

Manufacturer: National Instruments

Board Assembly Part Number(s):

Part Number and Revision	Description
158215B-01L or later	PXIe-4480
158215B-02L or later	PXIe-4481

The part number and revision for these devices is printed with the serial number on the circuit board on the back side of the product near the backplane connector.

Volatile Memory

<i>Purpose (“Target Data”)</i>	<i>Type</i>	<i>Size</i>	<i>Battery Backup</i>	<i>User¹ Accessible</i>	<i>System Accessible</i>	<i>Clearing Procedure</i>
Digital Logic/Board Control	FPGA – Xilinx Artix 7	75T	No	Yes	Yes	Cycle Power
PCIe Bus Interface	STC3 ASIC	N/A	No	Yes	Yes	Cycle Power

Non-Volatile Memory (incl. Media Storage)

<i>Purpose (“Target Data”)</i>	<i>Type</i>	<i>Size</i>	<i>Battery Backup</i>	<i>User Accessible</i>	<i>System Accessible</i>	<i>Clearing Procedure</i>
Device configuration	Flash	8 MB	No	No	Yes	None
<ul style="list-style-type: none"> • Device information • Calibration metadata • Calibration data² 				Yes	Yes	Cal. Data
<ul style="list-style-type: none"> • Calibration data² 				No	Yes	None
TEDS/IEPE Configuration	CPLD – Lattice MachX02	X02-2000	No	No	No	None
Analog Configuration	CPLD – Lattice MachX02	X02-1200	No	No	No	None

Clearing Procedures

Calibration Data – Device Configuration Flash (Calibration Metadata):

The only section of the EEPROM modifiable by users is the calibration area. To clear this area, do one of the following:

- Overwrite the existing User-Defined Information TWICE IN A ROW with non-sensitive information using the User-Defined Information property in the NI-DAQmx Calibration API.
- Overwrite the existing Calibration Password TWICE IN A ROW with a non-sensitive password using the DAQmx Change External Calibration Password function in the NI-DAQmx Calibration API.

¹ Refer to *Terms and Definitions* section for clarification of *User* and *System Accessible*

² Calibration constants that are stored on the device include information for the device’s full operating range.

Terms and Definitions

Cycle Power:

The process of completely removing power from the device and its components and allowing for adequate discharge. 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. This type of memory typically contains application specific data such as capture waveforms.

Non-Volatile Memory:

Power is not required to maintain the stored information. Device retains its contents when power is removed. This type of memory typically contains information necessary to boot, configure, or calibrate the product or may include device power up states.

User Accessible:

The component is read/write addressable such that a user can store arbitrary information to the component from the host using a publicly distributed NI tool, such as a Driver, the System Configuration, or NI Measurement and Automation Explorer (MAX).

System Accessible:

The component is read/write addressable from the host or through other, unaltered NI components of the system.

Clearing: Per NIST Special Publication 800-88 Revision 1

Logical techniques to sanitize data in all User Accessible storage locations for protection against simple non-invasive data recovery techniques using the same interface available to the user; typically applied through the standard read and write commands to the storage device.

Sanitize: Per NIST Special Publication 800-88 Revision 1

A process to render access to “Target Data” on the media infeasible for a given level of effort.