



Highlights

- >> Rear Panel Interfaces:
 - VGA
 - Serial port
 - USB
 - SATA interface with four channels

- >> Rear Panel Hot-Swap LED

- >> Internal SATA or IDE Hard Drive Options

- >> Internal CompactFlash® Interface

This single-slot, 6U module provides rear panel access to I/O functions and SATA connectivity for the CPC5564 single board computer, the CPC5900 storage blade, and the CPC5910 storage expansion blade. The RTM4810 easily snaps into the rear panel slot of a CompactPCI® system, such as Performance Technologies' Advanced Managed Platforms™.

The RTM4810 acts as a rear panel interconnect between the CPC5564 single board computer and the CPC5900 or CPC5910 storage expansion blades. This is accomplished by connecting a SATA interface cable between two RTM4810 RTMs supporting each front board.

The RTM4810 routes all cabling out the back of a system and provides access to a serial port, a USB, and a SATA interface. It allows for system troubleshooting and servicing without disrupting the storage board processor, which enhances the reliability and availability of the system, particularly while running diagnostics or conducting maintenance.

Key Design Elements

Hard Drive Options

Three loading options are available for the RTM4810:

1. No hard drive
2. One 40 GB SATA hard drive
3. One 40 GB IDE hard drive

Input/Output

The RTM4810 provides a RS-232 serial port connector. Rear panel access is provided to the VGA video and USB signals on the host SBC.

Internal Interfaces

Four SATA channels are routed from the host board to the rear panel, which allows a maximum expansion configuration of one SATA drive on the RTM4810 for the host board and two SATA drives on the CPC5910 storage expansion blade. The four SATA channels also support connectivity to an external RAID storage solution.

RTM4810

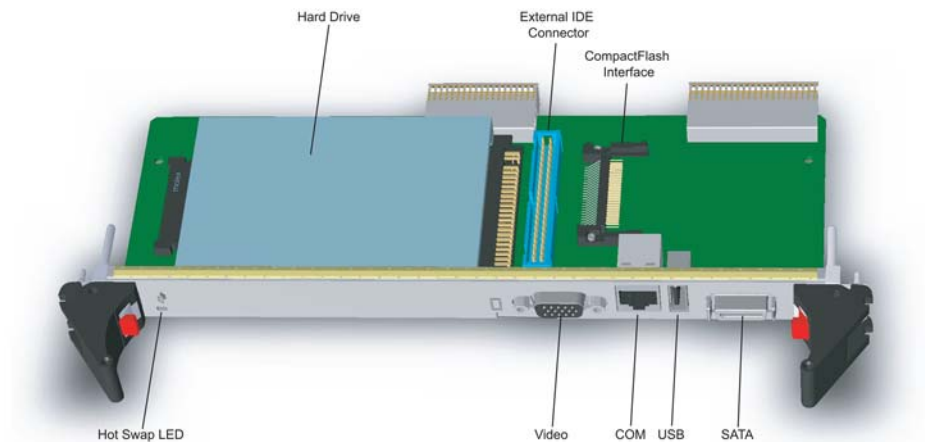
SATA Rear Panel Transition Module

An internal IDE channel supports an optional onboard IDE hard drive and an IDE header for external devices, such as a CD-ROM drive, or one IDE device when a Type I/II CompactFlash® expansion card is installed. Power for the IDE device can be drawn from an onboard power connector at J8 when supplemental power is supplied to power connector J9. The hot-swap LED receives information from the baseboard management controller (BMC) on the single board computer, indicating when it is safe to remove the rear panel board.

CompactFlash is selectable as a master or slave by using an onboard switch. A floppy drive connector and four-pin floppy power connector (J8) for external media are available on the internal portion of the board.

Warranty

One year.



RTM4810

SATA Rear Panel Transition Module



Technical Specifications

- CompactPCI core specification, PICMG 2.0 R3.0
- CompactPCI hot-swap specification, PICMG 2.1 R2.0
- CompactPCI system management, PICMG 2.9 R1.0
- Designed to be NEBS-compliant

Power Requirements	Minimum	Typical	Maximum
Supply Voltage, VCC	4.75 V	5.00 V	5.25 V
Supply Current, VCC = 5.0 V	0 mA	—	2 A [†]
VCC3	3.135 V	3.3 V	3.465 V
Current	0 mA	—	200 mA
12 VDT on J8	11.4 V	12.0 V	12.6 V
Current	—	6 A [‡]	—

† To spin up two 2.5-in. hard drives simultaneously.

‡ Fuse protected.

Mechanical

- Measures: 233.35 mm x 80 mm (9.2 in. x 3.2 in.)
- Width: 1 slot, 4HP, 20.3 mm (0.8 in.)
- Weight: 202 grams (7.13 oz)
- Connector: IEC-1076-4-101 (J5)

Environmental

- Operating temperature: 0 to 55°C (32 to 131°F)
- Storage temperature: -40 to 85°C (-40 to 185°F)
- Relative humidity: < 95% at 40°C (104°F), non-condensing

Peripherals and I/O Interfaces

I/O Interface	Compatibility
COM1 Serial Port	RJ-11
VGA	15-pin D-shell
USB 2	4-pin USB, Type A
SATA interface	4-port SATA connector
Internal I/O Interface	
SATA Drive	2.5-in. SATA drive connector
CompactFlash interface	Type I/II expansion cards
IDE Drive interface	2.5-in. IDE drive connector
IDE Channel 1 interface	40-pin Ultra DMA/33

Regulatory Compliance

CE Certification

The RTM4810 SATA Rear Panel Transition Board meets intent of Directive 89/336/EEC for Electromagnetic Compatibility and Low-Voltage Directive 73/23/EEC for Product Safety. Compliance was demonstrated to the following specifications as listed in the Official Journal of the European Communities:

Safety

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

Emissions Test Regulations

- FCC Part 15, Subpart B
- EN 55022
- CISPR 22
- Bellcore GR-1089

EN 50081-1 Emissions

- GR-1089-CORE Sections 2 and 3
- EN 55022 Class A Radiated
- EN 55022 Power Line Conducted Emissions
- EN 61000-3-2 Power Line Harmonic Emissions
- EN 61000-3-3 Power line Fluctuation and Flicker

EN 55024 Immunity

- GR-1089-CORE Sections 2 and 3
- 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, Variations and Short Interruptions

Ordering Information

Options

- >> **PT-RTM4810-12152**
SATA Storage Expansion Rear Transition Module with no hard drive. Requires a CPC5900 or CPC5564 host board, or CPC5910 expansion blade.
- >> **PT-RTM4810-12153**
SATA Storage Expansion Rear Transition Module with 40 GB SATA hard drive. Requires a CPC5900 or CPC5564 host board.
- >> **PT-RTM4810-12154**
SATA Storage Expansion Rear Transition Module with 40 GB IDE hard drive. Requires a CPC5900 or CPC5564 host board.

Accessories

- >> **PT-ACC4810-12161**
0.5 m SATA Cable
- >> **PT-ACC5911-12162**
RJ-11 to RJ-11 Serial Cable

The RTM4810 is compatible with the following boards:

- CPC5564 64-Bit SBC
- CPC5900 SATA Storage Blade
- CPC5910 SATA Storage Expansion Blade



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