COMPREHENSIVE SERVICES

We offer competitive repair and calibration services, as well as easily accessible documentation and free downloadable resources.

SELL YOUR SURPLUS

We buy new, used, decommissioned, and surplus parts from every NI series. We work out the best solution to suit your individual needs. We Sell For Cash We Get Credit We Receive a Trade-In Deal

OBSOLETE NI HARDWARE IN STOCK & READY TO SHIP

We stock New, New Surplus, Refurbished, and Reconditioned NI Hardware.

APEX WAVES

Bridging the gap between the manufacturer and your legacy test system.

1-800-915-6216
www.apexwaves.com
sales@apexwaves.com

 \bigtriangledown

All trademarks, brands, and brand names are the property of their respective owners.

Request a Quote CLICK HERE PCI-6143



Manufacturer: National Instruments

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

| Part Number and Revision | Description |
|--------------------------|-------------|
| 189947A-01(L) or later | PCI-6143 |
| 191083A-01(L) or later | PXI-6143 |

Volatile Memory

| | | | Battery | User ¹ | System | Sanitization |
|-------------|------|-----------|---------|-------------------|------------|--------------|
| Target Data | Туре | Size | Backup | Accessible | Accessible | Procedure |
| Glue logic | FPGA | Intel | No | No | No | Cycle Power |
| - | | EP1C3 | | | | - |
| Glue logic | CPLD | Intel | No | No | No | Cycle Power |
| | | EPM7032AE | | | | |

Non-Volatile Memory (incl. Media Storage)

| | | | Battery | User | System | Sanitization |
|---------------------------------|--------|--------|---------|------------|------------|--------------|
| Target Data | Туре | Size | Backup | Accessible | Accessible | Procedure |
| Calibration information | EEPROM | 1 kB | No | | | |
| Calibration metadata | | | | Yes | Yes | Procedure 2 |
| • Calibration data ² | | | | No | Yes | None |
| Device configuration | Flash | 128 kB | No | | | |
| • Device configuration | | | | No | Yes | None |
| • FPGA bitstream | | | | No | Yes | None |

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

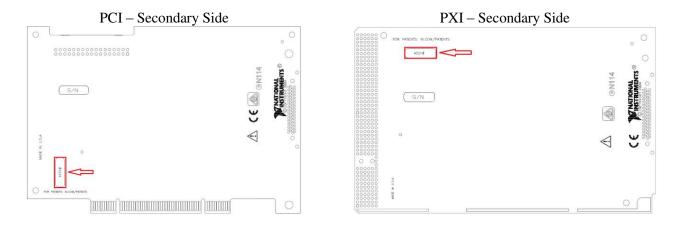
 $^{^{2}}$ Calibration constants that are stored on the device include information for the device's full operating range. Any implications resulting from partial self-calibration can be eliminated by running the full self-calibration procedure.



Procedures

Procedure 1–Board Assembly Part Number Identification:

To determine the Board Assembly Part Number and Revision, refer to the "P/N" label applied to the surface of your product as shown below. The Assembly Part Number should be formatted as "P/N: ######a-vvL" where "a" is the letter revision of the Board Assembly (eg. A, B, C...) and the "vv" is the type identifier. If the product is RoHS compliant, "L" can be found at the end of the part number.



Procedure 2–Calibration InformationEEPROM (Calibration Metadata):

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

1. The user-accessible areas of the Device Configuration EEPROM can be cleared using the NI DAQmx API. For instructions on how to clear these areas, go to <u>www.ni.com/info</u> and enter info code *DAQmxLOV*



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.