HPC-6120
ASMB-610V3

1U 18" Short-Depth Edge Accelerator Server with Intel® 14th/13th/ 12th Gen. Core™ Processors, Supporting 4 Expansion Slots



Features

- Single Intel® 14th/13th/ 12th Gen. Core™ processors
- Memory: DDR5 5600/4400/4000/3600 MHz ECC/Non-ECC UDIMM up to 128 GB
- One PCIe x16 slot or two PCIe x8 slots support FH/9.5" length cards*
- Two PCIe x4 slots support one external and one internal low profile cards
- Two hot-swappable 2.5" drive bays support SASII**/SATAIII drives
- One onboard M.2 2280/22110 (SATA/PCIe compatible)
- 4 x GbE, 2 x USB3.2, 1 x Serial Port, 1x VGA, 1 x IPMI
- Multiple power supply options

* Support double-deck GPU card with active fan
** SASII is only supported with installing RAID card

Specifications

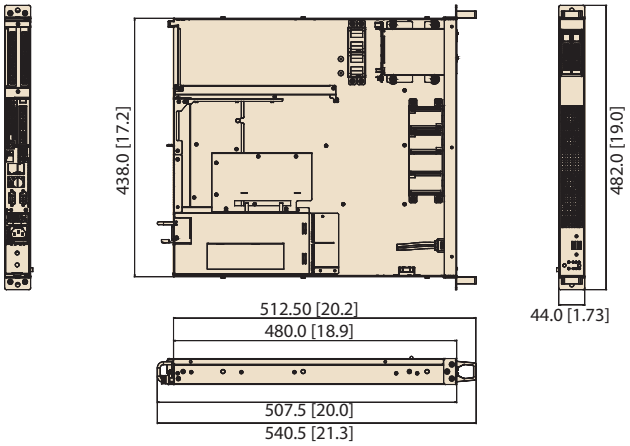
Processor System	Socket	Intel LGA 1700	
	CPU Type	Intel® 14th/13th/12th Generation Core™ i3/i5/i7/i9 Series (TDP up to 125W)	
	Chipset	Intel W680 Chipset	
Memory	Total Slots	4 (2 DIMM Per Channel)	
	Capacity	128GB	
	Memory Type	DDR5 ECC/Non-ECC 5600/4400/4000/3600 MHz UDIMM (288-pin)*	
Graphics	Controller	Aspeed AST2600	
	VRAM	DDR4 4Gb	
Expansion Slot	LR Riser	One PCIe X16 Slot (Gen5 X16 Link) or Two PCIe X8 Slot (Gen5 X8 Link) for FH/9.5" L Expansion Slot	
	MR Riser	One PCIe X4 Slot (Gen4 X4 Link) for External Low Profile Card	
	IR Riser	One PCIe X4 Slot (Gen4 X4 Link) for Internal Low Profile Card	
Storage	2.5" (Hot-Swap)	2	
	M.2 (2280/22110)	1 (SATA/PCIe Gen3 X4 Link)	
Ethernet	Interface	4 x 10/100/1000 Mbps Gigabit Ethernet	
	Controller	1 x Intel I350	
Front I/O Interface	USB	2 x USB3.2	
Rear I/O Interface	USB	2 x USB3.2	
	Serial Port	1	
	Display	1 x VGA	
	RJ-45	5 (4 x GbE + 1 Dedicated NIC for IPMI)	
Internal connector	USB	2 x USB3.2 ports(Onboard Header)	
	Serial Port Header	1	
	PS/Keyboard/Mouse Header	1	
	SMBus	1	
	Chassis Intrusion	1	
Watchdog Timer	Output	System Reset	
	Interval	Programmable, 1~255 Sec/Min	
Power Supply	Output Range	500W Single Flex ATX Power Supply or 650W Platinum 1+0 Non-Redundancy Power Supply	
	Input Range	AC 100 ~ 240 V	
Cooling	System Fan	3 (4CM/34 CFM) for CPU 2 (4CM/28 CFM) for Cards	
	Air Filter	-	
Miscellaneous	LED Indicators	Power Status, LAN1-LAN4 Status, System Information LED	
	Remote Management	Advantech Remote Monitoring Utility	
Environment		Operating	Non-Operating
	Temperature	0 ~ 40 °C (32 ~ 104 °F)	-40 ~ 70 °C (-40 ~ 156 °F)
	Humidity	10 ~ 85% @ 40 °C	10 ~ 95% @ 40 °C
	Vibration (5 ~ 500 Hz)	0.3 Grms	2 G
	Shock	10G (with 11MS Duration, Half Since Wave)	
Physical Characteristics	Dimension (W x H x D)	438mm x 44mm x 480mm (17.24" x 1.73" x 18.9")	
	Weight (N.W. / G.W.)	8.5kg/10.5kg	

* ECC support please reference to CPU specification

All product specifications are subject to change without notice.
Last updated: 20-Jan-2025

Dimensions

Unit: mm [inch]



Ordering Information

Part Number	Compatible Chassis	Memory	Chipset	GbE/ IPMI	Graphic
ASMB-610V3-00A1	HPC-6120	4 x DDR5 ECC/Non-ECC UDIMM	W680	4/1 (Dedicated NIC)	AST2600

Part Number	Compatible MB	CPU	CPU Cooler	GPU	Build-in PSU
HPC-6120-50ZX	ASMB-61 Series	Single P, up to 125W	1U Heatsink	150W with Active Fan	500W, Single Flex ATX PSU
HPC-6120-65ZX	ASMB-61 Series	Single P, up to 125W	1U Heatsink	300W with Active Fan	650W, 1+0 Single (Non-Redundancy) PSU

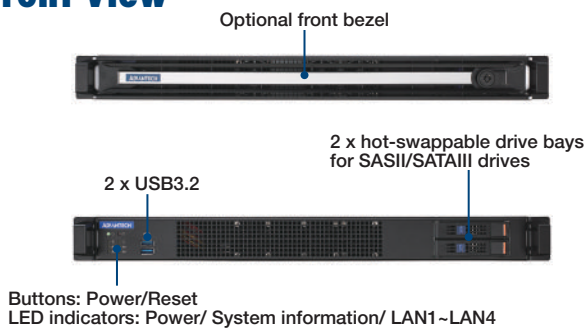
System Contents

Items	Advantech P/N	Quantity
Startup Manual	2042061000	1
Rackmount Kit (handle and Ear set)	N/A	2

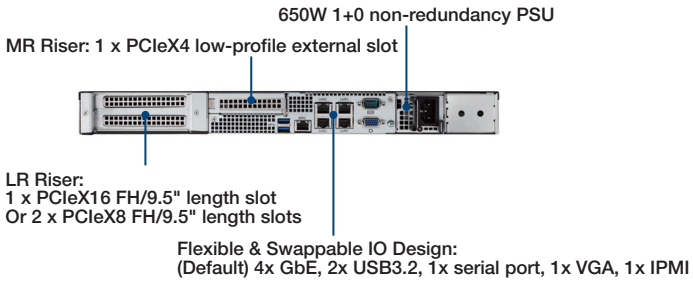
Optional Accessories

Items Description	Advantech P/N	Quantity
20" ~ 22" Slide Rail Kit	968DE00012	1
TPM 2.0 Module by SPI	PCA-TPMSPI-00A1	1
LGA 1700 CPU Heatsink for 1U Chassis	1970005531T001	1
GPU Power Cable for GPU Card with PCIE 8P+8P Power Connector	1700030122-01	1
GPU Power Cable for GPU Card with CPU 8P Power Connector	1700033606-01	1
GPU Power Cable for GPU Card with CPU 8P to 16P power connector	1700035589-01	1
650W Power Module	XSUN-TG15-0650-01	1
1U Front Bezel	98R1610020E	1

Front View



Rear View



Inner View

