

# Instructions



## Memory Erasure and Memory Parts List AFG3000 Series Arbitrary/Function Generators

**071-1856-00**

[www.tektronix.com](http://www.tektronix.com)



071185600

Copyright © Tektronix, Inc. All rights reserved.

Tektronix products are covered by U.S. and foreign patents, issued and pending. Information in this publication supercedes that in all previously published material. Specifications and price change privileges reserved.

Tektronix, Inc., P.O. Box 500, Beaverton, OR 97077

TEKTRONIX and TEK are registered trademarks of Tektronix, Inc.

### **Contacting Tektronix**

Tektronix, Inc.  
14200 SW Karl Braun Drive or 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](http://www.tektronix.com) to find contacts in your area.

# Memory Erasure and Non-Volatile Memory Parts List

The AFG3000 Series arbitrary/function generators contain a proprietary architecture based on a Generator on a Chip technology and the VxWorks operating system. Instrument code and calibration settings reside in non-volatile FLASH memory. The memory locations that contain instrument code and calibration constants cannot be accessed by the user interface, the LAN, GPIB, or USB port through the user.

Instrument setups and user-defined waveforms can be stored internally in FLASH or on an external USB memory device.

The user can update the instrument code using a USB memory device. The latest firmware is available on [www.tektronix.com](http://www.tektronix.com). Loading firmware does not overwrite instrument calibration settings, instrument setups, or user-defined waveforms. To guarantee FLASH memory erasure, use the Secure function, as described in the following section.

## Memory Erasure

The USB memory connector is a standard feature on all AFG3000 Series instruments. The USB memory devices can be removed and stored or destroyed.

To erase confidential data from your arbitrary/function generator, use the Secure function. The Secure function does the following:

- Erases all waveforms and stored setups in all user memories
- Replaces the current front-panel setup with the default factory setup values
- Replaces the current GPIB and Ethernet settings with the default factory settings

---

**NOTE.** *Secure does not erase or change factory calibration constants.*

---

To use the Secure function to erase FLASH memory:

1. Push the front-panel **Utility** button.
2. Push the **System** bezel button.
3. Push the **Secure** bezel button.
4. A dialog box prompts you to continue the Secure operation or to cancel the operation.
5. Select **OK** to execute Secure, and wait for the completion of Secure.

## Disable LAN Ethernet and GPIB connectivity (AFG3100 and AFG3200 Series)

To disable LAN Ethernet connectivity:

1. Push the front-panel **Utility** button.
2. Push the **I/O Interface** bezel button, and then select **Ethernet**.
3. Disable all network parameters:
  - a. Confirm that DHCP is set to **Off**.
  - b. Select **IP Address**, and then enter the value “0.0.0.0”.
  - c. Select **Subnet Mask**, and then enter the value “0.0.0.0”.
  - d. Select **Default Gateway**, and then enter the value “0.0.0.0”.

---

**NOTE.** *If you need to restore network connectivity at a later date, make sure to write down all setting values before clearing them.*

---

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

To disable GPIB connectivity:

1. Push the front-panel **Utility** button.
2. Push the **I/O Interface** bezel button, and then select **GPIB**.
3. Push the **Configuration** bezel button to select **Off Bus**.

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

## Non-Volatile Memory Parts List

The non-volatile memory parts used in the AFG3000 Series instruments are shown in Tables 1 and 2.

**Table 1: AFG3021/AFG3022 memory parts (Tektronix part number 679-5968-XX)**

Part number	Reference designator	Description	Use
156-9154-00	U202	IC, MEMORY, CMOS, FLASH, 4Mx16, E28F640J3A-100, TSOP56	Flash memory that holds instrument firmware, current setup, saved setup, saved waveforms, and calibration constants.
156-8844-00	U204 U208	IC, MEMORY, SDRAM, 1Mx16, 4BANK, 64M, MT48LC4M16A2TG-8C, TSOP54	Microprocessor system memory and display memory.

**Table 2: AFG3101/AFG3102 and AFG3251/AFG3252 memory parts (Tektronix part number 679-5815-XX)**

Part number	Reference designator	Description	Use
156-9154-00	U202	IC, MEMORY, CMOS, FLASH, 4Mx16, E28F640J3A-100, TSOP56	Flash memory that holds instrument firmware, current setup, saved setup, saved waveforms, and calibration constants.
156-8844-00	U204 U208	IC, MEMORY, SDRAM, 1Mx16, 4BANK, 64M, MT48LC4M16A2TG-8C, TSOP54	Microprocessor system memory and display memory.

