

Board Assembly Part Number(s)

Part Number	Description
153849B-02L	NI PXIe-6614

Manufacturer: National Instruments

Volatile Memory

Type	Size	User Accessible/ System Accessible	Battery Backup?	Purpose	Method of Clearing
Counter Input FIFO ¹	256 x 32-bit	No/No	No	Data Processing	Cycle power
Counter Output FIFO ²	256 x 32-bit	Yes/Yes	No	Data Processing	Cycle power
Digital Input FIFO	256 x 32-bit	No/No	No	Data Processing	Cycle power
Digital Output FIFO	2k x 32-bit	Yes/Yes	No	Data Processing	Cycle power

Non-Volatile Memory

Type	Size	User Accessible/ System Accessible	Battery Backup?	Purpose	Method of Clearing
EEPROM	2 KB	Yes ³ /Yes	No	Device Configuration	Refer to Clearing Notes

Media Storage

Type	Size	User Accessible/ System Accessible	Battery Backup?	Purpose	Method of Clearing
<i>NONE</i>					

Clearing Notes:

The calibration constants that are user-accessible contain 5 character user defined information and the calibration password. The user defined information can be changed by completing the following steps in LabVIEW:

1. From the Functions palette, select **Measurement I/O»DAQmx - Data Acquisition»Advanced»Calibration»Cal Info.node** and put the node on the block diagram.
2. Right-click the node and select **Change all to write**.
3. Expand the node to expose two items.
4. Left-click the items and select **ActiveDev** and then **Cal.UserDefinedInfo** from the menu.

¹ NI PXIe-6614 contains 8 Counter Input FIFO.

² NI PXIe-6614 contains 8 Counter Output FIFO.

³ The device configuration area is not accessible from any API. The section that stores calibration constants does have portions that are user-accessible.

5. Create a constant at the input of **ActiveDev**, and then select your device from the drop-down menu.
6. Create a constant at the input of **Cal.UserDefinedInfo**, then enter " " in the box.
7. Save the VI as **Declassify Device.vi**.
8. Run the VI.

*You can read **Cal.UserDefinedInfo** again to verify that the memory is, in fact, erased.*

The calibration password is 4 bytes maximum and is used to store the password for external calibration access. The default password is "NI". A new password can be set with the `DAQmxChangeExternalCalibrationPassword` function. To verify the current password, use the `DAQmx Initialize External Calibration` function and supply the password input field with the current password. If the password is correct, a 0 is returned as the error message.

Terms and Definitions

User Accessible Allows the user to directly write or modify the contents of the memory during normal instrument operation.

System Accessible Does not allow the user to access or modify the memory during normal instrument operation. However, system accessible memory may be accessed or modified by background processes. This can be something that is not deliberate by the user and can be a background driver implementation, such as storing application information in RAM to increase speed of use.

Cycle Power The process of completely removing power from the device and its components. This process includes a complete shutdown of the PC and/or chassis containing the device; a reboot is not sufficient for the completion of this process.

Volatile Memory Requires power to maintain the stored information. When power is removed from this memory, its contents are lost.

Non-Volatile Retains its contents when power is removed. This type of memory typically contains calibration or chip configuration information, such as power up states.