

**Manufacturer:** National Instruments

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

Part Number and Revision	Description
156485A-21L or later	USRP-2945
156485A-22L or later	USRP-2955 with GPSDO

**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>
Buffer Samples	Synchronous DRAM	1 GB	No	Yes	Yes	Cycle Power
User Storage	FPGA LUT RAM	5,663 Kb	No	Yes	Yes	Cycle Power
User Storage	FPGA Block RAM	28,620 Kb	No	Yes	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>
Device Configuration Data	Motherboard EEPROM	256 Kb	No	No	Yes	None
Store JTAG Bus setting	Motherboard EEPROM 2	2 Kb	No	No	Yes	None
Device Configuration	FLASH	256 Mb	No	No	Yes	None
• FPGA Image				No	Yes	None
• Calibration Data <sup>2</sup>				No	Yes	None
Device Configuration Data	Daughterboard IF EEPROM 1	2 Kb	No	No	Yes	None
Device Configuration Data	Daughterboard IF EEPROM 2	2 Kb	No	No	Yes	None
IF Control PLD						
• User Flash Memory	FLASH	1 KB	No	No	No	None
• Configuration Image	FLASH	570 LEs	No	No	No	None
RF Control PLD 1						
• User Flash Memory	FLASH	1 KB	No	No	No	None
• Configuration Image	FLASH	570 LEs	No	No	No	None
RF Control PLD 2						
• User Flash Memory	FLASH	1 KB	No	No	No	None
• Configuration Image	FLASH	570 LEs	No	No	No	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.

<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>
RF Control PLD 3						
• User Flash Memory	FLASH	1 KB	No	No	No	None
• Configuration Image	FLASH	570 LEs	No	No	No	None
GPS Parameters EEPROM	EEPROM	2 KB	No	No	Yes	None
	(-2955 only)					
GPS Executable Program	FLASH	512 KB	No	No	No	None
	(-2955 only)					

## 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.