Instructions

Tektronix

TDS3000C Series Oscilloscopes Declassification and Security

077-0091-00

www.tektronix.com

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Contacting Tektronix

Tektronix, Inc.
14200 SW Karl Braun Drive
P.O. Box 500
Beaverton, OR 97077
USA

For product information, sales, service, and technical support:

- In North America, call 1-800-833-9200.
- Worldwide, visit www.tektronix.com to find contacts in your area.

Memory Erasure and Nonvolatile Memory Parts List

The standard TDS3000C Series instruments contain a proprietary architecture based on a PowerPC and the VxWorks operating system. Instrument code and calibration settings reside in FLASH memory.

Instrument setups and reference waveforms can be stored internally in FLASH or on the USB flash drive.

Instrument code can be updated by the user from the USB flash drive. The latest firmware is available on www.tektronix.com. Loading firmware does not overwrite instrument calibration settings. Loading new firmware does not guarantee overwriting the instrument setups and reference waveforms. To guarantee FLASH memory erasure, use the TekSecure function.

The instrument application modules contain a single nonvolatile EEPROM which holds application module code. No user data is stored in the application modules.

If you have any questions, contact the Tektronix Technical Support Center at http://www.tektronix.com/support.

Memory Erasure

A USB host port is standard on TDS3000C models. Remove all USB flash drives. These can be stored or destroyed.

To erase confidential data in the FLASH memory on your oscilloscopes, use the TekSecure function. The TekSecure function does the following:

- Replaces all waveforms in all reference memories with null sample values
- Replaces the current front-panel setup and all stored setups with the default factory setup values
- Calculates the checksums of all reference waveform memory and setup memory locations to verify successful completion of waveform and setup erasure
- Displays a dialog indicating whether the secure erase was successful or unsuccessful

NOTE. *TekSecure does not erase or change factory calibration constants or Ethernet settings.*

To use the TekSecure function to erase FLASH memory:

1. Push the front-panel **UTILITY** button.
2. Push the **System** bottom bezel button until **Config** is selected.
3. Push the **TekSecure Erase Memory** bottom bezel button.
4. Push the **OK Erase Setup & Ref Memory** side bezel button.
5. Power off the oscilloscope; then power on the oscilloscope to complete the process.

Disable LAN Ethernet Connectivity

To disable LAN Ethernet connectivity:

1. Push the front-panel **UTILITY** button.
2. Push the **System** bottom bezel button until **I/O** is selected.
3. Push the **Ethernet Network Settings** bottom bezel button.
4. Push the **Change Instrument Settings** side bezel button.
5. Clear all settings. If you need to restore network connectivity at a later date, make sure to write down all setting values before clearing them.
6. Push the **OK Accept** side bezel button.

The LAN system is disabled and no longer allows data traffic in or out.

Memory Parts List

The memory parts used in the TDS3012C, TDS3012C-NV, TDS3014C, TDS3032C, TDS3032C-AF, TDS3034C, TDS3052C, and TDS3054C oscilloscopes are shown in the following table.

Table 1: TDS3000C series memory parts, board numbers 679-0259-XX and 679-0263-XX

Part number	Reference designator	Description	Use
156-7633-XX	U540	IC, MEMORY; CMOS, SRAM; 128K X 18, SYNCHRONOUS, 10NS	Synchronous SRAM: holds the display image.
156-7633-XX	U550	IC, MEMORY; CMOS, SRAM; 128K X 18, SYNCHRONOUS, 10NS	Synchronous SRAM: holds the live acquisition waveforms.
156-7633-XX	U560	IC, MEMORY; CMOS, SRAM; 128K X 18, SYNCHRONOUS, 10NS	Synchronous SRAM: holds the live acquisition waveforms.
167-0815-XX	U610	IC, MEMORY; CMOS, FLASH; 4M X 8/2 M X 16, 3.0 V ONLY, BOTTOM SECTORED	FLASH: stores the instrument code, calibration constants, reference waveforms, and instrument setups.
167-0815-XX	U620	IC, MEMORY; CMOS, FLASH; 4M X 8/2 M X 16, 3.0V ONLY, BOTTOM SECTORED	FLASH: stores the instrument code, calibration constants, reference waveforms, and instrument setups.
167-0828-XX	U640	IC, MEMORY; CMOS, NVRAM; 2K X 8, 150NS, INTERNAL BATTERY, W/CLOCK, Y2K, 3.3V	NVRAM: stores date format, RS-232 settings, and language choice.
156-9327-XX	U670	IC, MEMORY; CMOS, DRAM; 4M X 32, 128MB, SDRAM,3.3V	Synchronous DRAM: holds the instrument code and data during operation.
167-0393-XX	U808	IC, MEMORY; CMOS, EEPROM; SERIAL, 1M (131,072 X 8), 2 WIRE, 2.7V TO 5.5V	Serial EEPROM: holds USB controller boot and application programs.
167-0292-XX	U825	IC, MEMORY; SRAM, 64K X16, 1MB, ASYNCHRONOUS	Asynchronous SRAM: holds the data being communicated over USB.
167-0292-XX	U855	IC, MEMORY; SRAM, 64K X16, 1MB, ASYNCHRONOUS	Asynchronous SRAM: holds the data being communicated between the processor and the USB controller.
167-0815-XX	U860	IC, MEMORY; CMOS, FLASH; 4M X 8/2 M X 16, 3.0V ONLY, BOTTOM SECTORED	FLASH: holds USB controller application programs.

Application Module Memory Part

The memory part used in the TDS3AAM, TDS3LIM, TDS3TMT, and TDS3VID application modules is shown in the following table.

Table 2: Application module memory part, board number 679-4489-XX

Part number	Reference designator	Description	Use
156-6272-XX	U1	IC, MEMORY; CMOS, EEPROM; 256 X 8, SERIAL	EEPROM: holds the application module code.