Agilent E6237A

VXI Pentium® Real-Time Controller (LynxOS/166 MHz)

Data Sheet

- **2-Slot, C-size, message-based controller**
- **166 MHz Intel Pentium® Processor**
- **LynxOS real-time operating system**
- **Deterministic interrupt latency of 400 μsec**
- **SICL/C-SCPI support**
- **Upgrade memory using standard SODIMMS**

Agilent E6237A

Description

The Agilent E6237A is a **C-size, 2-slot, message-based, real-time controller** and can be used in all Agilent C-size mainframes. Embedding the controller in the VXI chassis allows direct computer access of other VXI devices, system memory, and triggers as though they were part of the controller hardware. A separate command module is not needed.

The E6237A accesses the VXIbus with a full 32-bit wide data path (D32) for highest performance. It has one additional EXM slot for inclusion of an additional interface that can be ordered separately. For an alternative data path into and out of your VXI system, LAN connection is standard on this module.
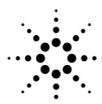
This real-time controller supports the Agilent SICL I/O library and Agilent C-SCPI instrument command language.

This product includes a 166 MHz processor, 2.16 GB disk, 3.5″ floppy drive, 32 MB RAM, SCSI-2, RS-232, GPIB, ECP parallel port, SVGA I/F with 2 MB VRAM, two PS-2 ports, and one EXM expansion slot.

Option 001 includes LynxOS PosixWorks development software and Agilent SICL/C-SCPI development software on CD-ROM and all user documentation. PosixWorks features TotalView, a multi-process debugger, and TimeScan, a performance analyzer, for optimizing your code development efficiency. Option 002 includes run-time licenses for LynxOS and Agilent software.

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

Note: This product uses a notebook-style 2.5" hard drive intended for low-usage operation. Applications that require frequent (more than once per minute) disk read/writes continuously over long periods may cause premature failure of the hard disk. For these applications, you should consider using an external SCSI hard drive, either a standalone drive or a VXI disk, such as the E3249B.

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Product Specifications

Processor:	Intel Pentium®
Clock speed:	166 MHz
Performance	
MIPS:	—
MFLOPS:	n/a
SPECmark 89:	—
SPEC int92:	4.82
SPEC fp92:	3.40
SPEC int95_base95:	4.82
SPEC fp95_base95:	2.68
X11 Xmark 93:	n/a
SPECrate int92:	n/a
SPECrate fp92:	n/a
Main memory:	32-128 MB
Built-in interfaces:	Two PS-2 ports
	SVGA w/2 MB Video RAM
	RS-232
	LAN
	GPIB
	ECP Parallel
	SCSI-2
	USB
	Trigger I/O
	Clock I/O
Additional interfaces:	GPIB
	2-channel RS-232
	Thick/thin LAN
Expansion slots:	1 EXM
Graphics support:	Color
	640 x 480
	800 x 600
	1024 x 768
	1280 x 1024
Internal mass storage:	2.16 GB Hard Drive
	3.5-in Floppy Drive
O.S. (earliest supported):	LynxOS rev 2.5

Environmental Specifications

EMC Specifications:	Meets CISPR 11, 1990/EN 55011 (1991): Group 1, Class A
Shock:	
Operating:	30 g 11 ms, half sine pulse
Non-operating:	50 g 11 ms, half sine pulse
Vibration:	
Operating:	2.5 g acceleration over 5-300 Hz sine wave (P-P), 1 oct/min sine sweep
Non-operating:	5 g acceleration over 5-300 Hz sine wave (P-P), 1 oct/min sine sweep
Environmental–temperature:	
Operating:	5 to 45 °C derated 2 °C per 1000 ft (300 m) over 6600 ft (2000 m)
Non-operating:	–40 to 65 °C (HDD limits)
Environmental–max. altitude:	
Operating:	10,000 ft (3,000 m)
Non-operating:	40,000 ft (12,000 m)
Environmental–rel. humidity:	
Operating:	8-90% non-condensing
Non-operating:	5-95% non-condensing

VXI Characteristics
VXI device type: Message-based controller
Size: C
Slots: 2
Connectors: P1/2
Shared memory: n/a
VXI busses: TTL Trigger Bus,
ECL Trigger Bus
C-size compatibility: n/a

Module Current

	I_{PM}	I_{DM}
+5 V:	11 A	0.02 A
+12 V:	40.2 mA	0.01 A
−12 V:	2.4 mA	0.01 A
+24 V:	0	0
−24 V:	0	0
−5.2 V:	335 mA	0.001 A
−2 V:	120 mA	0.006 A

Cooling/Slot
Watts/slot: 29
ΔP mm H$_2$O: 0.14
Air flow liter/s: 5.6

Ordering Information

Description	Product No.
VXI Pentium® Real-Time Controller*	E6237A*
Pentium Controller w/Development S/W	E6237A 001
Pentium Controller w/Run-time Software	E6237A 002
3 yrs. Return to Agilent to 1 yr. OnSite Warr.	E6237A W01
5 yrs. of Customer Return Repair Service	E6237A W50
16 Mbytes Additional RAM	E6245A
32 Mbytes Additional RAM	E6246A
Additional AUI/ThinLAN/10baseT Interface	RADIS-00724
Add'l 8-Channel RS-232 Interface	RADIS-00820
Additional GPIB Interface	RADIS-00848
Additional 2-Channel RS-232 Interface	RADIS-00849

***Note: You must specify either Opt. 001 or Opt. 002 when ordering.**

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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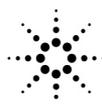European Marketing Organisation
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