PERFORMANCE TECHNOLOGIES

Highlights

>> **8-Port (10/100/1000) Switching Fabric**

>> **Support for Both 2.16 and Non-2.16 Modes**

>> **Wire Speed, Layer2/Layer3 Switching**

>> **16 Gbps Switching Speed**

>> **Layer 2-7 Filtering**

>> **FlexLink™ Site for Flexible I/O Options**

>> **IEEE 802.AD Link Aggregation**

>> **IEEE 802.1p Class of Service**

>> **IEEE 802.1Q VLANs**

>> **Prevents Broadcast, Multicast and Unicast Storms**

>> **Real-Time Continuous Integrity Checks**

>> **LUA Scripting Language**

The IPnexus™ CPC5400 is an embedded Ethernet switch compatible with both standard CompactPCI® and PICMG® 2.16 backplanes. It is designed to be used as a high-speed interconnect within server blade chassis or as a core switch in fault-tolerant clusters of embedded systems.

The CPC5400 offers increased bandwidth, performance and reliability in high availability applications such as defense, IP telephony and broadband. Used within a PICMG 2.16 environment, users can realize performance gains of up to 16 times that of current PCI-based architectures. The PICMG 2.16 standard extends the existing CompactPCI 2.x specifications by adding a packet-switched backplane architecture to the chassis midplane, based on dual redundant Ethernet.

The CPC5400 has been designed to make system integration easier, while maximizing network performance and flexibility. Its potent scripting language simplifies and automates installation and maintenance. Its support of multiple switching architectures allows devices with dual Ethernet ports alternate data paths in the event of node failure. And by continuously checking its own health - data can be rerouted to an alternate path if a problem is detected.

With dual switches in place, the alternate unit can obtain all of its operational and configuration information from the other switch or an external manager, making change-out of failed modules as simple as a hot-swap. The new unit "clones" its setup from the configuration stored on the surviving switch. With no active components on its rear panel I/O cards, failed units can easily be replaced without disturbing cables or other blades in the chassis.

The CPC5400 protects investments for the long term with easy FTP/TFTP updates to platform flash memory. System software is available through downloads from our Web site (www.pt.com), greatly simplifying or eliminating the need for dedicated on-site network administration.

The CPC5400 is part of our IPnexus family of embedded packet products.

Ordering Information

>> **PT-CPC5400-11376**
CPC5400 Ethernet Switch
with 8 port 10/100/1000 TX
single slot RTM

Contact Information

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Specifications

- 8 10/100/1000 base-T ports
- Wire speed Layer 2/Layer3 switching
- 16 Gbps switching fabric
- Store and forward frame processing, Layer 2-7 filtering
- Support for 2.16 and non-2.16 modes
- Up to eight rear panel RJ-45 connections
- 4m sec latency
- Hot-swap support - enhanced with our exclusive partner switch configuration replication, client cloning and version matching
- 8K MAC addresses
- 16 concurrent IEEE 802.1Q VLANs
- Spanning Tree Extensions - fast port, fast uplink and adjustable timers
- Support for IEEE 802.1p class of service with four priority queues for traffic class management
- GVRP/GMRP
- VRRP
- Port mirroring
- TFTP/FTP-based firmware upgrade and configuration upload/download
- TFTP/FTP client/server
- DHCP/BootP client
- DHCP/BootP relay
- DHCP/FTP/TFTP server with 2MB flash file system
- LED indicators of link, activity, speed, system status, fault and hot-swap
- Power-on or manager (CLI or SNMP) invoked diagnostics

Standards Supported
- PICMG 2.16 hot-swap-compliant
- CompactPCI CORE spec (PICMG 2.0 R3.0)-compliant, 6U x 4HP
- CompactPCI hot-swap support (PICMG 2.1), hardware connection layer
- CompactPCI system management bus (PICMG 2.9)-compliant
- CompactPCI switched 2.16 fabric-to-fabric interconnect, auto-negotiating
- IEEE 802.1D Spanning Tree Protocol
- IEEE 802.1D-1998 bridge extensions
- IEEE 802.1Q VLAN tagging, 16 VLANs
- IEEE 802.3x full duplex flow control
- IEEE 802.3AD link aggregation
- IEEE 802.3 10Base-T, 100Base-TX, 1000Base-T

Management
- RFC 1157 SNMP
- RFC 1213 MIBII
- RFC 1757 RMON groups 1, 2, 3, 9
- RFC 1493 bridge MIB
- RFC 1643 Ether-like MIB
- RFC 2674 bridge extensions MIB
- IEEE 802.3 AD link aggregation MIB
- Performance Technologies enterprise MIB
- CLI via out-of-band RS-232 and Telnet
- Front panel, non-switched 10/100 Ethernet port for out-of-band management

Certifications
- UL 1950, CSA-C22.2 No. 950 93, FCC Class A (Part 15, Subpart J), CE, ETSI EN 300 386
- Designed to meet the requirements of NEBS Level 3
- MTBF of 122,860 hours per Telcordia TR-NWT-000332 issue 5

Power Requirements
- 36 watts maximum; 30 watts typical

Environmental
- Operating Temperature: 32-131° F (0-55° C)
- Relative Humidity: 10-90%, non condensing