

Technical Note

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2026 Series Memory Security



This document gives a full description of the types of memory devices contained in the 2026 series signal generator and information on how to clear memory stores for when the instrument is removed from a secured application.

2026 Series Memory Security

There are occasions where instruments are required to be used in a secured environment. This means that no test instruments can leave the area e.g. for calibration, unless all memory settings are erased.

This technical note describes the methods available to erase the memory settings in the 2026 series signal generators and then goes on to describe the types of memory used.

A full description of each memory type is given indicating which sub-assembly the device(s) is located with its reference designator. A brief description of the contents of the device(s) is given. The statement of volatility indicates where memory is maintained or lost during power-down. The statement of accessibility indicates whether or not the memory can be accessed, either by a user or service personnel.

Clearing memory stores

Memory stores may be cleared by unlocking the instrument to level 2* and selecting [MEM], [Memory Erase], then selecting [Carrier Stores], [Full Stores] or [Entire Stores] as required. RAM stores are lost when the power is removed.

The stores may be erased remotely by sending the appropriate GPIB command:

ERASE

:CFRQ erase all Carrier Frequency stores (0-99)

:FULL erase all Full stores (100-199)

:RAM erase all RAM stores (200-299)

:ALL erase all stores (0-299)

* Please contact your nearest Aeroflex representative to obtain the level 2 password

Memory types

Located on the main processor board (AD1/1) are the following:

Description	Qty. 1 EPROM, 27C512, 64 kbytes x 8 (512 kbits) IC6
Volatility	Non-volatile UV erasable memory.
Contents	This contains the boot firmware for the instrument.
Accessibility	Non-user accessible.

Description	Qty. 4 SRAM, CY7C109A, 128 kbytes x 8 (1 Mbit), IC7,8,9,10
Volatility	Volatile Static RAM. Content is lost on power-down.
Contents	This is used during power-up to store instrument settings and other volatile information.
Accessibility	User accessible.

Description	Qty. 2 FLASH, 28F400TX, 256kbytes x 16 (4 Mbit), IC12,13
Volatility	Non-volatile flash memory
Contents	main instrument operating firmware.
Accessibility	Non-user accessible but new versions may be downloaded using a password protected download application.

Description	Qty. 1 EAROM, 28C256, 32 kbytes x 8 (256 kbit), IC14
Volatility	Electrically alterable non-volatile memory. Content is retained at power-down but may be changed as required.
Contents	i) Calibration data ii) Memory store settings (see "Clearing Memory Stores" below) iii) Instrument configuration settings (e.g. GPIB address, RF level units) iv) Instrument ID (serial number, type number, option configuration etc.)
Accessibility	Calibration data is non-user accessible but may be accessed via a level 2 password or via GPIB commands published in the service manual. Memory stores and instrument configuration settings are user-accessible. Instrument ID information is protected by a super-user password which can only be obtained on request from Aeroflex UK operation in Stevenage. Located on each of the RF tray's driver board (AB1/1) (on a 2026 with option 1, there are three RF trays):

Description	Qty. 2 EAROM, 93C86, 2 kbytes x 8 (16 kbit), IC8,9
Volatility	Electrically alterable non-volatile memory - content is retained at power-down but may be changed as required.
Contents	RF tray serial number RF tray calibration data
Accessibility	Calibration data is non-user accessible but may be accessed via a service level password or via GPIB commands published in the service manual.

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