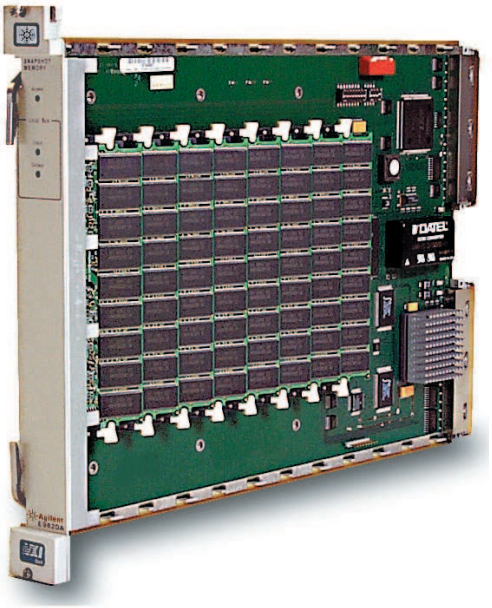
Agilent E9820A

Snapshot Memory Module

Product Overview



- **Eight SDRAM DIMM sockets allow 128 to 1024 MB of snapshot memory**
- **Input and output data transfers on local bus at up to 53 MB/sec**
- **Snapshot collects user data up to 1024 MB**
- **Register-based VXIbus module**
- **VXI*plug&play* compatible**

Enhance your productivity by adding the Agilent E9820A Snapshot Memory module to a signal analysis, signals development or COMINT system. Use the E9820A to take deep, wide-bandwidth snapshots of energy of interest. When your system's DSP algorithms are not fast enough to analyze energy of interest in real-time, take a snapshot with the E9820A to get a second chance at detailed post-processing.

Configure the E9820A Snapshot Memory module with up to 1024 MB of snapshot memory connected to the Agilent local bus. Move data from its source over the local bus to snapshot memory as fast as 53 MB/sec, or move data from snapshot memory to local bus at rates of up to 53 MB/sec.

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Fast Data Snapshot

Whether your project requires a signals development system, signal analysis system or data acquisition system, success depends upon capturing the right information as quickly as possible. The E9820A helps by recording data at rates up to 53 MB/sec.

Use the E9820A to snapshot and record data representing wide-bandwidth energy for post-processing and analysis. It is ideal for saving digital data streams generated at rates too high for conventional disk-based memory modules to handle.

Configure the E9820A with up to 1024 MB of memory configured in its eight SDRAM DIMM slots. Store up to 25 seconds of an 8 MHz-wide signal digitized by the 20 MSa/s E1437A ADC. To extend your snapshot depth, simply add additional E9820A modules in adjacent slots of a VXI mainframe.

Augment the Agilent E3238 Signals Development System

Enhance your productivity by adding the E9820A Snapshot Memory module to your E3238 Signals Development System. The E3238 software integrates the module for you, providing an easy-to-use graphical user interface as well as automatic controls. When an unknown signal of interest appears, achieve instant signal snapshots for post-capture analysis and demodulation. Take snapshots at the click of a mouse, or when user-defined alarm criteria are met. Choose a selection of bandwidths up to 2 MHz for your snapshots, or command the E3238 to automatically determine the appropriate snapshot bandwidth of the detected signal of interest.

Flexible Data Transfers

The E9820A can store or send data, either over the VXIbus or over the fast Agilent local bus. Achieve up to 53 MBytes/s transfer speed over the local bus. Configure several Agilent instruments that use the local bus with the E9820A, including the E1430A, E1432A, E1433A and E1437A digitizers. If you use VXI input modules that do not have local bus support, data can be transferred to the E9820A over the VXIbus. Please note that data cannot be input or output to the device over both the VXIbus and the local bus at the same time.

Comprehensive Software Support

The snapshot memory module is a register-based VXI module that is VXI*plug&play* compatible. It is supported by a set of C example programs for use in HP-UX* or Microsoft Windows® operating systems. The E9820A command set provides a simple, straightforward interface for programming the module.

* HP-UX Release 10.20 and later and HP-UX Release 11.00 and later (in both 32- and 64-bit configurations) on all HP 9000 computers are Open Group UNIX 95 branded products.

Windows is a U.S. registered trademark of Microsoft Corporation.

Product Specifications

Memory size	
	128 Mbytes 1024 Mbytes option 010
Memory type	
	PC100 non-buffered ECC SDRAM DIMMs
Data transfer speed	
	VXI Local Bus (LBUS)—up to 53 MB/sec

General Specifications

VXI System Level Specifications	
VXI Standard Information	Conforms to VXI Rev. 1.4 C-size, single-slot with register-based programming "Slave" data transfer bus functionality A16, D16 capability D32 capability for data transfer Local bus capability
Size (single slot, C-size VXI module)	
Dimensions	14 inches deep, 9.2 inches high, 1.2 inches wide
Weight	3 pounds
Software Drivers	
Driver Type	VXI *plug&play*
Supported Operating Systems	Windows® 95, Windows NT®, HP-UX 10.X
Regulatory Compliance	
Safety	Designed for compliance to CSA C22.2, No. 1010.1 Designed for compliance to EN61010
EMC	Complies with EN61326 for laboratory equipment (requires connector shields in the mainframe)
Radiated Emissions	CISPR 11 :1990 Group 1, Class A (requires connector shields in the mainframe)

Environmental

Operating Restrictions

Ambient Temperature	0 °C to 55 °C
Humidity, Non-condensing	10% to 90% at 40 °C
Maximum Altitude	4600m (15,000 ft) Above 2285m (7500 ft), derate operating temperature by –3.6 °C per 1000m (–1.1 °C per 1000 ft)

Storage and Transport Restrictions

Ambient Temperature	–40 °C to 70 °C
Humidity, Non-condensing	max 95% RH at 65 °C
Maximum Altitude	4600m (15,000 ft)

General Characteristics

VXI Power Requirements

Range	DC Current (Amps)	Dynamic Current (Amps)
+5 V:	2.0	1.0
+12 V:	0	0
-12 V:	0	0
+24 V:	0	0
-24 V:	0	0
-5.2 V:	0.7	0.07
-2 V:	0.175	0.02

VXI Cooling Requirements

15 °C rise	4.0 liters/second 0.5 mm H_20

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