



Manufacturer: National Instruments

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

Part Number and Revision	Description
149556A-01L or later	STS T4M2 DX Test Head
149557A-01L or later	STS T4M2 CX Test Head

Volatile and Non-Volatile Memory of Component Models

This device is composed of independent hardware models. Refer to the Letter of Volatility for each individual model listed below by going to ni.com/info and typing in the appropriate Info Code.

Model and Description	Info Code
sbRIO-9651, System on Module OEM Device	ok9erq

Volatile Memory

Target Data	Type	Size	Battery Backup	User ¹ Accessible	System Accessible	Sanitization Procedure
Real-time clock data	RTC	20 B	Yes	No	Yes	Procedure 2

Non-Volatile Memory (incl. Media Storage)

Target Data	Type	Size	Battery Backup	User Accessible	System Accessible	Sanitization Procedure
Primary storage	Flash	≤4 GB	No	No	No	None
• Firmware				Yes	Yes	Procedure 3
• Operating system				Yes	Yes	Procedure 3
• User data				Yes	Yes	Procedure 3

¹ Refer to *Terms and Definitions* section for clarification of *User* and *System Accessible*

Procedures

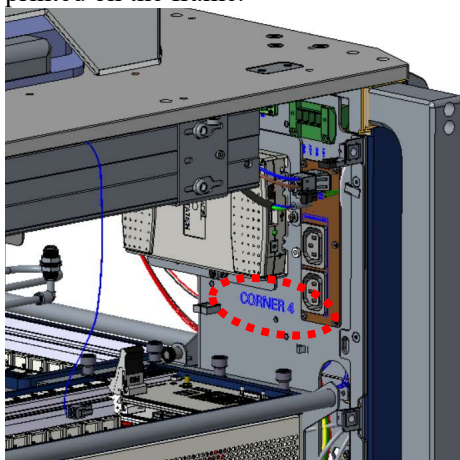
Procedure 1 – Frame Assembly Part Number identification:

To determine the Frame 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 149556a-01L” for the DX version or “P/N 149557a-01L” for the CX version, where “a” is a capital letter indicating the revision (e.g. A, B, C...).

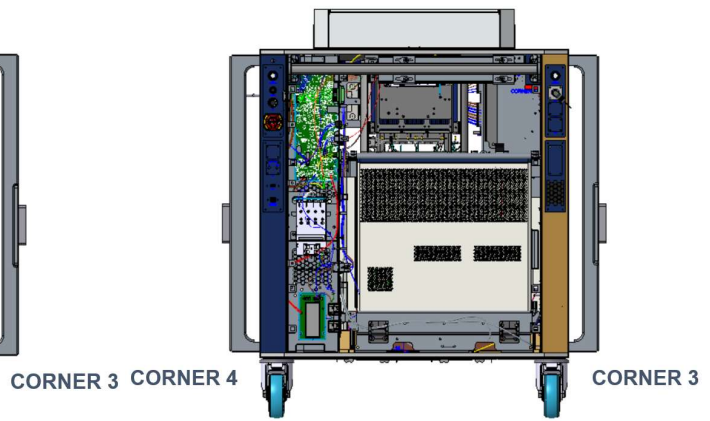
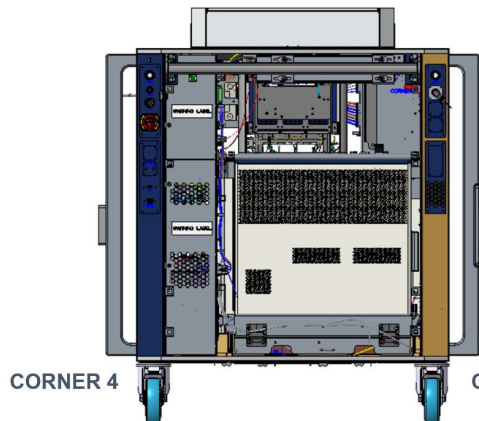
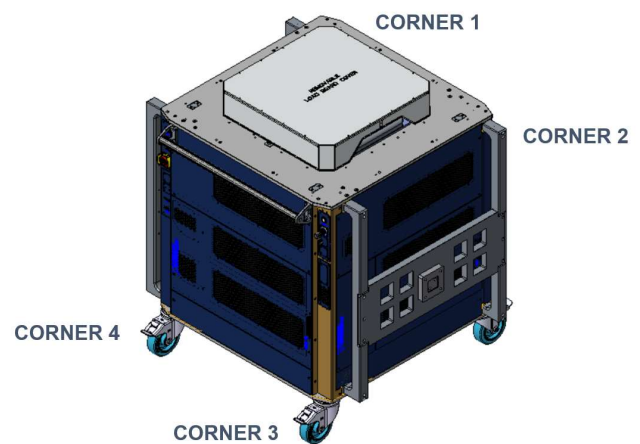
Procedure 2 - Time Keeping RTC:

To clear the Time Keeping Real-Time Clock (RTC), complete the following steps:

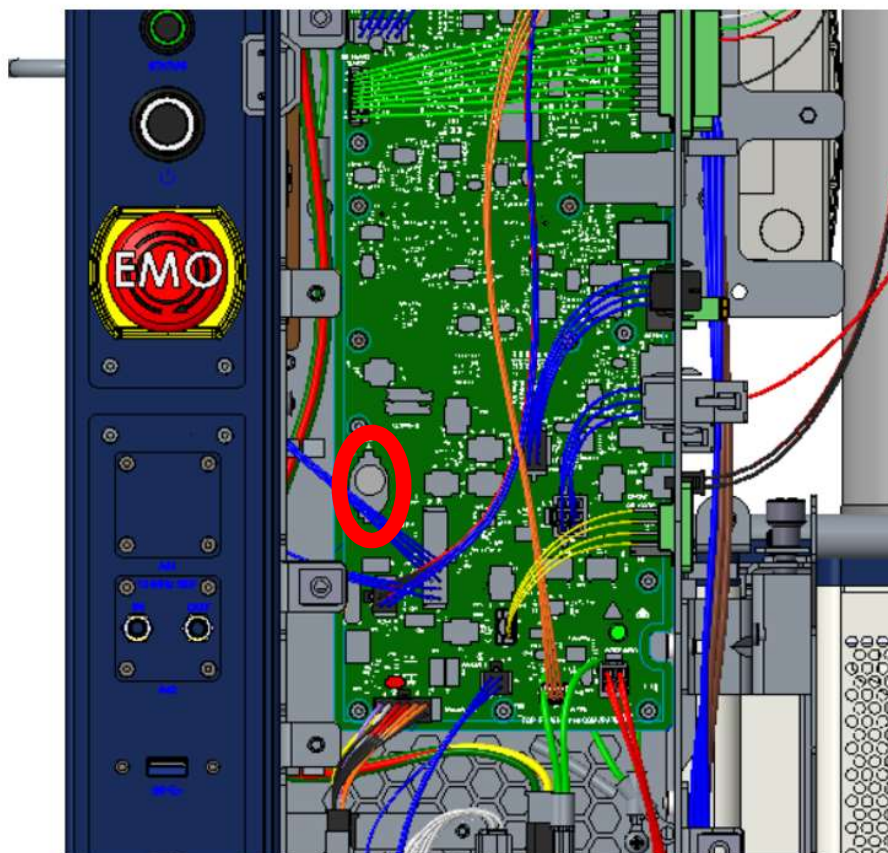
1. Turn off master power at the external switch and unplug the power cable.
2. Remove the two pieces of blue metal on the Corner 3 and 4 sides of the tester. Corner number are printed on the frame.



3. Remove the protective metal cover on Corner 4.



4. Remove the coin cell battery on the circuit board closest to the top.



5. Wait for 5 minutes.

Procedure 3 – Primary Storage Flash (Operating System and User Data):

The Primary Storage Flash can be reformatted to clear the user-accessible areas. The format operation is a “quick format” that re-initializes the file table, thereby making the existing files inaccessible. Format the drive for this target by performing the following steps:

1. Please contact the field service team for the firmware username and password. You will need this to format the sbRIO-9651.
2. Turn on the tester.
3. Open NI Measurement & Automation Explorer (MAX) on the internal PXIe controller.
4. Right click the SbRIO-9651 in MAX and click on “Format Drive”
5. Key-in the username and password for admin access and proceed.

Notes:

1. sbRIO-9651 is visible in MAX under remote systems if CompactRIO is installed. If CompactRIO is not installed, user will need to manually add to NI MAX or access through a web browser via IP Address (172.22.11.2).
2. For accessing sbRIO-9651 without powering up the controller, use an external host to plug into the internal ethernet port at corner 4 (next to the USB Type B) and access IP address 10.1.1.5

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.