Media and Voice Processor

FEATURES

Robust Feature Set for VoIP Media Gateway and Server Applications

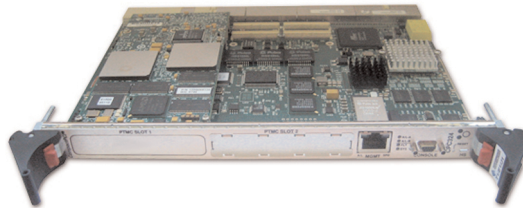Field-Hardened Voice Processing Technology

Up to 8 T1/E1 Line Interfaces

Support for 384 ports of G.711

Powerful and Simple to Use API

Onboard Application Processor and NexusWare® Core CGL Distribution and Development Tools

Scalable Port Densities to Meet Application Needs

The Media Blade 6108A combines PT's world-class media and voice processing technology and network access components into an integrated, open systems solution for media gateway, media servers, and enhanced service applications. Delivered in a 6U CompactPCI® form factor, the Media Blade 6108A adheres to the PICMG® 2.16 standard for Ethernet-based packet switching backplane and provides IPMI support for chassis management, allowing it to integrate seamlessly into standards-based platforms.

Fully Functional Software-Based Feature Set

The Media Blade 6108A provides a robust feature set of functionality for media gateway applications. PT's NexusWare® software delivers field-hardened functionality for functions such as voice coding, echo cancellation, conferencing, and fax relay. PT's feature-rich NexusWare Core Carrier Grade Linux® (CGL) and development tools allows OEM customers to leverage signaling and protocol stacks such as MTP2, SIP, HDLC, and ISDN. In addition, NexusWare provides a powerful API that is common across all PT products, which allows OEMs to bring media solutions to market faster and more economically.

Scalable for Carrier Grade Gateway Applications

The Media Blade 6108A offers a wide range of scalability, up to 384 ports of low-bit rate VoIP, and provides integral support for wireless interworking functions including T.38 fax. Designed to be an enabling solution for OEM gateways, the Media Blade 6108A can be used in a variety of carrier-grade applications including media gateways, trunk gateways, Class 5 replacement switches, digital loop carriers, access gateways, radio network controllers, mobile switching centers, and base station controllers.

Delivering a Wide Range of Solutions for Communications OEMs

PT is a world leader in delivering platforms, components, and software for the world's evolving communications infrastructure. In addition to the Media Blade 6108A, PT provides other platform and component solutions that can enable a wide range of VoIP applications including softswitches, application servers, media servers, and signaling gateways.

NexusWare Software Support

NexusWare® is a family of Linux® software products that enable users of PT's broad range of COTS embedded hardware solutions to rapidly develop and deploy value-added capabilities with their solutions. This powerful combination of software and hardware enables system engineers, architects, and designers in telecommunications as well as aerospace and defense markets to create applications and bring to market solutions such as LTE, WiMAX, media gateways, managed WAN gateways, VoIP, lawful intercept, radar servers, signaling gateways, and base station controllers.

The NexusWare family of products supported on the AMC328 include:

NexusWare Core: At the very center of the NexusWare Software Suite is NexusWare Core. NexusWare Core is a complete Carrier Grade Linux (CGL) distribution. In addition to being a Linux distribution, NexusWare Core also provides a complete set of development tools.

NexusWare SIP: NexusWare SIP is a Session Initiation Protocol (SIP) stack and API software package included with NexusWare Core that provides a powerful foundation for application developers for building SIP proxy servers, SIP location servers, SIP registrar servers, and SIP media gateways for wireless and IP telephony systems.

NexusWare WAN: NexusWare WAN protocols provides a wide range of WAN protocols which allows OEMs and System Integrators to create flexible and efficient radar gateways, converged serial gateways, and front-end I/O systems. NexusWare WAN software products are offered both as installable software packages for NexusWare Core and as turn-key packages for those developers interested in the protocol package by itself. Whether the installable or the turn-key solution is chosen, developers will be provided with a well-documented and powerful API to assist the development process.

NexusWare C7: NexusWare C7 is a comprehensive SS7 MTP-2 installable software package that provides a powerful foundation for building SS7 applications for wireless and IP telephony systems. NexusWare C7 provides extensive system scalability. The distributed processing architecture of NexusWare C7 allows the addition of SS7 links into existing equipment without compromising overall host system performance.

Media Specifications

Port Capacity

- Up to 240 VoIP connections with 128ms echo canceller, tone relay, and tone gen/det functions
- Up to 120 TDM-to-TDM cross connections with 128ms echo canceller and tone gen/det functions
- Up to 504 IP-to-IP cross connections
- Up to 96 T.38 Fax Relay connections
- Up to 336 conference bridges

Voice Coding

- Wireline: G.711 w.Appendix I and II, G.726, G.723.1A, G.729A/B
- Wireless: AMR, EVRC, QCELP
- All codecs can be flexibly mixed

Echo Cancellation

- G.168-2002-compliant, up to 128 ms configurable tail lengths

In-Band Signaling

- DTMF, MF detection and generation, packet & TDM side
- Detection of fax and data modem tones
- Generation and detection of call progress tones
- Caller ID Type 1 and 2

Media Protocols

- RTP/RTCP per RFC 3550/3551
- DTMF over RTP per RFC 2833

Fax

- T.38 Internet Fax Protocol, Fax Class 2.0, G.711 pass-through

Media Server Capabilities

- Conferencing up to 642 participants
- Announcements, recording: local and host storage options
- Full support of Lawful Interception/CALEA requirements

Quality of Assurance

- VLAN, IEE 802.1P/Q, and MPLS Management Interfaces
- SNMP version 3, Command Line Interface

ORDERING INFORMATION

PT-MB6108A-12472
8-port T1/E1/J1 Media Blade

PT-RTM308A-12396
8-port RTM (Eight RJ48C Connectors)

Cable Options

PT-ACC324-11977
Console Cable

Software Options

PT-NXSWARE-11359
NexusWare® Linux® Software

PT-NWC7KIT-11943
MTP2 Development Kit

PT-HDLCKIT-11490
HDLC Development Kit

PT-FRAMKIT-11661
Frame Relay Development Kit

PT-X25KIT-11612
X.25 Development Kit

This product is available with a variety of software options. For more information visit www.pt.com or call your local representative.

Base Card Specifications

Interface
- 8 T1 Ports @ 1.544 Mbps
- 8 E1 Ports @ 2.048 Mbps
- 8 J1 Ports @ 1.544 Mbps
- Three 10/100/1000 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: 8 T1/E1/J1 connections via eight RJ48C connectors on RTM
- Ethernet: Two RJ-45 connectors on RTM, one RJ-45 on front panel
- Console: One nine-pin subminiature on front panel

Power
- 33 W

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
- 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

CONTACT US

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