



Manufacturer: National Instruments

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

Part Number and Revision	Description
156968A-012L or later	NI PXI-8840, Duo-Core, Localized OS
156968A-112L or later	NI PXI-8840, Duo-Core, Win 7 (64-BIT)
156968A-912L or later	NI PXI-8840, Duo-Core, Win 7 (32-BIT)
156968F-011L or later	NI PXI-8840, Duo-Core, Localized OS, No Ecard
156968F-111L or later	NI PXI-8840, Duo-Core, Win 7 (64-BIT), No Ecard
156968F-211L or later	NI PXI-8840, Duo-Core, Win 10 Pro (64-BIT), No Ecard
156968F-251L or later	NI PXI-8840, Duo-Core, Win 10 Pro (64-BIT), No Ecard, Simplified Chinese
156968F-311L or later	NI PXI-8840, Duo-Core, Win IOT, No Ecard
156968F-351L or later	NI PXI-8840, Duo-Core, Win IOT, No Ecard, Simplified Chinese
158686A-011L or later	NI PXI-8840 Quad-Core, Localized OS, No Ecard
158686A-012L or later	NI PXI-8840 Quad-Core, Localized OS, Ecard
158686A-111L or later	NI PXI-8840 Quad-Core, Win 7 (64-BIT), No Ecard
158686A-112L or later	NI PXI-8840 Quad-Core, Win 7 (64-BIT), Ecard
158686A-211L or later	NI PXI-8840 Quad-Core, Win 10 Pro (64-BIT), No Ecard
158686A-251L or later	NI PXI-8840 Quad-Core, Win 10 Pro (64-BIT), No Ecard, Simplified Chinese
158686A-311L or later	NI PXI-8840 Quad-Core, Win IOT, No Ecard
158686A-351L or later	NI PXI-8840 Quad-Core, Win IOT, No Ecard, Simplified Chinese

Volatile Memory

<i>Target Data</i>	<i>Type</i>	<i>Size</i>	<i>Battery Backup</i>	<i>User¹ Accessible</i>	<i>System Accessible</i>	<i>Sanitization Procedure</i>
Processor Data	DDR3L SDRAM	4 or 8 GB	No	Yes	Yes	Cycle Power
PCH Real Time Clock (RTC)	CMOS RAM	256B	Yes	Yes	Yes	Procedure 2

Non-Volatile Memory (incl. Media Storage)

<i>Target Data</i>	<i>Type</i>	<i>Size</i>	<i>Battery Backup</i>	<i>User Accessible</i>	<i>System Accessible</i>	<i>Sanitization Procedure</i>
Power Sequence & Data Logic	CPLD	2112 LUTs	No	No	Yes	None
Secondary Ethernet Port Firmware.	SPI Flash	0.5MB	No	No	Yes	None
BIOS Configuration	Flash	16MB	No	Yes	Yes	Procedure 3
GPIB Configuration	EEPROM	32KB	No	No	Yes	None
Primary Storage	Magnetic Disk	80GB+	No	Yes	Yes	Procedure 4

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

Procedures

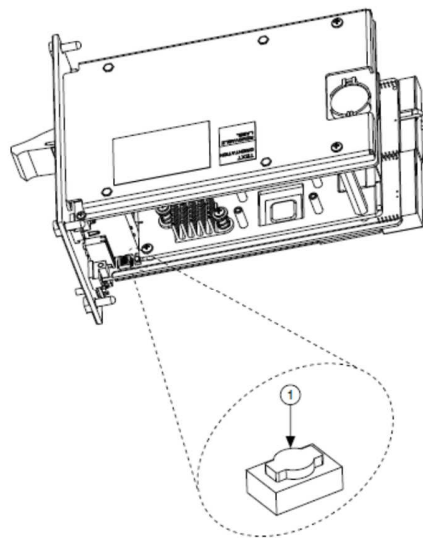
Procedure 1 – Board Assembly Part Number identification:

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 – PCH Real Time Clock (RTC), CMOS RAM:

To clear the battery-backed PCH Real Time Clock (RTC) CMOS RAM, use one of 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 SW1

- 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 Magnetic Disk/ Solid State Drive (SSD):

There are several alternatives for sanitizing the Primary Storage Magnetic Disk's contents. To sanitize the drive, perform one of the following steps:

1. Clear the disk using a commercially available utility for overwriting magnetic disk drives.
2. Remove the disk and apply sanitization procedures acceptable to your organization. You can also replace the disk with a removable one so that the stored data can be disassociated from the controller at any time.

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.