

SuperStorage 1029P-NMR36L (Complete System Only)



Integrated Board



X11DSF-E

Complete System Only: To maintain quality and integrity, this product is sold only as a completely-assembled system (with minimum 2 CPUs, 2 DIMMs and 4 NF1).

[▶ Drivers & Utilities](#)
[▶ BIOS](#)
[▶ IPMI](#)
[▶ Tested Memory](#)
[▶ Tested M.2 List](#)
[▶ Manuals](#)
[▶ OS Certification Matrix](#)
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Key Features

- IOPS Intensive Storage App.
- Database App. (MySQL, Casandra)
- Hyperconverged Infrastructure / Scale-out Architectures

1. Dual Socket P (LGA 3647) support 2nd Gen. Intel® Xeon® Scalable processors (Cascade Lake/Skylake)[†]
2. 24 DIMMs; up to 6TB 3DS ECC DDR4-2933MHz[†] RDIMM/LRDIMM, Supports Intel® Optane™ DCPMM^{††}
3. 2 PCI-E 3.0 x16 slots, 1 PCI-E 3.0 x4 slot
4. 32 Hot-swap PCI-E NF1 drive bays, 4 SATA3 M.2 drive bays support M.2 Form Factor 22x42/60/80/110
5. 2x 10GBase-T LAN ports via Intel X550
6. 8 Heavy duty 4cm counter-rotating fans with air shroud
7. 1600W Redundant Power Supplies Titanium Level (96%)

[Flyer / White Paper](#)
[NF1 SSD Details](#)

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

Specifications

Product SKUs

- SSG-1029P-NMR36L
- SuperServer 1029P-NMR36L (Black)

Motherboard

[Super X11DSF-E](#)

Processor/Cache

- CPU
- Dual Socket P (LGA 3647)
 - 2nd Gen. Intel® Xeon® Scalable Processors (Cascade Lake/Skylake)[†], 3 UPI up to 10.4GT/s
 - Support CPU TDP 70-205W

- Cores
- Up to 28 Cores with Intel® HT Technology

Chassis

- Form Factor
- 1U Rackmount
- Model
- CSE-121NF-R1K62P

Dimensions and Weight

- Height
- 1.7" (43mm)
- Width
- 17.26" (438.4mm)
- Depth
- 30.04" (763mm)
- Weight
- Net Weight: 40 lbs (18.1kg)
 - Gross Weight: 52 lbs (23.6kg)
- Available Color
- Black

Front Panel

Note	<ul style="list-style-type: none"> † BIOS version 3.0a or above is required to support 2nd Gen. Intel® Xeon® Scalable processors
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System Memory

Memory Capacity	<ul style="list-style-type: none"> 24 DIMM slots Up to 6TB 3DS ECC DDR4-2933MHz† RDIMM/LRDIMM Supports Intel® Optane™ DCPMM††
Memory Type	<ul style="list-style-type: none"> 2933†/2666/2400/2133MHz ECC DDR4 RDIMM/LRDIMM
Note	<ul style="list-style-type: none"> † 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	<ul style="list-style-type: none"> Intel® C627 chipset
SATA	<ul style="list-style-type: none"> SATA3 (6Gbps) with RAID 0, 1
Network Connectivity	<ul style="list-style-type: none"> Intel® X550 Dual Port 10GBase-T
IPMI	<ul style="list-style-type: none"> Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Graphics	<ul style="list-style-type: none"> ASPEED AST2500 BMC

Input / Output

SATA	<ul style="list-style-type: none"> 4 SATA3 (6Gbps) ports
LAN	<ul style="list-style-type: none"> 2 RJ45 10GBase-T ports 1 RJ45 Dedicated IPMI LAN port
USB	<ul style="list-style-type: none"> 2 USB 3.0 ports (front) 2 USB 3.0 ports (rear)
Video	<ul style="list-style-type: none"> 1 VGA D-Sub connector port
Serial Header	<ul style="list-style-type: none"> 1 COM port (header)

System BIOS

BIOS Type	<ul style="list-style-type: none"> AMI 32Mb SPI Flash ROM
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Management

Software	<ul style="list-style-type: none"> Intel® Node Manager IPMI 2.0 KVM with dedicated LAN NMI SSM, SPM, SUM SuperDoctor® 5 Watch Dog
Power Configurations	<ul style="list-style-type: none"> ACPI / APM Power Management

PC Health Monitoring

CPU	<ul style="list-style-type: none"> Monitors for CPU Cores, Chipset Voltages, Memory. 4+1 Phase-switching voltage regulator
FAN	<ul style="list-style-type: none"> Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors
Temperature	<ul style="list-style-type: none"> Monitoring for CPU and chassis environment Thermal Control for fan connectors

Buttons	<ul style="list-style-type: none"> Power On/Off button UID button
LEDs	<ul style="list-style-type: none"> Power LED Hard drive activity LED Network activity LEDs System Overheat LED / Fan fail LED / UID LED

Expansion Slots

PCI-Express	<ul style="list-style-type: none"> 2 PCI-E 3.0 x16 slots 1 PCI-E 3.0 x4 (Low profile) slot
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Drive Bays

Hot-swap	<ul style="list-style-type: none"> 32 Hot-swap PCI-E NF1 drive bays 4 SATA3 M.2 drive bays support M.2 Form Factor 22x42/60/80/110
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System Cooling

Fans	<ul style="list-style-type: none"> 8 Heavy duty 4cm counter-rotating fans with air shroud & optimal fan speed control
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Power Supply

1600W Redundant Power Supplies with PMBus	
Total Output Power	<ul style="list-style-type: none"> 1600W/1000W
Dimension (W x H x L)	<ul style="list-style-type: none"> 73.5 x 40 x 203 mm
Input	<ul style="list-style-type: none"> 100-127Vac / 13 - 9A / 50-60Hz 200-240Vac / 10 - 8A / 50-60Hz
+12V	<ul style="list-style-type: none"> Max: 83.3A / Min: 0A (100-127Vac) Max: 133A / Min: 0A (200-240Vac)
12Vsb	<ul style="list-style-type: none"> Max: 2.1A / Min: 0A
Output Type	<ul style="list-style-type: none"> 25 Pairs Gold Finger Connector

Certification	  <ul style="list-style-type: none"> UL/cUL/CB/BSMI/CE/CCC Titanium Level [Test Report]
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Operating Environment

RoHS	<ul style="list-style-type: none"> RoHS Compliant
Environmental Spec.	<ul style="list-style-type: none"> 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-X11DSF-E	1	Super X11DSF-E Motherboard
	CSE-121NF-R1K62P	1	CSE-121NF-R1K62P Chassis
Backplane	BPN-NGS3-121P1-S4	1	1U 36-slot NGSFF NF1/M.2 NVMe backplane, support 32x NF1/M.2 NVMe SSDs, plus 4x M.2 SATA devices,RoHS
Cable 1	CBL-PWEX-1026	1	GPU,2x4F/RA/CPU to 2x4F/CPU,P4.2, 35CM, 17AWG, 8A/pin, -25~85C, RoHS
Cable 2	CBL-PWEX-1027	1	GPU,2x4F/RA/CPU to 2x4F/CPU,P4.2, 14CM, 17AWG, 8A/pin, -25~85C, RoHS
Cable 3	CBL-SAST-1019	2	SLIMLINE SAS, INT,34.7CM, 41.9CM, 31.5/42.2CM,RoHS
Cable 4	CBL-SAST-1023	1	SLIMLINE SAS x4- SLIMLINE SAS x8, INT, 51.3CM, 30AWG,RoHS
Manual	MNL-2143-QRG	1	1029P-NMR36L/LR Quick Reference Guide
Riser Card	RSC-R1UU-E8R+	1	RSC-R1UU-E8R+ REV 1.00, PBF
Riser Card	RSC-X-66	1	1U LHS Passive Storage Riser card w/ 2 PCI-E x16slots,HF,RoHS
Heatsink / Retention	SNK-P0067PS	2	1U Passive CPU Heat Sink for X11 Purley Platform Equipped with a Narrow Retention Mechanism
* Power Supply	PWS-1K62A-1R	2	AC-DC 1600W, Titanium Level, Redundancy, 1U, DC Output: +12V and +12Vs, 203 x 73.5 x 40 mm, AC Input: 90 - 264 VAC/47-63Hz, PMBus 1.2 with DSP controller,HF,RoHS/REACH
* Cable 5	CBL-0160L	2	NEMA5-15P to C13 US power cord 16AWG 6ft, PBF (default for high watt)
* Cable 6	CBL-0335L	1	CBL,FRONT CNTL,20 TO 20 PIN,RA,RND TUBE,73CM,28AWG
* FAN 1	FAN-0163L4	8	40x40x56 mm, 23.3K-20.3K RPM, Counter-rotating Fan
* Drive Tray(s)	MCP-220-12102-0N	32	SC121NF NGSFF cage (cost-effective)
* Drive Tray(s)	MCP-220-12103-0N	4	SC121NF M.2 cage kit with M.2 adapter
* Rear Window	MCP-240-12103-0N	1	Rear window for SC121M3
* Front Panel	MCP-280-11605-0N	1	116U FP kit,2* USB3.0,slim bracket, 50cm cable
* Rail Set	MCP-290-11809-0N	1	Rail set, Quick/Quick, Auto Latch, travel 609.1mm Short Version, RACK POST=26.5, 1U 17.2 SC118GQE 1U 4xGPU
* Air Shroud	MCP-310-12101-0N	1	SC121 PWS Air Shroud

Notes:

- Parts with * are inside the chassis
- Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

Optional Parts List

	Part Number	Qty	Description
M.2 Adapter board	BPN-ADP-1N4-1M2	1	M.2 Adapter board for NF1 BPN, RoHS
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)