

IoT A+ Server AS -2115HE-TNR

2U Hyper-E with single AMD EPYC™ 9004/9005 series processor, 6 hot-swap 2.5" drive bays and up to 4 PCIe 5.0 x16 slots



Key Applications

Virtualization, Scientific Virtualization, AI Inference and Machine Learning, Cloud Computing, Enterprise Server,

Key Features

- Single AMD EPYC™ 9004/9005* Series Processor up to 400W with air cooling (*AMD EPYC™ 9005 series drop-in support requires board revision 2.x);
- Support for up to 3 double-width PCIe GPU accelerator cards;
- Up to 24 DIMMs supporting up to 3TB DDR5-4800 in 1DPC or 6TB DDR5-4000 in 2DPC or 3TB DDR5-5200 in 1DPC or 6TB DDR5-4400 in 2DPC;
- Flexible networking with up to 2 PCIe 5.0 x16 OCP 3.0 compatible AIOM slots
Optional PCIe slot configurations up to 5 PCIe 5.0 x8 FHFL and 3 PCIe 4.0 x8 FHFL or 3 PCIe 5.0 x16 FHFL and 1 PCIe 4.0 x16 FHFL slots with support for double-width GPU/Accelerator cards;
- 6 front hot-swap 2.5" NVMe drive bays;
- Redundant 2000W Titanium Level Hot-plug power supplies;
- 2U Rackmount chassis with 22.6" (574mm) depth;



Form Factor	2U Rackmount Enclosure: 436.88 x 88.9 x 574mm (17.2" x 3.5" x 22.6") Package: 598 x 247 x 938mm (23.5" x 9.7" x 36.9")
Processor	Single processor(s) AMD EPYC™ 9005/9004 Series Processors Up to 192C/384T
GPU	Max GPU Count: Up to 3 double-width or 4 single-width GPUs CPU-GPU Interconnect: PCIe Gen5 x16 GPU-GPU Interconnect: PCIe
System Memory	Slot Count: 24 DIMM slots/12 Channels Max Memory (1DPC): Up to 3TB 5200MT/s ECC DDR5 RDIMM (AMD EPYC™ 9005 Series Processor) Max Memory (2DPC): Up to 6TB 4400MT/s ECC DDR5 RDIMM (AMD EPYC™ 9005 Series Processor) Max Memory (1DPC): Up to 3TB 4800MT/s ECC DDR5 RDIMM (AMD EPYC™ 9004 Series Processor) Max Memory (2DPC): Up to 6TB 4000MT/s ECC DDR5 RDIMM (AMD EPYC™ 9004 Series Processor)
Drive Bays Configuration	Default: Total 6 bays • 6 rear hot-swap 2.5" PCIe 5.0 x4 NVMe drive bays M.2: 1 M.2 PCIe 3.0 x4 NVMe slot (M-key 22110(default)/2280) 1 M.2 PCIe 3.0 x2 NVMe slot (M-key 22110(default)/2280)
Expansion Slots	PCI-Express (PCIe) Configuration: Option A* • 2 PCIe 5.0 x16 (in x16) AIOM slots (OCP 3.0 compatible) • 3 PCIe 5.0 x16 (in x16) FHFL slots • 2 PCIe 4.0 x8 (in x16) FHFL slots Option B* • 2 PCIe 5.0 x16 (in x16) AIOM slots (OCP 3.0 compatible) • 3 PCIe 5.0 x16 (in x16) FHFL slots • 1 PCIe 4.0 x16 (in x16) FHFL slot Option C • 2 PCIe 5.0 x16 (in x16) AIOM slots (OCP 3.0 compatible) • 5 PCIe 5.0 x8 (in x16) FHFL slots • 3 PCIe 4.0 x8 (in x16) FHFL slots M.2: 1 M.2 PCIe 3.0 x4 slot (M-key 22110(default)/2280) 1 M.2 PCIe 3.0 x2 slot (M-key 22110(default)/2280) PCI: 8 PCI 5V 32-bit slots

On-Board Devices	Via AIOM
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.0 Type-A ports (Front) Video: 1 VGA port TPM: 1 TPM header

(Front View – System)



Drive Bay	Description
	6 Hot-swap 2.5" HDD/SSD Drive Bays

(Rear View – System)



Optional AC/DC Power Supply
VGA Port
2 USB 3.2 Gen 1 Ports
Dedicated BMC LAN Port

Slot Description			Slot Description		
Option 1*	Option 2*	Option 3*	Option 1*	Option 2*	Option 3*
PCIe 5.0 x16 FHFL	PCIe 5.0 x16 FHFL	PCIe 5.0 x8 FHFL	PCIe 5.0 x16 FHFL	PCIe 5.0 x16 FHFL	PCIe 5.0 x8 FHFL
PCIe 5.0 x16 FHFL	---	PCIe 4.0 x8 FHFL	PCIe 5.0 x16 FHFL	---	PCIe 5.0 x8 FHFL
PCIe 5.0 x16 FHFL	PCIe 5.0 x16 FHFL	PCIe 5.0 x8 FHFL	PCIe 4.0 x8 FHFL	PCIe 4.0 x16 FHFL	PCIe 4.0 x8 FHFL
PCIe 5.0 x16 FHFL	---	PCIe 5.0 x8 FHFL	PCIe 4.0 x8 FHFL	---	PCIe 4.0 x8 FHFL

Slot Description	
AIOM / OCP NIC 3.0 (optional)*	
AIOM / OCP NIC 3.0	

*Requires additional parts from the optional parts list

System Cooling	Fans: Up to 6x 6cm heavy duty fans with optimal fan speed control Air Shroud: 1 Air Shroud
Power Supply	2x 2000W Redundant (1 + 1) Titanium Level (96%) Hot-plug power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM BIOS Features: ACPI 6.4 Plug and Play (PnP) SMBIOS 3.5 or later UEFI 2.8 USB Keyboard support
Management	SuperCloud Composer® (SCC); Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); OOB Management Package (SFT-OOB-LIC); SuperServer Automation Assistant (SAA) New!
PC Health Monitoring	Fan: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors Voltage: System temperature, Memory temperature, CPU temperature, 3.3V standby, +5V standby, +5V, +3.3V, +12V, CPU thermal trip support
Dimensions and Weight	Weight: Gross Weight: 47.4 lbs (21.5 kg) Net Weight: 34.4 lbs (15.6 kg) Available Color: Silver
Operating Environment	RoHS Compliant Operating Temperature: 10°C to 30°C (50°F to 86°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)
Motherboard	Super H13SSH-E
Chassis	CSE-HE211-R000NFP-A