Manufacturer: National Instruments

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

Part Number and Revision	Description
140425B-01L or later	PXIe-5172, 8CH, 410T FPGA
140425B-02L or later	PXIe-5172, 8CH, 325T FPGA
140425B-03L or later	PXIe-5172, 4CH, 325T FPGA

Volatile Memory

Target Data	Type	Size	Battery Backup	User[1] Accessible	System Accessible	Sanitization Procedure
FPGA Programming	SDRAM	16 MB	No	Yes	Yes	Procedure 2
Waveform Data	DRAM	12Gb(8CH) 6Gb(4CH)	No	Yes	Yes	Cycle Power
PCI Communication Board Control	FPGA	Xilinx Kintex 7	No	No	Yes	Cycle Power

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

Target Data	Type	Size	Battery Backup	User Accessible	System Accessible	Sanitization Procedure
Board configuration	FLASH	512MB	No	No	Yes	None
Device information	EEPROM	1Mb	No			
• Product Identification				No	Yes	None
• Manufacturing Data				No	Yes	None
• Factory Data				No	Yes	None
• Self-Calibration Data				No	Yes	None
• External Cal. Metadata[2]				No	Yes	None
Front End Control	CPLD	EPM240	No	No	Yes	None
FPGA Programming	CPLD	MACHX02-1200HC	No	No	Yes	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.

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-##

Procedure 2 – FPGA Reconfiguration
For NI-SCOPE applications, the "niScope Initialize.vi" calls the FPGA reconfiguration method. For RIO applications, using "Open FPGA VI Reference" will allow the user to load a custom FPGA Image.

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.