

Single-width, C-size Module that combines the high performance of a PowerPC-based computer with the functionality of a VXI Slot-0 controller. A cost-effective and high-performance Slot-0 controller solution for your data collection needs.

TYPICAL APPLICATIONS

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

V157

Embedded Power-PC Slot-0 Controller



The V157 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.

FEATURES

- Single-width, C-size Slot-0 controller
- High-performance PowerPC Freescale 7448 (G4+) embedded processor with 1.0 GHz clock
- VxWorks™ operating 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
- Additional Serial Ports and GPIB options available

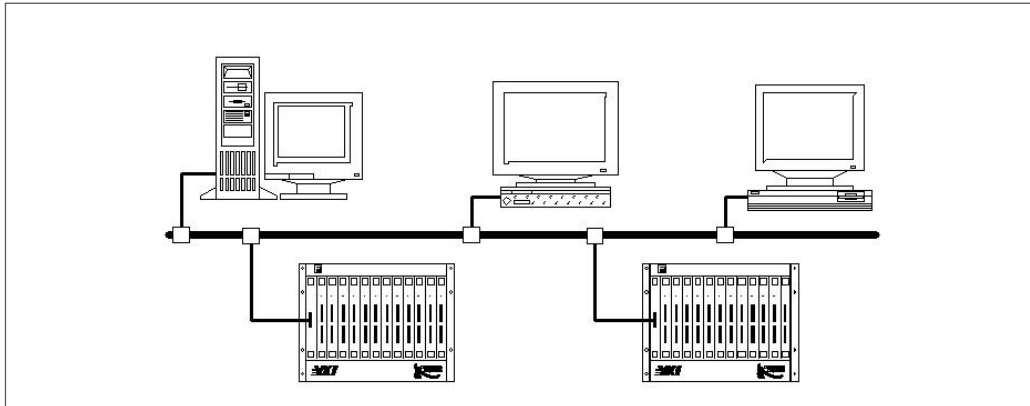


Figure 1: Host-target Configuration using the V157

GENERAL DESCRIPTION

The V157 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. The Slot0 capability includes MODID signal implementation for geographically addressing VXI modules during resource management and a set of trigger functions to control the VXI TTL/ECL trigger signals.

Using the VxWorks™ run-time kernel, the V157 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™ to communicate with a host computer. The V157 is an ideal real-time embedded controller for Automatic Test Equipment (ATE) applications.

One option of the V157 can be ordered with a GPIB interface and eight RS422 serial ports. The GPIB and serial port additions are provided by PMC (PCI Mezzanine Card) plug-in modules.

Software support drivers and libraries are offered to control access to VXI, GPIB and the additional serial ports.

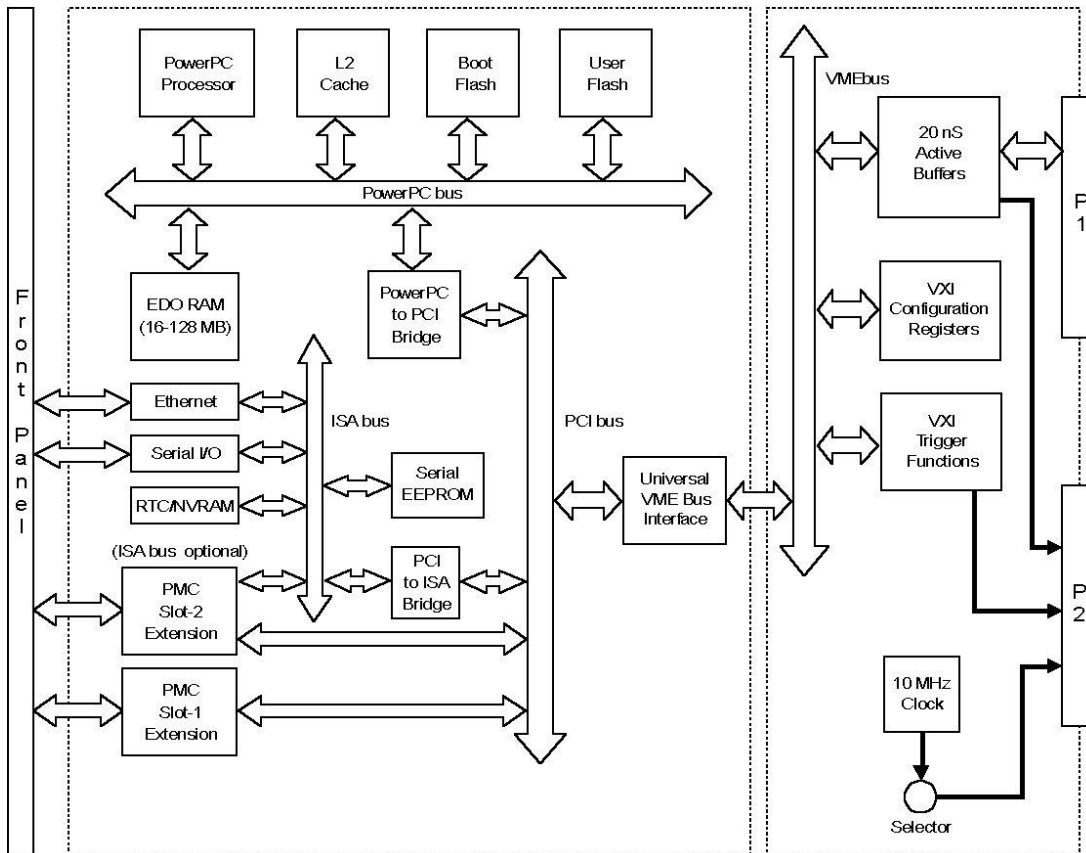


Figure 2: V157 Block Diagram

Item	Specification
Processor Options	Freescale PowerPC 7448 1.0 GHz
SDRAM Memory	256 Mbyte DDR2 SDRAM at 600 Mbytes/s peak rate
L1 Cache Memory	32 Kbytes data / 32 Kbytes Instruction
L2 Cache Memory	256 Kbytes
Flash EPROM	8/16 Mbytes
NOR Flash	256 Mbit (32 Mbytes)
NAND Flash	2 Gbit (256 Mbytes)
RTC/SRAM/battery	Real-time clock and NVRAM
PMC Slots	Two for 32-bit PMC modules (-AA11 both sites free / -AA21 both sites populated)
Ethernet Interface	Ethernet controller Two 10/100/1000 Base T
Serial I/O	Two standard RS-232 compatible port / Eight additional with -AA21 Option
Power Requirements	
+5V	7430 mA
-5.2V	270 mA
-2V	96 mA
+12V	100 mA
-12V	100 mA
Environmental and Mechanical	
Temperature range	
Operational	0°C to +50°C
Storage	-25°C to +75°C
Relative humidity	0 to 85%, non-condensing, to 40°C
Cooling requirements	10 CFM
Dimensions	340 mm x 233.35 mm x 30.48 mm (C-size VXIbus)
Front-panel potential	Chassis ground

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To find your local sales representative or distributor or to learn more about KineticSystems' products visit:

www.kscorp.com

ORDERING INFORMATION

Description

PowerPC Slot-0 Controller
PowerPC Slot-0 Controller with GPIB and eight RS-422 Serial Ports

Part Number

V157-AA11
V157-AA21

RELATED PRODUCTS

Various accessories are available for the V157. Contact the factory for details.