Manufacturer: National Instruments

Board Assembly Part Number(s):

Part Number and Revision	Description
188268D-03 or later	**PXI-6651**
188268D-02 or later	**PXI-6652**
188268D-01 or later	**PXI-6653**

To determine the Board Assembly Part Number and Revision, look at the sticker printed on the board underneath the Serial Number.

Volatile Memory

Purpose ("Target Data")	Type	Size	Battery Backup	User[1] Accessible	System Accessible	Sanitization Procedure
Board Control Registers	FPGA	N/A	No	Yes	No	Cycle Power
PXI Star Triggers	CPLD	N/A	No	Yes	No (CPLD has control registers)	Cycle Power
Load FPGA	CPLD	N/A	No	No	No	Cycle Power

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

Purpose ("Target Data")	Type	Size	Battery Backup	User Accessible	System Accessible	Sanitization Procedure
MITE Configuration	EEPROM	64Kbit	No	No	No	None
Calibration Constants	EEPROM	2Kbit	No	Yes	No	Procedure X

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

Sanitization Procedures

Procedure X – Calibration Metadata Clearing:
The calibration constants that are user-accessible are the calibration password, oscillator voltage, Clk10 phase voltage, and DDS start pulse phase voltage. These user-defined constants can be changed by completing the following steps in LabVIEW:

1. From the Functions palette, select **Measurement I/O»NI-Sync»Calibration** and place down niSync Initialize External Calibration.
2. Wire your device's resource name and current password to this VI.
3. Place the VIs used to change the calibration constants on the block diagram:
   a. From the **NI-Sync»Calibration** palette, select niSync Adjust Oscillator Voltage, niSync Adjust Clk10 Phase Voltage, and niSync Adjust DDS Start Pulse Phase Voltage.
   b. From the **NI-Sync»Calibration»Utility** palette, select niSync Change External Calibration Password.
4. Wire the **instrument handle** and **error out** returned from niSync Initialize External Calibration through each of the VIs placed down in step 3.
5. Create an empty string constant. Type "NI", and wire this to the **new password** input of niSync Change External Calibration Password. Also wire your device's current password to the **old password** input.
6. From the Functions palette, select **Measurement I/O»NI-Sync»Calibration** and place down niSync Close External Calibration.
7. Close the instrument handle by connecting it to the **instrument handle** input of niSync Close External Calibration.
8. Right-click on the action input of niSync Close External Calibration and select **Commit**.
9. Run the VI.

You can use the functions available at **NI-Sync»Calibration»Utility** to read back the calibration constants after running the above code to verify they have been reset.

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.