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.

Sell For Cash Get Credit 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

Request a Quote CLICK HERE *PXI-5404*

Manufacturer: National Instruments

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

Part Number and Revision	Description
187340A-01(L) or later	**PXI-5404 100 MHz Frequency Generator**
187340A-02(L) or later	**PXI-5404 100 MHz Frequency Generator with eHM Connector**

Volatile Memory

Target Data	*Type*	*Size*	*Battery Backup*	*User[1] Accessible*	*System Accessible*	*Sanitization Procedure*
DDS Control	FPGA Block RAM	40,960 b	No	Yes	Yes	Cycle Power

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

Target Data	*Type*	*Size*	*Battery Backup*	*User Accessible*	*System Accessible*	*Sanitization Procedure*
Board Configuration	EEPROM	64 Kb	No	No	Yes	None
Device configuration	EEPROM	16 Kb	No			
• Device information				No	Yes	None
• Calibration metadata				Yes	Yes	Procedure 2
• Calibration data[2]				No	Yes	None
FPGA Programming	CPLD	64 MacroCells	No	No	No	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 near the front panel. The Assembly Part Number should be formatted as "#####X-##(L).

Procedure 2 - Device Configuration EEPROM (Calibration Metadata):
The user-accessible areas of the Device Configuration Flash are exposed through the external calibration Applications Programming Interface (API), in the niArbCal.lib C library with niArbCal.h header file. (See PXI-5404 Calibration Procedure for more detail at www.ni.com/info. Enter info code PXI5404cal)
Windows 8.1/8.0/7/Vista support for the NI 5404 does not include support for external calibration. Perform external calibration for the NI 5404 on Windows XP operating systems.
To clear the calibration meta-data area, complete the following steps:

1. To clear the calibration password, from C call:
   __declspec(dllexport) long __stdcall niHSSources_CalChangePassword(unsigned long device, char *oldPassword, char *newPassword);
2. To clear the user-defined information, from C call:
   __declspec(dllexport) long __stdcall niHSSources_CalStoreMiscInfo(unsigned long device, char *miscInfo);

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.

Contact: 866-275-6964
support@ni.com