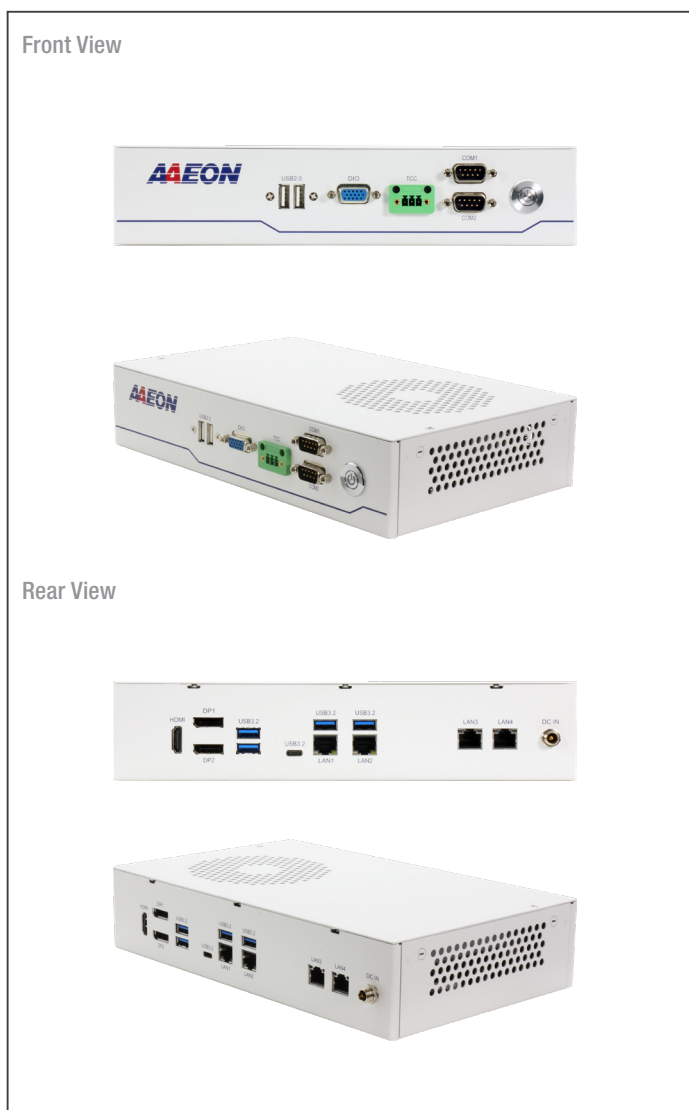


EPIC-ADS7-PUC

EPIC System with 12th Generation Intel® Core™ Processor



Features

- 12th Generation Intel® Core™ Processor
- DDR5 SODIMM x 2, up to 32GB
- 3 Simultaneous Displays: DP 1.4a x 2, HDMI 2.1 x 1
- SATA III x 2 (2.5" SSD x 2)
- 2.5GbE x 1, GbE x 3
- USB 3.2 Gen 2 x 2 (Type-C x 1), USB 3.2 Gen 2 x 4, USB 2.0 x 2
- M.2 3052 B-Key x 1, M.2 2280 M-Key x 1, M.2 2230 E-Key x 1
- COM Port x 2, DIO 8-bit x 1
- DC Jack 12V in

Display	
VGA/LCD Controller	Intel® UHD Graphics 770 / Intel® UHD Graphics 730 (by CPU sku)
Video Output	3 Simultaneous Displays DP 1.4a x 2, HDMI 2.1 x 1 (up to 3840 x 2160)
Backlight Inverter Supply	—
I/O	
Ethernet	Intel® I211AT, 10/100/1000Base, RJ-45 x 2 (No PXE & active LED function support) Intel® I219LM, 10/100/1000Base, RJ-45 x 1 Intel® I225LM, 10/100/2500Base, RJ-45 x 1
Audio	—
USB Port	USB 3.2 Gen 2 x 2 (Type-C x 1, supported by SKU) USB 3.2 Gen 2 x 4 (Type-A, supported by sku) USB 2.0 x 2 (Type-A)
Serial Port	COM RS232/422/485 x 2
Parallel Port (printer port)	—
HDD Interface	—
SSD	SATA3 x 2 with +5V SATA power connector onboard
Expansion Slot	M.2 3052 B-Key x 1 (PCIe 3.0 [x1] + USB 3.0 or PCIe [x2] Only) M.2 2280 M-Key x 1 (PCIe 4.0 [x4]) M.2 2230 E-Key x 1 (PCIe 3.0 [x1] + USB 2.0) 3-pin TCC x 1 (supported by SKU)
DIO	DIO 8 bit x 1
TPM	TPM 2.0 (Optional)
Touch	—
SIM	Nano SIM Slot x 1 (Supported by sku)

*Note : Please note that the function may be different based on PCH sku.

Specifications

System	
Form Factor	EPIC System
CPU	12th Generation Intel® Core™ Series Processor, up to 65W
CPU Frequency	Up to i7-12700E, up to 4.8GHz
Chipset	Intel® 600 Series Desktop Chipset (R680E/Q670E/H610E)
Memory Type	DDR5 4800 SODIMM x 2
Max. Memory Capacity	up to 32GB (Each SO-DIMM up to 16GB)
BIOS	UEFI
Wake on LAN	Yes (I219LM + I225LM RJ-45 support only)
Watchdog Timer	255 Levels
Power Requirement	DC in +12V
Power Supply Type	AT/ATX
Power Consumption (Typical)	with i7-12700E CPU + R680E Chipset Peak : +12V@18.15A, 217.8W during 100% loading test Steady State : +12V@11.15A, 133.8W
Dimension (L x W)	10.2" x 6.3" x 2.1" (260mm x 160mm x 55mm)
Operating Temperature	32°F ~ 122°F (0°C ~ 50°C) with 0.5 m/s airflow
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	380,264
Certification	CE/FCC Class A, LVD

Optional Accessories

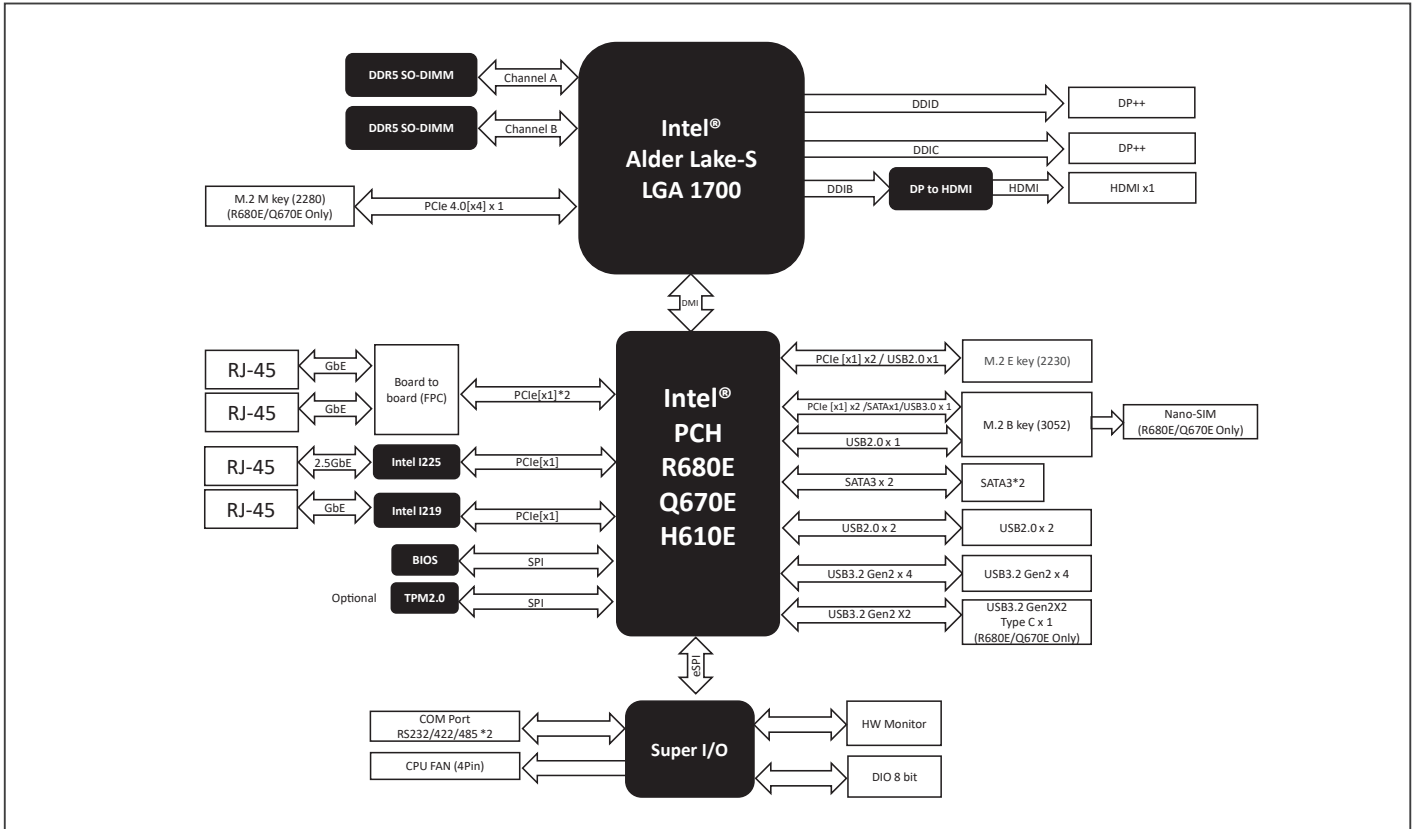
Part Number	Description	QTY
1255X00063	AC/DC Adapter:100-240V.150W.DC JACK	1
1702031803	Power cord for EU	1
1702031802	Power cord for US	1
170203180J	Power cord for UK	1
170203180E	Power cord for Japan	1
170203180B	Power cord for China	1
1702031811	Power cord for Taiwan	1
EPIC-ADS7-FAN01	CPU cooler for EPIC-ADS7 series use	1

Packing List

- EPIC-ADS7-PUC x 1
- SATA Cable x 2
- SATA Power Cable x 2
- Screw, thermal pads and accessories kit x 1
- CPU Cooler Backplate x 2

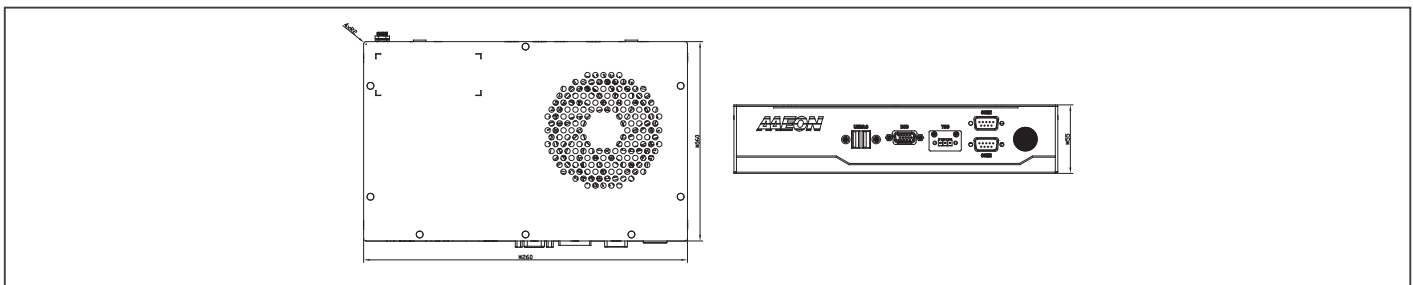
*(Please note that the packing list may be different based on sku, check order information or contact AAEON if any question.)

Block Diagram



Dimension

Unit: mm



HSIO Function Table Matrix

SKU	SATA3	USB3.2 Gen2 x 2 Type C	USB3.2 Type A	M.2 3052 B key	M.2 2280 M key	M.2 2230 E key	Ethernet (RJ45)	TCC
R680E sku	Yes (2 ports)	Yes	Yes (4 ports, up to USB3.2Gen2)	Yes (with Nano SIM) (PCIe[x1]+USB3)	Yes	Yes	I225LM (2.5GbE) x 1, I219LM (GbE) x 1, I211AT (GbE) x 2	Yes
Q670E sku	Yes (2 ports)	Yes	Yes (4 ports, up to USB3.2Gen2)	Yes (with Nano SIM) (PCIe[x1]+USB3)	Yes	Yes	I225LM (2.5GbE) x 1, I219LM (GbE) x 1, I211AT (GbE) x 2	No
H610E sku	Yes (2 ports)	No	Yes (4 ports, up to USB3.2Gen1)	Yes (without Nano SIM) (PCIe[x2])	No	Yes	I225LM (2.5GbE) x 1, I219LM (GbE) x 1, I211AT (GbE) x 2	No

Ordering Information

Part Number	CPU	Chipset	Fan/Fanless	Display	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	Power Temp	Others
EPIC-ADS7-PUC-A11-0003 (Barebone)	Socket Type (LGA1700)	R680E Chipset	4 Pin FAN Connector	DP++ 1.4a x 2 HDMI 2.1 x 1	SATA 3 x 2	2.5GbE (RJ45) x 1 GbE (RJ45) x 3	USB3.2 Gen2x2 (Type C) x 1, USB3.2 Gen2x1 (Type A) x 4, USB2.0 (Type A) x 2	—	2	M.2 3052 B key x 1 (with Nano Sim Slot, PCIe[x1]+USB3) M.2 2280 M key x 1 M.2 2230 E key x 1	+12V DC in	32°F ~ 122°F (0°C ~ 50°C) with 0.5m/sec air flow	COM Port x 2 (RS232/422/485), DIO 8 bit x 1, TPM 2.0 x 1, TCC (3 pin) x 1 Accessories: CPU cooler Backplate x 2, SATA Power Cable x 2, SATA Cable x 2, Screw, thermal pads and accessories kit x 1
EPIC-ADS7-PUC-A11-0004 (Barebone)	Socket Type (LGA1700)	H610E Chipset	4 Pin FAN Connector	DP++ 1.4a x 2 HDMI 2.1 x 1	SATA 3 x 2	2.5GbE (RJ45) x 1 GbE (RJ45) x 3	USB3.2 Gen2x1 (Type A) x 4, USB2.0 (Type A) x 2	—	2	M.2 3052 B key (without Nano Sim Slot, PCIe[x2] only) M.2 2230 E key x 1	+12V DC in	32°F ~ 122°F (0°C ~ 50°C) with 0.5m/sec air flow	COM Port x 2 (RS232/422/485), DIO 8 bit x 1, TPM 2.0 x 1 Accessories: CPU cooler Backplate x 2, SATA Power Cable x 2, SATA Cable x 2, Screw, thermal pads and accessories kit x 1

*Note : EPIC-ADS7-PUC-A11-0003 & 0004 (Barebone) don't include CPU Cooler inside, please order EPIC-ADS7-FAN01 together with barebone to achieve the best performance.