

HPS-GNRU1A

1U Compact Server support Single Intel Xeon 6 Processor, 850W, 10x E1.S NVMe SSD, IPMI2.0



Features

- 1U Chassis
- 438mm (W) x 43.5mm (H) x 596.9mm (D)
- 1 x 850W Single PSU
- 10 x NVMe E1.S hot-swap drive bays
- Intel LGA4710 Socket supports Intel® Xeon® 6 6500P/6700P/6700E series Processor (Max. TDP at 350W)
- 8 x DDR5 6400 MHz RDIMM & 8000 MHz MRDIMM up to 2TB
- IPMI 2.0 with AST 2600 BMC controller onboard.
- 2 x PCIe 5.0 x16 FHFL slots via riser card & 1 x PCIe 5.0 x8 HHHL slot via riser card



Intel® Xeon® 6 Processors



8 x DDR5 RDIMM & MRDIMM 6400MHz & 8000MHz



IPMI 2.0 Supported



10GbE



PCIe Gen5 Multiple Expansion

Specifications

System Information

Processor	Intel LGA4710 Socket supports Intel® Xeon® 6 6500P/6700P/6700E series Processor (Max. TDP at 350W)
System Memory	8 x DDR5 6400 MHz RDIMM & 8000 MHz MRDIMM Up to 2TB
BIOS	AMI UEFI BIOS
Watchdog Timer	System reset event 0 ~ 6553 seconds
H/W Status Monitor	CPU temperature Fan speed and voltage monitoring Fan speed control Case open detection
TPM	TPM 2.0 onboard
IPMI	IPMI 2.0 with AST 2600 BMC controller onboard
SBC	HPM-GNRUP

Front I/O

USB	2 x USB 3.2 Gen1 ports
Power Button	1 x RS232 port
Reset Button	1 x MiniDP port
LED Indicator	1 x Power status indicator 1 x Status indicator 2 x Network activity indicator

Rear I/O

USB	2 x USB 3.2 Gen1 ports
COM Port	1 x RS232 port
DP	1 x MiniDP port
RJ-45	4 x RJ45 1 x MGMT port for dedicated IPMI access only 1 x 1GbE port shared with IPMI access 2 x 10GbE ports

Display

Graphic Chipset	AST 2600 BMC controller
Resolution	1 x MiniDP port 1920 x 1200 @ 60Hz 32bpp

Power Requirement

Power Supply Unit	1 x 850W 1U Single PSU (Default) - 850W with Input 100-240Vac 1 x 850W Slimtype CRPS (Option) - 700W with Input 100-240Vac - 850W with Input 180-240Vac
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Expansion

Expansion	2 x PCIe Gen5 x16 slots via riser card & 1 x PCIe Gen5 x8 slot via riser card
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Storage

M.2	The following part numbers include 2 x M.2 M-Key Slot to support PCIe 5.0 x4 NVMe SSD 2242/2260/2280/22110 form factor a) HPS-GNRU1A8-A1-01R b) HPS-GNRU1AR-A1-01R
2.5 Drive Bay	The following part numbers include 4 x 2.5"U.2 NVMe SSD front accessible drive bays a) HPS-GNRU1A8-A1-01R b) HPS-GNRU1AR-A1-01R
Other Storage Device	The following part numbers include 10 x E1.S NVMe front accessible drive bays a) HPS-GNRU1A8-A1R b) HPS-GNRU1AR-A1R

Ethernet

LAN Chipset	1 x Intel I210AT GbE Ethernet port shared with IPMI management port 1 x Intel E610-XAT2 10GbE controller supports 2 x 10GbE Ethernet ports
LAN Port	4 x RJ45 1 x MGMT port for dedicated IPMI access only 1 x 1GbE port shared with IPMI access 2 x 10GbE ports

Mechanical & Environmental

Operating Temp.	0 ~ 40°C (L6 system with 850W Single PSU) with Air shroud
Storage Temp.	-40°C 24hrs IEC60068-2-1 Cold test Test: Ab 70°C/ RH95% 24hrs IEC 60068-2-3 Test: Ca
Operating Humidity	35°C @95% Relative Humidity, Non-condensing
Dimension (W x L x D)	1U Chassis 438mm (W) x 43.5mm (H) x 596.9mm (D)

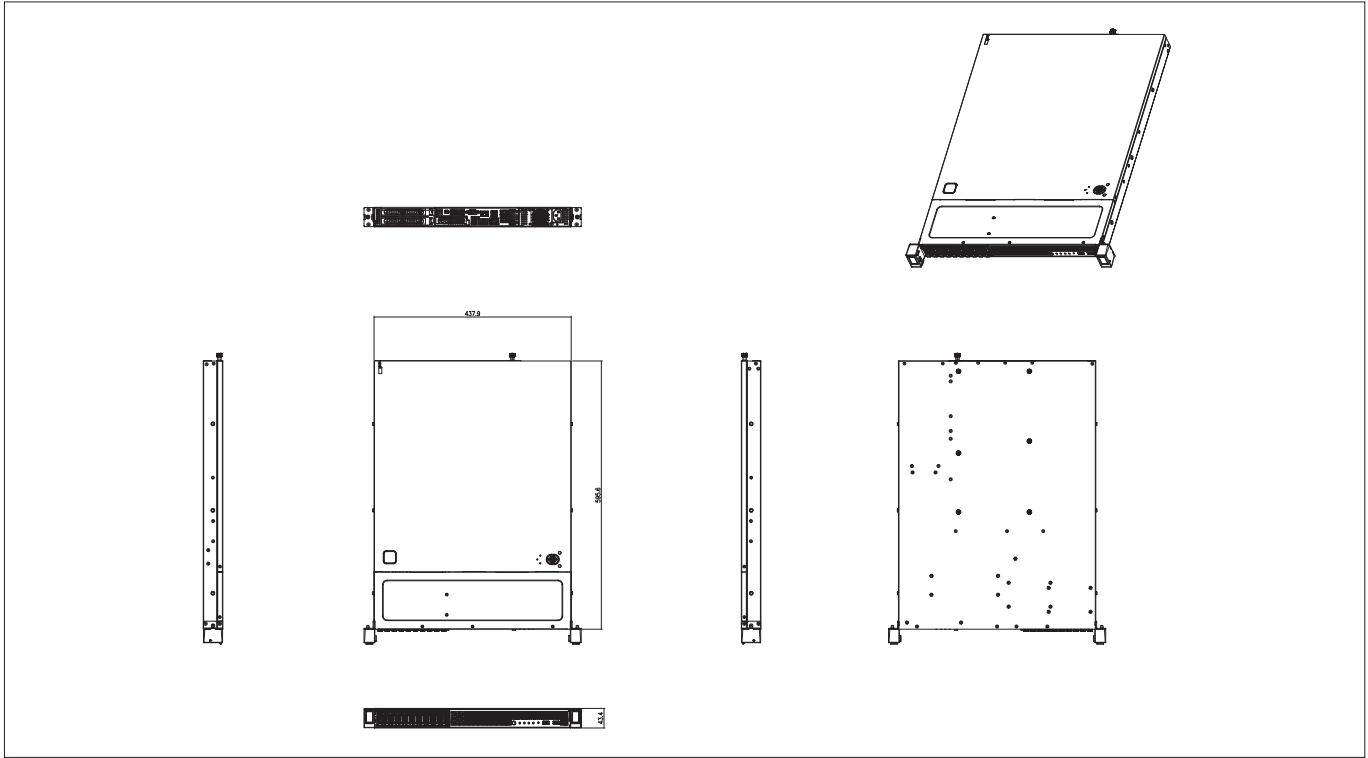
Software Support

OS	Windows 11 SAC and LTSC Windows Server 2025 Ubuntu 24.04 LTS or later Red Hat Enterprise Linux (RHEL)
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850W, 10x E1.S NVME SSD, IPMI2.0

Mechanical Drawing



Ordering Information

Model Name	P/N	CPU	Chipset	Memory	PCIe Slot	10GbE/ 2.5GbE/ 1GbE	USB 3.2 Gen2/ USB 3.2 Gen1/ USB 2.0	2.5" Drive Bay	Other Storage	PSU
HPS-GNRU1A	HPS-GNRU1A8-A1R	1	NA	8	3	2/0/1	0/4/0	NA	10x E1.S NVMe	850W Single PSU
HPS-GNRU1A	HPS-GNRU1A8-A1-01R	1	NA	8	3	2/0/1	0/4/0	4	NA	850W Single PSU
HPS-GNRU1A	HPS-GNRU1AR-A1R	1	NA	8	3	2/0/1	0/4/0	NA	10x E1.S NVMe	850W 1+1 CRPS
HPS-GNRU1A	HPS-GNRU1AR-A1-01R	1	NA	8	3	2/0/1	0/4/0	4	NA	850W 1+1 CRPS

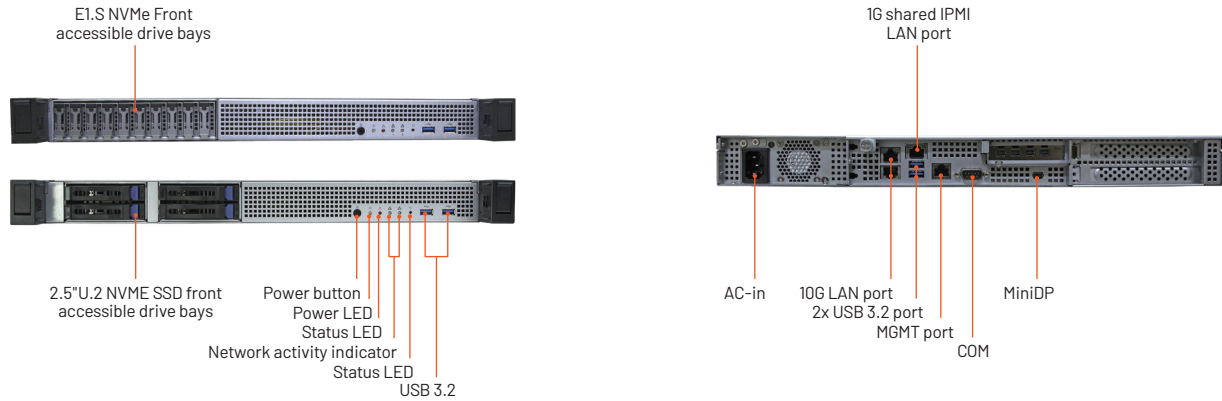
Packing List

Item	P/N	Quantity
L6 1U Rackmount w/HPM-GNRUPA/850W/10xE1.S	HPS-GNRU1A8-A1R	1
LGA4710 CPU carrier-E2B	E199TR00082R	1

Optional Items

Item	P/N
CPU cooler 1U passive LGA4710 350W	E1961251C50000R
Carrier-E2A for LGA4710	E199TR00081R

I/O Overview



CPU Support List (HPC Only)

SKU	Launch Date	# of Cores	# of Threads	Processor Base Frequency	Max Turbo Frequency	TDP (W)
Intel® Xeon® 6740P	Q1,25	48	96	2.1 GHz	3.8 GHz	270
Intel® Xeon® 6781P *(Only HPM-GNRUA use)	Q1,25	80	160	2.0 GHz	3.8 GHz	350
Intel® Xeon® 6530P	Q1,25	32	64	2.3 GHz	4.1 GHz	225
Intel® Xeon® 6520P	Q1,25	24	48	2.4 GHz	4.0 GHz	210
Intel® Xeon® 6731P *(Only HPM-GNRUA use)	Q1,25	32	64	2.5 GHz	4.1 GHz	245
Intel® Xeon® 6521P *(Only HPM-GNRUA use)	Q1,25	24	48	2.6 GHz	4.1 GHz	225
Intel® Xeon® 6736P	Q1,25	36	72	2.0 GHz	4.1 GHz	205
Intel® Xeon® 6517P	Q1,25	16	32	3.2 GHz	4.2 GHz	190
Intel® Xeon® 6515P	Q1,25	16	32	2.3 GHz	3.8 GHz	150
Intel® Xeon® 6505P	Q1,25	12	24	2.2 GHz	4.1 GHz	150
Intel® Xeon® 6780E	Q2'24	144	144	2.2 GHz	3.0 GHz	330
Intel® Xeon® 6768E	Q2'24	144	144	1.9 GHz	2.7 GHz	250
Intel® Xeon® 6756E	Q2'24	128	128	1.8 GHz	2.6 GHz	225
Intel® Xeon® 6740E	Q2'24	96	96	2.4 GHz	3.2 GHz	250
Intel® Xeon® 6710E	Q2'24	64	64	2.4 GHz	3.2 GHz	205