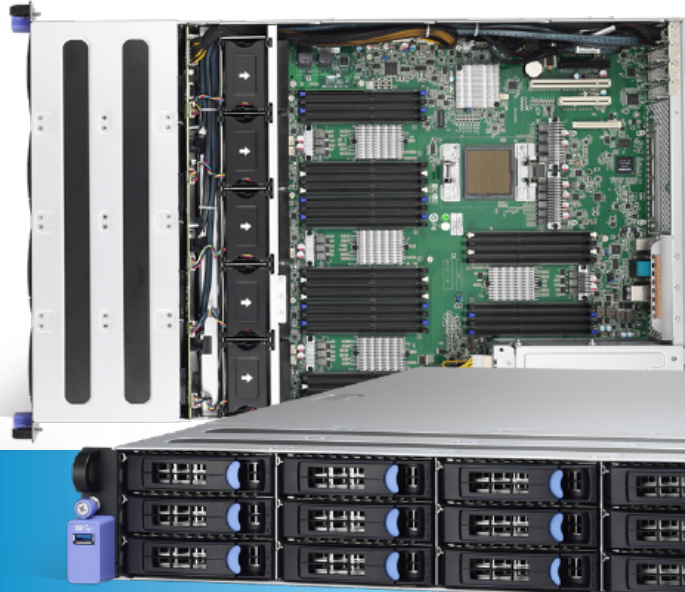


OPENPOWER POWER8 2U SINGLE-SOCKET PLATFORM



TN71-BP012

BSP012T71V14HR-4T-3 / BSP012T71V14HR-4T-4
BSP012T71V14HR-4T-5

 OpenPOWER™



 DDR3L

2U OpenPOWER Platform Optimized for Big Data Analytics

■ Front View



- (12) hot-swap 3.5" SAS 12G/SATA 6G HDDs
- *Need a discrete HBA/RAID adapter to enable

■ Back View



- (2) easy-swap 3.5" SATA 6Gb/s HDD
- (1) PCI-E Gen.3 x16 slot
- (4) 10GBASE-T (on mezzanine)
- (1+1) 1,200W RPSU @ 220Vac

- Single POWER8 CPU (Turismo SCM) pre-installed in the system,
 - (1) IBM POWER8 8-Core 3.325GHz (Nominal)/ 3.857GHz (Turbo) processor (-4T-3 SKU) or
 - (1) IBM POWER8 10-Core 2.926GHz (Nominal)/ 3.492GHz (Turbo) processor (-4T-4/-4T-5 SKU)
- (1) PLX PEX8748 PCI-E Gen.3 switch
- (4) IBM Centaur MBC (Memory Buffer Chip), each w/ 16MB cache integrated
- (32) DDR3 DIMM slots with below pre-installed DIMM configurations,
 - (8) R-DDR3L 16GB (-4T-3 SKU), or
 - (16) R-DDR3L 16GB (-4T-4 SKU), or
 - (32) R-DDR3L 16GB (-4T-5 SKU)
- (1) Half-Height/ Full-Length PCI-E Gen.3 x16 slot
- (3) Half-Height/ Half-Length PCI-E Gen.3 x8 slots
- (1) 4-port SATA 6Gb/s IOC mezzanine pre-installed and connected to the rear-accessed 2-drive cage
 - (2) 4TB HDDs (-4T-3/-4T-4 SKU) or (2) 1TB SSDs (-4T-5 SKU) are bundled.
- (12) hot-swap 3.5" carriers @ front
 - Need a discrete HBA/RAID adapter to enable the 12x drives
- (1) 4-port Ethernet mezzanine pre-installed provides (4) 1000BASE-T ports
- (1) dedicate 100BASE-T port for IPMI management
- Onboard BMC w/ iKVM support



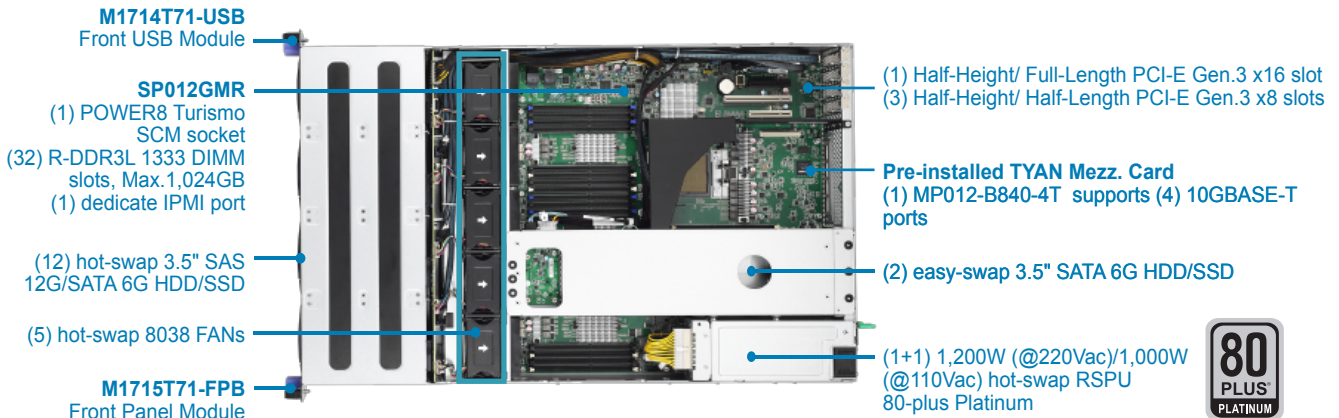
TN71-BP012

BSP012T71V14HR-4T-3 / BSP012T71V14HR-4T-4
BSP012T71V14HR-4T-5



Specifications

Top View



System (Recommend Chassis)	Form Factor	2U Rackmount
	Chassis Name	TN71
	Dimension (H x W x D)	27.99" x 17.24" x 3.45" (711 x 438 x 87.6mm)
	Barebone	BP012T71V14HR
	Motherboard	SP012GMR
Front Panel	Buttons	(1) PWR w/ LED / (1) ID
	LEDs	(1) ID / (1) Warning
External Drive Bay	I/O Ports	(1) USB 3.0 port
	Type / Q'ty	3.5" Hot-Swap / (12) @ front 3.5" Hot-Swap / (1) 2-drive @ rear
	Supported HDD Interface	SAS 12Gb/s / SATA 6Gb/s
	Pre-install TYAN Storage Mezzanine	MP012-9235-4I (4-port SATA 6Gb/s IOC w/o RAID stack)
System Cooling Configuration	Pre-install HDD/SSD	(2) 4TB HDDs (-4T-3/-4T-4 SKU), or (2) 1TB SSD (-4T-5 SKU)
	FAN	(5) 8cm fans
Power Supply	Type	RPSU
	Redundancy	1+1
	Input Range	AC 100-127V~/12.47A / AC 200-240V~/7.08A
	Output Watts	1,200 Watts / *100-127Vac support 1,000 Watts only
	Frequency	47-63 Hertz
Processor	Efficiency	80-plus Platinum
	Socket Type / Q'ty	IBM POWER8 Turismo SCM/ (1)
	Thermal Design Power (TDP) wattage	Up to 190W (Nominal) / 247W (Turbo)
Chipset	Pre-install Processor	(1) POWER8 8-Core 3.325GHz processor (-4T-3 SKU), or (1) POWER8 10-Core 2.926GHz processor (-4T-4/-4T-5 SKU)
	PCI-E Switch	(1) PLX PEX8748
Memory	Memory Buffer Chip	(4) IBM Centauri MBC
	DIMM Type / Qty.	R-DDR3L / (32)
	Max. Capacity	Up to 1,024GB
	Memory Voltage	1.35V
Expansion Slots	Pre-install Memory	(8) R-DDR3L 16GB (-4T-3 SKU), or (16) R-DDR3L 16GB (-4T-4 SKU), or (32) R-DDR3L 16GB (-4T-5 SKU)
	PCI-E	(1) HH/FL PCI-E Gen3 x16 slot (3) HH/HL PCI-E Gen3 x8 slots
LAN (Data)	Port Q'ty	(4)
	Controller	Qlogic BCM57840 + Broadcom BCM84834
	Pre-install TYAN LAN Mezz Card	MP012-B840-4T

LAN (IPMI)	Port Q'ty	(1)
	PHY Model	Broadcom BCM5221A
Graphic	Connector type	D-Sub 15-pin
	Resolution	up to 1920 x 1200
I/O Ports	Chipset	Aspeed AST2400
	USB	(4) USB ports (1x USB3.0 @ front, 2x USB3.0 @ rear, 1x USB1.1 @ rear for BMC F/W update only)
	COM	(1) DB-9 COM port
	VGA	(1) D-Sub 15-pin port
	RJ-45	(5)
System Monitoring	Chipset	Aspeed AST2400
	Voltage	Monitors voltage for CPU, memory, chipset & power supply
	Temperature	Monitors temperature for CPU & memory & system environment
System Management	LED	Over temperature warning indicator / Fan & PSU fail LED indicator
	Onboard Chipset	Onboard Aspeed AST2400
	AST2400 IPMI Feature	IPMI 2.0 compliant baseboard management controller (BMC) / Supports storage over IP and remote platform-flash / USB 2.0 virtual hub
PNOR	AST2400 iKVM Feature	24-bit high quality video compression / 10/100 Mb/s MAC interface
	Brand / ROM size	IBM / 64MB
Operating System	Feature	Boot from USB device / CD-ROM / Storage / PXE via LAN / IPMI Support / Device Tree / Console Redirection / OCC (Power Management) / Petitboot Bootloader (PPC64)
	OS supported list	Please refer to our Intel OS supported list.
Regulation	FCC (DoC)	Class A
	CE (DoC)	Yes
Operating Environment	Operating Temp.	10° C ~ 35° C (50° F ~ 95° F)
	Non-operating Temp.	- 40° C ~ 70° C (-40° F ~ 158° F)
	In/Non-operating Humidity	90%, non-condensing at 35° C
RoHS	RoHS 6/6 Complaint	Yes

L10 system configuration					
Model: TN71-BP012	POWER8 Processor	Memory		Hard Drives	
SKU	Cores	Size	Qty	Size	Qty
BSP012T71V14HR-4T-3	8	16 GB	8	4 TB	2
BSP012T71V14HR-4T-4	10	16 GB	16	4 TB	2
BSP012T71V14HR-4T-5	10	16 GB	32	1 TB SSD	2

(Specifications are subject to change without notice. Items pictured may only be representative.)

MITAC COMPUTING TECHNOLOGY CORP.
TYAN Business Unit

USA
Tel: +1-510-651-8888
Fax: +1-510-651-7688

Taiwan
Tel: +886-2-2652-5888
Fax: +886-2-2652-5805

Japan
Tel: +81-3-3769-8311
Fax: +81-3-3769-8328

China
Shanghai Tel: +86-21-61431188 Ext 1366
China Tel: +86-010-62555015 Ext 8302

