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Manufacturer: National Instruments

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

Part Number and Revision	Description
142471A-01L or later	**VB-8054**

Volatile Memory

Target Data	*Type*	*Size*	*Battery Backup*	*User[1] Accessible*	*System Accessible*	*Sanitization Procedure*
Instrument Data and Operating System	DRAM	768 MB	No	No	Yes	Remove AC power
Power Supply State and Sample Data	SRAM	101.59 kb	No	No	Yes	Remove AC power
Processor Cache	SRAM	896 kB	No	No	Yes	Remove AC power
Measurements and Instrument State	SRAM	1860 kb	No	No	Yes	Remove AC power

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

Target Data	*Type*	*Size*	*Battery Backup*	*User Accessible*	*System Accessible*	*Sanitization Procedure*
Device configuration	Flash	64 MB	No			
• Operating System/Firmware				No	Yes	None
• General purpose user data				Yes	Yes	Procedure 2
• Firmware				No	Yes	None
• Calibration data[2]				No	Yes	None
• Calibration metadata				Yes	Yes	Procedure 2
Firmware for Microcontroller	Flash	10 KB	No	No	No	None
Firmware for CPLD	Flash	0.17 Mb	No	No	Yes	None
Firmware for CPLD	Flash	0.33 Mb	No	No	Yes	None

[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. Any implications resulting from partial self-calibration can be eliminated by running the full self-calibration procedure.

Procedures

Procedure 1 – Board Assembly Part Number identification:
To determine the Board Assembly Part Number and Revision, refer to the label applied to the bottom surface of your product. The Assembly Part Number should be formatted as "P/N: #####a-##L."

Procedure 2 – Device Configuration Flash (User Data):
The reset button is located on the back panel. Press and hold the reset button for five seconds or longer to reboot the device into factory default mode; this will clear all user passwords and all User Data. During a reboot, saved configuration is deleted and the VirtualBench instruments reset to their factory default state.

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.