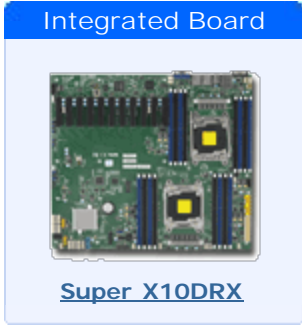


SuperServer 2028R-TXR



Super X10DRX

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Key Features

- Surveillance DVR
- Networking Telephony
- Industrial Server Solutions
- Head-node Controller
- Flash Array Server

1. Dual socket R3 (LGA 2011) supports Intel® Xeon® processor E5-2600 v4† / v3 family; QPI up to 9.6GT/s
2. Up to 2TB† ECC 3DS LRDIMM , up to DDR4- 2400†MHz ; 16x DIMM slots
3. 10 PCI-E 3.0 x8 Low-profile slots, 1 PCI-E 2.0 x4 (in x8) Low-profile slot
4. Intel® i350 Dual port Gigabit Ethernet
5. 16 Hot-swap 2.5" drive bays, 8 SATA3 ports by default; optional drive support: 16 SAS3; 1x 5.25" peripheral drive bay
6. I/O: 1 COM, 1 VGA, 2 USB 3.0 and 2 USB 2.0 (rear)
7. Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN
8. 4x 8cm 7K RPM, middle fans
9. 1000W Redundant Power Supplies Titanium Level (96%)

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

Specifications

Product SKUs

SYS-2028R-TXR ■ SuperServer 2028R-TXR (Black)

Motherboard

Super X10DRX

Processor/Cache

CPU ■ Intel® Xeon® processor E5-2600 v4† / v3 family (up to 145W TDP) *
 ■ Dual Socket R3 (LGA 2011)

Cores / Cache ■ Up to 22 Cores† / Up to 55MB† Cache

System Bus ■ QPI up to 9.6 GT/s

Note † BIOS version 2.0 or above is required

Note * Please contact Supermicro Technical Support for additional information about

Chassis

Form Factor ■ 2U Rackmount

Model ■ CSE-213XAC-R1K05LP

Dimensions

Width ■ 17.2" (437mm)

Height ■ 3.5" (89mm)

Depth ■ 27.76" (705.3mm)

Weight ■ Net Weight: 36 lbs (16.4 kg)
 ■ Gross Weight: 72 lbs (32.7 kg)

Available Colors ■ Black

Front Panel

Buttons ■ Power On/Off button
 ■ System Reset button

■ Power status LED
 ■ Hard drive activity LED

frequency optimized CPUs and specialized system optimization.

System Memory

Memory Capacity	<ul style="list-style-type: none">16x 288-pin DDR4 DIMM slotsUp to 2TB[†] ECC 3DS LRDIMM, 512GB ECC RDIMM
Memory Type	<ul style="list-style-type: none">2400[†]/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit
DIMM Sizes	<ul style="list-style-type: none">RDIMM: 32GB, 16GB, 8GB, 4GBLRDIMM: 64GB, 32GB3DS LRDIMM: 128GB
Memory Voltage	<ul style="list-style-type: none">1.2 V
Error Detection	<ul style="list-style-type: none">Corrects single-bit errors

On-Board Devices

Chipset	<ul style="list-style-type: none">Intel® C612 chipset
SATA	<ul style="list-style-type: none">SATA3 (6Gbps) with RAID 0, 1, 5, 10
IPMI	<ul style="list-style-type: none">Support for Intelligent Platform Management Interface v.2.0IPMI 2.0 with virtual media over LAN and KVM-over-LAN supportASPEED AST2400 BMC
Network Controllers	<ul style="list-style-type: none">Intel® i350 Dual Port Gigabit EthernetVirtual Machine Device Queues reduce I/O overheadSupports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output1x Realtek RTL8201N PHY (dedicated IPMI)
Graphics	<ul style="list-style-type: none">ASPEED AST2400 BMC

Input / Output

Serial ATA	<ul style="list-style-type: none">8 SATA3 (6Gbps) ports
LAN	<ul style="list-style-type: none">2 RJ45 Gigabit Ethernet LAN ports1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none">2 USB 3.0 ports (rear)2 USB 2.0 ports (rear)
Serial Port / Header	<ul style="list-style-type: none">1 COM port (rear)
VGA	<ul style="list-style-type: none">1 VGA port
DOM	<ul style="list-style-type: none">2 SuperDOM (Disk on Module) ports
TPM	<ul style="list-style-type: none">1 TPM 1.2 20-pin Header

LEDs

- 2 Network activity LEDs
- System information (overheat/UID) LED
- Power fail LED

Expansion Slots

	<ul style="list-style-type: none">10 PCI-E 3.0 x8 slots1 PCI-E 2.0 x4 (in x8) slot
PCI-Express	<p>(Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram for details.)</p>

Drive Bays

	<ul style="list-style-type: none">16 Hot-swap 2.5" drive bays8 SATA3 ports by defaultOptional drive support: 16 SAS3
Hot-swap	<p>Note: optional storage card is required to support more than 10 drives</p>

Peripheral Bay

Peripheral	<ul style="list-style-type: none">1x 5.25" peripheral drive bay
Optional	<ul style="list-style-type: none">1x slim DVD-ROM drive (optional)

Backplane

	<ul style="list-style-type: none">1x SAS3 / SATA backplane
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System Cooling

Fans	<ul style="list-style-type: none">4x 8cm 7K RPM, Middle fans
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PowerStick Power Supply

	<ul style="list-style-type: none">1000W Redundant Power Supplies with PMBus
Total Output Power	<ul style="list-style-type: none">800W/1000W
Dimension (W x H x L)	<ul style="list-style-type: none">38 x 40 x 360 mm
Input	<ul style="list-style-type: none">100-127Vac / 9-7.5A / 50-60Hz200-240Vac / 6-5A / 50-60Hz
+12V	<ul style="list-style-type: none">Max: 66.7A / Min: 0A (100-127Vac)Max: 83A / Min: 0A (200-240Vac)
+5Vsb	<ul style="list-style-type: none">Max: 4A / Min: 0A
Output Type	<ul style="list-style-type: none">Gold Finger Connector (16 Power Pin, 14 Signal Pin)

Certification	  UL/cUL/CB/BSMI/CE/CCC Titanium Level (Cert. in progress)
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System BIOS

BIOS Type	<ul style="list-style-type: none">128Mb SPI Flash EEPROM with AMI BIOS
BIOS Features	<ul style="list-style-type: none">Plug and Play (PnP)PCI 2.3ACPI 1.0 / 2.0 / 3.0 / 4.0BIOS rescue hot keysUSB Keyboard supportSMBIOS 2.7.1UEFI 2.3.1

Operating Environment / Compliance

RoHS	<ul style="list-style-type: none">RoHS Compliant
	<ul style="list-style-type: none">Operating Temperature:

Environmental Spec.

- 10°C to 35°C (50°F to 95°F)
- Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)
- Operating Relative Humidity: 8% to 90% (non-condensing)
- Non-operating Relative Humidity: 5% to 95% (non-condensing)

Parts List

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X10DRX	1	Super X10DRX Motherboard
	CSE-213XAC-R1K05LP	1	2U Chassis
Backplane	BPN-SAS3-213A	1	16-port 2U SAS3 12Gbps direct-attached backplane, support up to 16x 2.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-SAST-0631	2	cross-over mini SAS HD to 4 SATA w/SB, S. 55cm. 30AWG,RoHS/REACH
Label	LBL-0108	1	CAUTION LABEL FOR REDUNDANT PWR SYSTEMS
Manual	MNL-1933-QRG	1	SYS-2028R-TXR Quick Reference Guide
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Heatsink / Retention	SNK-P0048PS	2	2U Passive CPU Heat Sink for X9, X10 Generation Systems Equipped w/ a Narrow ILM MB
Power Supply	PWS-1K05A-1R	2	1U 1000W Redundant Power Supply Titanium, 38X40X360mm length

Optional Parts List

	Part Number	Qty	Description
Slim DVD Kit	MCP-220-81502-0N	-	Slim SATA DVD mounting kit for SC213,219,813,815,818,819,825,828,829,836,842
5.25" DVD kit	MCP-220-00006-00	-	5.25" drive rail set
USB 2.0/COM port tray	MCP-220-00007-01	-	Black USB2.0 /COM port tray (mount with Slim DVD Kit)
USB 3.0/COM port tray	MCP-220-00114-0N	-	Black 2x USB3.0/COM port tray (mount with Slim DVD Kit)
Mobile Rack	CSE-M14TQC & CBL-SAST-0699L	-	Black SAS3/SATA3 Mobile Rack for 4x 2.5 (mount with 5.25" DVD kit); internal mini SAS HD to 4 SATA 12G, 75/75/90/90cm w/75cm SB, S. 30AWG
Storage Control Card and Cable(s)	AOC-S3008L-L8e & 2x CBL-SAST-0593	-	Std LP, 8 internal ports, 12Gb/s per port- Gen3, 122HDD, HBA; Internal Mini-SAS HD to Mini-SAS HD 60cm,30AWG,12Gb/s
Storage Control Card and Cable(s)	AOC-S3008L-L8i & 2x CBL-SAST-0593	-	Std LP, 8 internal ports, 12Gb/s per port- Gen3, 63HDD, RAID 0,1,1E; Internal Mini-SAS HD to Mini-SAS HD 60cm,30AWG,12Gb/s
Storage Control Card and Cable(s)	AOC-S3108L-H8iR & 2x CBL-SAST-0593	-	Std LP, 8 internal ports, 12Gb/s per port- Gen3, 240HDD, RAID 0, 1, 5, 6, 10, 50, 60; Internal Mini-SAS HD to Mini-SAS HD 60cm,30AWG,12Gb/s
Global Services & Support	OS4HR3/2/1	-	3/2/1-year onsite 24x7x4 service
	OSNBD3/2/1	-	3/2/1-year onsite NBD service
Software	SFT-OOB-LIC	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)