



Model 8003 Scalar Network Analyzer

Instrument Security and Memory Sanitization Procedure



The Giga-tronics, Inc Model 8003 Scalar Network Analyzer includes several types of memory. Non-volatile memory stores functions such as sensor and path calibrations, user selected traces, and instrument configuration, and sensor calibration, which include frequency correction parameters set by the user. There are 10 user-accessible memory locations for storing instrument.

Non-volatile RAM (NVRAM) control include U44, U48A/B and U7-10 of the A10 PCA. The RAMs are 43256's which are 256K bits configured as 32K by 8 bits. Four of them make 128K bytes. It is operated continuously by using a 3.6-volt lithium battery to provide the power when the line power is off. The cell is mounted in a carrier at the front of the analog card cage. The memory is configured as two 64K byte banks. U44 selects the bank as well as preventing access to the memory when operating on battery by disabling the chip select gate if ~AC FAIL is true.

The dynamic RAM (DRAM) control is implemented by the TMS4500A DRAM controller chip, U31 and several additional gates and latches. The DRAMS, U13-18, U32-37, U49-52 are addressed by row and column, and must have the data rewritten (refreshed) periodically. The TMS4500A generates these signals as well as the row and column address strobes ~CAS and ~RAS0/~RAS1 from the CPU address lines A1-13. The 4464 DRAMs are 64K by 4 bits or 256K bits each. There are 16 of them which make a total of 512K bytes.



Memory Clearing Procedure

All user-programmable memory in NVRAM including all saved instrument states and the power-down states can be cleared by accessing the Power-UP Preset Menu.

The following procedure describes the correct process for clearing all user accessible memory and resetting the instrument to factory defaults.

1. If the 8003 Network Analyzer is powered, press the power switch on the front panel.
2. With the 8003 Network Analyzer powered down, press the power switch on the front panel power up the 8003.
3. Press the MEMORY button to display the Save/Recall soft key menu items.
4. Press the CLEAR N soft key, and then press the CLEAR ALL MEM soft key.