

# CloudDC SuperServer SYS-112C-TN

1U UP CloudDC with DC-MHS, up to 12 hot-swap 2.5" NVMe/SAS/SATA bays and 2 PCIe 5.0 x16 slots + 1 PCIe 5.0 x16 AIOM slot



## Key Applications

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

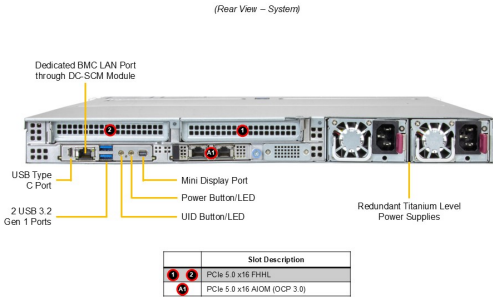
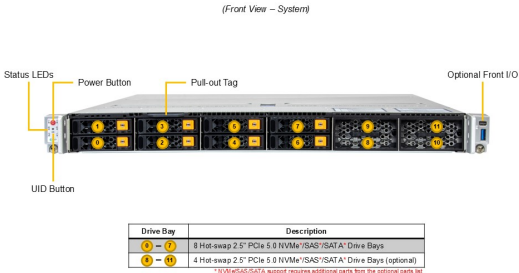
## Key Features

- All-in-one platform for cloud data centers, based on the OCP Data Center Modular Hardware System (DC-MHS) with flexible I/O and storage configurations  
Based on Modular Scalable DeNsity Optimized HPM Form Factor (M-SDNO)  
Support DC-SCM module with OpenBMC;
- Single Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores;
- 16 DIMM slots supporting DDR5 RDIMM(2DPC/1DPC) or MRDIMM(1DPC);
- Support FH DPU and single slot GPU;
- Flexible networking options with 1 AIOM networking slot (OCP NIC 3.0 compatible).;
- Breeze through high throughput workloads with PCIe 5.0 NVMe drive support;
- Trusted Platform Module (TPM) 2.0 9672 onboard;



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| Form Factor              | 1U Rackmount<br>Enclosure: 437 x 43 x 747mm (17.2" x 1.7" x 29.4")<br>Package: (23.8" x 8.1" x 40.6")                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Processor                | Single Socket E2 (LGA-4710)<br>Intel® Xeon® 6700/6500 series processors with P-cores or 6700 series processors with E-cores<br>P-cores: Up to 86C/172T; Up to 336MB Cache<br>E-cores: Up to 144C/144T; Up to 108MB Cache                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| GPU                      | Max GPU Count: Up to 2 single-width GPUs<br>Supported GPU: NVIDIA PCIe: L4<br>CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| System Memory            | Slot Count: 16 DIMM slots/8 Channels<br>Max Memory (1DPC): Up to 2TB 6400MT/s ECC DDR5 RDIMM<br>Max Memory (1DPC): Up to 512GB 8000MT/s ECC DDR5 MRDIMM (P-core only)<br>Max Memory (2DPC): Up to 4TB 5200MT/s ECC DDR5 RDIMM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Drive Bays Configuration | Default: Total 8 bays <ul style="list-style-type: none"> <li>• 8 front hot-swap 2.5" PCIe 5.0 x4 NVMe*/SAS*/SATA* drive bays</li> </ul> Option A: Total 12 bays <ul style="list-style-type: none"> <li>• 8 front hot-swap 2.5" PCIe 5.0 x4 NVMe*/SAS*/SATA* drive bays</li> <li>• 4 front hot-swap 2.5" SAS*/SATA* drive bays</li> </ul> Option B: Total 12 bays <ul style="list-style-type: none"> <li>• 12 front hot-swap 2.5" PCIe 5.0 x4 NVMe*/SAS*/SATA* drive bays</li> </ul> (*NVMe/SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details)<br>M.2: 2 M.2 PCIe 5.0 x2 NVMe slots (M-key 2280(default)/22110; optional configuration) |
| Expansion Slots          | Default <ul style="list-style-type: none"> <li>• 2 PCIe 5.0 x16 FHHL slots</li> <li>• 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| On-Board Devices         | NVMe: NVMe; RAID 0/1/5/10 support(Intel® VROC RAID key required)<br>Network Connectivity: Via AIOM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Input / Output           | LAN: 1 RJ45 1 GbE Dedicated BMC LAN port (via DC-SCM)<br>USB: 2 USB 3.2 Gen1 Type-A ports(Rear) (via DC-SCM)<br>Video: 1 Mini-DP port(Rear) (via DC-SCM)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |





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| System Cooling        | <p>Fans: Up to 8 Counter-Rotating PWM 40x40x56mm Fan(s)</p> <p>Air Shroud: 1 CPU Air Shroud</p> <p>1 M.2 Side Air Shroud</p>                                                                                                                                                                                |
| Power Supply          | 2x 1000W Redundant (1 + 1) Titanium Level (96%) power supplies                                                                                                                                                                                                                                              |
| System BIOS           | BIOS Type: AMI 32MB SPI Flash EEPROM                                                                                                                                                                                                                                                                        |
| Management            | SuperCloud Composer®; Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!                                                                                                                                    |
| PC Health Monitoring  | <p>CPU: Monitors for CPU Cores, Chipset Voltages, Memory</p> <p>FAN: Fans with tachometer monitoring</p> <p>Pulse Width Modulated (PWM) fan connectors</p> <p>Status monitor for speed control</p> <p>Temperature: Monitoring for CPU and chassis environment</p> <p>Thermal Control for fan connectors</p> |
| Dimensions and Weight | <p>Weight: Gross Weight: 47 lbs (21.3 kg)</p> <p>Net Weight: 31 lbs (14.1 kg)</p> <p>Available Color: Black</p>                                                                                                                                                                                             |
| Operating Environment | <p>Operating Temperature: 10°C to 35°C (50°F to 95°F)</p> <p>Non-operating Temperature: -30°C to 60°C (-22°F to 140°F)</p> <p>Operating Relative Humidity: 8% to 80% (non-condensing)</p> <p>Non-operating Relative Humidity: 8% to 90% (non-condensing)</p>                                                |
| Motherboard           | <a href="#">Super X14SBHM</a>                                                                                                                                                                                                                                                                               |
| Chassis               | CSE-MD101TS-R000NDP                                                                                                                                                                                                                                                                                         |