

# RTM-5104

AdvancedTCA® RTM for MIC-5332

NEW



## Features

- PICMG IRTM.0 compliant
- Supports two 2.5" SAS HDDs / 4 MO-297
- Supports one Advantech Fabric Mezzanine Module
- Provides external SAS / HDD failover cabling (mini SAS connectors)
- Two 1000BASE-T or fiber rear panel ports (RJ45 / SFP connectors)
- One USB2.0 rear panel port
- Up to two serial ports
- Fully managed, hot swappable RTM



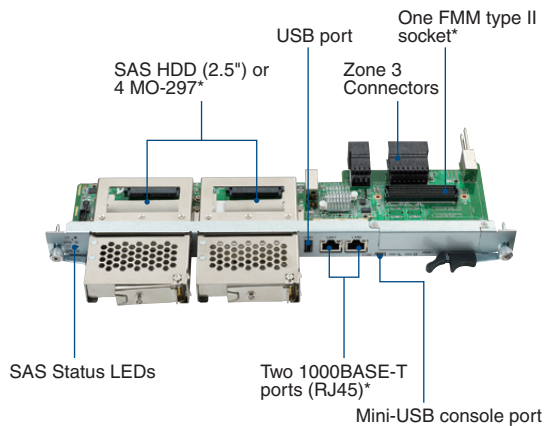
AdvancedTCA®

## Introduction

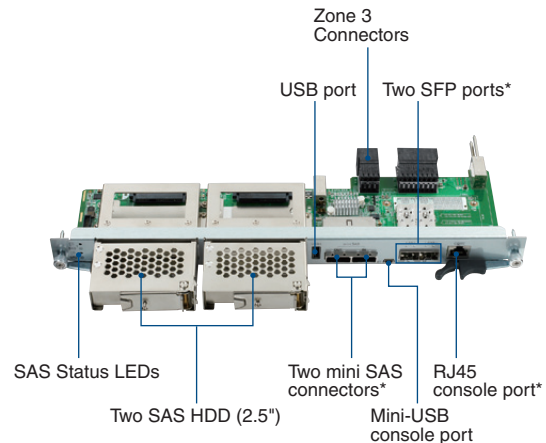
The RTM-5104 is a single slot (6HP) ATCA rear transition module for I/O extension of Advantech ATCA CPU blades. To meet serviceability requirements, RTM-5104 is designed as a fully managed and hot swappable FRU. The storage tray supports up to two 2.5" SAS HDD or four MO-297A SSD's, and can be operated up to 3.0 Gbits/sec. Two external mini SAS connectors are provided on the rear panel for failover cabling as a separate part number. The RTM implements a miniUSB connector that provides a host powered USB slave port exposing a UART port of the front blade via USB. Two Ethernet GbE ports provide two additional I/O ports for rear LAN access. One USB port (USB 2.0) supports USB devices such as keyboard, mouse, USB Flash drive, or USB-CDROM.

The RTM also implements one Fabric Mezzanine Module type II socket to support flexible IO extension like 10GE ports, a server type graphics module or PCIe expressed based offload. With a PCIe16 or 2 PCIe8 gen.3 ports interfacing to the front blade, the FMM socket is not only a perfect solution for IO port extension but also custom acceleration and interfaces.

RTM-5104SE / RTM-5104ME



RTM-5104NE



\*Note: This may show variant with the other SKUs, please refer to ordering information for details.

## Specifications

Rear Panel Interface	Serial (COM)	One mini USB connector (USB slave), RJ-45 connector (RS232)
	Ethernet	Two 1000BASE-T or SFP ports
	USB 2.0	One USB connector (Type A)
	Storage	Two 2.5" SAS HDD bays or 4 MO-297A trays; optional Two mini SAS connectors
Extension	FMM	One type II socket with PCIe16 gen.3 host interface
IPMI	MMC Controller	Cortex M
	IPMI	Advantech IPMI Core, compliant to IRTM.0 and IPMI 1.5/2.0
Zone 3	RTM	Advantech common RTM interface Type II
	Interface	One PCIe x 4, One PCIe x 16, Two SAS, One USB, 2 x RS232, GPIO, IPMBL, MMC management interface
Power Requirements		8W typical without hard drives and FMM 18W typical with two hard drives and FMM
Physical Characteristics	Dimensions (W x D)	6HP, 322.25 x 94 mm (PCB size) HDD cages protrude 30mm over rear panel
	Weight	1.15 kg with two hard drives 0.6 kg without hard drivers
Environment	Temperature	Operating: 0 ~ 55° C (32 ~ 131° F) Non-operating: -40 ~ 70° C (-40 ~ 158° F)
	Humidity	5 to 93% @ 40° C (non condensing) 95% @ 40° C (non-condensing)
	Shock	3G, half-sine 11ms, each axis 18G, half-sine 11ms, each axis
	Vibration	5 - 200 Hz, 0.2G, each axis 5 Hz to 20 Hz @ 1 m2/s3 (0.01 g2 /Hz) (flat) 20 Hz to 200 Hz @ -3 dB/oct (slope down)
Compliance	Environment	ETSI EN300019-2-1 Class1.2, EN300019-2-2 Class 2.3, ETSI EN300019-2-3 Class 3.1E
	PICMG	3.0 R3.0, HPM.1, IRTM.0
	EMC	FCC47 CFR Part15, Class A, CE Mark (EN55022/EN55024/EN300386) Designed to meet GR1089-CORE

## Ordering Information

Part Number	Storage	USB	LAN	COM	FMM Support	External SAS
RTM-5104S00E	SAS x2	1	RJ45x2	miniUSB x 1	Yes	-
RTM-5104M00E*	MO-297x4	1	RJ45x2	miniUSB x 1	Yes	-
RTM-5104N00E*	SAS x2	1	SFPx2	miniUSB x1 RJ45 x1	-	mini SAS x2

\*Note: Please contact your local Advantech sales for RTM-5104M00E or RTM-5104N00E availability.

## Related Products

Part Number	Description
MIC-5332 series	ATCA CPU blade with dual Intel Xeon CPU
FMM-5001FE	10Gb Intel 82599ES with dual SFP+ output
FMM-5002E	FMM-5002 with one external VGA port
FMM-5006E	FMM-5006 with Intel QuickAssist Accelerator