Instructions

Tektronix

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

071-1856-00
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. 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”.

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.

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

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

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

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