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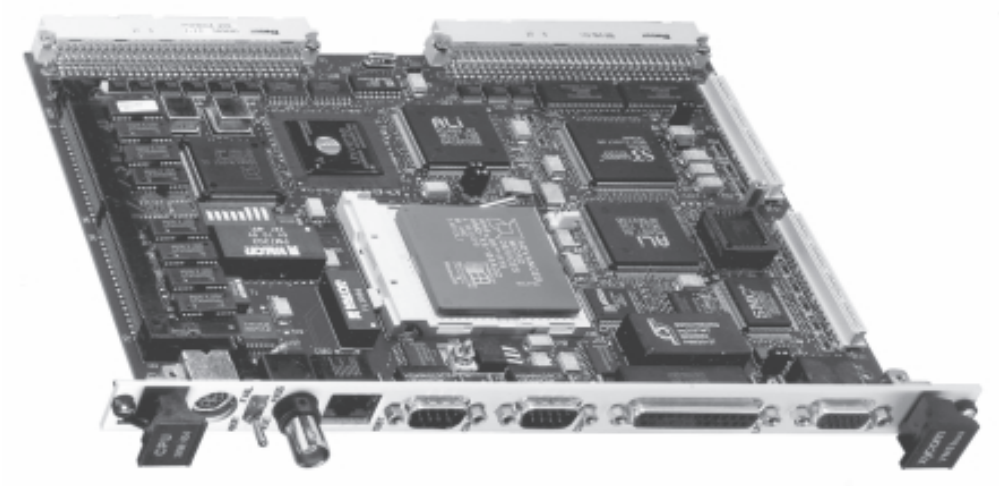
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Find the *Acromag / Xembedded / Xycom XVME-654* at our website: ***Click HERE***

XVME-654
VMEbus Processor Module



Features

- 133 MHz AM5x86™
- Supports 4 MB to 32 MB DRAM
- PCI local bus
- PCI local bus SVGA controller, with resolutions up to 1024 x 768
- PCI enhanced IDE controller
- PCI to VMEbus interface
- Two 16550-compatible serial ports
- EPP or ECP parallel port
- Optional PCI and ISA expansion
- Embedded PCI Ethernet controller with 10BaseT and 10Base2 interfaces

Overview

The XVME-654 PC-compatible VMEbus processor module is the latest VME PC product from Xycom Automation, the pioneer and leader in VMEbus PC technology. The new design integrates an AM5x86 processor along with a PCI-to-VMEbus interface, offering the latest in high-performance VMEbus technology.

At the core of the XVME-654 is the 133 MHz AM5x86 CPU. The CPU's 16 K on-board, write-back cache minimizes the time the CPU spends waiting for data and instructions, accelerating business and multimedia applications. To further enhance the performance of its processor, the XVME-654 supports 4, 8, 16, and 32 MB of EDO DRAM.

Additional performance enhancements are provided through implementation of a Peripheral Component Interconnect (PCI) bus. The PCI bus is the fastest local bus designed for AT systems. It communicates with the high-speed video controller, enhanced IDE controller, and on-board Ethernet controller.

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The PCI bus video controller–featuring a 64-bit graphics engine, with 24-bit RAMDAC for true color support–supports resolutions up to 1024 x 768 with 256 colors. The controller also incorporates the latest Green PC monitor plug-and-play features for power savings. The video controller also offers hardware-assisted enhanced video playback for Indeo™, Cinepak™ , and MPEG-1.

The high-speed enhanced IDE (EIDE) controller supports programmed I/O modes 0-4 for IDE hard drives with capacities greater than 525 MB. EIDE and floppy controller signals are routed through the A and C rows of the P2 connector.

IDE hard drive and floppy drive capabilities are available through the connection of the XVME-977 single-slot VMEbus mass-storage module. A single ribbon cable is used to connect the XVME-654's hard and floppy drive signals to the XVME-977. For applications that require mass storage outside of the VMEbus chassis, the XVME-973 drive adapter module plugs onto the VMEbus P2 connector. This module provides industry- standard connections for IDE and floppy signals.

The XVME-654 uses the PCI local bus to interface with the VMEbus. The VMEbus interface supports full DMA to/from the VMEbus, integral FIFOs for posted writes, block mode transfers, and read-modify-write operations. The interface contains four master and slave images that can be programmed in a variety of modes to allow the VMEbus to be mapped into the PC memory. This feature makes it easy to configure VMEbus resources in protected and real-mode programs.

The VMEbus interface supports A32/A24/A16 addressing modes and D64/D32/D16/D08 data transfer modes for both master and slave. The module also contains a full four-level VMEbus arbiter, VMEbus interrupter, and interrupt handler.

PC-compatible features include two 16550 RS-232C-compatible serial ports, a Centronics-compatible parallel port, a six-pin mini-DIN keyboard port, a battery-backed real-time clock, and a PC PCI-compatible system BIOS.

The XVME-654 provides an on-board 32-bit bus mastering PCI Ethernet controller. The Ethernet controller is software compatible with NE2100 and NE1500 controllers. 10BaseT and 10Base2 interfaces are available on the module's front panel.

PC/104 and PCI Mezzanine Card (PMC) expansion is available through the XVME-976 module. The XVME-976 incorporates PMC and PC/104 sites, allowing easy integration of PC-compatible modules into your VMEbus system.

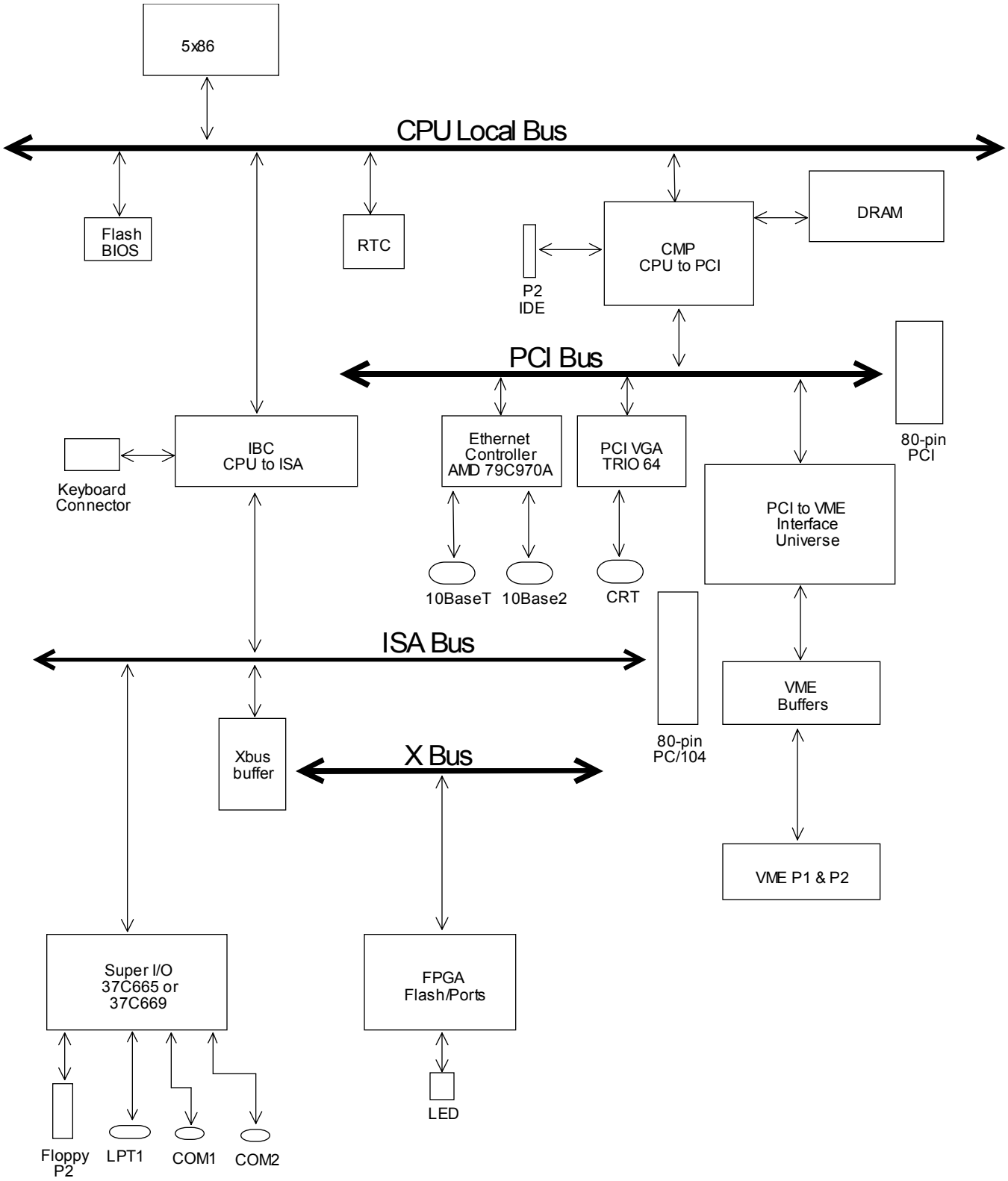
Because the XVME-654 is fully PC compatible, it can run most applications. Software support is available for MS-DOS®; Microsoft® Windows® NT™, 3.1, and '95 QNX™; Novell®; and the latest multimedia and business applications.

VMEbus Compliance

- Complies with VMEbus Specification, IEEE 1014–1987 Rev. C1
- A32/A24/A16:D64/D32/D16/D08(EO) DTB Master
- A32/A24:D64/D32/D16/D08(EO) DTB Slave
- R(0-3) Bus Requester
- Interrupter I(1)-I(7) DYN
- IH(1)-IH(7) Interrupt Handler
- SYSCLK and SYSRESET Driver
- PRI, SGL, RRS Arbiter
- RWD, ROR bus release
- Form Factor: Double
  233.35 mm x 160.00 mm (9.2" x 6.3")

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XVME-654 CPU Block Diagram



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Environmental Specifications

Temperature

Operating

No air flow	0° to 43° C (32° to 109° F)
400 ft/min. air flow (122 m/min)	0° to 65° C (32° to 149° F)
Nonoperating	-40° to 85°C (-40° to 185° F)

Vibration

Frequency	5 to 2000 Hz
Operating	.015" peak-to-peak displacement 2.5 g (maximum) acceleration
Nonoperating	.030" peak-to-peak displacement 5.0 g (maximum) acceleration

Shock

Operating	30 g peak acceleration 11 msec duration
Nonoperating	50 g peak acceleration 11 msec duration

Humidity 20% to 95% RH, non-condensing

Warranty Information

The XVME-654 carries a two-year warranty.

Hardware Specifications

CPU Speed

133 MHz

PCI SVGA Graphics Controller

1024 x 768, 256 colors maximum resolution

1 MB video DRAM

Serial Ports (2)

16550 RS-232C compatible

Parallel Interface

ECP/EPP compatible

On-board Memory

4 to 32 MB DRAM

Power Specifications

+12V	75 mA maximum
-12V	24 mA maximum
+5V	4.3 A (max.), 3.4 A (typical)

Ordering Information

XVME-654/20x			133 MHz VMEbus PC Processor
where	x	= 0	No DRAM
	x	= 1	4 MB EDO DRAM
	x	= 2	8 MB EDO DRAM
	x	= 3	16 MB EDO DRAM
	x	= 4	32 MB EDO DRAM
XVME-973			Drive Adapter Module
XVME-976			PMC/PC/104 Expansion Module
XVME-977			Single-slot Mass Storage Module

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