

The V151 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. 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

V151

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 embedded processor with 120,166 and 200 MHz clock options
- VxWorks™ operating environment for powerful real-time computing
- Ideal for high-performance data acquisition and control
- Include Ethernet, RS-232 serial port, real time clock, timers and counters
- Options available with 16,32, 64 or 128 Mbyte DRAM

GENERAL DESCRIPTION

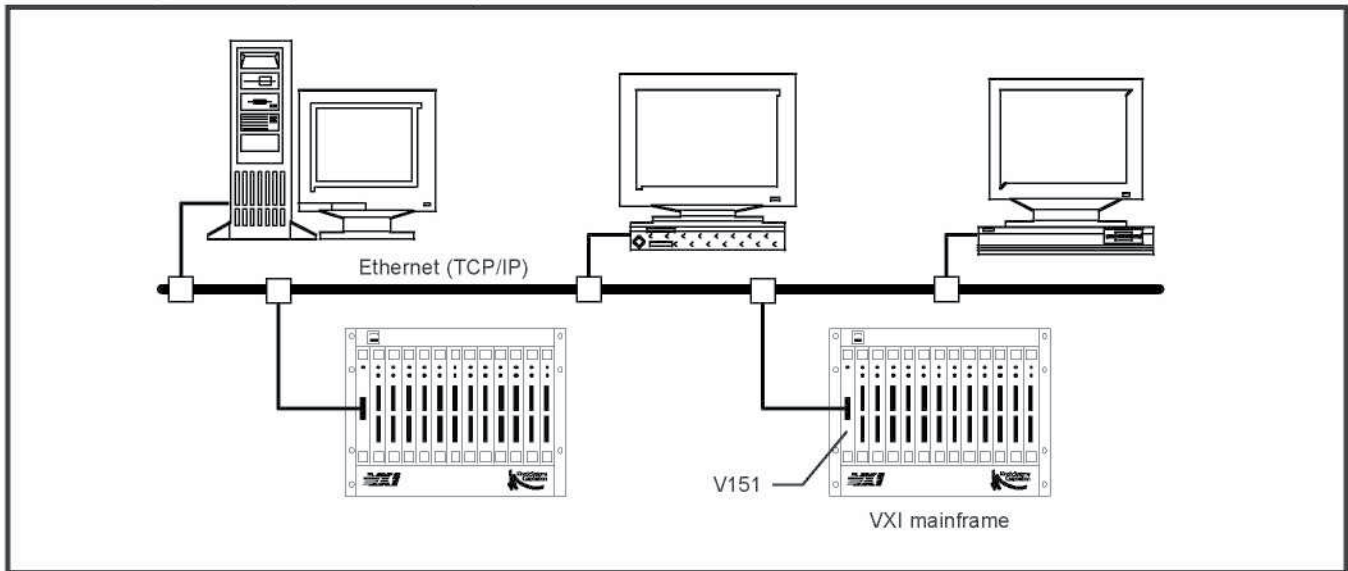
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Using the VxWorks™ run-time kernel, the V151 provides an extremely powerful real-time computing environment. In most applications this controller is connected to a host computer via an Ethernet link and uses TCP/IP protocol and VxWorks to communicate with a host computer. The V151 is an ideal real-time embedded controller for Automatic Test Equipment (ATE) applications.

VxWorks supports a wide range of industry standards such as POSIX, ANSI C and ISO networking protocols. Providing strong interoperability, VxWorks integrates these standards with a set of tools specifically designed to meet the requirements of the real-time developer. Note that the Model AL51 Vx-Works Board Support Package and the Model AS12 VxWorks OS Runtime License are required for operation under the VxWorks Operating System.

Wind River Systems' VxWorks integrated cross-development environment offers a high-performance operating system with sophisticated networking facilities and a complete set of cross-development tools specifically designed to work with the most popular computer platforms.

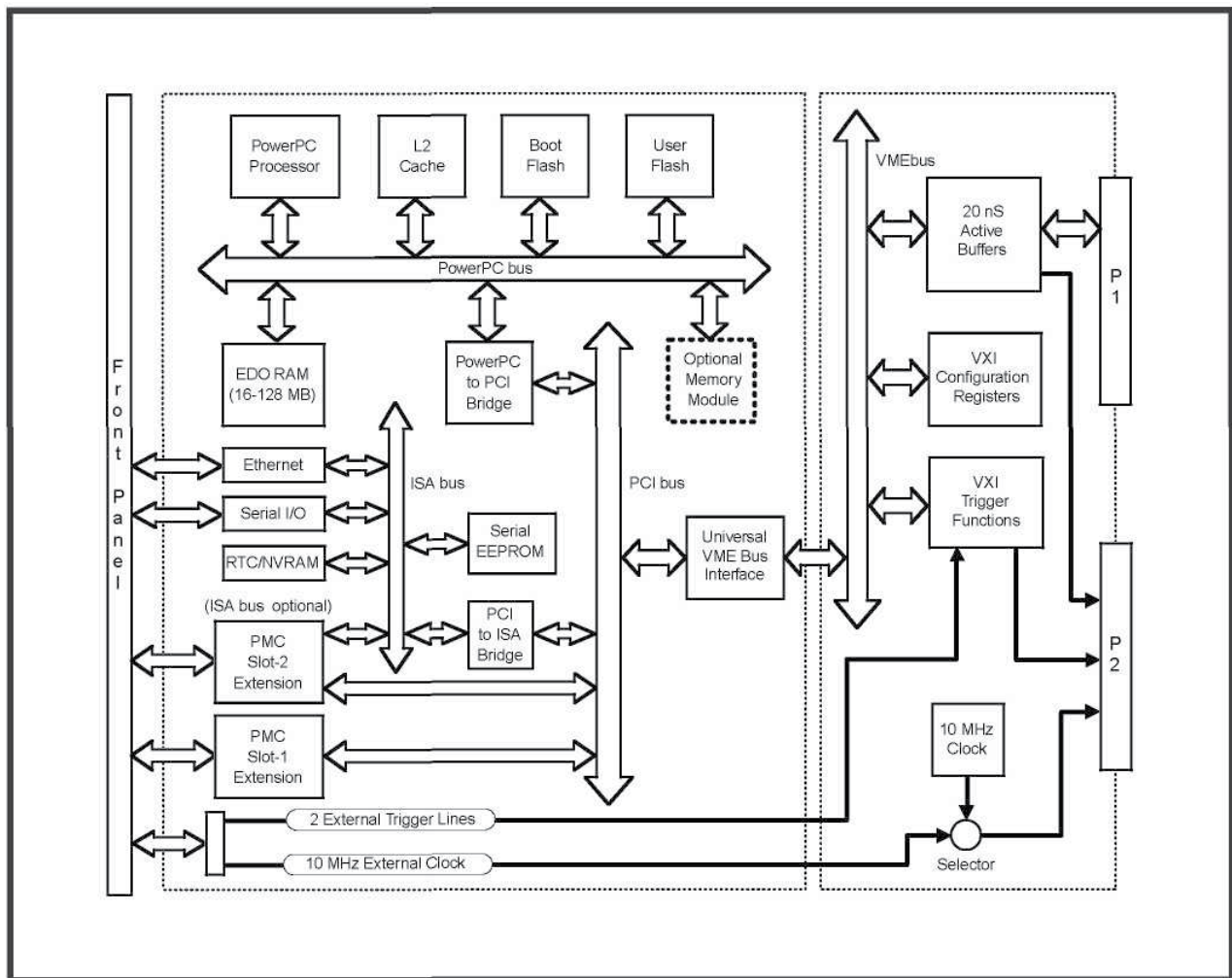
A Host-target Configuration using the V151



Item	Specification
Processor Options	PowerPC 603e (120 MHz clock) PowerPC 603ev (166 MHz clock) PowerPC 604e (200 MHz clock)
DRAM Memory	Options available with 16, 32, 64, and 128 Mbyte EDO RAM
L2 Cache Memory	Up to 512 kbyte SRAM
Boot Flash Memory	Up to 1 Mbyte
User Flash Memory	Up to 8 Mbyte
RTC/SRAM/battery	Real-time clock and NVRAM
PMC Slots	Two for 32-bit PMC modules
Ethernet Interface	Ethernet controller 10Base-T on front
Serial I/O	RS-232 compatible
Counters/timers	Four 16-bit, programmable
Additional Features	Reset and abort key, status LEDs, serial PROM for board configuration, voltage sensors, watchdog timer

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
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V151 Block Diagram





Related Products

Various disk drives, tape drives and other accessories are available for the V151. Contact the factory for details.

ORDERING INFORMATION

MODEL	DESCRIPTION
V151-CA11	PowerPC 750-300 Slot-0 Controller, 64 Mbyte DRAM/4 Mbyte Flash/2 PMC
V151-CA21	PowerPC 750-300 Slot-0 Controller, 192 Mbyte DRAM/4 Mbyte Flash/2 PMC
V151-CA31	PowerPC 750-300 Slot-0 Controller, 320 Mbyte DRAM/4 Mbyte Flash/2 PMC
V151-CB11	PowerPC 750-400 Slot-0 Controller, 64 Mbyte DRAM/4 Mbyte Flash/2 PMC
V151-CB21	PowerPC 750-400 Slot-0 Controller, 192 Mbyte DRAM/4 Mbyte Flash/2 PMC
V151-CB31	PowerPC 750-400 Slot-0 Controller, 320 Mbyte DRAM/4 Mbyte Flash/2 PMC
V151-0001	PMC Fast/Wide SCSI-2 Controller for V151
V151-0002	PMC-based IEEE-488 Interface for V151
V151-C001	PowerPC 750 Slot 0 Controller Documentation

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