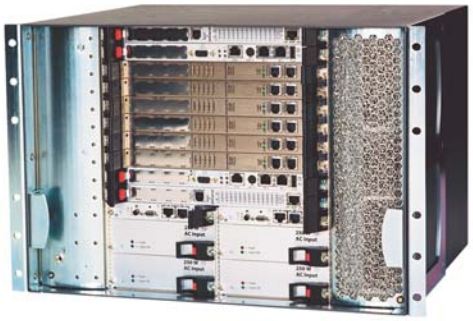
AMP5095 PRODUCT SHEET

7U PICMG® 2.16 Advanced Managed Platform™



FEATURES

7U, PICMG® 2.16 19-in. Rack-Mount Enclosure

Ten Hot-Swappable, Standards-Based Slots
- Eight payload slots
- Two 10/100/1000 PICMG 2.16 redundant fabric slots

Dual Intelligent Shelf Managers

Dual Gigabit/10Gb or 10/100 Ethernet Switches

IPMI Star Topology for Increased Reliability and Security

One H.110 Bus Segment, One CompactPCI® Bus Segment

Redundancy and Hot-Swap Throughout All Active Components

N+1 AC or DC Power Supplies

Up to 80W per Slot Power and Cooling:
- Efficient and redundant cooling architecture
- Push and pull fan trays
- IPMI-based management for both power and cooling

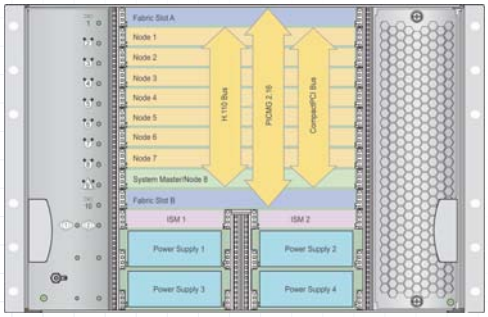
Designed for NEBS Level 3

The AMP5095 Advanced Managed Platform™ is designed for equipment manufacturers who require a low profile system with complete component redundancy for high-availability applications, such as softswitches, WAN gateways, controllers, and converters. This high-density platform features eight node slots, dual PICMG® 2.16 fabric slots, dual PICMG 2.9 IPMI-based shelf management slots, and redundant power and cooling.

The AMP5095 platform supports five-nines (99.999%) availability with built-in redundancy for all active system components, including Layer 2/Layer 3 Ethernet switches, intelligent shelf managers (ISMs), power supplies, and fan trays. Redundant ISMs enable customers to manage all IPMI-enabled components in the platform and conduct chassis diagnostics remotely for enhanced system reliability. Ethernet signals are routed across the midplane without the use of cables, which saves time in setup, maintenance, and repair, and minimizes the challenges of traditional cabling methods. Hot-swappable system components simplify replacement and minimize service time.

Midplane Configuration and Details

The AMP5095 midplane features 10 6U x 160 mm slots. Slots 1 and 10 are dedicated to 6U, PICMG 2.16-compliant, 10/100/1000 Ethernet switches (fabric boards), and slots 2 through 9 are PICMG 2.16-compliant node slots, each supporting a single 33 MHz, 64-bit CompactPCI® bus segment and one contiguous PICMG 2.5 R1.0 H.110 bus. Slots 2 through 8 are CompactPCI peripheral slots, and slot 9 is a CompactPCI system master slot.



AMP5095 midplane details. All active components in the platform are IPMI-enable, including the fan trays and power supplies.

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Below slot 10 are two 3U x 160 mm slots for redundant ISMs (CPC7301). The rear panel I/O section directly behind the midplane supports IEEE 1101.11-style and 6U x 80 mm rear panel transition modules (RTMs) for all 10 6U slots and has a single 6U RTM slot, which supports the redundant pair of ISMs. The V(I/O) plane can be configured for either 3.3 V or 5 V operation.

Intelligent Shelf Manager

The AMP5095 platform includes two redundant CPC7301 ISMs that operate in active/standby mode. The CPC7301 is the central management component for all of Performance Technologies' PICMG 2.16-compliant platforms. It implements the PICMG 2.9 specification for a standards-based interface, which allows management of third-party, IPMI-based products within a platform. ISM software interfaces are comprehensive, including a Web-based GUI, a command line interface (CLI), SNMP, and more. It communicates with components in the AMP5095 via point-to-point IPMB buses in a unique star topology to achieve secure, comprehensive, highly available management.

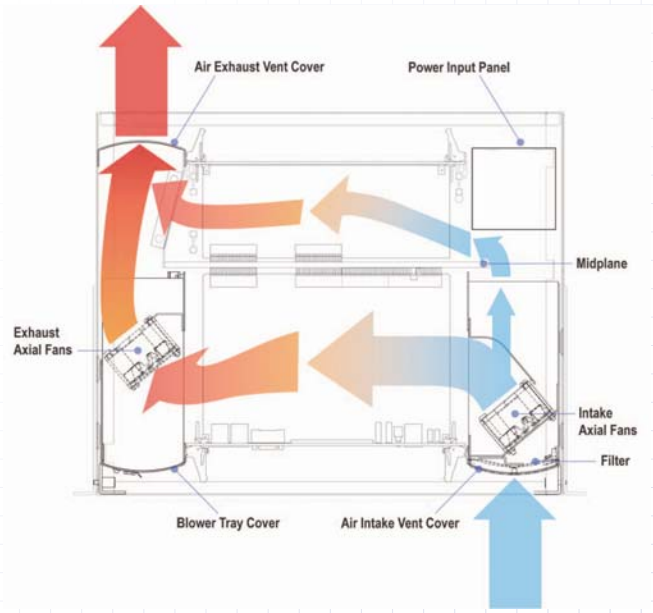
Ethernet Switching

AMP5095 platforms come configured with a choice of Performance Technologies' award-winning switches: either dual CPC4416 24-port 10/100 + 2-Port Gb TX switches, or dual CPC6620 24-port 10/100/1000 TX + 2-port 10Gb switches. Other switching options are available.

Cooling Architecture

The AMP5095 can power and cool up to 975 W of total redundant power. The platform houses two redundant fan trays, which are serviceable from the front. The intake fan tray draws air from the front and pushes it through the payload and power supplies. The exhaust fan tray pulls the air from the payload and power supplies and exhausts it out the rear. Each fan tray supports five fans, featuring speed control, and provides management features, such as fan tachometer, voltage and temperature sensors, and FRU information (i.e., serial or part number).

The exhaust fan tray also includes a status LED for each slot in the platform, including power supplies and ISMs. The AMP5095 also contains air baffles that allow enough airflow to the rear card cage slots to properly cool up to
5 W per slot.



Cooling Architecture

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Technical Specifications

ORDERING INFORMATION

PT-AMP5088-12137
Two CPC6620s, Two 5-port rear transition modules (RTM), Six 250 W AC supplies, Two ISMs, ISM RTM, Air management blade

PT-AMP5088-12138
Two CPC6620s, Two 5-port RTMs, Six 325 W DC supplies, Two ISMs, ISM RTM, Air management blade

PT-AMP5088-12139
Two CPC4416s, Two 5+2-port RTMs, Six 250 W AC supplies, Two ISMs, ISM RTM, Air management blade

PT-AMP5088-12140
Two CPC4416s, Two 5+2-port RTMs, Six 325 W DC supplies, Two ISMs, ISM RTM, Air management blade

PT-AMP5088-12225
Two CPC6620s, Two 5-port rear transition modules (RTM), Six 300 W AC supplies, Two ISMs, ISM RTM, Air management blade

PT-AMP5088-12226
Two CPC4416s, Two 5+2-port RTMs, Six 300 W AC supplies, Two ISMs, ISM RTM, Air management blade

For more information visit www.pt.com or call your local representative.

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The AMP5085 is compliant with the following specifications:

- CompactPCI core specification, PICMG 2.0, R2.1
- CompactPCI hot-swap specification, PICMG 2.1, R2.0
- CompactPCI system management specification, PICMG 2.9, R1.0
- CompactPCI power interface specification, PICMG 2.11,R1.0
- CompactPCI packet switching backplane specification, PICMG 2.16, R1.0
- IPMI specification, version 1.5
- Standard CompactPCI keying

Power

Input

- AC input: 110 to 220 V AC (50 to 60 Hz)
- DC input: -36 to -60 V DC

Output

Power Supplies	+5 V	+5 V	+12 V	-12 V
Eight 325 W DC supplies (4+4)	120 A	160 A	20 A	4 A
Eight 300 W AC supplies (4+4)	120 A	160 A	20 A	2 A
Eight 250 W AC supplies (4+4)	160 A*	160 A*	22 A	6 A

* CPC6303 AC power supply; the 5 V and 3.3 V rails share current.

Physical

- Height: 12U, 533 mm (21-in.)
- Width: 436 mm (17.2-in.) without rack-mount flanges. Rack-mount flanges allow mounting to 19-in. racks.
- Depth: 431 mm (17-in.)
- Weight: 44.2 kg (97.5 lb)

Note: To provide proper cooling to the AMP5088, each unused slot in the chassis should be populated with an air management blade. All rear slots should be populated with a rear filler panel.

See the list below for orderable components:

- To cover a single rear panel slot, use a filler panel that is 6U x 4HP (horizontal pitch = 0.2-in.) (PT-ACC5040-12059).
- To cover six rear panel slots, use a filler plate that is 6U x 24HP (PT-ACC5043-12062).
- To fill a front slot, use an air management blade that is 6U x 4HP (PT-ACC5031-12064).
- To fill a power supply bay, use an air management blade that is 3U X 8HP (PT-ACC5030-12063).
- To fill an ISM slot, use a filler panel that is 3U X 4HP (PT-ACC5044-12155).

Regulatory Compliance

Designed for NEBS Level 3 and ETSI Installations.

Safety

- UL/cUL 60950 Safety for Information Technology Equipment E179737
  - UL File Number E179737
- EN/IEC 60950 Safety for Information Technology Equipment
- CB Certificate and Report Scheme
- CE Certificate

Emissions Test Regulations

- FCC, Class B
- EN 55022/CISPR 22 Class B Radiated and Conducted Emissions Tests
- EN 55024/CISPER 24
- EN-61000-3-2 Power Line Harmonic Emissions
- EN-61000-3-3 Power Line Fluctuation and Flicker
- EN-61000-4-2 Electro-Static Discharge (ESD)
- EN-61000-4-3 Radiated Susceptibility
- EN-61000-4-4 Electrical Fast Transient Burst
- EN-61000-4-5 Power Line Surge
- EN-61000-4-6 Frequency Magnetic Fields
- EN-61000-4-11 Voltage Dips, Variation and Short Interruptions

Network Equipment-Building System (NEBS) Requirements

- GR-1089-CORE
  - Sect. 2 Electrical Discharge
  - Sect. 3.2.2 Radiated RF Emissions
  - Sect. 3.2.3 AC Line Conducted Emissions-Voltage
  - Sect. 3.2.4 AC & DC Line Conducted Emissions-Current
  - Sect. 3.3.1 RF Radiated Fields
  - Sect. 3.3.3 RF Common Mode
- GR-63-CORE issue 1
  - Sect. 5.1.1.1 Low-Temperature Exposure and Thermal Shock
  - Sect. 5.1.1.2 High-Temperature Exposure and Thermal Shock
  - Sect. 5.1.1.3 High Relative Humidity Exposure
  - Sect. 5.3.1 Handling Drop Tests-Packaged Equipment
  - Sect. 5.3.2 Unpackaged Equipment Drop Tests
  - Sect. 5.4.1 Earthquake Tests
  - Sect. 5.4.2 Office Vibration Test Procedure
  - Sect. 5.4.3 Transportation Vibration-Packaged Equipment
  - Sect. 5.6 Acoustic Noise Test

MTBF

- 410,958 hours Bellcore SR-332 Issue 1

PS/1210