# UP SuperServer SYS-111C-NR

Key Applications

Virtualization, HPC, CDN, Edge Nodes, Cloud Computing, Data Center Optimized, Storage Headnode,

Key Features

- Single Socket E (LGA-4677) 4th/5th Gen Intel® Xeon® Scalable processors. Up to 350W TDP;
- Intel® C741 Chipset;
- 16 DIMMs; Supports 3DS DDR5 RDIMM. Up to 5600 MHz;
- 2 PCIe 5.0 x16 FHHL; 2 PCIe 5.0 x16 AIOM NIC(OCP 3.0); 2 PCIe 3.0 x2 NVMe M.2;
- Dual AIOM (OCP 3.0) for networking (NCSI available), 1 dedicated IPMI LAN;
- 10x front hot-swap 2.5" SATA3 drive bays (Optional all 10 hybrid Gen5 NVMe), SAS3 with additional SAS controller card;
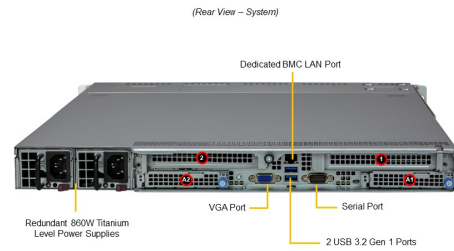- Redundant Now Titanium 860W Power Supplies;

Form Factor	1U Rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 605 x 197 x 822mm (23.8" x 7.8" x 32.4")
Processor	Single Socket E (LGA-4677) 5th Gen Intel® Xeon®/4th Gen Intel® Xeon® Scalable processors Up to 64C/128T; Up to 320MB Cache
GPU	Max GPU Count: Up to 2 single-width GPU(s) Supported GPU: NVIDIA PCIe: L4,A2 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: PCIe
System Memory	Slot Count: 16 DIMM slots/8 Channels Max Memory (1DPC): Up to 2TB 4800MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 4TB 4400MT/s ECC DDR5 RDIMM
Drive Bays	10x 2.5" NVMe/SATA/SAS drive bays (10x 2.5" NVMe hybrid) 2x PCIe 3.0 x 2 M-key, 2280, 22110
Expansion Slots	2 PCIe 5.0 x16 FHHL slot(s) 2 PCIe 5.0 x16 OCP 3.0 AIOM NIC slot(s) Note: AIOM slots share PCIe lanes with NVMe drives. Acronyms: (FH = Full Height, LP = Low Profile, FL = Full Length, HL = Half Length)
On-Board Devices	SATA: SATA3 (6Gbps); RAID 0/1/5/10 support NVMe: NVMe Chipset: Intel® C741 Network Connectivity: Via AIOM IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Input / Output	SATA: 12 SATA (6Gbps) port(s) LAN: 1 RJ45 Dedicated IPMI LAN port USB: 2 USB 2.0 port(s) (2 front) 2 USB 3.2 Gen 1 port(s) (2 rear) Video: 1 VGA port(s) Serial Port: 1 COM Port(s) (1 rear)

(Front View – System)

(Rear View – System)
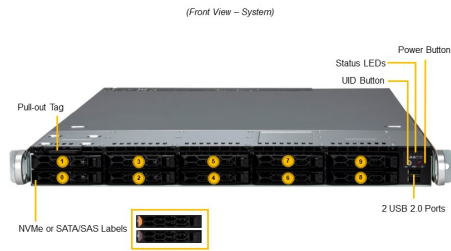
Drive Bay	Description
① - ⑨	2.5" Hot-swap PCIe 5.0 NVMe¹/SAS3¹/SATA3 Drive Bays

* NVMe or SAS3 support requires additional parts from the optional parts list

	Slot Description
① ②	PCIe 5.0 x16 FHHL
A1 A2	PCIe 5.0 x16* AIOM (OCP 3.0)

* Default Configuration. Exact lane quantity depends on the system loadout.

System Cooling	Fans: 6 middle cooling PWM 40x40x56mm Fan(s)
Power Supply	2x 860W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline ; KVM with dedicated LAN ; IPMI 2.0
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 　　　8 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
Dimensions and Weight	Height: 1.7" (43 mm) Width: 17.2" (437 mm) Depth: 23.5" (597 mm) Gross Weight: 40 lbs (18.1 kg) Net Weight: 25 lbs (11.3 kg) Packaging: 7.8" (H) x 23.8" (W) x 32.4" (D) Available Color: Black front & silver body
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F) Non-operating Temperature: -30°C to 60°C (-22°F to 140°F) Operating Relative Humidity: 8% to 80% (non-condensing) Non-operating Relative Humidity: 8% to 90% (non-condensing)
Motherboard	Super X13SEDW-F
Chassis	CSE-LB16TS-R0AWNP3