

Rear Transition Modules for Intel® Core™ 2 Duo cPCI x86 Processor Blade

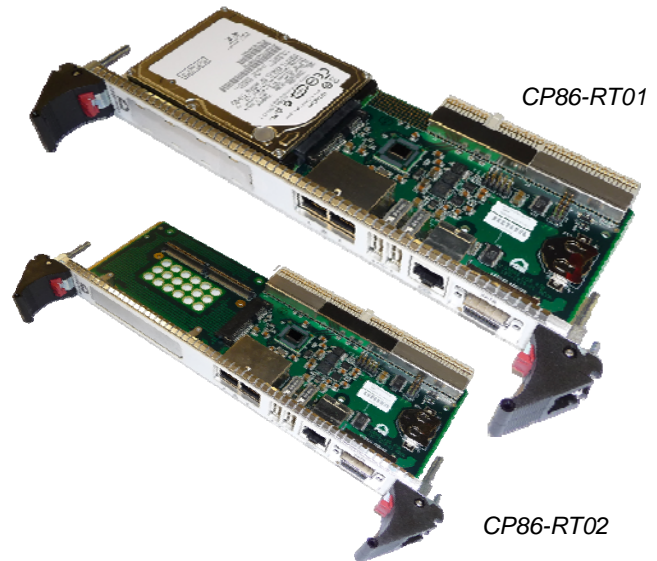


Product Datasheet

ComputeNode™
Carrier-grade cPCI solutions

These CompactPCI® Rear Transition Modules (CP86-RT01 and CP86-RT02) provide additional I/O and storage options when using PDSi's CP86-N1 Intel® Core™ 2 Duo cPCI processor blade.

The two versions of this ComputeNode CP86-RT RTM offer either onboard HDD/SSD storage capability up to 320GB, or a PIM site for use in conjunction with the front blade's PMC/XMC rear I/O. Both versions have optional onboard Flash storage up to 8GB. Other I/O features include 2 gigabit Ethernet ports and 2 USB ports. A multi-channel SATA port provides the ability to connect up to 3 external drives to the processor blade's SATA bus. Rear connection to the processor blade's COM1 serial port is available through the RJ45 connector on the CP86-RT faceplate. Rear access to the processor's COM2 port is also available through a header on the RTM.



PDSi gives telecom, aerospace, and military OEMs the ability to deploy configurable, scalable, high-reliability cPCI solutions using the CP86-N1 compute blade based on the latest Intel technology, in concert with this rear I/O module. Extended availability from PDSi is assured as key components are supported by embedded roadmaps. PDSi can also provide customization, turnkey integration and support of cPCI systems, as well as extended warranty and repair services.

Key Features

- 2 alternate versions offering either
 - HDD/SSD storage, or
 - PIM site for PMC/XMC rear I/O
- 2 Ethernet ports
- 2 USB 2.0 ports
- Rear access to primary serial port (COM1)
- Header for COM2 serial access
- Optional USB Flash drive
- RoHS compliant
- Extended availability assured

ComputeNode CP86-N1 Processor Blade

PDSi's ComputeNode CP86-N1 blade is based on the Intel Core 2 Duo CPU and server-grade chipset, offering the highest performance and best power management in its class. It is designed for use in military, telco, and other critical systems benefiting from multi-threading capabilities.

Typical applications include:

- Communication Gateways
- VOIP Servers
- Controllers
- Security
- Image Processing



Alternative Models

CP86-RT01

- no PIM site
- HDD/SSD onboard storage option,
 - 2.5" SATA HDD extended availability 7200 RPM drives, or
 - 2.5" SATA Intel X-25 SSD with either MLC or SLC technology

CP86-RT02:

- 1 PIM Site
- no HDD/SSD

I/O Features

- 2 x 10/100/1000 Ethernet ports
- 2 x USB 2.0 ports
- 3 x external SATA channels
- 1 x COM1 serial
- 1 x COM2 serial (header)

NV Storage

Optional USB uDOC Flash drive, up to 8 GB

PMC/XMC

1 PMC/XMC PIM site for rear I/O from front blade PMC/XMC Pn4 connector



Front Panel

- Ethernet** 2 - RJ-45 ports
- USB** 2 - Type A ports
- Serial** 1 - RJ-45
- SATA** Multichannel SATA connector

Optional Front Panel – PC86-RT02

- PMC/XMC** Cutout for PIM I/O module

Compatible Blades

- PDSi CP86-N1-H-XXX
- PDSi CP86-N1-P-XXneX

Power Consumption

Under 15 Watts

Compliance

- PICMG Core 2.0 R3.0 / ECN002
- PICMG cPSB 2.16 R1.0 / ECN001
- RoHS Directive 2002/95/EC

Operating Systems

Linux, Windows (XP, Server2003)

Form Factor/Dimensions

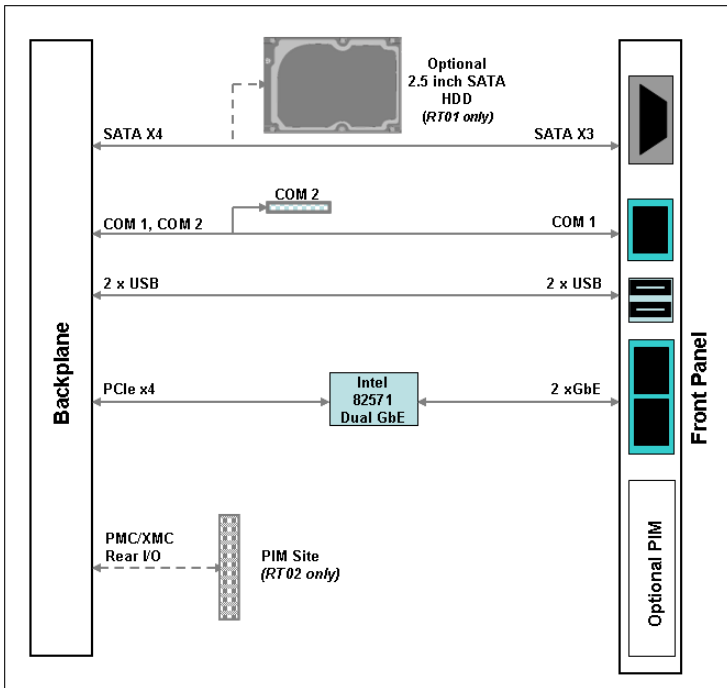
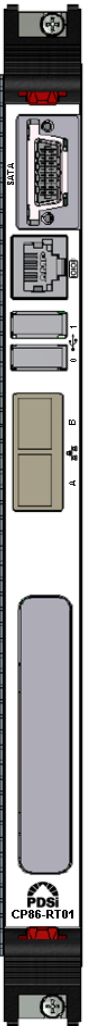
6U cPCI RTM board
79mm(D) x 233mm(H) x 20.5mm(W)

Temperature

Operation : -5 to 55 degC

Humidity

5% - 90% non-condensing



Ordering Guide

CP86-RT	X	-	X	-	X	-	0	6U cPCI Rear Transition Module with:
								USB Flash Storage
								0 none
								1 1 GB
								2 2 GB
								3 4 GB
								4 8 GB
								Onboard HDD (only available with CP86-RT01)
								0 none
								1 160GB, HDD, 7.2K, Extended Availability ("EA")
								2 250GB, HDD, 7.2K, Extended Availability ("EA")
								3 320GB, HDD, 7.2K, Extended Availability ("EA")
								4 80GB, SSD, Intel X25-M (Mainstream, MLC)
								5 160GB, SSD, Intel X25-M (Mainstream, MLC)
								6 32GB, SSD, Intel X25-E Model (Extreme, SLC)
								7 64GB, SSD, Intel X25-E Model (Extreme, SLC)
								Board Model
								01 No PIM, HDD, 2xUSB, 2xGbE, 1xSerial, 3xExt. SATA
								02 1xPIM, no HDD, 2xUSB, 2xGbE, 1xSerial, 3xExt. SATA