Manufacturer: National Instruments

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

Part Number and Revision	Description
188133E-02 or later	**PXI-7830R**
188133C-01 or later	**PXI-7831R**
188133E-03 or later	**PXI-7833R**

Volatile Memory

Target Data	Type	Size	Battery Backup	User[1] Accessible	System Accessible	Sanitization Procedure
Data storage during VI execution	FPGA Block RAM	40 x 18 Kbits (-01, -02) 96 x 18 Kbits (-03)	No	Yes	Yes	Cycle Power

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

Target Data	Type	Size	Battery Backup	User Accessible	System Accessible	Sanitization Procedure
Device configuration	Flash	1M x 8 bits (-01, -02) 2M x 8 bits (-03)	No			
• Device information				No	Yes	None
• FPGA bitstream				Yes	Yes	Procedure 2
• Calibration metadata				Yes	Yes	Procedure 3
• Calibration data[2]				No	Yes	None
CPLD configuration	CPLD	17 KB	No	No	No	None

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[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 label applied to the surface of your product. The Assembly Part Number should be formatted as "P/N: #####a-##L

Procedure 2 - Device Configuration Flash (FPGA bitstream):
You can use the NI-RIO Device Setup utility to erase the FPGA bitstream data. For more details, visit `ni.com/info` and enter the infocode `fpgaflashclr`.

Procedure 3 - Device Configuration Flash (Calibration Metadata):
The user-accessible areas of the Device Configuration Flash are exposed through a calibration Applications Programming Interface (API) in LabVIEW. For more details, visit `ni.com/info` and enter the infocode `rseriescalclr`.

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.