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**PCI-4070**

**Manufacturer:** National Instruments

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

Part Number and Revision	Description
189380C-01 or later	PCI-4070 DMM
191485A-01 or later	PXI-4070 FlexDMM
191485A-02 or later	PXI-4071 DMM
191485A-03 or later	PXI-4072 FlexDMM and LCR Meter

**Volatile Memory**

<i>Target Data</i>	<i>Type</i>	<i>Size</i>	<i>Battery Backup</i>	<i>User<sup>1</sup> Accessible</i>	<i>System Accessible</i>	<i>Sanitization Procedure</i>
Measurement scanlist	SRAM	4096Kb (x2)	No	No	Yes	Cycle Power
Buffer storing data before transferring it to host	FIFO Registers	16Kb	No	No	Yes	Cycle Power
Digital logic controller	FPGA Block RAM	40Kb (x2)	No	No	Yes	Cycle Power
DSP Microcomputer	SRAM	544Kb	No	No	Yes	Cycle Power

**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>
PCI bus configuration information	EEPROM	64KB	No	No	Yes	None
Calibration information	EEPROM	256KB	No			
<ul style="list-style-type: none"> <li>• Calibration metadata</li> <li>• Calibration data<sup>2</sup></li> </ul>				Yes No	Yes Yes	Procedure 2 None

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

<sup>2</sup> 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 surface of your product. The Assembly Part Number should be formatted as “P/N: #####A-##L

### **Procedure 2 – Calibration Information EEPROM (Calibration Metadata):**

The user-accessible areas of the Calibration Information EEPROM are exposed through a calibration Applications Programming Interface (API) in LabVIEW. To clear the Calibration Metadata area, complete the following steps:

1. To clear the calibration password, use the niDMM Set Cal Password VI to overwrite the current password of the device you wish to clear.
2. To clear the user-defined information, use the niDMM Set Cal User Defined Info to overwrite the current user-defined information of the device you wish to clear.

## 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.