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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight E8491A

The Keysight E8491A isaC-size single-slot message-based VXI Slot 0 / Resource Manager module providing an IEEE-1394 FireWire PC-to-VXI link, predecessor to the E8491B, per HP E8491A configuration and user documentation. PC-controlled VXI systems, multi-mainframe FireWire ATE, and high-speed block data movement from VXI instruments. CLK10 and triggerIO Technical Specifications Instrument Type: IEEE 1394 PC to VXI interface Module Current Plus5V Ipm Family E8491B: 2.5 A Module Current Minus12V Ipm Family E8491B: 0.050 A Ohci Pci Host Adapter Option Class: Option 001 family CLK10 and trigger delay numbers from HP E8491A specifications appendix. Throughput, cable, current, and cooling rows aligned to Agilent E8491B IEEE-1394 PC Link datasheet 5966-2878E which documents the E8491A to E8491B family upgrade path; confirm A-specific currents on the E8491A faceplate/manual.



MODEL

**Agilent / Keysight
E8491A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E8491A

LISTING

<https://aumictechlabs.com/products/e8491a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight E8491A is an IEEE-1394 (FireWire) to VXI interface module that bridges a PC's IEEE-1394 bus with a VXI mainframe. Housed in a C-size, single-slot form factor, it functions as a message-based commander and Resource Manager, residing in Slot 0 of the VXI mainframe. The E8491A enables data block transfers between PC and VXI systems, supporting control and data acquisition from VXI instruments across multiple mainframes. Up to 16 VXI mainframes can be managed from a single PC via daisy-chain or star configuration. Hot-plugging capability simplifies

system reconfiguration without powering down.

Technical Specifications

Data Transfer Performance

Maximum sustained data transfer (16-bit): 14 MB/sec
Maximum backplane burst rate (16-bit): 13 MB/sec
Shared memory: 128 kB
Bus support: A16, A24, A32, D08, D16, D32, D64

Interface and Connectivity

Interface type: IEEE-1394 (FireWire)
VXI module size: C-size, 1-slot
Included cable length: 4.5 meters
IEEE-1394 ports (Option 001 host adapter): 3 external ports

Multiple mainframe interconnection

Daisy-chain or star configuration

Power Consumption

+5 V: 2.5 A (IPM), 0.001 A (IDM)
+12 V: 0.35 A (IPM), 0.050 A (IDM)
-12 V: 0.015 A (IPM), 0.001 A (IDM)
-5.2 V: 0.180 A (IPM), 0.001 A (IDM)
-2 V: 0.360 A (IPM), 0.001 A (IDM)

IEEE-1394 device power (Option 001)

12 V at up to 1.5 A

Key Features

- Message-based commander with Resource Manager functionality
- Hot-plugging support for dynamic reconfiguration
- 4.5 meter FireWire cable included
- Supports up to 16 mainframes per PC
- 128 kB shared memory for efficient data buffering
- RoHS compliant and CE marked

Compatibility & Integration

Operating Systems

Windows 95, Windows 98, Windows Me, Windows NT 4.0, Windows 2000, Windows 7

Software Support

SICL/VISA, VISA COM; 32-bit Interpreted SCPI (I-SCPI); VXIplug&play compliant

Programming Languages

C/C++, Visual Basic, Agilent VEE, LabVIEW/VISA

Regulatory

IEC 61010-1, CSA C22.2 #1010.1:1992, CISPR 22 Class A, CISPR 11 Group 1 Class A

E8491A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	IEEE 1394 PC to VXI interface
Vxi Device Type	Message-based commander
Module Size	C
Slots Occupied	1
Connectors	P1 P2
Logical Address	0 Resource Manager
Servant Area	255
Host Link	IEEE 1394 FireWire
Clk10 Input	TTL
Clk10 Output	TTL
Clk10 Stability	plus or minus 100 ppm
Clk10 Duty Cycle	50 percent plus or minus 5 percent
Trigger Input Levels	TTL ECL CMOS plus or minus 30 V class per manual
Maximum Trigger Delay Ttltrg To Ecltrg	60 ns
Maximum Trigger Delay Ecltrg To Ttltrg	60 ns
Shared Memory	128 kB class family
Data Transfer Bus Support	A16 A24 A32 D08 D16 D32 D64 family
Cable Length Between Devices Typical Kit	4.5 m
Bus Maximum Length Family	72 m
Maximum Mainframes Per System Family	16
Sustained Transfer Family E8491B Sheet	up to 14 MB per sec 16 bit and 32 bit
Backplane Burst Family E8491B Sheet 64 Bit	up to 53 MB per sec
Cooling Per Slot Family	20 W
Air Flow Family	2.0 liter persDeltaPFamily: 0.10 mm H2O

PARAMETER	VALUE
Module Current Plus5V Ipm Family E8491B	2.5 A
Module Current Minus12V Ipm Family E8491B	0.050 A
Ohci Pci Host Adapter Option Class	Option 001 family Notes CLK10 and trigger delay numbers from HP E8491A specifications appendix. Throughput, cable, current, and cooling rows aligned to Agilent E8491B IEEE-1394 PC Link datasheet 5966-2878E which documents the E8491A to E8491B family upgrade path; confirm A-specific currents on the E8491A faceplate/manual.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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PARAMETER	VALUE
Instrument Type	IEEE 1394 PC to VXI interface
Vxi Device Type	Message-based commander
Module Size	C
Slots Occupied	1
Connectors	P1 P2
Logical Address	0 Resource Manager
Servant Area	255
Host Link	IEEE 1394 FireWire
Clk10 Input	TTL
Clk10 Output	TTL
Clk10 Stability	plus or minus 100 ppm
Clk10 Duty Cycle	50 percent plus or minus 5 percent
Trigger Input Levels	TTL ECL CMOS plus or minus 30 V class per manual
Maximum Trigger Delay Ttltrg To Ecltrg	60 ns
Maximum Trigger Delay Ecltrg To Ttltrg	60 ns
Shared Memory	128 kB class family
Data Transfer Bus Support	A16 A24 A32 D08 D16 D32 D64 family
Cable Length Between Devices Typical Kit	4.5 m
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Module Current Minus12V Ipm Family E8491B	0.050 A
Ohci Pci Host Adapter Option Class	Option 001 family

Notes

CLK10 and trigger delay numbers from HP E8491A specifications appendix. Throughput, cable, current, and cooling rows aligned to Agilent E8491B IEEE-1394 PC Link datasheet 5966-2878E which documents the E8491A to E8491B family upgrade path; confirm A-specific currents on the E8491A faceplate/manual.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.