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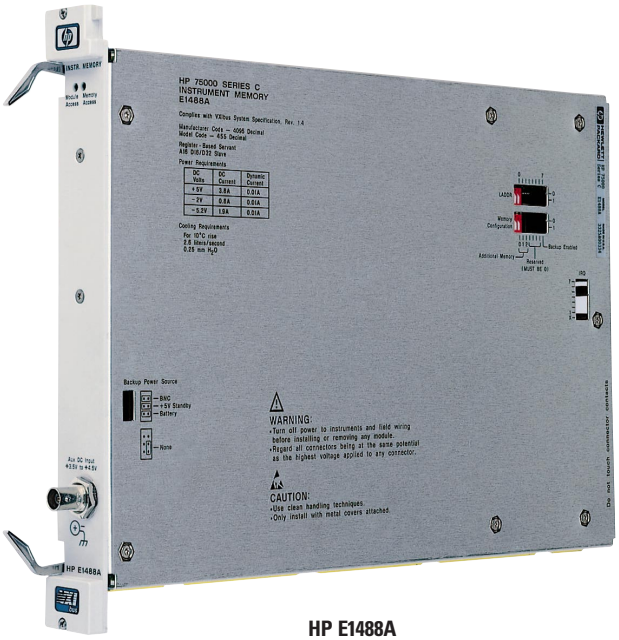
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Find the *Keysight / Agilent E1488A* at our website: ***Click HERE***

2 to 16 Mbyte Instrument Memory Module HP E1488A

Technical Specifications

- **Adds memory to VXI Local Bus instruments**
- **High-speed data transfers over VXI Local Bus**
- **Interfaces to VXI Data Transfer Bus**
- **Battery-backed static RAM**
- **Memory used by HP VXI digitizers and DSP products**



HP E1488A

Description

The HP E1488A instrument memory module is a **C-size, 1-slot, register-based VXI device.** It offers a convenient way to extend the memory of an instrument in 2 MB increments (Opt 1B2) up to 16 MB.

Several HP VXI instruments that make use of the local bus may use the HP E1488A for high-speed data transfers. Compatible products include: HP E1429B, HP E1430A, HP E1437A, HP E1431A, E1432A Digitizers, and HP E1485C Digital Signal Processor. A common data transfer protocol was designed to ensure data integrity during high-speed transfers. It implements a full handshake for each byte of data, even with the high-speed digitizers. The HP E1488A memory is single ported, not FIFO. It can either store or send data, but not both simultaneously.

The HP E1488A offers a configurable memory size by mounting the memory chips on plug-in circuit boards. The memory size can be increased in the field simply by plugging in additional memory boards and setting the configuration switches. Multiple memory cards may be placed in adjacent slots to form a larger memory system.

Refer to the HP Website for instrument driver availability and downloading instructions, as well as for recent product updates, if applicable.

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Multiple Memory Modules

If your application requires more memory than a single module offers, multiple memory cards may be placed in adjacent slots to form a larger memory system. For example, if the HP E1429B digitizer is used as a waveform recorder that requires 32 MB of data storage, two HP E1488As can be installed in the next two slots. This gives the HP E1429B a 32 MB memory that takes data at full speed. If an additional 4 MB are needed, simply install another HP E1488A in the next slot. The number of modules is limited only by the number of slots available in your VXI mainframe.

Battery-backed Static RAM

An on-board battery can be switched in to preserve the data in case of power failure. By using the internal battery, the module can even be removed from the mainframe and still retain its data. For longer data retention, other standby power sources available are the VXI +5 V standby line and the faceplate BNC connector.

Product Specifications

Memory

Memory size:	2 to 16 MB
Memory type:	Low-power static RAM
Nonvolatility:	On-board battery, VXI + 5 V standby, or faceplate BNC
Battery life:	Nominally 2 months at 25 °C, 7 days at 70 °C with maximum amount of SRAM on-board
Battery backup:	+ 3 to + 5 V connection for external backup (BNC)

Speed

Data transfer speed:	VXI Local Bus (LBUS)—greater than 80 MB/s nominal; VXI Transfer Bus—greater than 3 MB/s in 16-bit mode nominal, greater than 6 MB in 32-bit mode nominal
LBUS mode switch time:	<2 ns switching from consuming data to passing data through from LBUSA to LBUSC nominal

General

SCSI-2 interface:	No
Interrupts:	Upon reaching end of programmed byte count
Device type:	Register-based slave; A16, D16/D32
VXI Local Bus usage (LBUS):	High-speed data transfers; read, source, or pass through from LBUSA to LBUSC
VXI backplane access:	Serial through a single register access; shared RAM not supported
Transfer rate:	>3 MB/s (16 b)

General Specifications

VXI Characteristics

VXI device type:	Register based
Data transfer bus:	A16, D16/D32
Size:	C
Slots:	1
Connectors:	P1/2
Shared memory:	n/a
VXI busses:	Local Bus A Local Bus C
C-size compatibility:	n/a

Instrument Drivers

See the HP Website (http://www.hp.com/go/inst_drivers) for driver availability and downloading.

Command module firmware:	Downloadable
Command module firmware rev:	A.06
I-SCPI Win 3.1:	Yes, not supported on VXLink
I-SCPI Series 700:	Yes
C-SCPI LynxOS:	Yes
C-SCPI Series 700:	Yes
HP Panel Drivers:	Yes
VXI*plug&play* Win Framework:	No
VXI*plug&play* Win 95/NT Framework:	No
VXI*plug&play* HP-UX Framework:	No

Module Current

	I_{PM}	I_{DM}
+5 V:	3.8	0.2
+12 V:	0	0
–12 V:	0	0
+24 V:	0	0
–24 V:	0	0
–5.2 V	1.9	0.2
–2 V:	0.8	0.2

Cooling/Slot

Watts/slot:	25.00
ΔP mm H_2O:	0.25
Air Flow liter/s:	2.60

Ordering Information

Description	Product No.
2 to 16 Mbyte Instrument Memory Module	HP E1488A
2 MB Additional Memory	HP E1488A 1B2
3 Yr. Retn. to HP to 1 Yr. OnSite Warr.	HP E1488A W01
Shield, Backplane Connector	HP E1400-80920
VXI Backplane Conn Shield Kit	HP E1421-80920
2 Mbyte Memory Board for the HP E1488A	HP E1488AU
3 Yr. Retn. to HP to 1 Yr. OnSite Warr.	HP E1488AU W01

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Related Literature

1998 Test System and VXI Products Data Book,
HP Pub. No. 5966-2812E

1998 Test System and VXI Products Catalog,
HP Pub. No. 5966-2815

Warranty

Standard Hewlett-Packard VXIbus hardware products are warranted against defects in materials and workmanship for a period of three years unless otherwise noted. HP software and firmware products that are designated by HP for use with a hardware product, when properly installed on that hardware product, are warranted not to fail to execute their programming instructions due to defects in materials and workmanship.

For a complete and detailed warranty statement please see the HP *Test System and VXI Products Data Book* or visit the HP Website at http://www.hp.com/go/vxi.

HP Website Directory

Main HP Website
http://www.hp.com

HP Test and Measurement
http://www.hp.com/go/tmdir

HP VXI Product Information
http://www.hp.com/go/vxi

HP VXI Channel Partners
http://www.hp.com/go/vxichanpart

HP VEE Application Website
http://www.hp.com/go/hpvee

Data Acquisition and Control Website
http://www.hp.com/go/data_acq

HP Instrument Driver Downloads
http://www.hp.com/go/inst_drivers

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For more information about Hewlett-Packard test & measurement products, applications, services, and for a current sales office listing, visit our website, *http://www.hp.com/go/tmdir*. **You can also contact one of the following centers and ask for a test and measurement sales representative.**

United States:
Hewlett-Packard Company
Test and Measurement Call Center
P.O. Box 4026
Englewood, CO 80155-4026
1 800 452 4844

Canada:
Hewlett-Packard Canada Ltd.
5150 Spectrum Way
Mississauga, Ontario L4W 5G1
(905) 206 4725

Europe:
Hewlett-Packard
European Marketing Centre
P.O. Box 999
1180 AZ Amstelveen
The Netherlands
(31 20) 547 9900

Japan:
Hewlett-Packard Japan Ltd.
Measurement Assistance Center
9-1, Takakura-Cho, Hachioji-Shi,
Tokyo 192, Japan
Tel: (81) 426 56 7832
Fax: (81) 426 56 7840

Latin America:
Hewlett-Packard
Latin American Region Headquarters
5200 Blue Lagoon Drive, 9th Floor
Miami, Florida 33126
U.S.A.
Tel: (305) 267-4245
(305) 267-4220
Fax: (305) 267-4288

Australia/New Zealand:
Hewlett-Packard Australia Ltd.
31-41 Joseph Street
Blackburn, Victoria 3130
Australia
1 800 629 485

Asia Pacific:
Hewlett-Packard Asia Pacific Ltd.
17-21/F Shell Tower, Times Square,
1 Matheson Street, Causeway Bay,
Hong Kong
Tel: (852) 2599 7777
Fax: (852) 2506 9285

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