



Agilent E9851A VXI Embedded PC Controller, 700 MHz

Data Sheet

- 2-Slot, C-size, message based
- 700 MHz Intel Pentium® III Processor
- VXI plug&playcompatible with Windows NT 4.0
- VISA and SICL support
- 128 MB standard SDRAM memory



Agilent E9851A

Description

The Agilent Technologies E9851A is a **C-size, 2-slot, message-based VXI embedded PC controller running Win NT 4.0 operating system**. The E9851A can be embedded in various Agilent VXI mainframes including the E84XX series, E1401B or E1421B.

Standard features include a 6 GB (or larger) Ultra DMA 33 hard drive/disk, a 3.5-inch 1.44 MB floppy drive, and 128 MB RAM standard memory that can be expanded to 384 MB using standard SODIMMs in two free sockets.

Standard features also 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 E9851A 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.



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Product Specifications

Processor:	Intel Pentium® III
Clock speed:	700 MHz
O.S. (earliest supported):	Windows NT 4.0
Internal mass storage:	6 GB Hard Drive 3.5-in. Floppy Drive (see Note below)
Main memory:	128 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
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Front panel LEDs:

VXIbus interface status	
LEDs (indicate initial- ization 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 E9851A 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 FCC Class A verified
EMI specifications:	MIL-T-28800E Class 3 (30 g peak, half sine shock pulse). Also meets IEC 60068-2-27.
Functional shock:	MIL-T-28800E MIL-STD-810E Category 1
Random vibration:	5 to 500 Hz, 0.3 g _{rms} , 3-axes
Operating:	5 to 500 Hz, 2.4 g _{rms} , 3-axes
Non-operating:	
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 busses: TTL Trigger Bus

ECL Trigger Bus

C-size compatibility: n/a

Cooling/Slot (preliminary)

Watts/slot: 24/slot (48/2-slots)

ΔP mm H₂O: 0.07

Air flow liter/s: 1.9

Module Current (preliminary)

	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, 700 MHz E9851A**

(includes operating manuals)

**** 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
www.agilent.com/find/assist
or check your local phone book for the Agilent office near you.

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