

# CPC324A PRODUCT SHEET

## 24-Port T1/E1/J2 TDM/IP Edge Processor

### FEATURES

PICMG® 2.16 or Standard PCI™  
Bus Operation

24 Fully Channelized T1/E1/J1  
Spans (768 Software  
Programmable Channels)

Stratum 3 Clocking

Onboard Nine-Port Gigabit  
Switch

1 GHz PowerQUICC® III  
Processor

NexusWare® Core CGL  
Distribution and Development  
Tools

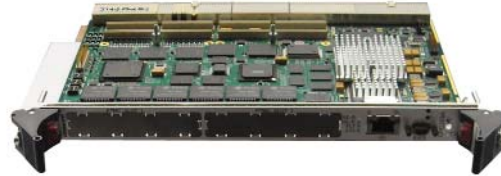
NexusWare WAN Protocol  
Software:

- HDLC
- X.25
- Frame Relay

NexusWare SIP Session Initiation  
Protocol (SIP) Stack and API

NexusWare C7 SS7 MTP-2

Broad Operating System Support  
includes Solaris™, Windows®, and  
Linux®



The CPC324A is a powerful and flexible access controller that is designed to meet the multifaceted demands of today's market, while also providing backwards compatibility for exiting systems wishing to increase performance and extend product life. Scalable DSP/CPU processing via the PCI Telecom Mezzanine Card (PTMC) sites combined with onboard TDM/IP switches and Stratum 3 clocking capability makes the CPC324A an ideal replacement for several lower density products currently used in PICMG® 2.16 and PCI™ backplanes.

Providing 24 fully programmable T1/E1/J1 interfaces, the CPC324A offers a comprehensive design that supports voice, data, signaling, and monitoring applications all via a single architecture.

The CPC324A is ideal for applications required to handle large volumes of voice circuits for protocol processing or for transfer to the H.110 bus, PCI bus, Ethernet, or onboard PTMC sites. Two PTMC sites can connect two single or one dual PTMC module. The PTMC interfaces support 32-bit PCI, H.110 style TDM, and 10/100/1000 Mb Ethernet. Application examples include wireless infrastructure equipment, media and signaling gateways, IP media equipment, telecom switching and routing

equipment, and SS7 network elements. With its ability to support full H.110 and PICMG 2.16 backplanes, 24 framers for external connections, and full gigabit IP interconnect between major components, the CPC324A offers true TDM/IP bridge capability.

#### Hardware Features

The CPC324A uses a 1 GHz PowerQUICC® III processor with L1/L2 cache. Support for up to 768 HDLC channels is also provided by the CPC324A.

The CPC324A fully complies with the latest PICMG hot-swap specifications, and its fully passive RTMs also improve reliability. By incorporating the H.110 interface device, the CPC324A can send/receive any of its possible time slots to the J4 connector.

Additional features include Stratum 3 clocking ability, 512 MB of DRAM, and 128 MB application flash, which allows the CPC324A to execute protocols and WAN applications directly onboard.





# 24-Port T1/E1/J2 TDM/IP Edge Processor

## Technical Specifications

### Interface

- 24 T1 Ports @ 1.544 Mbps
- 24 E1 Ports @ 2.048 Mbps
- 24 J1 Ports @ 1.544 Mbps
- Three 10/100/1000 Mb Ethernet ports

### Framing Standards

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

### Processor/Memory

- 1 GHz PowerQUICC® III
- 512 MB dedicated DDR SDRAM
- 32 KB/32 KB instruction/data L1 cache
- 512 KB L2 cache and/or high speed packet/code store
- 128 MB Boot Flash
- 128 MB Application Flash

### Specification Compliance

- PCI Local Bus specification revision 2.2
- PICMG® 2.0 R 3.0 CompactPCI® core specification
- PICMG 2.1 R2.0 hot-swap specification
- PICMG 2.5 R1.0 CompactPCI computer telephony specification
- PICMG 2.9 R1.0 CompactPCI system management specification
- PICMG 2.15 R1.0: ECN 2.15 PCI telecom mezzanine/carrier card specification
- PICMG 2.16 R1.0 CompactPCI packet-switched backplane
- VITA 32-199x processor PMC standard draft 0.41-compatible

### Physical Interface

- T1/E1/J1: 24 T1/E1/J1 port connections via two 50-pin high-density RJ21 telco connectors (12 ports on each connector) on RTM
- Ethernet: Two RJ-45 connectors on RTM, one RJ-45 on front panel
- Console: One nine-pin subminiature on front panel

### Protocol Support

- MTP2 Link Layer
- Transparent (Voice Stream)
- HDLC
  - LAPD (Q.921), LAPB, LAPF
- X.25
- Frame Relay
- ATM (AAL0, AAL1, AAL2, AAL5)

### Accessories

- RJ21 to RJ21 shielded cable
- RJ21 to 19-inch breakout box

### Power

- Typical 32W
- Maximum 42W

### 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)

### Agency Certifications (Pending)

- FCC Part 15, Subpart B for Class A
- CE
- UL 60950 / EN 60950
- ETSI EN 300 386
- Designed to meet the requirements of NEBS Level 3

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### ORDERING INFORMATION

**PT-CPC324A-12361**

24-port T1/E1/J1 Advanced Subsystem

**PT-RTM324A-12395**

24-port RTM (Two RJ21 Connectors)

#### Cable Options

**PT-ACC324-11968**

RJ21 to RJ21 Cable

**PT-ACC324-11967**

19-inch Rack-mountable Breakout Box provides two RJ21 and 24 RJ48C Connectors

**PT-ACC324-11977**

Console Cable

#### Software Options

PT's NexusWare® suite of software provides a comprehensive Carrier Grade Linux® (CGL) OS and development environment as well as middleware and protocol communications software.

For more information visit [www.pt.com](http://www.pt.com) or call your local representative.

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