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PXIe-8100

Manufacturer: National Instruments

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

Part Number and Revision	Description
150173A-012L or later	**NI PXIE-8100, SINGLE CORE INTEL ATOM D410 1.66GHZ, RT**

Volatile Memory

Target Data	*Type*	*Size*	*Battery Backup*	*User[1] Accessible*	*System Accessible*	*Sanitization Procedure*
Processor Data	DDR3L SDRAM	512MB	No	Yes	Yes	Cycle Power
PCH Real Time Clock (RTC)	CMOS RAM	256B	Yes	Yes	Yes	Procedure 2

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

Target Data	*Type*	*Size*	*Battery Backup*	*User Accessible*	*System Accessible*	*Sanitization Procedure*
PCIe Switch Configuration	EEPROM	256Kb	No	No	Yes	None
Power Sequence & Data Logic	CPLD	1200 LUTs	No	No	Yes	None
BIOS Configuration	Flash	32Mbit	No	Yes	Yes	Procedure 3
Primary Storage	Flash	512MB	No	Yes	Yes	Procedure 4

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

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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 - PCH Real Time Clock (RTC), CMOS RAM:
To clear the battery-backed PCH Real Time Clock (RTC) CMOS RAM, complete the following steps:
1. **First method:**
   a) Power off the chassis.
   b) Remove the controller from the chassis.
   c) Press the 'Clear CMOS' button (SW1) shown in the figure for 2 to 3 seconds.

| 1 | Push Button Switch SW2 |
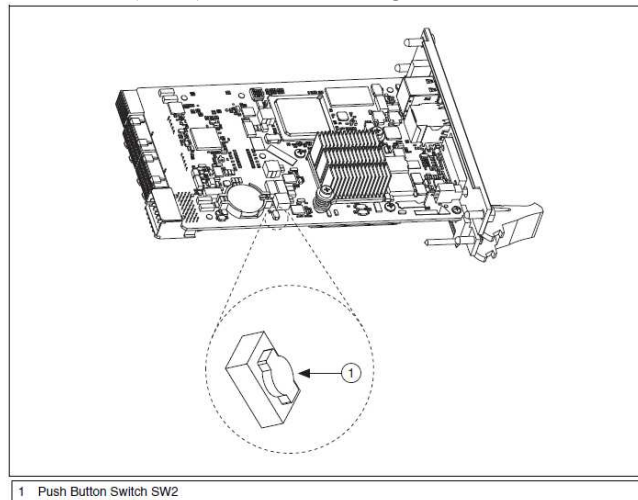
   d) Wait for 10 seconds.
   e) Reinstall the controller in the chassis.

2. **Second method:**
   a) Power off the chassis.
   b) Remove the controller from the chassis.
   c) Remove the coin-cell battery and wait for more than 10 seconds.
   d) Reinstall the battery.
   e) Reinstall the controller in the chassis and power up as usual.

Procedure 3 - BIOS Configuration Flash:
To clear the user-accessible information in the BIOS Flash, perform a factory reset within BIOS setup.

Procedure 4 – Primary Storage Flash:
To clear the allocated disk space on the Primary Storage flash, use the Format Disk feature in NI MAX. This feature re-initializes the file table, thereby making the existing files no longer user-accessible.
1. In NI MAX, right click the controller to be sanitized.
2. Select Format Disk

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.