

Manufacturer: National Instruments

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

Part Number and Revision	Description
145871C-11L	PXIE-3621

Volatile Memory

<i>Target Data</i>	<i>Type</i>	<i>Size</i>	<i>Battery Backup</i>	<i>User¹ Accessible</i>	<i>System Accessible</i>	<i>Sanitization Procedure</i>
MM Board Control	FPGA	Xilinx XC6SLX45	No	No	Yes	Cycle Power
Modem Control	FPGA	Altera 10M16DCU324I7G	No	No	Yes	Cycle Power
IF Control	FPGA	Altera 10M08DCU324I7G	No	No	Yes	Cycle Power
LO Control	FPGA	Altera 10M08DCU324I7G	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>
Device Configuration Flash	Flash	8 MB	No	No	Yes	None
Modem Board Cal Flash	Flash	64 MB	No	No	Yes	None
<ul style="list-style-type: none"> • Calibration Data² • Calibration Metadata 				Yes	Yes	Procedure 2
Modem Board CPLD	CPLD	Altera				
<ul style="list-style-type: none"> • Configuration Image • User Flash Memory 		10M16DC U324I7G	No No	No No	Yes Yes	None None
IF Board CPLD	CPLD	Altera				
<ul style="list-style-type: none"> • Configuration Image • User Flash Memory 		10M16DC U324I7G	No No	No No	Yes Yes	None None
LO1 Board CPLD	CPLD	Altera				
<ul style="list-style-type: none"> • Configuration Image • User Flash Memory 		10M16DC U324I7G	No No	No No	Yes Yes	None 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 surface of your product. The Assembly Part Number should be formatted as “P/N: xxxxxxa-xxL” where “x” are numerals, and “a” is the letter module revision.

Procedure 2 – Modem Board Cal Flash (Calibration Metadata):

Requirements: LabVIEW version 2016 or later, RFSG 19.1 or later that supports this model.

The user-accessible portion of the Device Calibration Flash is limited to a programmable calibration password which is exposed through an NI-RFSG attribute that can be programmed in LabVIEW. To clear this metadata, complete the following steps in an empty VI and run in LabVIEW:

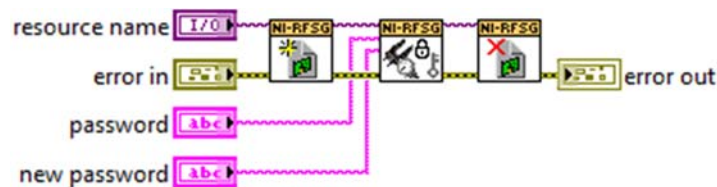


Fig: LabView block diagram for clearing the calibration password

1. Open an RFSG session using the niRFSG Initialize VI.
2. To clear/reset the calibration password:
 - a. Add the niRFSG Change External Calibration Password VI after the niRFSG Initialize VI.
 - b. Specify the current password in the “password” input of the niRFSG Change External Calibration Password VI.
 - c. Wire a string of 32 “0” characters to the “new password” input of the niRFSG Change External Calibration Password VI.
3. Close the RFSG session using the niRFSG Close VI.

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.