VMIVME-8440
IOWorks® PC-Based Controller on VMEbus

FEATURES

- Complete, factory-ready industrial VME-based PC system
- IOWorks® target running on VxWorks operating system for real-time applications
- Standard features include:
  - — Single-slot single-board computer (SBC) (VMIVME-7698-355) with PMC site
  - — Intel® Celeron™ PPG processor with speeds up to 366 MHz
  - — On-board Fast Ethernet controller supporting 10BaseT and 100BaseTX
  - — Two high-performance 16550-compatible serial ports * (Requires VMIACC-0045 or individual connector adapters.)
  - — Enhanced parallel port with ECP/EPP modes supported * (Requires VMIACC-0045 or individual connector adapters.)
- 128 Mbyte SDRAM using 144-pin SODIMM standard
- Intel Celeron system comes with 64-bit Intel AGP SVGA controller with 2 Mbyte SGRAM
- Up to 64 Mbyte of flash memory accessible through the secondary IDE port; no OS-specific software drivers are required for flash memory operation.
- Rugged 10U x 17 in. x 8.3 in. metal chassis with an aluminum 6U 21-slot subrack and backplane with one stem slot and 20 user-available I/O slots; includes a switchable 110/220 VAC 750 W power supply unit and a 1U fan tray with DC-powered fans
- 32 Kbyte of battery-backed SRAM is accessible in ISA memory space; contents of the SRAM are preserved when +5 V power is interrupted or removed from the unit
- Hard drive and CD-ROM boards sold separately

WHEN LOADED WITH IOWorks SOFTWARE

- Distributed system to support an unlimited number I/O points
- VxWorks controller target for real-time solutions
- VMIC VMEbus I/O driver software
- Execute IEC 61131-3-compliant programs
- Enable a connected host SBC to monitor all plant data and debug any programming problems; date and time stamping on error and status messages

INTRODUCTION — The VMIC VMIVME-8440 IOWorks PC-based controller is a complete, high-performance VMEbus system that can come loaded with VMIC's award-winning IOWorks software controller package. This controller system provides customers with turnkey solutions for applications ranging from high-speed process control—to data acquisition—to industrial automation.

The VMIVME-8440 controller rolls in the PC's power and connectivity with the universality of the VMEbus platform. VMIC used the latest technology to develop both the hardware and software components comprising the VMIVME-8440. VMIC has designed-in the migration path to controller upgrades to protect your software and application investments.

As an IOWorks controller target, the VMIVME-8440 can be used in a distributed control system —much like PLCs. The programming environment provided by IOWorks is one familiar to the experienced engineer. By adhering to the internationally recognized IEC 61131-3 programming specification, users can develop applications with ladder logic, function blocks, and C/C++. On-line tools such as monitoring, single step, and debug speed program development.

POWERED BY:

THE VMIVME-8440 ADVANTAGE — Here are just a few of the benefits customers received from this high-performance VMEbus system:

Affordability:

- The specially designed system enclosure is an industrial-class chassis that can be mounted (a) to a wall, (b) inside any enclosure or cabinet with a rigid back panel, or (c) in a standard, 19-inch industrial-class rack.
- Modular, scalable architecture provides easy system expansion. For example, the VMIVME-8440 support IEEE-P1386 common mezzanine card specification with a 5 V PCI mezzanine card expansion site. This expansion capability allows third-party devices to be used with the VMIVME-8440. Commercial PMC and PC card modules now available include Fibre Channel, Reflective Memory, analog and digital I/O, and Flash to name just a few.
- Open fieldbuses such as Genius®, DeviceNet, and Profibus-DP are supported. IOWorks provides drivers to integrate third-party modules so that a VMIVME-8440 IOWorks controller can adapt to customer needs.

Broad Family Offering:

- Customers can purchase the controller, software, remote I/O, and other add-ons from a single vendor —VMIC. This **one-stop** shopping makes ordering, integration, and technical support easy and convenient. If you have a question about the controller or its components, call VMIC for assistance.
- The VMIVME-8440 can be used with a number of VMIC's PMC bus and VMEbus products.
- The IOWorks drivers support the majority of VMIC's extensive line of I/O boards. Features of each board can be accessed through driver functions.

Leading-Edge PC-Based Controller:

- An IOWorks VME controller offers a control system with throughput, performance, and programming capabilities exceeding those of conventional PLCs.
- With IOWorks, you can develop, download, execute, and monitor programs from a central development SBC station.
- Ethernet and Fast Ethernet are the supported network topologies. Networked users —at all levels of the organization in a plant — can access real-time data. In addition, data can be transferred between any connected PLCs and the controller simultaneously.
- The controller target, once configured, can boot up, load, and run compiled applications without user/hose intervention.

ADD-ON PRODUCTS

I/O Products: The VMIVME-8440 enables access to VMIC's wealth of VMEbus products. If you have real-world control, monitoring, and real-time networking requirements, VMIC has a solution for you. VMIC supplies a wide range of I/O boards including analog, digital, etc. Distributed I/O expansion is available with VMIC's new IOMax™ DIN rail I/O product line.

Floppy/Hard Disk: VMIC's VMIVME-7452 floppy/hard disk module can be purchased to support the built-in IDE and floppy controller ports. It provides hard disk storage and a 3.5-inch 1.44 Mbyte floppy drive.

CD-ROM Support: Since much of today's advanced software is delivered on CD-ROM, the VMIVME-7455 CD-ROM can be purchased for CD-ROM capability.

NOTE: Add-on products use one or more chassis I/O slots from the 20 user-available I/O slots.

Ordering Options

February 13, 2002 800-008440-000 D		A	B	C	–	D	E	F
VMIVME-8440	–		0		–			

A = Processor
1 = Reserved
2 = Reserved
3 = Intel 366 MHz Celeron PPG Processor

B = 0 (Option is reserved for future use)

C = Controller Software/Operating System
0 = IOWorks Target with VxWorks Run-Time License
1 = Reserved

Companion Single-Slot VMEbus Floppy/Hard Disk Modules

		A	B	C	–	D	E	F
VMIVME-7452	–	5			–			

A = 5

BC = Indicates Disk Module Configuration
(See the VMIVME-7452 specification for details on disk module configuration options.)

Connector Adapter Kit

VMIACC-0045 *

An accessory kit is available that adapts the product's front panel 9-pin serial and 25-pin parallel port Micro-D connectors to Standard-D size 9- and 25-pin connectors. The Connector Adapter Kit contains two 9-pin Micro-D to Standard-D serial port adapters and one 25-pin Micro-D to Standard-D parallel port adapter. Individual connector adapters: 360-0100050-000 Micro-DB9 to DB9 and 360-010051-000 Micro-DB25 to DB25. **These adapters and accessory kit are sold separately.**

CD-ROM Module

		A	B	C	–	D	E	F
VMIVME-7455	–	4	0	0	–			

A = Indicates CPU Board to Be Mated with CD-ROM Module
4 = For Use with VMIVME-7696, -7697, and -7698

BC = Indicates Disk Module Configuration
00 = CD-ROM Drive Only

For Ordering Information, Call:
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