

**Manufacturer:** National Instruments

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

Part Number and Revision	Description
156333A-01L or later	USRP E310, Shipping Kit P/N 783773-01 or 785110-01
140605A-01L or later	USRP E312, Shipping Kit P/N 784421-01
141634A-01L or later	USRP E313, Shipping Kit P/N 784583-01

## Volatile Memory

Target Data	Type	Size	Battery Backup	User <sup>1</sup> Accessible	System Accessible	Sanitization Procedure
Buffer Samples	Synchronous DRAM	1 GB	No	Yes	Yes	Cycle Power
Microprocessor Storage	Synchronous DRAM	1 GB	No	Yes	Yes	Cycle Power
Microprocessor Storage	Synchronous RAM	256 KB	No	Yes	Yes	Cycle Power
Microprocessor L1 Cache	Synchronous RAM	32 KB (instruction) 32 KB (data)	No	Yes	Yes	Cycle Power
Microprocessor L2 Cache	Synchronous RAM	512 KB	No	Yes	Yes	Cycle Power
Microcontroller Storage	Synchronous RAM	512 bytes	No	Yes	Yes	Cycle Power
User Storage	FPGA LUT RAM	5,440 Kb	No	Yes	Yes	Cycle Power
User Storage	FPGA Block RAM	4900 Kb	No	Yes	Yes	Cycle Power

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

Target Data	Type	Size	Battery Backup	User Accessible	System Accessible	Sanitization Procedure
Device Configuration Data	Motherboard EEPROM	2 kb	No	No	Yes	None
Microcontroller Configuration Data	FLASH	8 kB	No	No	Yes	None
Microcontroller Configuration Data	EEPROM	64 bytes	No	No	Yes	None
Device Configuration Data	Daughterboard EEPROM	256 kb	No	No	Yes	None

<sup>1</sup> 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.

## 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.