

SuperServer F629P3-RC1B



Views: | [Angled \(node\)](#) | [Top \(node\)](#) | [Angled Front \(system\)](#) | [Rear \(system\)](#) |



Key Features

4 Hot-plug System Nodes in 4U Each node supports:

- Dual Socket P (LGA 3647) support 2nd Gen Intel® Xeon® Scalable processors (Cascade Lake/Skylake)[†]
- 12 DIMMs; up to 3TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM, Supports Intel® Optane™ DCPMM^{††}
- Expansion slots: 1 PCI-E 3.0 x16 (LP) 1 PCI-E 3.0 x16 (for [SIOM](#))
- SIOM Network card, 1 dedicated IPMI LAN port
- 1 VGA, 2 USB 3.0 ports
- 8 Hot-swap 3.5" SAS3/SATA3 or 6 Hot-swap 3.5" SAS3/SATA3 + 2 optional NVMe U.2 M.2 Interface: PCI-E 3.0 x4 M.2 Form Factor: 2260, 2280, 22110 M.2 Key: M-Key
- SAS3 via Broadcom 3108, HW RAID
- 2x 8cm 14k RPM middle fans
- 1200W Redundant Power Supplies **Titanium Level** (96% Efficiency)

Drivers & Utilities BIOS IPMI Tested Memory Tested M.2 List Drive Options NVMe Options Manuals OS Certification Matrix Tested SIOM
Network Card (AOC) Matrix

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

Specifications ^

Product SKUs

SYS-F629P3-RC1B SuperServer F629P3-RC1B (Black)

Motherboard

Super X11DPFR-SN

Processor (per Node)

CPU	Dual Socket P (LGA 3647) 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors [†] , Dual UPI up to 10.4GT/s Support CPU TDP 70-165W with IVR
Cores	Up to 28 Cores
Note	[†] BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake-R). Extended thermal solutions may be required to support CPUs higher than 165W TDP, please contact Supermicro Technical Support for additional information.

System Memory (per Node)

Memory Capacity	12 DIMM slots Up to 3TB 3DS ECC DDR4-2933MHz [†] RDIMM/LRDIMM Supports Intel® Optane™ DCPMM ^{††}
Memory Type	2933 [†] /2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
Note	[†] 2933MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro ^{††} Cascade Lake only. Contact your Supermicro sales rep for more info.

On-Board Devices

Chipset	Intel® C621 chipset
SAS	SAS3 (12Gbps) via Broadcom 3108 HW RAID Firmware Download
Network Controllers	Flexible networking via SIOM
IPMI	Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	ASPEED AST2500 BMC

Input / Output (per node)

SAS	8 SAS3 (12Gbps) ports
NVMe	2 NVMe U.2 optional
LAN	SIOM flexible Network card 1 RJ45 Dedicated IPMI LAN port
USB	2 USB 3.0 ports (rear)
VGA	1 VGA port

System BIOS

BIOS Type 128Mb SPI Flash EEPROM with AMI BIOS

Management

Software	Intel® Node Manager IPMI 2.0 KVM with dedicated LAN SuperDoctor® 5 Watch Dog
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Power Configurations ACPI Power Management

PC Health Monitoring

CPU	Monitors for CPU Cores, Chipset Voltages, Memory. 4+1 Phase-switching voltage regulator
FAN	Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	Monitoring for CPU and chassis environment Thermal Control for fan connectors

Chassis

Form Factor 4U Rackmount

Model CSE-F424A52-R1K23BP

Dimensions and Weight

Width	17.63" (448mm)
Height	6.96" (177mm)
Depth	29" (737mm)
Package	28.3" (W) x 15.0" (H) x 42.4" (D)
Weight	Net Weight: 150 lbs (68.04 kg) Gross Weight: 200 lbs (90.71 kg)

Available Colors Black

Front Panel

Buttons	Power On/Off button UID button
LEDs	Power status LED Hard drive activity LED Network activity LEDs Information LED (UID, Fan failure, Overheat)

Expansion Slots (per node)

PCI-Express	1 PCI-E 3.0 x16 (Low-profile) 1 PCI-E 3.0 x16 (SIOM)
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Drive Bays (per node)

Hot-swap	8 Hot-swap 3.5" SAS3/SATA3 or 6 Hot-swap 3.5" SAS3/SATA3 + 2 optional NVMe U.2
M.2	M.2 Interface: PCI-E 3.0 x4 M.2 Form Factor: 2260, 2280, 22110 M.2 Key: M-Key

Backplane

1 SAS/SATA backplane

System Cooling (per node)

Fans 2x 8cm 14 RPM middle fans

Power Supply (76mm Width)

1200W Redundant Power Supplies with PMBus

Total Output Power	1000W/1200W
Dimension (W x H x L)	76 x 40 x 336 mm
Input	100-127Vac / 15-12A / 50-60Hz 200-240Vac / 8.5-7A / 50-60Hz 200-240Vdc / 8.5-7A (for CCC only)
+12V	Max: 83A / Min: 0A (100-127Vac) Max: 100A / Min: 0A (200-240Vac) Max: 100A / Min: 0A (200-240Vdc)
+5Vsb	Max: 4A / Min: 0A
Output Type	19 Pairs Gold Finger Connector
Certification	Titanium Level [Test Report]

Operating Environment

RoHS	RoHS Compliant
Environmental Spec.	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -40°C to 60°C (-40°F to 140°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-X11DPFR-SN	4	Super X11DPFR-SN Motherboard
	CSE-F424A52-R1K23BP	1	4U Chassis
Backplane	BPN-ADP-8S3108-1UF	4	Avago (LSI) 3108 adapter card for X10 FatTwin Rear I/O motherboards. Adapter card includes TFM module port and x8 SAS3 ports via x2 Mini-SAS HD connectors, HF, RoHS/REACH
Backplane	BPN-ADP-X11DPFR	4	Power distribution board for X11DPFR-S(N)
Backplane	BPN-SAS3-F424-A2N2A	4	2-Port Hybrid Backplane support 2 x SAS3/SATA3/NVMe Storage Devices
Backplane	BPN-SAS3-F424-A6	4	6-port Fat Twin SAS3 12Gbps backplane, support up to 6x 3.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-0486L	12	2x2 to 2x2 15cm power cable HF. 18AWG
Cable 2	CBL-OTHR-0022L	4	20 to 20 pin cable for BPN-ADP-F418LS, 7.5cm, 28AWG, RoHS/REACH, PBF
Cable 3	CBL-PWCD-0900	4	PWCD, US/EU/Canada/China/Australia, IEC60320 C14 TO C13, 4FT, 17AWG
Cable 4	CBL-SAST-0691	4	MINI SAS HD RA- 2x MINI SAS HD, INT, 15/59CM, 28AWG
Cable 5	CBL-SAST-0706	4	MINI SAS HD (reversed RA)-MINI SAS HD, 12G, INT, 11CM, 30AWG
Heatsink / Retention	SNK-P0068PSC	4	2U Passive CPU Heat Sink with a Side Air Channel for X11 Purley Platform Equipped with a Narrow Retention Mechanism
Heatsink / Retention	SNK-P0069PSC	4	1.5U Proprietary 50-mm Tall Passive CPU Heat Sink with a Side Air Channel for X11 Purley Platform 2U Node Twin Series Servers
Power Supply	PWS-1K23A-1R	4	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm, HF, RoHS/REACH

Optional Parts List

	Part Number	Qty	Description
Super Cap for LSI 3108	1x BTR-TFM8G-LSICVM02 & 1x BKT-BBU-BRACKET-05	-	LSI Supercap w 8GB CV 24 cable (whole kit) & Supercap mounting bracket for PCI-E location
CacheVault Kit	BTR-CV3108-FT1	1/node	CacheVault kit for FatTwin Broadcom 3108 card. Includes: TFM, cables, brackets and supercap
Backplane	BPN-ADP-2UPWR-X11	-	1 per node for configurations with CPU at 145W or higher
Cable	CBL-0480L	-	1 per node for configurations with CPU at 145W or higher
NVMe	-	-	Contact Supermicro for configurations with more NVMe SSDs.
Software	SFT-OOB-LIC • eStore	1	OoB Management Package (per node license)
Software	SFT-DCMS-Single	1	DataCenter Management Package (per node license)

Global SKU [English](#)

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