



ComputeNode4U



PICMG® 2.0

NEBS® Certified

AC or DC Power

Customizable

Pinnacle's management system is certified to:

ISO 9001:2000

ISO 14001:2004

ISO 13485

TL9000

SYSTEM OVERVIEW

PDSI's ComputeNode4U (Node4U) is an efficient carrier-grade CompactPCI® solution developed for the embedded control and communications marketplace. This 8-slot cPCI chassis measures only 7" high, and may be densely packed into any new design or existing rack. The cPCI form factor offers horizontal scalability with front and rear accessible I/O for easy service and maintenance.

Configurable with various processors—Sun™, Intel®, PowerPC and custom-designed—Node4U provides high performance in a compact unit. Using the H.110 backplane with one system slot and seven I/O slots provides superior slot density and a standard 3.5" SCSI hard drive located above the power supplies offers reliable data storage. For applications requiring greater density, higher capacity, hot-swappability or disk mirroring, PDSI offers various "in-box" solutions.

PDSI's Node4U is designed with a system alarm card for monitoring and control status. The system alarm card communicates with the system CPU through an I2C Bus Interface or an RS-232 interface. The alarm card is designed to be hot-swappable as a Field Replaceable Unit (FRU) and does not require a cPCI card slot.



With its horizontal design and superior air cooling functionality, Node4U is a cost-effective product providing the highest levels of quality and manageability in mission-critical applications.

With front accessible power supplies in a load-sharing 2+1 redundant configuration, these hot-swappable power supplies are standard with dual DC feed or single AC feed. As with all PDSI products, Node4U combines expert Rapid Product Realization design, branding and testing services for a complete SKU utilizing customer-specified third party components or Commercial off-the-shelf products, greatly reducing time to market.

Key Differentiators

- Greater slot density
- Three hot-swappable DC and AC power options in 2+1 redundant configuration
- Hot-swappable front and rear fan trays for superior cooling and serviceability
- Alarm card provides fan, power monitoring and status LED without the use of cPCI slot
- Optional high-performance 3.5" hard drive that does not require a card slot
- Telcordia NEBS GR-1089-CORE Level 3 and GR-63-CORE Level 3 tested & certified design
- High performance cooling with redundant Quad 66 CFM fans in the front fan tray, Dual in rear
- Customizable options available

Mechanical Specifications

<i>Height</i>	4U (178 mm/7 in.)
<i>Width</i>	436 mm (17.2 in.)
<i>Depth</i>	318 mm (12.5 in.)
<i>Enclosure</i>	19 in. rackmount (EIA & telco rack support) and custom (23 in.) requirements
<i>Mounting Points</i>	Front support mounting brackets and custom requirements

System Module Configurations

- Eight 6U cPCI slots, with corresponding RTMs
1 system slot
7 I/O slots
- Standard H.110 backplane; non H.110 optional

Power Supply Options

<i>AC single feed</i>	
<i>Dual DC feed with rear ON/OFF switch for each feed</i>	
<i>2+1 Redundant Configuration</i>	
<i>Hot-swappable, 3U, 8 hp power supplies</i>	
<i>DC Power</i>	200W*/supply
<i>DC Input</i>	Rear terminal block -36/-72 VDC
<i>AC Power</i>	200W*/supply
<i>AC Input</i>	115/230 VAC, 60/50Hz
<i>Optional AC/DC</i>	250W/supply
<i>Voltage Outputs</i>	+5V@25A, +3.3V@25A, +12V@5A, -12V@1A (based on single 200W power supply)

Regulatory

<i>Certification-Standard</i>	FCC Class A (AC/DC) cUL 60950 3rd Edition
<i>Certification-Optional</i>	NEBS, ETSI, CE, TUV, VCI, CSA and others

System Cooling

- Left to right airflow
- 6 hot-swap fans providing 356 CFM
- Quad Front and Dual rear Fan Trays

Standard Alarm Card Specifications

- Two NO/NC Dry Relay Contact Outputs
 - Power Supply Output Monitoring (+3.3V, +5V, +12V, -12V)
 - Power Input Monitoring
 - Power Supply Fail Signal Monitoring
 - Tri-color Status LED on rear panel to signal status
 - Fan Monitoring
 - Serial Console and custom I2C interface
 - Hot-swappable
 - Out-of-bandwidth management
- (Use Alert!Node for additional capabilities)*

Media Options

<i>Standard</i>	3.5" SCSI HD in 3U, 8hp above power supply
<i>Optional</i>	Compact Media Carrier 2.5" SCSI HD w/PMC 2-slot cPCI 3.5" SCSI HD carrier Custom media configurations available RTM Available with standard SCSI I/O RTM

Environmental Specifications

<i>Temperature Range</i>	Operating: 0°C to 55°C Storage: -40°C to 70°C
<i>Flammability Rating</i>	UL94-V0

Customizable Options

- Backplanes
- Power supplies
- Alarm card—Providing input and output voltage, fan and interface monitoring
- System integration
- Product branding and labeling

Warranty & Service

<i>Standard Warranty</i>	One year parts and labor return to factory
<i>Service Plans</i>	All permutations of 7x24, 5x24, 5x9, or next day; on site or phone



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