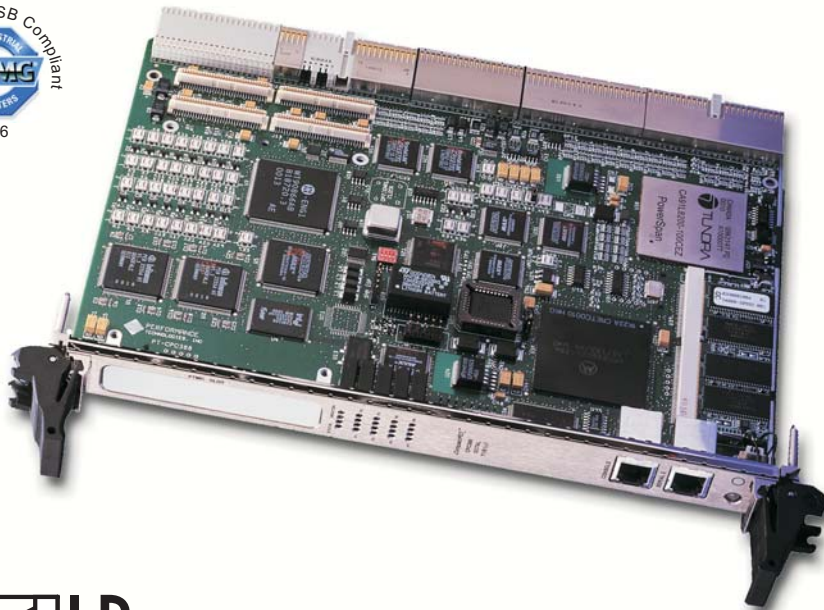


IPnexus™

CPC388

Octal T1/E1/J1 Telecom Adapter



As Next-Generation IP networks become a reality, the need for high density and high performance access for new telecom and IP telephony systems becomes critical. The CPC388, part of Performance Technologies' IPnexus™ product family, addresses these needs by providing telecom OEMs and integrators with a high density, highly advanced connectivity subsystem.

The CPC388 is ideally suited for both PSTN and IP telephony systems handling large volumes of voice circuits for protocol processing or for transfer to the H.110 bus, the PCI bus, Ethernet, or the onboard PTMC site. Application examples include SS7 network elements, wireless infrastructure equipment, media and signaling gateways, and telecom switching and routing equipment.

The PICMG 2.16 compatible CPC388 is an adaptable platform designed with an onboard MPC8260 PowerQUICCII RISC communications processor. Combined with an embedded Linux operating system and dual onboard Ethernet, the CPC388 operates as a fully programmable communications subsystem capable of intra-chassis communication using the PCI bus, or Ethernet.

- **Carrier-Grade Octal T1/E1/J1 Communications Interface for 6U CompactPCI Systems**

Ideal for high density voice/data apps in IP telephony systems

- **Motorola MPC8260 PowerQUICCII Processor**

Integrated communications functionality managed by an MPC603e PowerPC core

- **PICMG 2.16 Compliant**

Capable of operating in conventional CompactPCI chassis, or in CompactPCI Packet Switched Backplane configurations

- **Dual 10/100 Ethernet**

Provides redundant IP connectivity for high reliability carrier-grade solutions

- **H.110 Bus Support**

Capable of switching 192/256 time slots bi-directionally between the local and H.110 bus

- **NexusWare Development Environment**

Embedded Linux OS manages all onboard functions & offers an open API for development

- **PTMC Support**

Expandability for enhanced telecom applications

- **128MB Dedicated Processor DRAM Memory**

Handles extensive onboard traffic and protocol requirements

- **Hot Swappable**

Complies w/latest PICMG spec

- **Rear Panel I/O with Passive Transition Module**

Passive transition module facilitates hot swap and eliminates failure points



Specifications

Telecom Hardware Features: The architecture of the CPC388 capitalizes on the Motorola MPC8260 PowerQUICCII Processor. The advanced feature set of the MPC8260 allows for superior handling of 8 fully channelized T1/E1/J1 spans, increasing the number of possible active protocol links.

Critical to any telecom system is the ability to "hot swap" its board level components. The CPC388 fully complies to the latest PICMG hot swap specification. 80mm LIMs for the CPC388 improve reliability by being fully passive (no active components).

The CPC388 also supports the ECTF H.110 specification. By incorporating the H.110 interface device, the CPC388 can send or receive any of its possible time slots to the J4 connector. The CPC388 can switch all 256 of its DS-0 channels to any of the 4096 H.110 CT bus channels.

Other features include 128MB of DRAM allowing the CPC388 to execute protocols and WAN applications directly onboard. It also provides a monitor port and console port for upgrades and management.

Extensive Software Support: The CPC388 is enabled with the Linux-based NexusWare development environment. Due to the wide acceptance and extensive number of publicly available applications and protocols, system developers can bring sophisticated systems to market in a much shorter time.

With a well defined API, the integrated protocol suite from Performance Technologies reduces time to market by eliminating unnecessary development time at the hardware/protocol level. The protocols for our standard WAN hardware products enable development engineers to proceed directly to integration and application development.

Performance Technologies' suite of WAN communications protocols provides complete WAN connectivity solutions for SS7, Channel7 MTP-2, Frame Relay, HDLC, LAPD, X.25, and PPP protocols. OS support includes Solaris, Linux, and Windows NT.

For the Solaris environment, Performance Technologies' ChannelLink™ Communications Software provides both a transparent link to all SunLink protocols, as well as a documented set of driver primitives for developing T1, J1 or E1 related applications.

Ordering Information

PT-CPC388-11300: Octal T1, 100 Ohm Communications Adapter, Rear I/O
PT-CPC388-11301: Octal E1, 120 Ohm Communications Adapter, Rear I/O
PT-CPC388-11302: Octal E1, 75 Ohm Communications Adapter, Rear I/O
PT-CPC388-11303: Octal J1, 110 Ohm Communications Adapter, Rear I/O
PT-LIM388-11304: Line Interface Module (T1/E1/J1, 120 Ohm), w/Rear Ethernet
PT-LIM388-11305: Line Interface Module (T1/E1/J1, 120 Ohm), w/Midplane Ethernet
PT-LIM388-11306: Line Interface Module (E1, 120 Ohm), w/Rear Ethernet
PT-LIM388-11307: Line Interface Module (E1, 120 Ohm), w/Midplane Ethernet

Contact Performance Technologies for other configurations

Interface:

8 T1 Ports @ 1.544 Mbps
8 E1 Ports @ 2.048 Mbps
8 J1 Ports @ 1.544 Mbps
2 10/100 Ethernet Ports

Processor:

Motorola MPC8260 PowerQUICCII (MPC603e core)
64 bit data and 32 bit address bus

Framing Standards:

AMI/B8ZS, D-4, ESF, DS-1, PRI

Memory:

128MB dedicated DRAM
16MB flash PROM

Specification Compliance:

CPCI Revision 2.1 Compliant, including all PCI required configuration registers and protocols.
PICMG 2.5 CT Bus Compliant.
ECTF H.110 Compliant.
PICMG 2.1 Hot Swap Compliant
ANSI T1. 102-1993
IEEE 802.3
PICMG 2.16 CompactPCI Packet Switched Backplane Compliant

Physical Interface:

T1/E1/J1: 8 RJ-48C Connectors on LIM
Ethernet: Two RJ-45 Connectors on LIM
Monitors: Two RJ-11 Connectors on Front Panel

Protocol Support:

SS7, Channel7 MTP-2, HDLC, Frame Relay, LAPD, X.25, PPP

Agency Certifications:

FCC Class A, CE, UL 1950 (pending), NEBS Level 3 friendly

MTBF:

> 200,000 power-on hours (POH)

Power:

16.83 watts maximum (5.1 A @ +3.3 V)

Dimensions:

6U Eurocard Form Factor

Temperature:

Operating: 0° to 50° C (32° to 122° F)
Non-operating: -20° to 80° C (-4° to 176° F)

