Instrument Security Procedures

Model:

1586A

Product Name:

SUPER-DAQ Precision Temperature Scanner

Instrument Description:

The Fluke Calibration 1586A SUPER-DAQ Precision Temperature Scanner is a 45 analog channel bench-top measurement instrument that measures and records temperature, resistance, dc volts, and dc current, as well as other types of measurements derived using computed channels.

Memory Description:

The Fluke Calibration 1586A SUPER-DAQ Precision Temperature Scanner has the following memory on four printed circuit assemblies:

Out-guard (A6) PCA

- The Flash Memory is an electrically erasable and programmable 32 MB memory that stores instruction code for the out-guard microprocessor, calibration constants, measurement data record, test setup, and instrument configuration. The instruction code is loaded at the factory or at a service facility and is not user accessible. Calibration constants are stored during calibration at the factory or at a service facility, and are not user accessible. The measurement data record, test setup, and instrument configuration are set by the user (except MAC address and instrument serial number), and can be cleared with the procedure below.
- A Static RAM (SRAM) provides 2 MB of data storage for measurement data. The SRAM is backed up by battery, and can be cleared with the procedure below.
- The Synchronous Dynamic Random Access Memory (SDRAM) provides 32 MB of data storage for the instrument using two 16 MB DDR II SDRAM. This includes operating memory for the microprocessor and temporary storage of measurement data.

The SDRAM is volatile memory that clears when power is removed from the instrument.

In-guard Digital (A2) PCA

- The Flash Memory is an electrically erasable and programmable 512 kb memory that stores instruction code for the in-guard microprocessor. The instruction code is loaded at the factory or at a service facility and is not user accessible.
- The Static RAM (SRAM) provides 2 MB data storage for the instrument. This includes operating memory for the in-guard microprocessor and temporary storage of measurement data. The SRAM is volatile memory that clears when power is removed from the instrument.
- The Ferroelectric Nonvolatile RAM (FRAM) provides 512 byte memory that stores Ch001's relay count and internal DMM circuit's relay count, the relay counts are initialed at the factory or in Service, Ch001's relay count can be cleared with the procedure below, DMM circuit's relay count is not user accessible.

Relay Card (B1) PCA

- The Ferroelectric Nonvolatile RAM (FRAM) provides 512 byte memory that stores module type and channel's relay count, module type is loaded at the factory and is not user accessible, channel's relay counts are initialed at the factory and can be cleared with the procedure below.

Input Module (B2) PCA

- The 1-Wire Nonvolatile RAM provides 128 byte memory that stores serial number of input module and module calibration date, both of them are loaded at the factory and are not user accessible.

DAQ-STAQ Module (B4) PCA

- The Ferroelectric Nonvolatile RAM (FRAM) provides 512 byte memory that stores module type, serial number, module calibration date and channel relay counts. Module type, serial number and module calibration date are loaded at factory and are not user accessible, channel relay counts are initialed at the factory and can be cleared with the procedure below.

Memory Cleaning Instructions:

Use the following procedure to clear the Fluke Calibration 1586A memory via LAN or USB interface:

- Send the command “SYST:SEC:IMM”. This command immediately clears all measurement data in battery powered SRAM, restores all instrument settings to default value, and erases all set-up files and data record files in internal memory.

Use the following procedure to clear the Fluke Calibration 1586A memory from front panel:

1. Push [MEMORY] key to go to memory menu
2. Push F1 key to select [Internal Files].
3. Push F1 key to select [Clear All Files]. After “admin” password verification, it will clear all set-up files, data record files and probe definition file in internal memory.
4. Push the [INSTRUMENT SETUP] key to go to the instrument setup menu.
5. Push F2 key to select [Factory Reset]. After “admin” password verification, all instrument settings are reset to default, it also clears all measurement data in battery powered SRAM.

Use the following procedure to clear the relay count via LAN or USB interface:

- Send the command “DIAG:CHAN:REL:CLE (@<ch_list>)”. This command will clear all specified channel’s relay count.