

The V154 is a single-width, C-size, VXIbus module that combines the performance of a PowerPC-based computer with the functionality of a VXI Slot-0 controller.

Alternatively, on-board strap options enable this module to be used as a VXI-based processor in non-Slot-0 applications.

# **TYPICAL APPLICATIONS**

Aerospace and aircraft testing High-performance ATE High-performance data acquisition and control Applications requiring a real-time

kernel

Embedded data acquisition

# V154 Embedded PowerPC Slot-0 Controller

A powerful real-time computer in a VXI Controller

# **FEATURES**

- Single-width, C-size, Slot-0 controller
- High-performance PowerPC processor MVME 5500 at 1Ghz or MVME 5100 at 500 Mhz options
- VxWorks<sup>™</sup> operating e environment for powerful real-time computing
- Ideal for high-performance data acquisition and control
- Includes Ethernet, RS-232 serial ports, real-time clock, timers and counters
- Available with 512 MB SDRAM, expandable to 1 GB

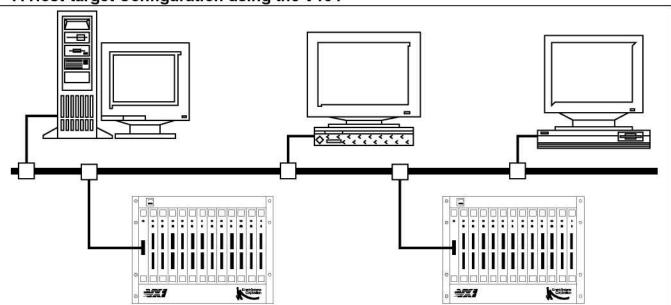


#### **GENERAL DESCRIPTION**

The V154 is a single-width, C-size, VXIbus module that combines the performance of a PowerPC-based computer with the functionality of a VXI Slot-0 controller. Alternatively, on-board strap options enable this module to be used as a VXI-based processor in non-Slot-0 applications.

The V154 offers the latest in PowerPC technology, enabling higher levels of performance in a single VXIbus slot. The V154 is ideal for data intensive applications.

Using the VxWorks<sup>™</sup> run-time kernel, the V154 provides an extremely powerful real-time computing environment. In most applications, this controller is connected to a host computer via an Ethernet link using TCP/IP protocol and VxWorks<sup>™</sup> to communicate with a host computer. The V154 is an ideal real-time embedded controller for Automatic Test Equipment (ATE) applications, and aerospace and aircraft testing.



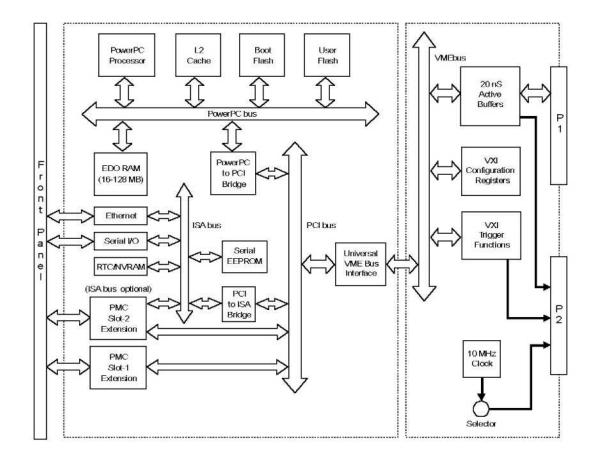
## A Host-target Configuration using the V154

Item	MVME 5500 Series	MVME 5100 Series	
Processor Options	MPC7455 Power PC (1Ghz clock)	MPC7410 Power PC (500 Mhz clock)	
SDRAM	512 MB onboard, additional 512 MB available via memory mezzanine card	512 MB onboard, additional 512 MB available via memory mezzanine card	
L2 Cache Memory	256КВ	2MB	
L3 Cache Memory	2MB	None	
Bank A Flash	32MB	1 MB	
Bank B Flash	8MB	16MB	
Counters/Timers NVRAM Battery	8 Real-Time Counters4 Real-Time CountersWatch Dog TimerWatch Dog Timer32 KB NVRAM32 KB NVRAMBattery backed NVRAMBattery backed NVRAM		
PMC Slots	Two for 32/64-bit PMC modules	Two for 32/64-bit PMC modules	
Ethernet Interface	Gigabit Ethernet Interface 10/100 Base T Ethernet Interface	Dual 10/100 Base T Ethernet Interface	

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Serial I/O	Two Serial Ports Front Panel RJ-45		Two Serial Ports Front Panel RJ-45		
Additional Features	Dual independent	AltiVec coprocessor for computations Dual independent 64-bit PCI buses Support for processor PMCs		64-bit PCI expansion mezzanine connector On board debug monitor	
Power Requirements	+5V -5.2V -2V +12V -12V	7.0 A 270 mA 96 mA 100 mA 100 mA	+5V -5.2V -2V +12V -12V	5.6 A 270 mA 96 mA 100 mA 100 mA	
Environmental and Mechanical Temperature range Operational Storage Relative humidity Cooling requirements Dimensions Front-panel potential	0°C to +50°C -25°C to +75°C 0 to 85%, non-condensing, to 40°C 10CFM 340 mm x 233.35 mm x 30.48 mm (C-size VXIbus) Chassis ground		10CFM	ondensing, to 40°C 5 mm x 30.48 mm (C-size VXIbus)	





#### **RELATED PRODUCTS**

Various accessories are available for the V154. Contact the factory for details.

## **ORDERING INFORMATION**

MODEL	DESCRIPTION
V154-AA11	Motorola PowerPC 5100, MPC7410, 500 Mhz, 512 MB, 17 MB Flash
V154-BA11	Motorola PowerPC 5500, MPC7455, 1 Ghz, 512 MB, 40 MB Flash

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