

Agilent E9850A VXI Embedded PC Controller, 450 MHz

Data Sheet

- 2-Slot, C-size, message based
- 450 MHz Intel Pentium® II Processor (or better)
- VXI *plug&play* compatible with Windows NT 4.0
- VISA and SICL support
- 64 MB standard SDRAM memory



Agilent E9850A

Description

The Agilent Technologies E9850A is a **C-size, 2-slot, message-based VXI embedded PC controller running Win NT 4.0 operating system**. The E9850A can be embedded in various Agilent VXI mainframes including the E84XX series, E1401B or E1421B.

The E9850A 450 MHz Pentium II (or better) uses Intel "Slot 1" architecture that allows the processor to be upgraded in the field. Standard features include a 4.2 GB Ultra DMA 33 (or better) hard drive/disk, a 3.5-inch 1.44 MB floppy drive, and 64 MB RAM standard memory that can be expanded to 384 MB using standard SODIMMs in two free sockets.

Standard features include an internal AT/PCI expansion slot that accepts a full-length PCI card, or a 16-bit XT-height ISA bus card. In addition, two front panel slots can accept one Type I/II/III and one Type I/II PC card (PCMCIA) peripherals.

Several standard I/O ports include an Advanced Graphics Port (AGP), a 2 MB 64-bit accelerated SGRAM port for SVGA connection, a Wide Ultra SCSI-3 port, a 10/100 BaseT (RJ45) Ethernet port, an IEEE 488.2 GPIB port, two RS-232 serial ports, an IEEE-1284-compatible parallel port, and two USB ports. (Note: USB not supported in Win NT 4.0.) A PS/2 keyboard, keyboard adapter and PS/2 mouse are also standard.

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

Note: The Agilent E9850A includes a 2.5-inch hard drive designed for relatively low-usage notebook PC applications. For applications requiring more than one disk read/write per minute over continuous long periods, premature hard drive failure may occur. For such applications, consider using an external SCSI hard drive.

Product Specifications

Processor:	Intel Pentium® II (or better)
Clock speed:	450 MHz
O.S. (earliest supported):	Windows NT 4.0
Internal mass storage:	4.2 GB Hard Drive 3.5-in. Floppy Drive (see Note below)
Main memory:	64 MB standard expandable to 384 MB using SODIMMS
Available internal slot:	Accepts full-length PCI or 16-bit XT-height ISA card
Available front panel slots:	Two PC card (PCMCIA) slots that accept one Type I/II/III and one Type I/II cards
Standard built-in interfaces:	Wide Ultra SCSI-3 port (AGP) 2 MB 64-bit accelerated SGRAM SVGA port 10/100 BaseT Ethernet port IEEE 488.2 GPIB port Two RS-232 serial ports IEEE-1284 parallel port Two USB ports* * (not supported in Win NT 4.0)
Included cables:	GPIB cable RS-232 cable IEEE-1284-2 cable (printer) PS-2 keyboard adapter (DIN 5F/MINI 6M)

Advanced Graphics Port (some of the supported resolutions):

Resolution	Number of colors
640 x 460	16 M colors
800 x 600	16 M colors
1024 x 768	64 K colors
1280 x 1024	256 colors
1600 x 1200	256 colors

Additional front panel connectors/functions:

10 MHz Clock I/O SMB connector
Trigger-In SMB connector
Trigger-Out SMB connector
Audio Out (speaker) connector
Keyboard connector
Mouse connector

Front panel LEDs:

VXibus interface status LEDs (indicate initialization stages as PC boots):

FAIL
SYSF
ONLINE
PWROK

Board access LEDs (indicate that board resources have been accessed):

ACC
DRV
SCSI

Ethernet LEDs (indicate Ethernet interface status):

RX/TX
LNK
100B-T

Note: Processor, RAM and hard disk technologies are improving rapidly, so the Agilent E9850A processor, RAM and hard disk may be upgraded without notice.

Environmental Specifications

EMC specifications:	Meets CISPR 11, 1990/EN 55011 (1991): Group 1, Class A
EMI specifications:	FCC Class A verified
Functional shock:	MIL-T-28800E Class 3 (30 g peak, half sine shock pulse). Also meets IEC 60068-2-27.
Random vibration:	MIL-T-28800E MIL-STD-810E Category 1
Operating:	5 to 500 Hz, 0.3 grms, 3-axes
Non-operating:	5 to 500 Hz, 2.4 grms, 3-axes
Operating environment:	
Ambient temperature:	0 to 50 °C
Relative humidity:	10% to 90% non-condensing
Storage environment:	
Ambient temperature:	-20 to + 70 °C
Relative humidity:	5% to 95% non-condensing
Maximum altitude:	
Operating:	10,000 ft
Non-operating:	40,000 ft

General Specifications

General Characteristics

Dimensions:	233.4 mm high x 340 mm deep (9.2 in. x 13.4 in.)
Weight:	2.5 Kg (5.5 lbs.)
VXI slots required:	2

VXI Characteristics

VXI device type:	Message based
Size:	C
Slots:	2
Connectors:	P1/P2
VXI buses:	TTL Trigger Bus ECL Trigger Bus

Cooling/Slot

Watts/slot:	24/slot (48/2-slots)
ΔP mm H₂O:	0.07
Air flow liter/s:	1.9

Module Current

	I_{PM}	I_{DM}
+5 V:	9.0 A	4.0 A
+12 V:	70 mA	30 mA
-12 V:	10 mA	10 mA
+24 V:	1 mA	1 mA
-24 V:	1 mA	1 mA
-5.2 V:	350 mA	30 mA
-2 V:	100 mA	6 mA

Ordering Information

Description	Product No.
VXI Embedded PC Controller, 450 MHz (includes operating manuals)	E9850A
128 MB PC100 SODIMM (16MX64) RAM Module	E9850A 001*

* UNIGEN part UG416S6448JSGPL or equivalent

** Standard warranty is one year return-to-Agilent.

Related Literature

2000 Test System and VXI Catalog CD-ROM,
Agilent Pub. No. 5980-0308E (detailed specifications for VXI products)

2000 Test System and VXI Catalog,
Agilent Pub. No. 5980-0307E (overview of VXI products)

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

Online

Internet access for Agilent product information, services and support
www.agilent.com/find/tmdir

VXI product information
www.agilent.com/find/vxi

Defense Electronics Applications
www.agilent.com/find/defense_ATE

Agilent Technologies VXI Channel Partners
www.agilent.com/find/vxichanpart

Agilent Technologies' HP VEE Application Website
www.agilent.com/find/vee

Agilent Technologies Data Acquisition and Control Website
www.agilent.com/find/data_acq

Agilent Technologies Instrument Driver Downloads
www.agilent.com/find/inst_drivers

Agilent Technologies Electronics Manufacturing Test Solutions
www.agilent.com/go/manufacturing

Get assistance with all your test and measurement needs at
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