

SuperServer 2028R-TXR



Integrated Board



Super X10DRX

**Views: | [Angled View](#) | [Top View](#) |
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Note: Image above may show a varied configuration of optional parts.
Please refer to parts list for standard parts included.

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%)**

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 frequency optimized CPUs and specialized system optimization.

System Memory

Memory Capacity ■ 16x 288-pin DDR4 DIMM slots
■ Up to 2TB[†] ECC 3DS LRDIMM, 512GB ECC RDIMM

Memory Type ■ **2400**[†]/2133/1866/1600MHz ECC DDR4 SDRAM 72-bit

DIMM Sizes ■ RDIMM: 32GB, 16GB, 8GB, 4GB
■ LRDIMM: 64GB, 32GB
■ 3DS LRDIMM: 128GB

Memory Voltage ■ 1.2 V

Error Detection ■ Corrects single-bit errors

On-Board Devices

Chipset ■ Intel® C612 chipset

SATA ■ SATA3 (6Gbps) with RAID 0, 1, 5, 10

IPMI ■ Support for Intelligent Platform Management Interface v.2.0
■ IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
■ ASPEED AST2400 BMC

Network Controllers ■ Intel® i350 Dual Port Gigabit Ethernet
■ Virtual Machine Device Queues reduce I/O overhead
■ Supports 10BASE-T, 100BASE-TX, and 1000BASE-T, RJ45 output
■ 1x Realtek RTL8201N PHY (dedicated IPMI)

Graphics ■ ASPEED AST2400 BMC

Input / Output

Serial ATA ■ 8 SATA3 (6Gbps) ports

LAN ■ 2 RJ45 Gigabit Ethernet LAN ports
■ 1 RJ45 Dedicated IPMI LAN port

USB ■ 2 USB 3.0 ports (rear)
■ 2 USB 2.0 ports (rear)

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

LEDs ■ Power status LED
■ Hard drive activity LED
■ 2 Network activity LEDs
■ System information (overheat/UID) LED
■ Power fail LED

Expansion Slots

PCI-Express ■ 10 PCI-E 3.0 x8 slots
■ 1 PCI-E 2.0 x4 (in x8) slot

(Both CPUs need to be installed for full access to PCI-E slots and onboard controllers. See manual block diagram for details.)

Drive Bays

Hot-swap ■ 16 Hot-swap 2.5" drive bays
■ 8 SATA3 ports by default
■ Optional drive support: 16 SAS3
Note: optional storage card is required to support more than 10 drives

Peripheral Bay

Peripheral ■ 1x 5.25" peripheral drive bay

Optional ■ 1x slim DVD-ROM drive (optional)

Backplane

1x SAS3 / SATA backplane

System Cooling

Fans ■ 4x 8cm 7K RPM, Middle fans



PowerStick Power Supply

1000W 1U Redundant Power Supplies with PMBus

Total Output Power ■ 800W: 100 – 127Vac
■ 1000W: 200 – 240Vac

Dimension (W x H x L) ■ 38 x 40 x 360 mm

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

Input	<ul style="list-style-type: none"> 100-127Vac / 9-7.5A / 50-60Hz 200-240Vac / 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	  Titanium Level [Test Report]

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 2.3 ACPI 1.0 / 2.0 / 3.0 / 4.0 BIOS rescue hot keys USB Keyboard support SMBIOS 2.7.1 UEFI 2.3.1

Operating Environment / Compliance

RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> Operating Temperature: 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)

Список деталей

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	MINI SAS HD-4 SATA,6G,INT,RF,Cross Over,55CM,55CM SB,30AWG
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-0699	-	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
CacheVault	BTR-TFM8G-LSICVM02	1	Supercap 8GB CV + BKT-BBU-BRACKET-05 or MCP-240-00127-0N x1
	BKT-BBU-BRACKET-05	1	Mounting PCIe Card
	MCP-240-00127-0N	1	SuperCap tray for 2.5" HDD
P4 GPU kit	MCP-310-00084-0B	1	Mylar Air Shroud(GPU) and air block for SC213X (X10DRX)
	MCP-310-00086-0B	1	Mylar Air dummy(GPU) for SC213X
TPM security module (optional, not included)	AOM-TPM-9670V	-	TPM module (Vertical) TPM 2.0
	AOM-TPM-9671V	-	TPM module (Vertical) TPM 1.2.
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 • eStore	1	OOB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)