#### **COMPREHENSIVE SERVICES**

We offer competitive repair and calibration services, as well as easily accessible documentation and free downloadable resources.

## SELL YOUR SURPLUS

We buy new, used, decommissioned, and surplus parts from every NI series. We work out the best solution to suit your individual needs. We Sell For Cash We Get Credit We Receive a Trade-In Deal

**OBSOLETE NI HARDWARE IN STOCK & READY TO SHIP** 

We stock New, New Surplus, Refurbished, and Reconditioned NI Hardware.

APEX WAVES

**Bridging the gap** between the manufacturer and your legacy test system.

1-800-915-6216
www.apexwaves.com
sales@apexwaves.com

 $\bigtriangledown$ 

All trademarks, brands, and brand names are the property of their respective owners.

Request a Quote CLICK HERE NI-9216



# Manufacturer: National Instruments

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

Part Number and Revision	Description
157270C-0#L or later	NI 9216 Spring, 8-CH PT100 RTD 24-BIT, C Series Module
158028C-0#L or later	NI 9216 DSUB, 8-CH PT100 RTD 24-BIT, C Series Module
157643C-0#L or later	NI 9226 Spring, 8-CH PT1000 RTD 24-BIT, C Series Module
158028C-0#L or later	NI 9226 DSUB, 8-CH PT1000 RTD 24-BIT, C Series Module

# **Volatile Memory**

			Battery	User <sup>1</sup>	System	Sanitization
Target Data	Туре	Size	Backup	Accessible	Accessible	Procedure
Module configuration	CPLD RAM	1 byte	NO	Yes	Yes	Cycle Power
Module measurement data		32 bits		Yes	Yes	
Calibration data	CPLD RAM	8 bytes	No	No	Yes	Cycle Power
ADC configuration	ADC RAM	1 byte	No	No	No	Cycle Power
ADC data	ADC RAM	32 bits	No	No	No	Cycle Power

# Non-Volatile Memory (incl. Media Storage)

Target Data	Туре	Size	Battery Backup	User Accessible	System Accessible	Sanitization Procedure
Module ID and Calibration <sup>2</sup>	EEPROM	1KB	No	No	Yes	Procedure 2
Module Operation	CPLD	256LUTs	No	No	No	None
Isolation Common Mode	Digital	1 byte	No	No	No	None
compensation	Potentiometer	-				

<sup>&</sup>lt;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, look for the white label at the bottom of the module. The Assembly Part Number should be formatted as "######<Rev Letter>-##L" (where '#' are numbers).

## **Procedure 2 - Device Configuration EEPROM (Calibration Metadata):**

The user-accessible areas of the Device Configuration EEPROM are exposed through a calibration Applications Programming Interface (API) in LabVIEW. Follow the instructions in KB <u>4GHLANQE</u> for changing the calibration password and clearing the user-defined information.



# **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.