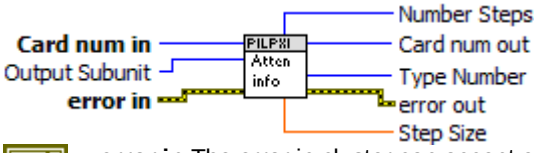
PILPXI LabVIEW Function Reference V1.2.1
Installed by PXI Installer 4.27.005

Functions listed in alphabetical order

PILPXI Attenuator Info.vi
Obtains a description of an attenuator sub-unit, as numeric values.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Handle combining session handle and card handle.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

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code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Type Number Type code.

Number Steps Step count.

Step Size Step size, in dB.

Card num out Handle combining session handle and card handle.

PILPXI Attenuator Pad Value.vi
Obtains the attenuation value of a numbered pad. This function facilitates explicit pad selection using PIPLX_OpBit or PIPLX_WriteSub, if the selections made by PIPLX_attenSetAttenuation are not optimal for the application. The number of pads in the sub-unit can be found using PIPLX_SubInfo.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

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source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Pad Number Pad number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

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source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Attenuation Pad's attenuation value, in dB.

Card num out Card number

PILPXI Attenuator Type.vi
Obtains a description of an attenuator sub-unit, as a text string. The format of the result is "ATTEN(<number of steps>,<step size in dB>". The description obtained by this VI is a logical one; a physical description indicating the number of discrete pads employed in the attenuator can be obtained using PIPLX Subunit Type.vi.s

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

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Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

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source The **source** string describes the origin of the error or warning.

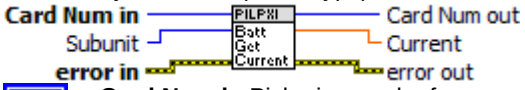
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Type String containing description of the subunit of the card.

Card num out Card number

PILPXI Batt Get Current.vi

Get Battery Simulator (BATT type) channel sink current



Card Num in Pickering card reference of target (unity-based)

Subunit sub-unit of target to access (unity-based)

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source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Current variable to receive the current currently set (in Amps)

Card Num out Pickering card reference of target (unity-based)

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source The **source** string describes the origin of the error or warning.

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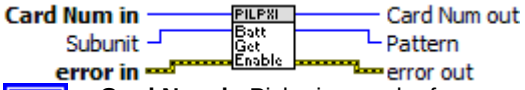
PILPXI Batt Get Enable.vi
Get Battery Simulator (BATT type) channel output enable states



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Subunit sub-unit of target to access (unity-based)

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source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Pattern variable to receive the pattern of channel outputs currently enabled ('1' bit indicates corresponding channel is enabled)

Card Num out Pickering card reference of target (unity-based)

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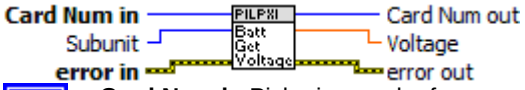
PILPXI Batt Get Voltage.vi
Get Battery Simulator (BATT type) channel output voltage



Card Num in Pickering card reference of target (unity-based)

Subunit When Subunit corresponds to a BATT sub-unit, the function sets the voltage of that sub-unit alone.If Subunit = 0 (BATT_ALL_BATT_SUB_UNITS), all of the card's BATT sub-units are set to the given voltage.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

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source The **source** string describes the origin of the error or warning.

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Voltage variable to receive the voltage currently set (in Volts)

Card Num out Pickering card reference of target (unity-based)

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source The **source** string describes the origin of the error or warning.

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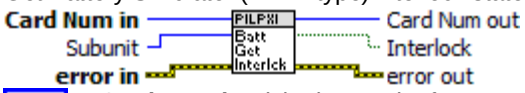
PILPXI Batt Read Interlock State.vi
Get Battery Simulator (BATT type) interlock state



Card Num in Pickering card reference of target (unity-based)

Subunit sub-unit of target to access (unity-based)

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

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code The **code** input identifies the error or warning.

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source The **source** string describes the origin of the error or warning.

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Interlock variable to receive the interlock state

Card Num out Pickering card reference of target (unity-based)

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The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

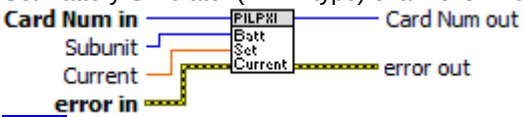
code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

PILPXI Batt Set Current.vi
Set Battery Simulator (BATT type) channel sink current



Card Num in Pickering card reference of target (unity-based)

Subunit When Subunit corresponds to a BATT sub-unit, the function sets the sink current of that sub-unit alone.If Subunit = 0 (BATT_ALL_BATT_SUB_UNITS), all of the card's BATT sub-units are set to the given current.

Current the current to set (in Amps)

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

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Card Num out Pickering card reference of target (unity-based)

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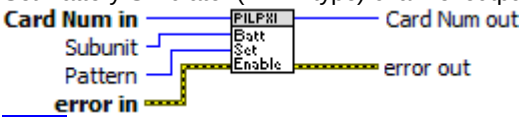
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

PILPXI Batt Set Enable.vi
Set Battery Simulator (BATT type) channel output enable states



Card Num in Pickering card reference of target (unity-based)

Subunit When SubNum corresponds to a BATT sub-unit, the function sets the output enable state of that sub-unit alone according to the least significant bit of Pattern (0 = OFF, 1 = ON). If SubNum = 0 (BATT_ALL_BATT_SUB_UNITS), enable states of all the card's BATT sub-units are set; bits in the supplied Pattern are utilised in ascending order of BATT sub-unit, i.e.

Pattern the pattern of channel outputs to enable ('1' bit enables corresponding channel)

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

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source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card Num out Pickering card reference of target (unity-based)

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

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source The **source** string describes the origin of the error or warning.

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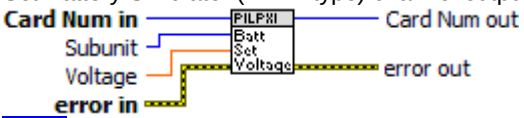
PILPXI Batt Set Voltage.vi
Set Battery Simulator (BATT type) channel output voltage



Card Num in Pickering card reference of target (unity-based)

Subunit sub-unit of target to access (unity-based)

Voltage the voltage to set (in Volts)

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

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code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card Num out Pickering card reference of target (unity-based)

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

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The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

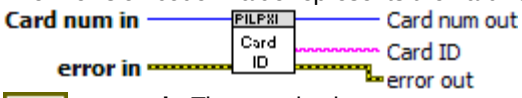
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

PILPXI Card Id.vi
Obtains the identification string of the specified card. The string contains these elements:

"model code;serial number;revision code"

The <revision code> value represents the hardware version of the unit - cards have no firmware on-board.



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source The **source** string describes the origin of the error or warning.

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Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

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source The **source** string describes the origin of the error or warning.

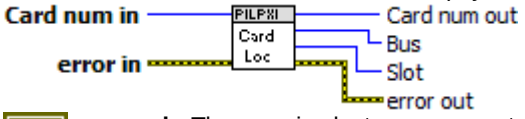
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card ID String containing card identification.

Card num out Card number

PILPXI Card Loc.vi

Obtains the location of the specified card in terms of the logical PCI bus and device number in which it is located. These values can be cross-referenced to physical slot locations in a particular system.



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Card num in Card number

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source The **source** string describes the origin of the error or warning.

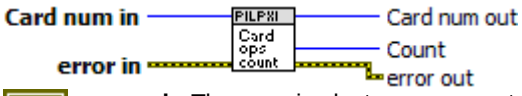
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Bus Logical PCI bus number of the card.

Slot Logical PCI device number of the card.

Card num out Card number

PILPXI Card Ops Count.vi
Returns count of switched relays from operation system start.



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source The **source** string describes the origin of the error or warning.

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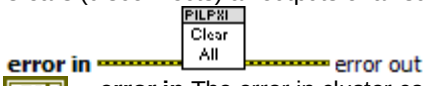
Count Number of operations.

Card num out Card number

PILPXI Clear All.vi
Clears (disconnects) all outputs of all sub-units of all opened Pickering card.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

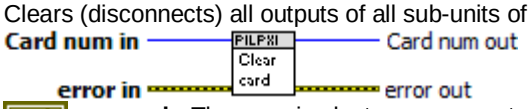
code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

PILPXI Clear Card.vi
Clears (disconnects) all outputs of all sub-units of the specified Pickering card.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Clear Mask.vi
Clears a sub-unit's switch mask, enabling operation of all outputs by the PIPLX OpenClose Bit.vi, PIPLX OpenClose Crosspoint.vi and PIPLX Write Subunit.vi VIs.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

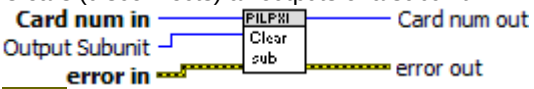
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Clear Subunit.vi
Clears (disconnects) all outputs of a subunit.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

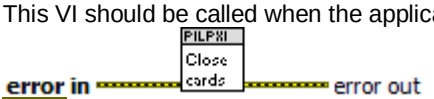
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Close Cards.vi
Closes all open Pickering cards, which must have been opened using OpenCards.
This VI should be called when the application program has finished using them.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

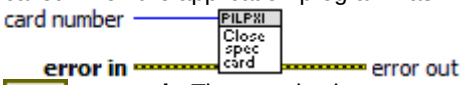
code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

PILPXI Close Specified Card.vi
Closes the specified Pickering card, which must have been opened using OpenSpecifiedCard. This VI should be called when the application program has finished using the card.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

card number Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

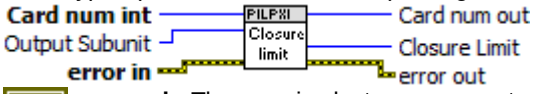
code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

PILPXI Closure Limit.vi
Obtains the maximum number of switches that may be activated simultaneously in the specified sub-unit. A single-channel multiplexer (MUX type) allows only one channel to be closed at any time. In some other models such as high-density matrix types a limit is imposed to prevent overheating; although it is possible to disable the limit for these types (see PIPLX Set Mode.vi), doing so is not recommended.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Output subunit.

Card num int Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

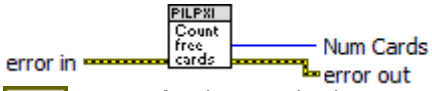
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Closure Limit Closure Limit

Card num out Card number

PILPXI Count Free Cards.vi
Obtains the number of installed cards that are operable by the Piplx driver but are not currently opened by it.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

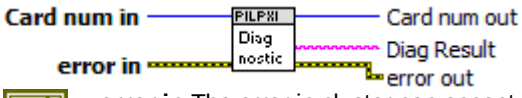
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Num Cards Number of available cards.

PILPXI Diagnostic.vi
Obtains the diagnostic string of the specified card, giving expanded information on any fault conditons indicated by the PIPLX Status.vi value.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

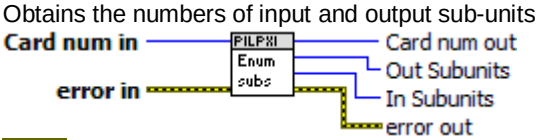
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Diag Result Diagnostic string.

Card num out Card number

PILPXI Enumerate Subs.vi
Obtains the numbers of input and output sub-units implemented on the specified card.



error in The error in cluster can accept error information wired from VIs previously called. Use

this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

In Subunits Number of input subunits.

Out Subunits Number of output subunits.

Card num out Card number

PILPXI Error Converter.vi

This VI converts error codes from VXIPnp instrument driver to standard LabVIEW error codes. If an error is detected the VI builds the appropriate error cluster that is readable by one of the error handlers supplied with LabVIEW.

error in The **error in** cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

CVI error code I32
Error code returned from a VXIPnp instrument driver operation.

VI name

error out The **error out** cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

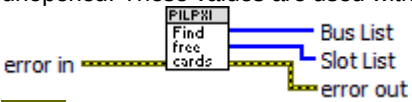
code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

PILPXI Find Free Cards.vi
Obtains the logical bus and slot locations of installed cards that are operable by the Piplx driver and are currently unopened. These values are used with PIPLX Open Specified Card.vi.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no

error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Bus List List of bus numbers for free cards.

Slot List List of device numbers for free cards.

PILPXI Get Attenuation.vi
Obtains the current attenuation setting.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the

error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Attenuation Attenuation value, in dB.

Card num out Card number

PILPXI Get Attribute DWORD.vi
Obtains the value of DWORD-type attribute.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Attribute Code Code of DWORD attribute.

Output subunit True for output subunit, false for input subunit.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Value Value of attribute.

Card num out Card number

PILPXI Get Resistance.vi
Obtains the current resistance setting of the specified programmable resistor. This function is only usable with programmable resistor models that support it, such as 40-260-001.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the

error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

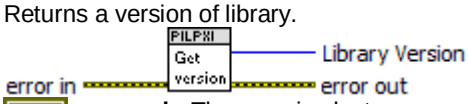
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

Resistance Current resistance set.

PILPXI Get Version.vi
Returns a version of library.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Library Version Version number of pilpxi library.

PILPXI Init.vi

Opens the specified Pickering card. Once a card has been opened, other driver VIs may then be used to access it. If the card is currently opened by some other program it cannot be accessed and the VI returns an error.

This VI uses Pickering Resource Management system to find location of card.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Alias Alias defined in a resource management file

Storage Path to the stored resource management file

Access Not implemented yet.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

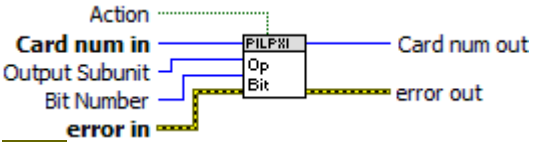
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

card number Card number

PILPXI Op Bit.vi
Operate a single output channel or bit. Note that in the case of a single-channel multiplexer (MUX type) any existing channel closure will be cleared automatically prior to selecting the new channel. Note that OpCrosspoint allows more straightforward use of row/column co-ordinates with matrix sub-units.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the

error displayed.

Output Subunit Subunit number.

Bit Number Bit number.

Action True to close relay,
False to open relay.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

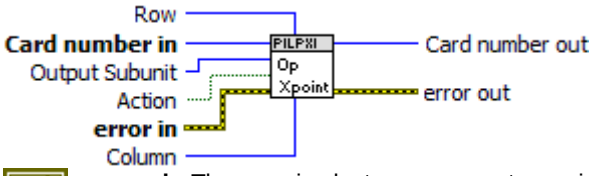
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Op Crosspoint.vi
Operate a single matrix crosspoint.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Row Crosspoint row (Y) location.

Column Crosspoint column (X) location.

Action True to close relay,
False to open relay.

Card number in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

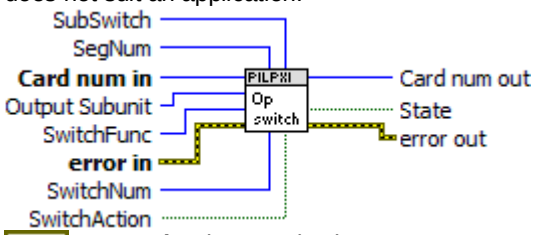
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card number out Card number

PILPXI Op Switch.vi
This VI obtains, and optionally sets, the state of a switch. It allows explicit access to the individual switches making up a sub-unit, in types where their operation is normally handled automatically by the driver. The main purpose of this is in implementing fault diagnostic programs for such types; it can also be used where normal automated behaviour does not suit an application.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no

error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

SwitchFunc Code indicating the functional group of the switch.

SegNum The segment location of the switch.

SwitchNum The number of the switch in its functional group (unity-based).

SubSwitch The number of the subswitch to operate (unity-based).

SwitchAction True to close relay,
False to open relay.

Card num in Handle combining session handle and card handle.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

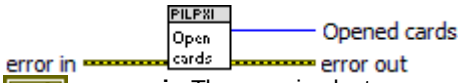
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

State True - closed relay,
False - opened relay.

Card num out Handle combining session handle and card handle.

PILPXI Open Cards.vi
Locates and opens all installed Pickering cards. Once cards have been opened, other VIs may then be used to access cards by their handles. If cards are currently opened by some other program they cannot be accessed and the VI returns error.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

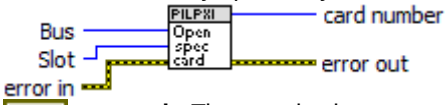
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Opened cards Number of opened cards using OpenCards VI.

PILPXI Open Specified Card.vi
Opens the specified Pickering card. Once a card has been opened, other driver VIs may then be used to access it. If the card is currently opened by some other program it cannot be accessed and the VI returns an error.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Bus The card's logical bus location.

Slot The card's logical device location.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

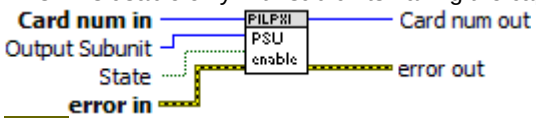
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

card number Card number

PILPXI PSU Enable.vi
Enables or disables a power supply's output.
This VI is usable only with sub-units having the capability PSU_CAP_OUTPUT_CONTROL - see PIPLX PSU Info.vi.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

State True = enable,
False = disable

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI PSU Get Voltage.vi
Obtains the voltage setting of a power supply sub-unit.
The result is the nominal value to which the output has been let, not necessarily the actual voltage being output (which may be affected by device tolerances, current-limit conditions etc.).
This VI is also usable with fixed-voltage supplies, returning the nominal output voltage.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no

error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Input Handle Handle combining session handle and card handle.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

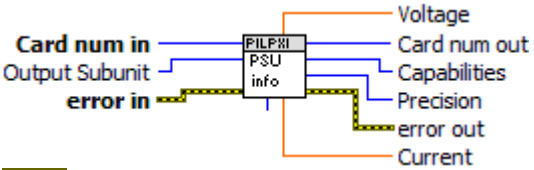
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Voltage Output setting, in Volts.

Output Handle Handle combining session handle and card handle.

PILPXI PSU Info.vi
Obtains a description of a power supply sub-unit, as numeric values.
Power supply sub-unit type code is: 9 - TYPE_PSUDC (DC power supply)

Certain driver VIs are only usable with sub-units having appropriate capabilities - examples being:
PIL_PsuEnable
PIL_PsuSetVoltage



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Type Number Type code.

Voltage Rated voltage (in Volts).

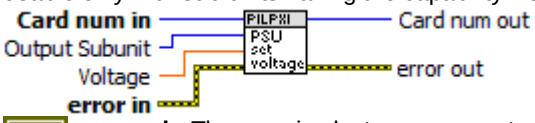
Current Rated current (in Amps).

Precision Precision (in bits, meaningful only for programmable supplies).

Capabilities Capability flag bit definitions:
0x00000010 - PSU_CAP_CURRENT_MODE_SENSE (can sense if operating in current-limited mode)
0x00000008 - PSU_CAP_PROG_CURRENT (output current is programmable)
0x00000004 - PSU_CAP_PROG_VOLTAGE (output voltage is programmable)
0x00000002 - PSU_CAP_OUTPUT_SENSE (has logic-level sensing of output active state)
0x00000001 - PSU_CAP_OUTPUT_CONTROL (has output on/off control)

Card num out Card number

PILPXI PSU Set Voltage.vi
Sets the output voltage of a power supply sub-unit to the specified value. The voltage value specified is rounded to the precision of the supply's DAC. The actual voltage setting can be obtained using PIPLX PSU Get Voltage.vi. This VI is usable only with sub-units having the capability PSU_CAP_PROG_VOLTAGE - see PIPLX PSU Info.vi.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Voltage The output voltage to set, in Volts.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

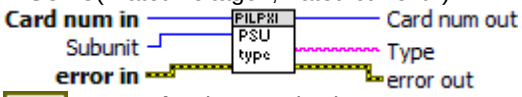
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI PSU Type.vi
Obtains a description of a power supply sub-unit, as a text string. For a DC power supply the format of the result is "PSUDC(<rated voltage>,<rated current>)".



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Subuni Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

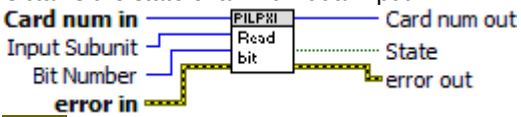
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Type String containing description of the subunit of the card.

Card num out Card number

PILPXI Read Bit.vi
Obtains the state of an individual input.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Input Subunit Subunit number.

Bit Number Bit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

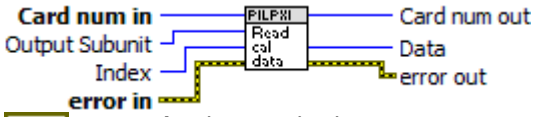
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

State True = logical 1,
False = logical 0

Card num out Card number

PILPXI Read Calibration Data.vi
Reads a 16-bit calibration value from on-card EEPROM.
The driver places no interpretation on the value obtained - an application program can utilise it in any way it wishes.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Index Calibration value index.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

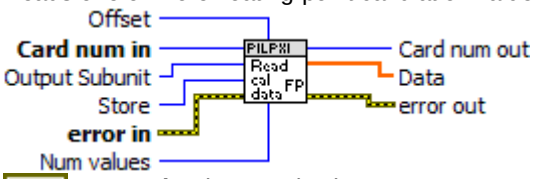
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Data Calibration value.

Card num out Card number

PILPXI Read Calibration DataFP.vi
Reads one or more floating-point calibration values from on-card EEPROM.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

Store Value indicating which store to access

Offset the offset in the sub-unit's calibration store at which to start

Num Values The number of values to be written

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

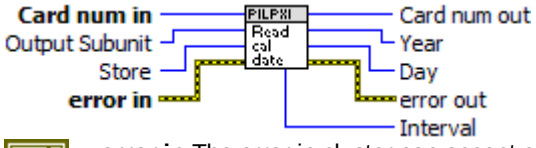
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

Data Array containing values to write

Num Values 2 The number of values to be written

PILPXI Read Calibration Date.vi
Reads a sub-unit's calibration date and interval from on-card EEPROM.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

Store Value indicating which store to access

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

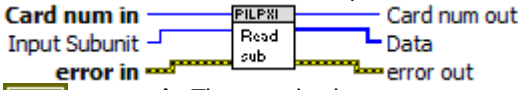
Card num out Card number

Year Year of calibration

Day Day of calibration

Interval Calibration interval (in days)

PILPXI Read Subunit.vi
Obtains the current state of all inputs of a sub-unit.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Input Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

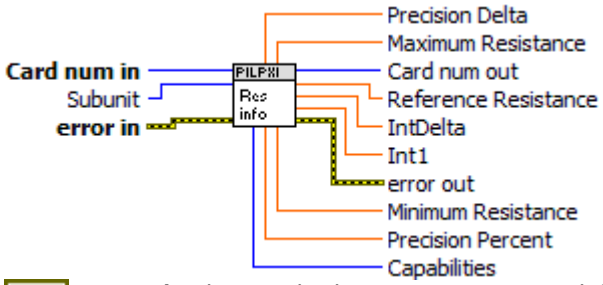
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

Data Bit pattern of input subunit.

Data Bit pattern of input subunit.

PILPXI Resistor Info.vi
obtain resistor characteristics



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no

error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

Maximum Resistance Maximum resistance setting

Minimum Resistance Minimum resistance setting

Reference Resistance reference resistance value

Precision Percent percentage precision (+/- percent)

Precision Delta delta precision (+/- ohms)

IntDelta internal precision (+/- ohms)

Int1 (currently unused) value

Capabilities capabilities flags

RES_CAP_NONE = 0x00000000UL - No special capabilities
RES_CAP_PREC = 0x00000001UL - Supports precision setting (40-260 etc.)
RES_CAP_ZERO = 0x00000002UL - Supports "zero ohms" setting
RES_CAP_INF = 0x00000004UL - Supports infinity setting
RES_CAP_REF = 0x00000008UL - Supports reference calibration value (e.g. 40-265)

PILPXI Set Attenuation.vi
Sets the attenuation to the specified value. The combination of pads inserted to achieve the desired attenuation level is determined by the driver for best all-round performance. In some models it may be possible to optimise particular aspects of attenuator performance by setting other pad combinations explicitly using PIPLX_OpBit or PIPLX_WriteSub. The pad value associated with each output channel can be discovered with PIPLX_AttenPadValue.s

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Attenuation The attenuation value to be set, in dB.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

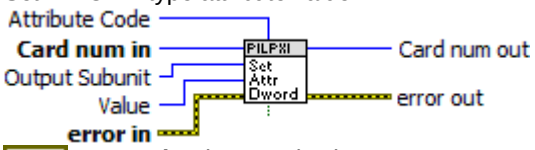
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Set Attribute DWORD.vi
Set DWORD-type attribute value.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Value Value of attribute to set.

Attribute Code Code of DWORD attribute.

Output subunit True for output subunit, false for input subunit.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Set Cal Point.vi
Writes a sub-unit's calibration date and interval into on-card EEPROM. Date information is obtained from the current system date.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

Index index number of calibration point

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Set Mode.vi
Allows control flags affecting the driver's global behaviour to be set and read. This VI gives accessto low-level control features of the Pilpxi driver and is intended for 'expert' use only - the default driver behaviour should be satisfactory for the great majority of applications:

```
MODE_DEFAULT                    = 0x00000000UL,// Default, no special modes set
MODE_NO_WAIT                    = 0x00000001UL,// Function calls exclude output settling delay
MODE_UNLIMITED          = 0x00000002UL,// Disable maximium closure limits
MODE_REOPEN                     = 0x00000004UL,// Allow re-open without clearing cards
MODE_IGNORE_TEST    = 0x00000008UL // Enable card operation even if selftest fails
```

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Mode Flags New value for driver mode flags.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

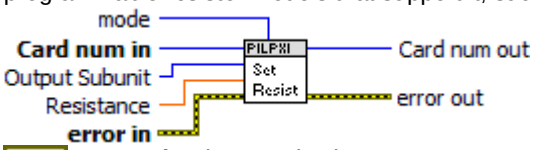
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Old mode The driver's mode flags prior to executing this function

PILPXI Set Resistance.vi
Sets a programmable resistor to the closest available setting to the value specified. This function is only usable with programmable resistor models that support it, such as 40-260-001.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

Resistance The resistance value to set

mode RES_MODE_SET = 0
Default mode to support existing break before make with settling delay

RES_MODE_MBB = 1
New mode to suport make before break with settling delay

RES_MODE_APPLY_PATTERN_IMMEDIATE = 2
Apply new pattern immediately and wait till settling delay

RES_MODE_NO_SETTLING_DELAY = 4
Disable settling delay, this mode is same as DriverMode NO_WAIT, but at sub-unit level

RES_MODE_DONT_SET = 999
Do the calculations but don't set the card

Using RES_MODE_MBB then changing resistance the algorithm will make new relay contacts before releasing unwanted,
thus causing the output resistance to drop in the transition between resistance settings.

Using RES_MODE_SET in those cases where the transitional resistance going high can be tolerated
and using RES_MODE_MBB in those cases where it cannot be tolerated.

RES_MODE_APPLY_PATTERN_IMMEDIATE
it simply applies the new pattern with neither MBB nor BBM operation.
The advantage of this is faster operation, but the resistance in the transition between set values is undefinable
since it depends entirely on the movement of the armatures of the relays being changed.
Generally it is better to control the operation so that the transition is defined.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Settle Time.vi
Obtains a sub-unit's settling time (the period taken for its switches to stabilise). By default, Piplx driver VIs retain control during this period so that switches are guaranteed to have stabilised on completion. This mode of operation can be overriden if required - see PIPLX Set Mode.vi.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Output subunit.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the

error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Settling Time Settling time of relays on subunit.

Card num out Card number

PILPXI Status.vi
Obtains the current status flags for the specified card.

Status bits are as follows:
0x80000000 - STAT_NO_CARD (no card with specified number)
0x40000000 - STAT_WRONG_DRIVER (card requires newer driver)
0x20000000 - STAT_EEPROM_ERR (card EEPROM fault)
0x10000000 - STAT_DISABLED (card disabled)
0x04000000 - STAT_BUSY (card operations not completed)
0x02000000 - STAT_HW_FAULT (card hardware defect)
0x01000000 - STAT_PARITY_ERROR (PCIbus parity error)
0x00000000 - STAT_OK (card functional and stable)

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the

error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Status Obtains the current status flags for the specified card.

Status bits are as follows:
0x80000000 - STAT_NO_CARD (no card with specified number)
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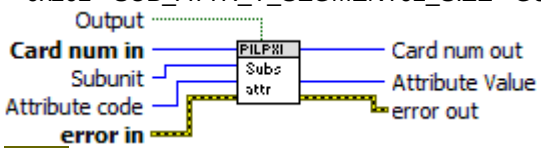
0x20000000 - STAT_EEPROM_ERR (card EEPROM fault)
0x10000000 - STAT_DISABLED (card disabled)
0x04000000 - STAT_BUSY (card operations not completed)
0x02000000 - STAT_HW_FAULT (card hardware defect)
0x01000000 - STAT_PARITY_ERROR (PCIbus parity error)
0x00000000 - STAT_OK (card functional and stable)

Card num out Card number

PILPXI Subunit Attribute.vi
Obtains the value of a sub-unit property. These values facilitate operation using PIPLX OpenClose Switch.vi.
AttrCode:
1 - SUB_ATTR_CHANNEL_SUBSWITCHES - Gets number of subswitches per logical channel (matrix crosspoint)
2 - SUB_ATTR_X_ISO_SUBSWITCHES - Gets number of subswitches per logical X-isolator
3 - SUB_ATTR_Y_ISO_SUBSWITCHES - Gets number of subswitches per logical Y-isolator
4 - SUB_ATTR_X_LOOPTHRU_SUBSWITCHES - Gets number of subswitches per logical X-loopthru
5 - SUB_ATTR_Y_LOOPTHRU_SUBSWITCHES - Gets number of subswitches per logical Y-loopthru
0x100 - SUB_ATTR_NUM_X_SEGMENTS - Gets number of X-axis segments
0x101 - SUB_ATTR_X_SEGMENT01_SIZE - Gets size of X-axis segment 1
0x102 - SUB_ATTR_X_SEGMENT02_SIZE - Gets size of X-axis segment 2
0x103 - SUB_ATTR_X_SEGMENT03_SIZE - Gets size of X-axis segment 3
0x104 - SUB_ATTR_X_SEGMENT04_SIZE - Gets size of X-axis segment 4
0x105 - SUB_ATTR_X_SEGMENT05_SIZE - Gets size of X-axis segment 5
0x106 - SUB_ATTR_X_SEGMENT06_SIZE - Gets size of X-axis segment 6
0x107 - SUB_ATTR_X_SEGMENT07_SIZE - Gets size of X-axis segment 7
0x108 - SUB_ATTR_X_SEGMENT08_SIZE - Gets size of X-axis segment 8
0x109 - SUB_ATTR_X_SEGMENT09_SIZE - Gets size of X-axis segment 9
0x10A - SUB_ATTR_X_SEGMENT10_SIZE - Gets size of X-axis segment 10
0x10B - SUB_ATTR_X_SEGMENT11_SIZE - Gets size of X-axis segment 11
0x10C - SUB_ATTR_X_SEGMENT12_SIZE - Gets size of X-axis segment 12
0x200 - SUB_ATTR_NUM_Y_SEGMENTS - Gets number of Y-axis segments
0x201 - SUB_ATTR_Y_SEGMENT01_SIZE - Gets size of y-axis segment 1
0x202 - SUB_ATTR_Y_SEGMENT02_SIZE - Gets size of y-axis segment 2



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Subunit Number of subunit.

Card num in Handle combining session handle and card handle.

Output True = output subunit,
false = input subunit

Attribute code AttrCode:
1 - SUB_ATTR_CHANNEL_SUBSWITCHES - Gets number of subswitches per logical channel (matrix crosspoint)
2 - SUB_ATTR_X_ISO_SUBSWITCHES - Gets number of subswitches per logical X-isolator
3 - SUB_ATTR_Y_ISO_SUBSWITCHES - Gets number of subswitches per logical Y-isolator
4 - SUB_ATTR_X_LOOPTHRU_SUBSWITCHES - Gets number of subswitches per logical X-loopthru
5 - SUB_ATTR_Y_LOOPTHRU_SUBSWITCHES - Gets number of subswitches per logical Y-loopthru
0x100 - SUB_ATTR_NUM_X_SEGMENTS - Gets number of X-axis segments
0x101 - SUB_ATTR_X_SEGMENT01_SIZE - Gets size of X-axis segment 1
0x102 - SUB_ATTR_X_SEGMENT02_SIZE - Gets size of X-axis segment 2
0x103 - SUB_ATTR_X_SEGMENT03_SIZE - Gets size of X-axis segment 3
0x104 - SUB_ATTR_X_SEGMENT04_SIZE - Gets size of X-axis segment 4
0x105 - SUB_ATTR_X_SEGMENT05_SIZE - Gets size of X-axis segment 5
0x106 - SUB_ATTR_X_SEGMENT06_SIZE - Gets size of X-axis segment 6
0x107 - SUB_ATTR_X_SEGMENT07_SIZE - Gets size of X-axis segment 7
0x108 - SUB_ATTR_X_SEGMENT08_SIZE - Gets size of X-axis segment 8
0x109 - SUB_ATTR_X_SEGMENT09_SIZE - Gets size of X-axis segment 9
0x10A - SUB_ATTR_X_SEGMENT10_SIZE - Gets size of X-axis segment 10
0x10B - SUB_ATTR_X_SEGMENT11_SIZE - Gets size of X-axis segment 11
0x10C - SUB_ATTR_X_SEGMENT12_SIZE - Gets size of X-axis segment 12
0x200 - SUB_ATTR_NUM_Y_SEGMENTS - Gets number of Y-axis segments
0x201 - SUB_ATTR_Y_SEGMENT01_SIZE - Gets size of y-axis segment 1
0x202 - SUB_ATTR_Y_SEGMENT02_SIZE - Gets size of y-axis segment 2

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

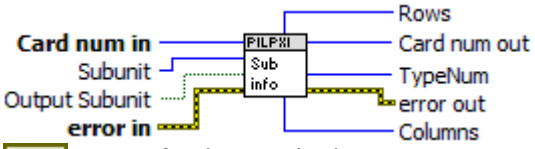
Attribute Value Attribute value.

Card num out Handle combining session handle and card handle.

PILPXI Subunit Info.vi
Obtains a description of a sub-unit, as numeric values.
Output sub-unit type codes are:
1 - TYPE_SW (uncommitted switch)
2 - TYPE_MUX (multiplexer single-channel)
3 - TYPE_MUXM (multiplexer, multi-channel)
4 - TYPE_MAT (matrix - LF)
5 - TYPE_MATR (matrix - RF)
6 - TYPE_DIG (digital outputs)
7 - TYPE_RES (programmable resistor)
8 - TYPE_ATTEN (programmable attenuator)
9 - TYPE_PSUDC (DC power supply)

Input sub-unit type codes are:
1 - INPUT

Row and column values give the dimensions of the sub-unit. For all types other than matrices the column value contains the significant dimension: their row value is always '1'.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Subunit Subunit number.

Output Subunit True = output subunit,

False = input subunit.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

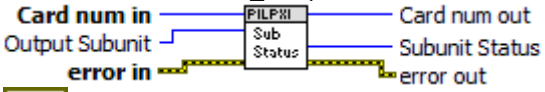
Rows Row count.

Columns Columns count

TypeNum Type number.

PILPXI Subunit Status.vi
Obtains the current status flags for the specified output sub-unit. Status bits associated with significant card-level conditions are also returned. Status bits are as follows:

0x80000000 - STAT_NO_CARD (no card with specified number)
0x40000000 - STAT_WRONG_DRIVER (card requires newer driver)
0x20000000 - STAT_EEPROM_ERR (card EEPROM fault)
0x10000000 - STAT_DISABLED (card disabled)
0x08000000 - STAT_NO_SUB (no sub-unit with specified number)
0x04000000 - STAT_BUSY (sub-unit operations not completed)
0x02000000 - STAT_HW_FAULT (card hardware defect)
0x01000000 - STAT_PARITY_ERROR (PCIbus parity error)
0x00800000 - STAT_PSU_INHIBITED (power supply output is disabled - by software)
0x00400000 - STAT_PSU_SHUTDOWN (power supply output is shutdown - due to overload)
0x00200000 - STAT_PSU_CURRENT_LIMIT (power supply is operating in current-limited mode)
0x00100000 - STAT_CORRUPTED (sub-unit logical state is corrupted)
0x00000000 - STAT_OK (card functional and stable)



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num in Card number

Output Subunit Output subunit.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

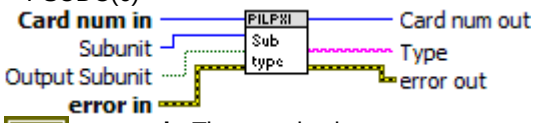
Subunit Status Obtains the current status flags for the specified output sub-unit. Status bits associated with significant card-level conditions are also returned. Status bits are as follows:

0x80000000 - STAT_NO_CARD (no card with specified number)
0x40000000 - STAT_WRONG_DRIVER (card requires newer driver)
0x20000000 - STAT_EEPROM_ERR (card EEPROM fault)
0x10000000 - STAT_DISABLED (card disabled)
0x08000000 - STAT_NO_SUB (no sub-unit with specified number)
0x04000000 - STAT_BUSY (sub-unit operations not completed)
0x02000000 - STAT_HW_FAULT (card hardware defect)
0x01000000 - STAT_PARITY_ERROR (PCIbus parity error)
0x00800000 - STAT_PSU_INHIBITED (power supply output is disabled - by software)
0x00400000 - STAT_PSU_SHUTDOWN (power supply output is shutdown - due to overload)
0x00200000 - STAT_PSU_CURRENT_LIMIT (power supply is operating in current-limited mode)
0x00100000 - STAT_CORRUPTED (sub-unit logical state is corrupted)
0x00000000 - STAT_OK (card functional and stable)

Card num out Card number

PILPXI Subunit Type.vi
Obtains a description of a sub-unit, as a text string.
Type strings:

INPUT(<size>)	- Digital inputs
SWITCH(<size>)	- Uncommitted switches
MUX(<size>)	- Multiplexer, single-channel only
MUXM(<size>)	- Multiplexer, multi-channel
MATRIX(<columns>X<rows>)	- Matrix, LF
MATRIXR(<columns>X<rows>)	- Matrix, RF
DIGITAL(<size>)	- Digital Outputs
RES(<number of resistors in chain>)	- Programmable resistor
ATTEN(<number of pads>)	- Programmable attenuator
PSUDC(0)	- DC Power Supply



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Subunit Subunit number.

Output Subunit True = output subunit,
False = input subunit.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the

error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Type String containing type of subunit.

Card num out Card number

PILPXI TC Get Voltage.vi
Obtains the voltage setting of a thermocouple channel in milivolts.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Input Handle Handle combining session handle and card handle.

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

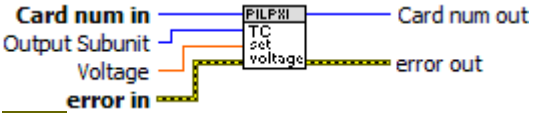
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Voltage Output setting, in miliovolts.

Output Handle Handle combining session handle and card handle.

PILPXI TC Set Voltage.vi
Sets the output voltage of a thermocouple channel. Value is in milivolts.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Voltage The output voltage to set, in milivolts.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI VI Tree.vi
The VI Tree displays all the user-callable VIs of the instrument driver in an organized table.

PILPXI View Bit.vi
Obtains the state of an individual output.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Bit Number Bit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the

error displayed.

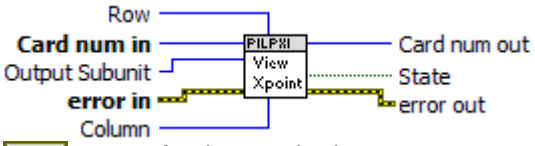
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

State True - closed relay,
False - opened relay.

Card num out Card number

PILPXI View Crosspoint.vi
Obtains the state of an individual matrix crosspoint.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Row Crosspoint row (Y) location.

Column Crosspoint column (X) location.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

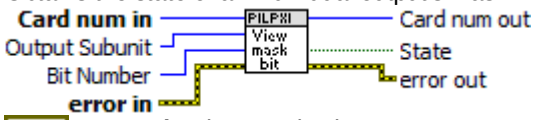
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

State True - closed relay,
False - opened relay.

Card num out Card number

PILPXI View Mask Bit.vi
Obtains the state of an individual output's mask.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Bit Number Bit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the

error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

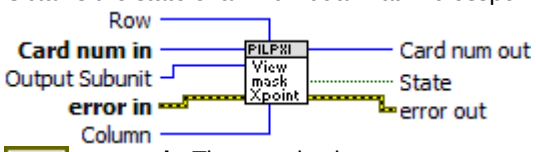
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

State True = masked,
False = not masked

Card num out Card number

PILPXI View Mask Crosspoint.vi
Obtains the state of an individual matrix crosspoint's mask.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Row Crosspoint row (Y) location.

Column Crosspoint column (X) location.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

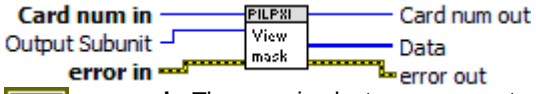
source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

State True = masked,
False = not masked

Card num out Card number

PILPXI View Mask.vi
Obtains the switch mask of a sub-unit. The result fills the number of least significant bits corresponding to the size of the sub-unit.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no

error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

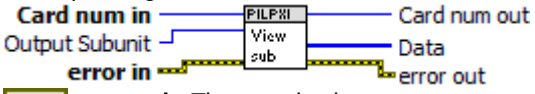
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

Data One-dimensional array (vector) to receive the result.

Numeric

PILPXI View Subunit.vi
Obtains the state of all outputs of a sub-unit. The result fills the number of least significant bits corresponding to the size of the sub-unit.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no

error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

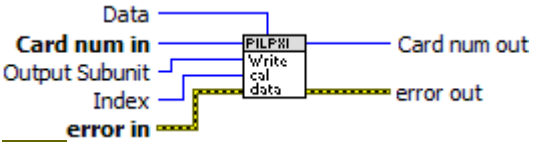
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Data One-dimensional array (vector) to receive the result.

Numeric

Card num out Card number

PILPXI Write Calibration Data.vi
Writes a 16-bit calibration value to on-card EEPROM. The driver places no interpretation on the value written - an application program can utilise it in any way it wishes.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Index Calibration value index.

Data Value to be written.

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

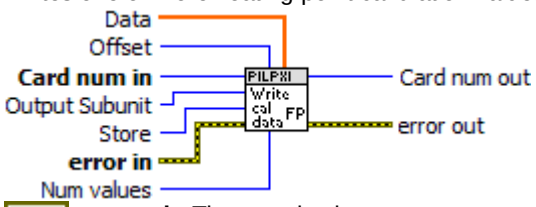
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Write Calibration DataFP.vi
Writes one or more floating-point calibration values into on-card EEPROM.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

Store Value indicating which store to access

Offset the offset in the sub-unit's calibration store at which to start

Num Values The number of values to be written

Data Array containing values to write

Num Values 2 The number of values to be written

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Write Calibration Date.vi
Writes a sub-unit's calibration date and interval into on-card EEPROM. Date information is obtained from the current system date.

error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

Store Value indicating which store to access

Interval Calibration interval (in days)

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

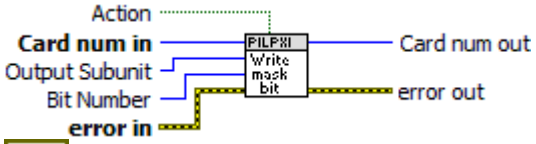
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Write Mask Bit.vi
Sets an individual output's mask.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Bit Number Bit number.

Action True = mask,
False = do not mask

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

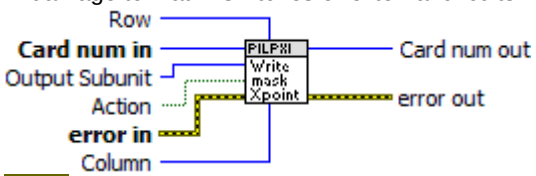
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Write Mask Crosspoint.vi
Mask or unmask a single matrix crosspoint.
Masking disables the corresponding switch for the PIPLX OpenClose Bit.vi, PIPLX OpenClose Crosspoint.vi and PIPLX Write Subunit.vi VIs. This facility can be used to guard against programming errors that could otherwise result in damage to matrix switches or external circuits.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Row Crosspoint row (Y) location.

Column Crosspoint column (X) location.

Action True = mask,
False = do not mask

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

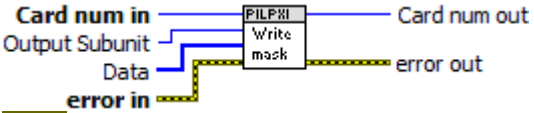
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Write Mask.vi
Sets a sub-unit's switch mask to the supplied bit-pattern. The number of least significant bits corresponding to the size of the sub-unit are written into the mask. A '1' bit in the mask disables the corresponding switch for the OpBit, OpCrosspoint, WriteSub VIs. This facility is particularly useful for matrix sub-units, where it can be used to guard against programming errors that could otherwise result in damage to matrix switches or external circuits.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Card num in Card number

Data One-dimensional array (vector) containing the bit-pattern to be written.

Numeric

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

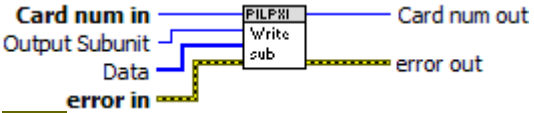
The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number

PILPXI Write Subunit.vi
Sets all outputs of a sub-unit to the supplied bit-pattern. The number of least significant bits corresponding to the size of the sub-unit are written.



error in The error in cluster can accept error information wired from VIs previously called. Use this information to decide if any functionality should be bypassed in the event of errors from other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

code The **code** input identifies the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Output Subunit Subunit number.

Data One-dimensional array (vector) containing the bit-pattern to be written.

Numeric

Card num in Card number

error out The error out cluster passes error or warning information out of a VI to be used by other VIs.

The pop-up option Explain Error (or Explain Warning) gives more information about the error displayed.

status The **status** boolean is either TRUE (X) for an error, or FALSE (checkmark) for no error or a warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

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source The **source** string describes the origin of the error or warning.

The pop-up option **Explain Error** (or Explain Warning) gives more information about the error displayed.

Card num out Card number