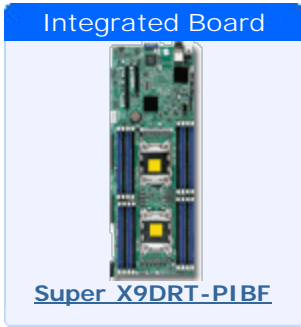


# SuperServer 2027PR-DC1FR



## Key Features

Two **hot-pluggable** systems (nodes) in a 2U form factor. Each node supports the following:

1. Dual socket R (LGA 2011) supports Intel® Xeon® processor E5-2600 and E5-2600 v2 family†
2. Up to 1TB ECC LRDIMM, 512GB ECC RDIMM, up to 1866MHz; 16x DIMM sockets
3. 1x PCI-E 3.0 x16 Low-profile slot; 1x PCI-E 3.0 x8 Low-profile slot
4. Intel® i350 Dual port GbE LAN
5. Integrated IPMI 2.0 with KVM and Dedicated LAN
6. Single port IB (FDR, 56 Gbps), w/ QSFP connector
7. 12x Hot-swap 2.5" SAS/SATA HDD Bays
8. LSI 3108 SAS3 controller (8 ports) + 2 SATA3 + 2 SATA2; RAID 0, 1, 5, 6, 10, 50, 60
9. 1280W Redundant Power Supplies Platinum Level (94%)

Note: Image above may show a varied configuration or optional parts, Please refer to parts list for standard parts included.

## Specifications

### Product SKUs

SYS-2027PR-DC1FR	▪ SuperServer 2027PR-DC1FR (Black)
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### Motherboard

Super X9DRT-PIBF

### Processor/Cache

CPU	<ul style="list-style-type: none"> <li>▪ Dual Socket R (LGA 2011)</li> <li>▪ Intel® Xeon® processor E5-2600 and E5-2600 v2 family† (up to 135W TDP *)</li> </ul> <p>* Please contact your Supermicro sales representative for additional details</p>
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Note † BIOS version 3.0 or above is required

Cache ▪ Up to 30MB

System Bus ▪ QPI up to 8 GT/s

### Chassis

Form Factor	▪ 2U Rackmount
Model	▪ CSE-217HD+-R1K28B

### Dimensions

Width	▪ 17.25" (438mm)
Height	▪ 3.47" (88mm)
Depth	▪ 28.75" (730mm)
Gross Weight	▪ 66 lbs (29.9kg)
Available Colors	▪ Black

### Front Panel

Buttons	<ul style="list-style-type: none"> <li>▪ Power On/Off button</li> <li>▪ UID button</li> </ul>
LEDs	<ul style="list-style-type: none"> <li>▪ Power status LED</li> <li>▪ HDD activity LED</li> <li>▪ 2x Network activity LEDs</li> </ul>

System Memory (per Node)	
Memory Capacity	<ul style="list-style-type: none"> <li>16x 240-pin DDR3 DIMM slots</li> <li>Up to 1TB DDR3 ECC LRDIMM</li> <li>Up to 512GB DDR3 ECC Registered memory (RDIMM)</li> </ul>
Memory Type	<ul style="list-style-type: none"> <li>1866/1600/1333/1066/800MHz ECC DDR3 SDRAM 72-bit, 240-pin gold-plated DIMMs</li> </ul>
DIMM Sizes	<ul style="list-style-type: none"> <li>32GB, 16GB, 8GB, 4GB, 2GB, 1GB</li> </ul>
Memory Voltage	<ul style="list-style-type: none"> <li>1.5 V, 1.35 V</li> </ul>
Error Detection	<ul style="list-style-type: none"> <li>Corrects single-bit errors</li> <li>Detects double-bit errors (using ECC memory)</li> </ul>

#### On-Board Devices

Chipset	<ul style="list-style-type: none"> <li>Intel® C602 Chipset</li> </ul>
Infiniband	<ul style="list-style-type: none"> <li>Mellanox ConnectX-3 FDR Infiniband 56Gb/s Controller</li> </ul>
SAS	<ul style="list-style-type: none"> <li>LSI 3108 SAS3 (12Gbps) controller; RAID 0, 1, 5, 6, 10, 50 support</li> <li>Note: In order to support the LSI RAID Controllers, both CPU socket must be populated</li> </ul>
SATA	<ul style="list-style-type: none"> <li>SATA w/ RAID 0, 1, 5, 10 support, maximum speed of the drive will go with port interface</li> </ul>
IPMI	<ul style="list-style-type: none"> <li>Support for Intelligent Platform Management Interface v.2.0</li> <li>IPMI 2.0 with virtual media over LAN and KVM-over-LAN support</li> <li>Nuvoton WPCM450 BMC</li> </ul>
Network Controllers	<ul style="list-style-type: none"> <li>Intel® i350 Dual Port Gigabit Ethernet</li> <li>Virtual Machine Device Queues reduce I/O overhead</li> <li>Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output</li> <li>1x Realtek RTL8201N PHY (dedicated IPMI)</li> </ul>
Graphics	<ul style="list-style-type: none"> <li>Matrox G200eW</li> </ul>

#### Input / Output (per Node)

SATA	<ul style="list-style-type: none"> <li>2x SATA3 (6Gbps) ports</li> <li>2x SATA2 (3Gbps) ports</li> </ul>
SAS	<ul style="list-style-type: none"> <li>8x SAS3 (12Gbps) ports</li> </ul>
LAN	<ul style="list-style-type: none"> <li>2x RJ45 Gigabit Ethernet LAN ports</li> <li>1x RJ45 Dedicated IPMI LAN port</li> </ul>
Infiniband	<ul style="list-style-type: none"> <li>1 external QSFP Infiniband connector</li> </ul>
USB	<ul style="list-style-type: none"> <li>2x USB 2.0 ports total (2x rear)</li> </ul>
VGA	<ul style="list-style-type: none"> <li>1x VGA port</li> </ul>
Serial Port / Header	<ul style="list-style-type: none"> <li>1x Fast UART 16550 port / 1 Header (internal)</li> </ul>
Others	<ul style="list-style-type: none"> <li>1x <u>mSATA</u> (full size) and one SATADOM support on the daughter card</li> <li>1x <u>SATADOM</u> support on the motherboard</li> </ul>

- Universal Information (UID) LED

#### Expansion Slots (per Node)

PCI-Express	<ul style="list-style-type: none"> <li>1x PCI-E 3.0 (x16) Low-profile slot</li> <li>1x PCI-E 3.0 (x8) Low-profile slot</li> </ul>
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#### Drive Bays (per Node)

Hot-swap	<ul style="list-style-type: none"> <li>12x 2.5" Hot-swap SAS/SATA HDD trays</li> </ul>
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#### System Cooling

Fans	<ul style="list-style-type: none"> <li>4x 8cm heavy duty PWM fans with optimal fan speed control</li> </ul>
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#### Power Supply

1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2

AC Input	<ul style="list-style-type: none"> <li>1000W Output @ 100-140V, 8-12A, 50-60Hz</li> <li>1280W Output @ 180-240V, 6-8A, 50-60Hz</li> </ul>
DC Output	<ul style="list-style-type: none"> <li>1000W: +12V/83A; +5Vsb/4A</li> <li>1280W: +12V/106.7A, +5Vsb/4A</li> </ul>

Certification	  Platinum Certified [ <a href="#">Test Report</a> ]
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#### System BIOS

BIOS Type	<ul style="list-style-type: none"> <li>128Mb SPI Flash EEPROM with AMI BIOS</li> </ul>
BIOS Features	<ul style="list-style-type: none"> <li>Plug and Play (PnP)</li> <li>APM 1.2</li> <li>PCI 2.2</li> <li>ACPI 1.0 / 2.0</li> <li>USB Keyboard support</li> <li>SMBIOS 2.3</li> <li>UEFI</li> </ul>

#### Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> <li>RoHS Compliant</li> </ul>
Environmental Spec.	<ul style="list-style-type: none"> <li>Operating Temperature: 10°C to 35°C (50°F to 95°F)</li> <li>Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)</li> <li>Operating Relative Humidity: 8% to 90% (non-condensing)</li> <li>Non-operating Relative Humidity: 5% to 95% (non-condensing)</li> </ul>

## Parts List

### Parts List - (Items Included)

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X9DRT-PIBF	2	Super X9DRT-PIBF Motherboard
	CSE-217HD+-R1K28B	1	2U Chassis
<b>Backplane</b>	BPN-ADP-S3108H-H8IRP	2	BPNADPS3108H-H8IRP
<b>Backplane</b>	BPN-SAS3-217HD	1	,RoHS/REACH,PBF 2U Twin Backplane, support 24 SAS3/SATA3 HDD (2.5") with Hot Swapping. Per node for 12 HDDs. PWM fan control, HDD spin up and failure LED supported.
<b>Heatsink / Retention</b>	SNK-P0048PS	4	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB

### Optional Parts List

	Part Number	Qty	Description
<b>GPU Kit</b>	MCP-420-21715-ASM	-	Support passive GPU and Xeon Phi (passive)
	MCP-420-21715-ASM-OEM	-	Support Geforce GTX GPU (active)
<b>SuperCap Kit</b>	BTR-CV3108-TP1	-	LSI 3108 CacheVault kit for TwinPro