PrPMC2750 Processor PMC Module

Embedded Computing for Business-Critical Continuity™

The Emerson PrPMC2750 is a high performance, high quality PowerPC processor PCI mezzanine card (PMC) in a module form factor.

- PowerPC 750GX processor at up to 1.0 GHz in singleprocessor configuration
- Optional dual-processor configuration
- Highly integrated Marvell Discovery II system controller
- Up to 1GB DDR SDRAM memory
- 64-bit/66 MHz PCI bus interface
- 64MB on-board flash memory
- Configurable monarch/ non-monarch mode
- Dual/independent Gigabit Ethernet interfaces
- Dual serial interfaces

The Emerson PrPMC2750 is a high performance, high quality PowerPC[®] processor PCI mezzanine card (PMC) in a module form factor for space-constrained industrial control, communications, benign defense and aerospace, and other demanding applications. By adhering to industry standard technologies like PMC and PowerPC, the PrPMC2750 offers the advantage of solutions with flexibility, reliability, and longevity.







PowerPC 2MB Boot Flash 750GX 750GX 512KB L2 1.0 GHz 512KB L2 1.0 GHz processo processo 64MB Flash MPX Bus 133 MHz CPLD Device Bus Reset Logic Misc Logic UART1 32-bit/3.3V Marvell UART2 Discovery II System Controller MV64360 PCI Bus – 64-bit, 66 MHz, 3.3/5V 512MB DDRAM PMC Connectors Memory Bus 64-bit ECC 133 MHz 512MB GbE PHY Magnetics Stacked (optional) GbE PHY Magnetics I²C Bus 64KB Serial E²PROM (BIB) 64KB Serial E²PROM (auto-config) 15-pin 2x RS-232 console RTC SRAM Debug Connecto 1x 10/100 Ethernet

PrPMC2750 Block Diagram

Specifications

PROCESSOR

- PowerPC 750GX processor at up to 1.0 GHz in single-processor configuration
- Dual processor configuration optional

MEMORY

- 512MB ECC-protected SDRAM at 133 MHz, scaleable to 1GB
- 64KB L1 cache, 1MB L2 cache
- 64MB user flash
- 2MB boot flash

SYSTEM CONTROLLER

- Integrated 2Mb SRAM
- CPU interface 1.8/2.5V, 64-bit 60x/MPX bus (100/133 MHz)
- SDRAM interface 3.3V, 72-bit (64-bit, 8-bit ECC)

I/O CAPABILITIES

- Ethernet
 - Dual/independent Gigabit Ethernet
- Serial Interfaces
 - ▲ Dual RS-232 controllers
- PCI Interface
 - Monarch or non-monarch mode
 - ▲ 64-bit/66 MHz PCI bus
 - ▲ Four-channel DMA controller
 - ▲ I²C interface for multiple EEPROMs
- Debug Support
- JTAG interface

SOFTWARE

- VxWorks real-time operating system (supports loosely coupled multiprocessing)
- Linux operating system (single CPU variant)

Ordering Information			
Part Number	Description		
PRPMC2750S-0001	1GHz MPC750GX processor, 512MB DDR SDRAM memory, 64MB flash, 6E		

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	Embedded Computing	Power Switching & Control	Surge & Signal Protection

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