcnew String( "McsBus13") [static]
```

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```
String ^ MCSBUS2 = gcnew String( "McsBus2") [static]
String ^ MCSBUS3 = gcnew String( "McsBus3") [static]
String ^ MCSBUS4 = gcnew String( "McsBus4") [static]
String ^ MCSBUS5 = gcnew String( "McsBus5") [static]
String ^ MCSBUS6 = gcnew String( "McsBus6") [static]
String ^ MCSBUS7 = gcnew String( "McsBus7") [static]
String ^ MCSBUS7 = gcnew String( "McsBus7") [static]
String ^ MCSBUS8 = gcnew String( "McsBus8") [static]
String ^ MCSBUS9 = gcnew String( "McsBus9") [static]
String ^ MCU1 = gcnew String( "MCU1") [static]
String ^ PIC = gcnew String( "PIC") [static]
String ^ PIC2 = gcnew String( "PIC2") [static]
String ^ PIC3 = gcnew String( "PIC3") [static]
String ^ PIC4 = gcnew String( "PIC4") [static]
String ^ USB = gcnew String( "USB") [static]
```

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Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

- CMcsUsbListEntryNet
- CMcsUsbListNet
- CMcsUsbNet
 - o CStg200xBasicNet
 - CStg200xDownloadBasicNet
 - CStg200xDownloadNet
 - CStg200xStreamingNet
- CMcsUsbPointerContainer
- CUsbExceptionNet
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- DriverVersionNet
- FirmwareDestinationNames

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- <u>q</u>
- <u>r</u>
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- <u>t</u>
- <u>u</u>
- 117
- ~

Here is a list of all class members with links to the classes they belong to:

-!-

• !CMcsUsbListNet() : <u>CMcsUsbListNet</u>

• !CMcsUsbNet() : <u>CMcsUsbNet</u>

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- <u>1</u>
- <u>m</u>
- 0
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- <u>u</u>
- <u>V</u>
- <u>W</u>
- _

Here is a list of all class members with links to the classes they belong to:

- a -

AddSoftwareKey(): <u>CMcsUsbNet</u>
 Altera: <u>FirmwareDestinationNames</u>

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- i
- 1
- <u>m</u>
- <u>0</u>
- <u>p</u>
- <u>q</u>
- -
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- <u>u</u>
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- <u>~</u>

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Here is a list of all class members with links to the classes they belong to:

- b -

• BcdDevice : <u>DeviceIdNet</u>

BUS1_MCSBUS1 : <u>FirmwareDestinationNames</u>BUS1_MCSBUS2 : <u>FirmwareDestinationNames</u>

• BusType : <u>DeviceIdNet</u>

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Here is a list of all class members with links to the classes they belong to:

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- c -

• ClearChannelData(): CStg200xDownloadBasicNet

• ClearSyncData(): <u>CStg200xDownloadBasicNet</u>

• CMcsUsbListEntryNet() : <u>CMcsUsbListEntryNet</u>

• CMcsUsbListNet(): CMcsUsbListNet

• CMcsUsbNet(): CMcsUsbNet

• CMcsUsbPointerContainer(): CMcsUsbPointerContainer

• Connect(): CMcsUsbNet

• Count : <u>ČMcsUsbListNet</u>

• CStg200xDownloadNet(): <u>CStg200xDownloadNet</u>

• CStg200xStreamingNet(): <u>CStg200xStreamingNet</u>

• CUsbExceptionNet(): CUsbExceptionNet

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- <u>W</u>
- _

Here is a list of all class members with links to the classes they belong to:

- d -

• DeviceArrival : CMcsUsbListNet

• DeviceId: CMcsUsbListEntryNet

• DeviceIdNet(): <u>DeviceIdNet</u>

• DeviceName : CMcsUsbListEntryNet

- DevicePath : <u>CMcsUsbListEntryNet</u>
- DeviceRemoval : <u>CMcsUsbListNet</u>
- DisableAutoReset(): CStg200xDownloadBasicNet
- DisableContinousMode(): <u>CStg200xStreamingNet</u>
- DisableMultiFileMode(): CStg200xDownloadNet
- Disconnect(): <u>CMcsUsbNet</u>
- DriverVersionNet(): <u>DriverVersionNet</u>
- DriverVersionNet::FormatVersion(): <u>DriverVersionNet</u>
- DSP : FirmwareDestinationNames



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Here is a list of all class members with links to the classes they belong to:

- e -

- EnableAutoReset(): <u>CStg200xDownloadBasicNet</u>
- EnableContinousMode(): CStg200xStreamingNet
- EnableMultiFileMode(): <u>CStg200xDownloadNet</u>
- EnqueueData(): <u>CStg200xStreamingNet</u>
- EnqueueSyncout(): <u>CStg200xStreamingNet</u>
- Equals(): <u>CMcsUsbListEntryNet</u>
- EraseEepromRegisterPreconfig(): <u>CMcsUsbNet</u>

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Here is a list of all class members with links to the classes they belong to:

- f -

• ForceStatusEvent(): <u>CStg200xDownloadBasicNet</u>

• FPGA2 : FirmwareDestinationNames

• FPGA3 : FirmwareDestinationNames

• FPGA4 : <u>FirmwareDestinationNames</u>

• FPGA5 : FirmwareDestinationNames

• FPGA6 : <u>FirmwareDestinationNames</u>



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Here is a list of all class members with links to the classes they belong to:

- g -

- GetAnalogRanges(): CStg200xBasicNet
- GetAnalogResolution(): CStg200xBasicNet
- GetAutocalibrationDisabled(): <u>CStg200xBasicNet</u>
- GetBlankingEnable(): <u>CStg200xBasicNet</u>
- GetCapacity(): CStg200xDownloadBasicNet, CStg200xStreamingNet
- GetConfiguration(): CMcsUsbNet
- GetCurrentRangeInNanoAmp(): <u>CStg200xBasicNet</u>
- GetCurrentRate(): CStg200xStreamingNet
- GetCurrentResolutionInNanoAmp(): CStg200xBasicNet
- GetDacAmplificationFactor(): CStg200xBasicNet
- GetDACResolution(): <u>CStg200xBasicNet</u>
- GetDataQueueSpace(): CStg200xStreamingNet
- GetDestinationCode() : <u>DriverVersionNet</u>
- GetDestinationName(): <u>DriverVersionNet</u>
- GetDeviceCapableSpeed() : <u>CMcsUsbNet</u>
- GetDeviceEnum(): CMcsUsbNet
- GetDeviceId(): CMcsUsbNet
- GetDeviceSpeed(): CMcsUsbNet
- GetElectrodeDacMux(): <u>CStg200xBasicNet</u>
- GetElectrodeEnable(): <u>CStg200xBasicNet</u>
- GetElectrodeMode(): <u>CStg200xBasicNet</u>
- GetEnableAmplifierProtectionSwitch(): CStg200xBasicNet
- GetErrorText(): CMcsUsbNet
- GetFAAmplification(): CStg200xBasicNet
- GetFirmwareVersion(): CMcsUsbNet
- GetFramesBuffered(): <u>CStg200xStreamingNet</u>
- GetFramesDone(): <u>CStg200xStreamingNet</u>
- GetHardwareRevision(): CMcsUsbNet
- GetHeadstage(): CStg200xBasicNet
- GetIdent() : <u>CMcsUsbNet</u>
- GetImplantatVoltage(): CMcsUsbNet
- GetLastUSBError(): CMcsUsbNet
- GetListmodeIndexRange(): CStg200xBasicNet
- GetListmodeTriggerSource(): <u>CStg200xBasicNet</u>
- GetMajor(): DriverVersionNet
- GetMemory(): CStg200xBasicNet
- GetMinor(): DriverVersionNet

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- GetModuleCurrent(): CStg200xDownloadNet
- GetModuleTemp(): <u>CStg200xDownloadNet</u>
- GetNumberOfAnalogChannels(): <u>CStg200xBasicNet</u>
- GetNumberOfDevices(): CMcsUsbListNet
- GetNumberOfHWDACPaths(): CStg200xBasicNet
- GetNumberOfStimulationElectrodes(): CStg200xBasicNet
- GetNumberOfSyncoutChannels(): <u>CStg200xBasicNet</u>
- GetNumberOfTriggerInputs(): CStg200xBasicNet
- GetNumEntries(): DriverVersionNet
- GetOutputRate(): CStg200xBasicNet
- GetRFConnectionStatus(): CMcsUsbNet
- GetSerialNumber(): CMcsUsbNet
- GetSoftwareKey(): CMcsUsbNet
- GetSoftwareKeyString(): CMcsUsbNet
- GetStatus(): CMcsUsbNet, DriverVersionNet
- GetStgProgramInfo(): <u>CStg200xBasicNet</u>
- GetStgVersionInfo(): CStg200xBasicNet
- GetSweepCount(): CStg200xDownloadBasicNet
- GetSyncoutQueueSpace(): CStg200xStreamingNet
- GetTotalMemory(): CStg200xBasicNet
- GetTrigger(): CStg200xStreamingNet, CStg200xDownloadBasicNet
- GetTriggerSource() : <u>CStg200xBasicNet</u>
- GetUsbListEntries(): <u>CMcsUsbListNet</u>
- GetUsbListEntry(): <u>CMcsUsbListNet</u>, <u>CMcsUsbNet</u>
- GetVersion(): CMcsUsbNet
- GetVersionInt(): DriverVersionNet
- GetVersionString(): <u>DriverVersionNet</u>
- GetVoltageRangeInMicroVolt(): CStg200xBasicNet
- GetVoltageResolutionInMicroVolt(): <u>CStg200xBasicNet</u>

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Here is a list of all class members with links to the classes they belong to:

- h -

• HasSoftwareKey(): <u>CMcsUsbNet</u>

• HwVersion : <u>CMcsUsbListEntryNet</u>

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Here is a list of all class members with links to the classes they belong to:

- i -

- IdProduct : <u>DeviceIdNet</u>
- IdVendor: DeviceIdNet
- IfStatusGetLastUSBError(): CMcsUsbNet
- Initialize(): <u>CMcsUsbListNet</u>
- IsConnected(): <u>CMcsUsbNet</u>
- IsDeviceHighSpeed() : <u>CMcsUsbNet</u>
- IsDeviceHighSpeedCapable(): CMcsUsbNet
- IsDeviceTypeOf() : <u>CMcsUsbListNet</u>



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Here is a list of all class members with links to the classes they belong to:

- l -

- ListModeSendStart(): CStg200xBasicNet
- ListModeSendStop(): CStg200xBasicNet

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Here is a list of all class members with links to the classes they belong to:

- m -

- m pMcsUsb: CMcsUsbNet
- Manufacturer : <u>CMcsUsbListEntryNet</u>
- MCSBUS1 : FirmwareDestinationNames
- MCSBUS10 : FirmwareDestinationNames
- MCSBUS11 : FirmwareDestinationNames
- MCSBUS12 : FirmwareDestinationNames
- MCSBUS13 : FirmwareDestinationNames
- MCSBUS2 : FirmwareDestinationNames
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- MCSBUS4 : FirmwareDestinationNames
- MCSBUS5 : FirmwareDestinationNames
- MCSBUS6 : FirmwareDestinationNames
- MCSBUS7 : FirmwareDestinationNames
- MCSBUS8 : FirmwareDestinationNames
- MCSBUS9 : FirmwareDestinationNames
- MCU1 : FirmwareDestinationNames
- MwPollStatusEvent : CStg200xDownloadNet

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Here is a list of all class members with links to the classes they belong to:

- 0 -

- OnStg200xDataHandlerEvent : CStg200xStreamingNet
- OnStg200xErrorHandlerEvent : <u>CStg200xStreamingNet</u>
- operator=(): <u>DeviceIdNet</u>

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Here is a list of all class members with links to the classes they belong to:

- p -

- PIC : FirmwareDestinationNames
- PIC2 : Firmware Destination Names
- PIC3 : <u>FirmwareDestinationNames</u>
- PIC4 : FirmwareDestinationNames
- Pointer: CMcsUsbPointerContainer
- PrepareAndSendData(): CStg200xDownloadNet
- Product : CMcsUsbListEntryNet

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Here is a list of all class members with links to the classes they belong to:

- q -

• QueryTriggerstatus(): <u>CStg200xDownloadNet</u>

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Here is a list of all class members with links to the classes they belong to:

- r -

• ReadEepromRegisterPreconfig() : <u>CMcsUsbNet</u>

• ReadRegister(): <u>CMcsUsbNet</u>

• ReadRegisterTimeSlot() : <u>CMcsUsbNet</u>

• RemoveSoftwareKey(): CMcsUsbNet

• ResetStatus(): CStg200xDownloadBasicNet

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Here is a list of all class members with links to the classes they belong to:

- S -

- SendChannelData(): <u>CStg200xDownloadBasicNet</u>
- SendSegmentDefine(): <u>CStg200xDownloadNet</u>
- SendSegmentSelect() : <u>CStg200xDownloadNet</u>
- SendSegmentStart(): CStg200xDownloadNet
- SendStart(): CStg200xBasicNet
- SendStop(): CStg200xBasicNet
- SendSyncData(): CStg200xDownloadBasicNet
- SerialNumber : CMcsUsbListEntryNet , CMcsUsbNet
- SetAutocalibrationDisabled(): CStg200xBasicNet
- SetBlankingEnable(): CStg200xBasicNet
- SetCapacity(): <u>CStg200xDownloadBasicNet</u>, <u>CStg200xStreamingNet</u>
- SetConfiguration(): CMcsUsbNet
- SetCurrentMode(): CStg200xBasicNet
- SetDacAmplificationFactor(): CStg200xBasicNet
- SetElectrodeDacMux(): CStg200xBasicNet
- SetElectrodeEnable(): <u>CStg200xBasicNet</u>
- SetElectrodeMode(): <u>CStg200xBasicNet</u>
- SetEnableAmplifierProtectionSwitch(): CStg200xBasicNet
- SetFAAmplification(): CStg200xBasicNet
- SetHeadstage(): <u>CStg200xBasicNet</u>
- SetListmodeIndexRange(): CStg200xBasicNet
- SetListmodeTriggerSource(): <u>CStg200xBasicNet</u>
- SetMeasurementMode(): CStg200xBasicNet
- SetOutputMap(): CStg200xDownloadNet
- SetOutputRate() : <u>CStg200xBasicNet</u>
- SetSoftwareKey(): <u>CMcsUsbNet</u>
- SetStgProgramInfo(): <u>CStg200xBasicNet</u>
- SetStringFormat(): CMcsUsbListEntryNet, CMcsUsbListNet
- SetTriggerSource(): <u>CStg200xBasicNet</u>
- SetupRetriggerMode(): CStg200xDownloadBasicNet
- SetupTrigger(): CStg200xDownloadBasicNet, CStg200xStreamingNet
- SetVoltageMode(): CStg200xBasicNet
- StartLoop(): CStg200xStreamingNet

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- Status : <u>CUsbExceptionNet</u>
- Status_AlreadyConfigured : <u>CMcsUsbNet</u>
- Status BadStartFrame : CMcsUsbNet
- Status Btstuff: CMcsUsbNet
- Status BufferOverrun : CMcsUsbNet
- Status BufferUnderrun : CMcsUsbNet
- Status Canceled: CMcsUsbNet
- Status Canceling: CMcsUsbNet
- Status ConnectedPipes : CMcsUsbNet
- Status ControlNotOwned: CMcsUsbNet
- Status Crc: CMcsUsbNet
- Status DataOverrun: CMcsUsbNet
- Status DataToggleMismatch: CMcsUsbNet
- Status DataUnderrun: CMcsUsbNet
- Status DeviceLocked: CMcsUsbNet
- Status DeviceNotFound : CMcsUsbNet
- Status DeviceRemoved: CMcsUsbNet
- Status DevNotResponding : <u>CMcsUsbNet</u>
- Status EndpointHalted: CMcsUsbNet
- Status ErrorBusy: <u>CMcsUsbNet</u>
- Status ErrorShortTransfer : <u>CMcsUsbNet</u>
- Status Fifo: CMcsUsbNet
- Status FrameControlOwned: CMcsUsbNet
- Status InternalHcError: CMcsUsbNet
- Status InvalidParameter : CMcsUsbNet
- Status_InvalidPipeHandle : <u>CMcsUsbNet</u>
- Status InvalidUrbFunction : <u>CMcsUsbNet</u>
- Status IoPending : <u>CMcsUsbNet</u>
- Status IoTimeout : CMcsUsbNet
- Status IsochRequestFailed: CMcsUsbNet
- Status NoBandwidth: CMcsUsbNet
- Status NoMemory : CMcsUsbNet
- Status NoSuchDevice : <u>CMcsUsbNet</u>
- Status NotAccessed : CMcsUsbNet
- Status_NotSupported : <u>CMcsUs</u>bNet
- Status PidCheckFailure: CMcsUsbNet
- Status PipeNotLinked: CMcsUsbNet
- Status RequestFailed : CMcsUsbNet
- Status Stall: CMcsUsbNet
- Status Unconfigured: CMcsUsbNet
- Status_UnexpectedPid : <u>CMcsUsbNet</u>
- Stg200xPollStatusEvent : <u>CStg200xDownloadNet</u>
- Stimulus : <u>CStg200xDownloadBasicNet</u>
- StopLoop(): <u>CStg200xStreamingNet</u>

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Here is a list of all class members with links to the classes they belong to:

- t -

- ThrowCUsbExceptionNet() : <u>CMcsUsbNet</u>
- ToString(): <u>CMcsUsbListEntryNet</u>
- TxnGetSerialNumber(): CMcsUsbNet
- TxnSetSerialNumber() : <u>CMcsUsbNet</u>
- TxnTestMemoryReadAndCheck(): CMcsUsbNet
- TxnTestMemoryWrite(): <u>CMcsUsbNet</u>

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Here is a list of all class members with links to the classes they belong to:

- u -

• USB : Firmware Destination Names

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Here is a list of all class members with links to the classes they belong to:

- **v** -

• ValidKey() : <u>CMcsUsbNet</u>

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Here is a list of all class members with links to the classes they belong to:

- w -

- WPAError ScanningIsPending: CMcsUsbNet
- WriteEepromRegisterPreconfig(): <u>CMcsUsbNet</u>
- WriteRegister() : <u>CMcsUsbNet</u>
- WriteRegisterTimeSlot(): <u>CMcsUsbNet</u>

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- <u>u</u>
- <u>V</u>
- <u>W</u>
- _

Here is a list of all class members with links to the classes they belong to:

- ∼ -

- ~CMcsUsbListNet(): <u>CMcsUsbListNet</u>
- ~CMcsUsbNet(): <u>CMcsUsbNet</u>
- ~CStg200xBasicNet(): <u>CStg200xBasicNet</u>
- ~CStg200xDownloadNet(): <u>CStg200xDownloadNet</u>
- ~CStg200xStreamingNet(): <u>CStg200xStreamingNet</u>
- ~DriverVersionNet(): DriverVersionNet

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- <u>a</u>

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- <u>C</u>
- <u>d</u>
- <u>e</u>
- <u>f</u>
- <u>g</u>
- <u>h</u>
- 1
- <u>0</u>
- <u>p</u>
- <u>q</u>
- <u>r</u>
- S
- t
- <u>V</u>
- <u>W</u>
- ~

-!-

- !CMcsUsbListNet() : <u>CMcsUsbListNet</u>
- !CMcsUsbNet() : <u>CMcsUsbNet</u>

- a -

• AddSoftwareKey(): CMcsUsbNet

- c -

- ClearChannelData(): <u>CStg200xDownloadBasicNet</u>
- ClearSyncData(): CStg200xDownloadBasicNet
- CMcsUsbListEntryNet(): CMcsUsbListEntryNet
- CMcsUsbListNet() : <u>CMcsUsbListNet</u>
- CMcsUsbNet(): CMcsUsbNet
- CMcsUsbPointerContainer(): CMcsUsbPointerContainer
- Connect(): <u>CMcsUsbNet</u>
- CStg200xDownloadNet(): CStg200xDownloadNet
- CStg200xStreamingNet(): <u>CStg200xStreamingNet</u>
- CUsbExceptionNet(): CUsbExceptionNet

- d -

- DeviceIdNet(): DeviceIdNet
- DisableAutoReset(): CStg200xDownloadBasicNet
- DisableContinousMode(): CStg200xStreamingNet
- DisableMultiFileMode(): CStg200xDownloadNet
- Disconnect(): CMcsUsbNet
- DriverVersionNet(): DriverVersionNet
- DriverVersionNet::FormatVersion(): <u>DriverVersionNet</u>

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- e -

- EnableAutoReset(): <u>CStg200xDownloadBasicNet</u>
- EnableContinousMode(): <u>CStg200xStreamingNet</u>
- EnableMultiFileMode(): CStg200xDownloadNet
- EnqueueData(): CStg200xStreamingNet
- EnqueueSyncout(): <u>CStg200xStreamingNet</u>
- Equals(): CMcsUsbListEntryNet
- EraseEepromRegisterPreconfig(): <u>CMcsUsbNet</u>

- f -

• ForceStatusEvent(): CStg200xDownloadBasicNet

- g -

- GetAnalogRanges(): <u>CStg200xBasicNet</u>
- GetAnalogResolution(): CStg200xBasicNet
- GetAutocalibrationDisabled(): CStg200xBasicNet
- GetBlankingEnable(): CStg200xBasicNet
- GetCapacity(): CStg200xDownloadBasicNet, CStg200xStreamingNet
- GetConfiguration(): <u>CMcsUsbNet</u>
- GetCurrentRangeInNanoAmp(): CStg200xBasicNet
- GetCurrentRate(): CStg200xStreamingNet
- GetCurrentResolutionInNanoAmp(): <u>CStg200xBasicNet</u>
- GetDacAmplificationFactor(): CStg200xBasicNet
- GetDACResolution(): <u>CStg200xBasicNet</u>
- GetDataQueueSpace(): <u>CStg200xStreamingNet</u>
- GetDestinationCode(): DriverVersionNet
- GetDestinationName(): <u>DriverVersionNet</u>
- GetDeviceCapableSpeed(): CMcsUsbNet
- GetDeviceEnum(): CMcsUsbNet
- GetDeviceId(): CMcsUsbNet
- GetDeviceSpeed(): <u>CMcsUsbNet</u>
- GetElectrodeDacMux(): <u>CStg200xBasicNet</u>
- GetElectrodeEnable() : <u>CStg200xBasicNet</u>
- GetElectrodeMode(): <u>CStg200xBasicNet</u>
- GetEnableAmplifierProtectionSwitch(): <u>CStg200xBasicNet</u>
- GetErrorText(): <u>CMcsUsbNet</u>
- GetFAAmplification(): CStg200xBasicNet
- GetFirmwareVersion(): CMcsUsbNet
- GetFramesBuffered(): CStg200xStreamingNet
- GetFramesDone(): <u>CStg200xStreamingNet</u>
- GetHardwareRevision(): CMcsUsbNet
- GetHeadstage(): <u>CStg200xBasicNet</u>
- GetIdent(): CMcsUsbNet
- GetImplantatVoltage(): <u>CMcsUsbNet</u>
- GetLastUSBError(): CMcsUsbNet
- GetListmodeIndexRange(): CStg200xBasicNet
- GetListmodeTriggerSource(): <u>CStg200xBasicNet</u>
- GetMajor() : <u>DriverVersionNet</u>
- GetMemory(): CStg200xBasicNet

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- GetMinor(): <u>DriverVersionNet</u>
- GetModuleCurrent(): <u>CStg200xDownloadNet</u>
- GetModuleTemp(): CStg200xDownloadNet
- GetNumberOfAnalogChannels(): CStg200xBasicNet
- GetNumberOfDevices() : <u>CMcsUsbListNet</u>
- GetNumberOfHWDACPaths(): CStg200xBasicNet
- GetNumberOfStimulationElectrodes(): CStg200xBasicNet
- GetNumberOfSyncoutChannels(): CStg200xBasicNet
- GetNumberOfTriggerInputs(): CStg200xBasicNet
- GetNumEntries(): DriverVersionNet
- GetOutputRate(): CStg200xBasicNet
- GetRFConnectionStatus(): CMcsUsbNet
- GetSerialNumber(): CMcsUsbNet
- GetSoftwareKey(): CMcsUsbNet
- GetSoftwareKeyString() : <u>CMcsUsbNet</u>
- GetStatus(): CMcsUsbNet, DriverVersionNet
- GetStgProgramInfo(): CStg200xBasicNet
- GetStgVersionInfo(): <u>CStg200xBasicNet</u>
- GetSweepCount(): CStg200xDownloadBasicNet
- GetSyncoutQueueSpace(): <u>CStg200xStreamingNet</u>
- GetTotalMemory(): <u>CStg200xBasicNet</u>
- GetTrigger(): CStg200xStreamingNet, CStg200xDownloadBasicNet
- GetTriggerSource(): <u>CStg200xBasicNet</u>
- GetUsbListEntries(): <u>CMcsUsbListNet</u>
- GetUsbListEntry(): CMcsUsbListNet, CMcsUsbNet
- GetVersion(): <u>CMcsUsbNet</u>
- GetVersionInt(): <u>DriverVersionNet</u>
- GetVersionString(): DriverVersionNet
- GetVoltageRangeInMicroVolt(): CStg200xBasicNet
- GetVoltageResolutionInMicroVolt(): <u>CStg200xBasicNet</u>

- h -

HasSoftwareKey(): <u>CMcsUsbNet</u>

- i -

- IfStatusGetLastUSBError(): CMcsUsbNet
- Initialize(): CMcsUsbListNet
- IsConnected(): CMcsUsbNet
- IsDeviceHighSpeed(): CMcsUsbNet
- IsDeviceHighSpeedCapable() : <u>CMcsUsbNet</u>
- IsDeviceTypeOf() : <u>CMcsUsbListNet</u>

-1-

- ListModeSendStart(): CStg200xBasicNet
- ListModeSendStop(): CStg200xBasicNet

- 0 -

• operator=(): DeviceIdNet

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- p -

• PrepareAndSendData(): <u>CStg200xDownloadNet</u>

- q -

• QueryTriggerstatus(): CStg200xDownloadNet

- r -

- ReadEepromRegisterPreconfig(): CMcsUsbNet
- ReadRegister(): CMcsUsbNet
- ReadRegisterTimeSlot(): CMcsUsbNet
- RemoveSoftwareKey(): <u>CMcsUsbNet</u>
- ResetStatus(): CStg200xDownloadBasicNet

- S -

- SendChannelData(): CStg200xDownloadBasicNet
- SendSegmentDefine(): CStg200xDownloadNet
- SendSegmentSelect(): <u>CStg200xDownloadNet</u>
- SendSegmentStart(): <u>CStg200xDownloadNet</u>
- SendStart(): CStg200xBasicNet
- SendStop(): CStg200xBasicNet
- SendSyncData(): CStg200xDownloadBasicNet
- SetAutocalibrationDisabled(): CStg200xBasicNet
- SetBlankingEnable(): <u>CStg200xBasicNet</u>
- SetCapacity(): CStg200xDownloadBasicNet, CStg200xStreamingNet
- SetConfiguration(): CMcsUsbNet
- SetCurrentMode(): CStg200xBasicNet
- SetDacAmplificationFactor(): CStg200xBasicNet
- SetElectrodeDacMux(): CStg200xBasicNet
- SetElectrodeEnable(): <u>CStg200xBasicNet</u>
- SetElectrodeMode(): CStg200xBasicNet
- SetEnableAmplifierProtectionSwitch(): CStg200xBasicNet
- SetFAAmplification(): CStg200xBasicNet
- SetHeadstage(): <u>CStg200xBasicNet</u>
- SetListmodeIndexRange() : <u>CStg200xBasicNet</u>
- SetListmodeTriggerSource(): <u>CStg200xBasicNet</u>
- SetMeasurementMode(): CStg200xBasicNet
- SetOutputMap(): CStg200xDownloadNet
- SetOutputRate(): CStg200xBasicNet
- SetSoftwareKey(): CMcsUsbNet
- SetStgProgramInfo(): <u>CStg200xBasicNet</u>
- SetStringFormat(): CMcsUsbListEntryNet, CMcsUsbListNet
- SetTriggerSource(): CStg200xBasicNet
- SetupRetriggerMode(): <u>CStg200xDownloadBasicNet</u>
- SetupTrigger(): CStg200xStreamingNet, CStg200xDownloadBasicNet
- SetVoltageMode(): CStg200xBasicNet
- StartLoop(): <u>CStg200xStreamingNet</u>
- StopLoop(): <u>CStg200xStreamingNet</u>

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- t -

• ThrowCUsbExceptionNet(): <u>CMcsUsbNet</u>

• ToString(): <u>CMcsUsbListEntryNet</u>

• TxnGetSerialNumber() : <u>CMcsUsbNet</u>

• TxnSetSerialNumber(): <u>CMcsUsbNet</u>

• TxnTestMemoryReadAndCheck(): CMcsUsbNet

• TxnTestMemoryWrite(): <u>CMcsUsbNet</u>

- V -

• ValidKey(): <u>CMcsUsbNet</u>

- w -

• WriteEepromRegisterPreconfig(): CMcsUsbNet

• WriteRegister(): CMcsUsbNet

• WriteRegisterTimeSlot(): CMcsUsbNet

_ ~ -

• ~CMcsUsbListNet(): <u>CMcsUsbListNet</u>

• ~CMcsUsbNet(): CMcsUsbNet

• ~CStg200xBasicNet() : <u>CStg200xBasicNet</u>

• ~CStg200xDownloadNet(): <u>CStg200xDownloadNet</u>

• ~CStg200xStreamingNet(): <u>CStg200xStreamingNet</u>

• ~DriverVersionNet(): <u>DriverVersionNet</u>

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- <u>m</u>
- <u>p</u>
- <u>S</u>
- <u>u</u>
- W
- a -
 - Altera: FirmwareDestinationNames
- b -
 - BcdDevice: DeviceIdNet
 - BUS1_MCSBUS1 : FirmwareDestinationNames
 BUS1 MCSBUS2 : FirmwareDestinationNames
 - BusType : DeviceIdNet
- d -
 - DSP : FirmwareDestinationNames
- f -
 - FPGA2 : FirmwareDestinationNames
 - FPGA3: FirmwareDestinationNames
 - FPGA4: FirmwareDestinationNames
 - FPGA5 : FirmwareDestinationNames
 - FPGA6 : FirmwareDestinationNames
- i -
 - IdProduct : DeviceIdNet
 - IdVendor : DeviceIdNet
- m -
 - m pMcsUsb: CMcsUsbNet
 - MCSBUS1 : FirmwareDestinationNames
 - MCSBUS10 : <u>FirmwareDestinationNames</u>
 - MCSBUS11 : <u>FirmwareDestinationNames</u>
 - MCSBUS12 : <u>FirmwareDestinationNames</u>
 - MCSBUS13: FirmwareDestinationNames
 - MCSBUS2 : FirmwareDestinationNames
 - MCSBUS3 : <u>FirmwareDestinationNames</u>
 - MCSBUS4 : <u>FirmwareDestinationNames</u>
 - MCSBUS5 : FirmwareDestinationNames
 - MCSBUS6 : FirmwareDestinationNames
 - MCSBUS7 : FirmwareDestinationNames
 - MCSBUS8 : FirmwareDestinationNames

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- MCSBUS9 : FirmwareDestinationNames
- MCU1: Firmware Destination Names

- p -

- PIC : FirmwareDestinationNames
- PIC2 : FirmwareDestinationNames
- PIC3: FirmwareDestinationNames
- PIC4 : FirmwareDestinationNames
- Pointer: CMcsUsbPointerContainer

- S -

- Status AlreadyConfigured: CMcsUsbNet
- Status BadStartFrame: CMcsUsbNet
- Status Btstuff: CMcsUsbNet
- Status BufferOverrun: CMcsUsbNet
- Status BufferUnderrun: CMcsUsbNet
- Status Canceled: CMcsUsbNet
- Status Canceling: CMcsUsbNet
- Status ConnectedPipes: CMcsUsbNet
- Status ControlNotOwned: CMcsUsbNet
- Status Crc: CMcsUsbNet
- Status DataOverrun: CMcsUsbNet
- Status DataToggleMismatch: CMcsUsbNet
- Status DataUnderrun: CMcsUsbNet
- Status DeviceLocked: CMcsUsbNet
- Status DeviceNotFound: CMcsUsbNet
- Status DeviceRemoved: CMcsUsbNet
- Status DevNotResponding: CMcsUsbNet
- Status EndpointHalted: CMcsUsbNet
- Status ErrorBusy: CMcsUsbNet
- Status ErrorShortTransfer: CMcsUsbNet
- Status Fifo: CMcsUsbNet
- Status FrameControlOwned : CMcsUsbNet
- Status InternalHcError: CMcsUsbNet
- Status InvalidParameter: CMcsUsbNet
- Status InvalidPipeHandle: CMcsUsbNet
- Status InvalidUrbFunction: CMcsUsbNet
- Status IoPending: CMcsUsbNet
- Status IoTimeout : CMcsUsbNet
- Status IsochRequestFailed: CMcsUsbNet
- Status NoBandwidth: CMcsUsbNet
- Status NoMemory: CMcsUsbNet
- Status NoSuchDevice: CMcsUsbNet
- Status NotAccessed: CMcsUsbNet
- Status NotSupported: CMcsUsbNet
- Status PidCheckFailure: CMcsUsbNet
- Status PipeNotLinked: CMcsUsbNet
- Status RequestFailed: CMcsUsbNet
- Status Stall: CMcsUsbNet
- Status Unconfigured: CMcsUsbNet

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• Status_UnexpectedPid : <u>CMcsUsbNet</u>

- u -

• USB : FirmwareDestinationNames

- W -

• WPAError_ScanningIsPending : <u>CMcsUsbNet</u>

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- Count : CMcsUsbListNet
- DeviceId: CMcsUsbListEntryNet
- DeviceName : <u>CMcsUsbListEntryNet</u>
- DevicePath : CMcsUsbListEntryNet
- HwVersion : <u>CMcsUsbListEntryNet</u>
- Manufacturer : <u>CMcsUsbListEntryNet</u>
- Product : CMcsUsbListEntryNet
- SerialNumber : <u>CMcsUsbListEntryNet</u>, <u>CMcsUsbNet</u>
- Status : <u>CUsbExceptionNet</u>
- Stimulus : <u>CStg200xDownloadBasicNet</u>

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- DeviceArrival : <u>CMcsUsbListNet</u>DeviceRemoval : <u>CMcsUsbListNet</u>
- MwPollStatusEvent : <u>CStg200xDownloadNet</u>
- OnStg200xDataHandlerEvent : <u>CStg200xStreamingNet</u>
 OnStg200xErrorHandlerEvent : <u>CStg200xStreamingNet</u>
- Stg200xPollStatusEvent : <u>CStg200xDownloadNet</u>

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