**Manufacturer:** National Instruments

**Board Assembly Part Numbers** (Refer to Procedure 1 for identification procedure):

| Part Number and Revision | Description |
|---|---|
| 196232x-03L | NI PCI-5105, 512MB/CH |
| 196232x-02L | NI PCI-5105, 128MB/CH |
| 196232x-01L | NI PCI-5105, 16MB/CH |
| 195855x-03L | NI PXI-5105, 512MB/CH |
| 195855x 02L | NI PXI -5105, 128MB/CH |
| 195855x 01L | NI PXI -5105, 16MB/CH |
| 156861x-03L | NI PXIe-5105, 512MB/CH |
| 156861x-02L | NI PXIe-5105, 128MB/CH |
| 156861x-01L | NI PXIe-5105, 16MB/CH |

## Volatile Memory

| Target Data | Type | Size | Battery Backup | User[1] Accessible | System Accessible | Sanitization Procedure |
|---|---|---|---|---|---|---|
| Waveform data | SDRAM | 16 MB, 128 MB, or 512 MB | No | Yes | Yes | Cycle Power |
| DRAM Buffers | FPGA Block RAM | Xilinx XC2VP20 (PCI/PXI) Altera EP2S90 (PXIe) | No | Yes | Yes | Cycle Power |

## Non-Volatile Memory (*incl. Media Storage*)

| Target Data | Type | Size | Battery Backup | User Accessible | System Accessible | Sanitization Procedure |
|---|---|---|---|---|---|---|
| Board configuration | EEPROM | 8 KB (PCI/PXI) 32 MB (PXIe) | No | No | Yes | None |
| Device configuration | EEPROM | 4 Kb | No | | | |
| • Device information | | | | No | Yes | None |
| • Calibration metadata | | | | Yes | Yes | Procedure 2 |
| • Calibration Constants[2] | | | | No | Yes | None |
| FPGA Programming | CPLD | Altera EPM7064 (PCI/PXI) Altera EPM240 (PXIe) | No | No | Yes | None |

---

[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. Any implications resulting from partial self-calibration can be eliminated by running the full self-calibration procedure.

March 2017
374812A-01 Rev 001
This document is subject to change without notice.
For the most recent version, visit ni.com/manuals.
Contact: 866-275-6964
support@ni.com

## Procedures

**Procedure 1 –Board Assembly Part Number Identification:**
To determine the Board Assembly Part Number and Revision, refer to the label applied to the surface of your product.  The Assembly Part Number should be formatted as "P/N: #####x-##L

**Procedure 2 - Device Configuration EEPROM (Calibration Metadata):**
The user-accessible areas of the Device Configuration EEPROM are exposed through a calibration Applications Programming Interface (API) in LabVIEW. To clear the calibration meta-data area, complete the following steps:

> 1. To clear the calibration password, from LabVIEW use niScope Cal Change Password.vi to overwrite the password.
> 2. To clear the user-defined information, from LabVIEW use niScope Cal Store Misc Info.vi to overwrite user-defined information.

March 2017
374812A-01 Rev 001

This document is subject to change without notice.
For the most recent version, visit ni.com/manuals.

Contact: 866-275-6964
support@ni.com

# 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 and/or 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 API, the System Configuration API, or MAX.

**System Accessible:**
The component is read and/or write addressable from the host without the need to physically alter the product.

**Clearing:**
Per *NIST Special Publication 800-88 Revision 1*, "clearing" is a logical technique 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.

**Sanitization:**
Per *NIST Special Publication 800-88 Revision 1*, "sanitization" is a process to render access to "Target Data" on the media infeasible for a given level of effort. In this document, clearing is the degree of sanitization described.

March 2017
374812A-01 Rev 001

This document is subject to change without notice.
For the most recent version, visit ni.com/manuals.

Contact: 866-275-6964
support@ni.com