

**Manufacturer:** National Instruments

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

Part Number and Revision	Description
159096A-01	MODULE ASSEMBLY, NI PXIE-5185,3GHZ,1M/50 OHM,32MB, NON-ROHS
159096A-02	MODULE ASSEMBLY, NI PXIE-5185,3GHZ,1M/50 OHM,1GB, NON-ROHS
152962x-01L	MODULE ASSEMBLY, NI PXIE-5185,3GHZ,1M/50 OHM,32MB
152962x-02L	MODULE ASSEMBLY, NI PXIE-5185,3GHZ,1M/50 OHM,1GB
159095A-01	MODULE ASSEMBLY, NI PXIE-5186,5GHZ,1M/50 OHM,32MB, NON-ROHS
159095A-02	MODULE ASSEMBLY, NI PXIE-5186,5GHZ,1M/50 OHM,1GB, NON-ROHS
152961x-01L	MODULE ASSEMBLY, NI PXIE-5186,5GHZ,1M/50 OHM,32MB
152961x-02L	MODULE ASSEMBLY, NI PXIE-5186,5GHZ,1M/50 OHM,1GB

**Volatile Memory**

Target Data	Type	Size	Battery Backup	User <sup>1</sup> Accessible	System Accessible	Sanitization Procedure
Waveform storage	SDRAM	32 MB or 1 GB	No	Yes	Yes	Cycle Power
PXIe Interface	FPGA	Altera EP1AGX50	No	Yes	Yes	Cycle Power
DRAM Buffer and Memory Control	FPGA	Altera EP3SL340	No	Yes	Yes	Cycle Power
Waveform Buffer	FPGA	Xilinx XC5VLX50	No	Yes	Yes	Cycle Power
Calibration Processor	FPGA	Xilinx XC4VFX12	No	No	Yes	Cycle Power
Processor storage	SDRAM	128 MB	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	8 MB	No	No	Yes	None
FPGA Programming	CPLD	Altera EPM240	No	No	Yes	None
PXIe Trigger Interface	CPLD	Xilinx XC9572XL	No	No	Yes	None
SW and FW storage	FLASH	32 MB	No	No	Yes	None
• Calibration Constants <sup>2</sup>				Yes	Yes	Procedure 2
• Calibration metadata				Yes	Yes	Procedure 2
FPGA Configuration	PROM	2 MB	No	No	Yes	None

<sup>1</sup> Refer to *Terms and Definitions* section for clarification of *User* and *System Accessible*

## 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 (Calibration Metadata):**

The user-accessible areas of the Device Configuration FLASH 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.

## 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.