

# MXM-ACMA-PUC

System Box with 12th/13th Generation Intel Core Processor & MXM 3.1 Type A Intel® Arc™ A370E/Intel® Arc™ A350E GPU



## Features

- 12th/13th Gen Intel® Core™ Processor, up to 35W
- DDR5 SODIMM 4800 x 2, up to 64GB
- HDMI 2.0 x 1 (Supported by Main Board), DP++ 1.4 x 4 (Supported by MXM)
- 2.5GbE x 3, 1GbE x 1
- USB 3.2 Gen 2 x 2, USB 2.0 x 2
- M.2 2280 M-Key x 1, M.2 3052 B-Key x 1, M.2 2230 E-Key x 1
- Supports MXM 3.1 Type A Module, up to 55W (MXM-ACMA series)
- COM Port x 2, GPIO 8-bit, DC 19V-24V



External I/O	
Ethernet	Intel® Ethernet Controller I226-LM, 2.5GbE RJ-45 x 3 Intel® Ethernet Connection I219-LM, GbE RJ-45 x 1
USB	USB 3.2 Gen 2 x 2, USB 2.0 x 2
Serial Port	COM 1 ~ COM 2 (RS-232/422/485, RI as default, 5V/12V selected by BOM change)
Video	HDMI 2.0 x 1, up to 3840 x 2160 @60Hz (from Main Board) DP++1.4 x 4 (from MXM Module) up to 1920 x 1080
Internal I/O	
USB	—
Serial Port	—
Video	—
SATA	SATA 6Gb/s x 2, +5V SATA Power Connector x 2
Audio	—
DIO/GPIO	—
SMBus/I2C	—
Touch	—
Fan	4-Pin Smart Fan (CPU) x 1, 3-Pin Fan (MXM-ACMA) x 1, System Fan x 1
SIM	Nano SIM x 1
Front Panel	Power Button, Power LED
Others	—
Expansion	
Mini PCI-E/mSATA	—
M.2	M.2 2280 M-Key x 1 (PCIe 4.0 [x4] x 1) M.2 3052 B-Key x 1 (PCIe 3.0 [x2] + USB 3.2 + USB 2.0) M.2 2230 E-Key x 1 (PCIe 3.0 [x1] + USB 2.0)
Others	MXM 3.1 Type A Module
Environment & Certification	
Operating Temperature	14°F ~ 122°F (-10°C ~ 50°C) with 0.7m/sec airflow
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	823,430 Hours
EMC	CE/FCC Class A

## Specifications

System	
Form Factor	MXM System
CPU	12th/13th Generation Intel® Core™ Processor, up to 35W
Chipset	Intel® Q670E Chipset
Memory Type	Dual Channel DDR5 4800 SODIMM x 2, up to 64GB
BIOS	UEFI
Wake On Lan	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0
RTC Battery	Lithium Battery 3V/240mAh
Dimension	310mm x 160mm x 75mm
OS Support	Windows 10 (64bit) Ubuntu 24.04/kernel 6.8
Power	
Power Requirement	+19V to +24V
Power Supply Type	AT/ATX
Connector	3Pin Phoenix Connector
Power Consumption	Intel® Core™ i7-13700TE, DDR5 32GB x 2, Intel® Arc™ A370E, 3.54A @22.9V, 80.83W (Typical) Intel® Core™ i7-13700TE, DDR5 32GB x 2, Intel® Arc™ A370E, 7.48A @23.1V, 167.71W (Max)
Display	
Controller	CPU Graphic Controller Intel® UHD Graphics 770 (i5 SKU and above) Intel® UHD Graphics 730 (i3 SKU) MXM-ACMA Graphic Module: Intel® Arc™ A370E/Intel® Arc™ A350E Graphics
LVDS/eDP	—
Display Interface	HDMI 2.0 x 1, up to 3840 x 2160 @60Hz (from Main Board) DP++ 1.4 x 4 (from MXM Module)
Multiple Display	Up to 1 Simultaneous Displays from Main Board Up to 4 Simultaneous Displays from MXM-ACMA
Audio	
CODEC	—
Audio Interface	—
Speaker	—

## Packing List

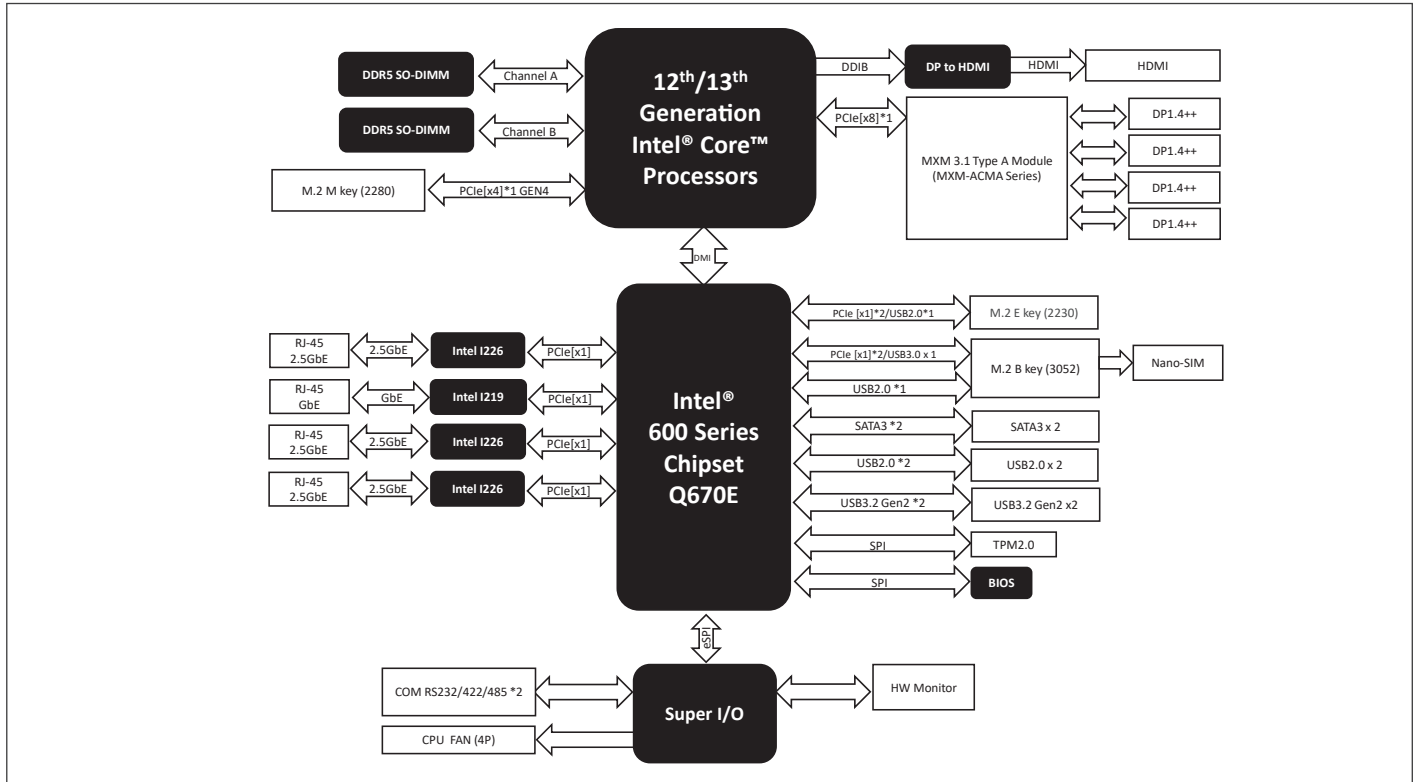
- MXM-ACMA-PUC

## Optional Accessories

Part Number	Description	Qty
170X000593	SATA Cable	1
1702150155	SATA POWER Cable	1
1255903300	AC/DC Adapter.19.5V.330W.16.9A.AC.100-240.3P phoenix 7.62mm	1
1702031802	Power code for US	1
1702031803	Power code for Europe	1
170203180E	Power Cord for Japan	1
170203180J	Power Cord for UK	1
170203180B	Power Cord for China	1
1702031811	1702031811	1

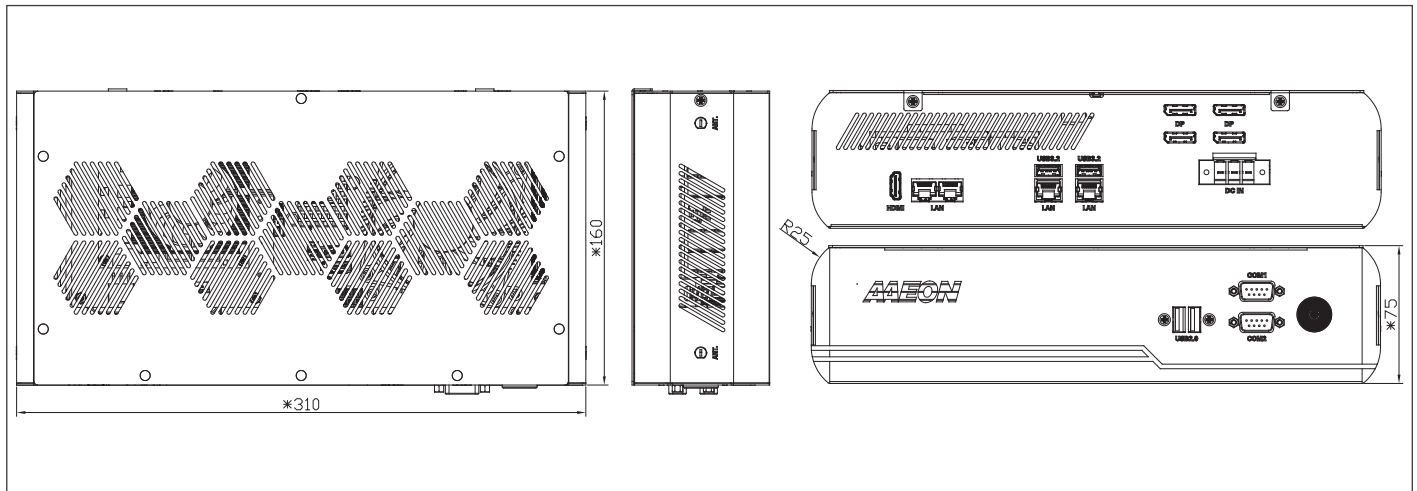
Note: All specifications are subject to change without notice.

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

Part Number	CPU	Memory	Display	Storage	LAN	USB	COM Port	Expansion	TPM	Power	Operating Temperature	Others
MXM-ACMA-PUC-A10-0001	Intel® Core™ i7-13700TE (with Q670E)	DDR5 SODIMM 8GB x 2	HDMI x 1, DP++ x 4	SATA 6.0 Gbps x 2	2.5GbE x 3, GbE x 1	USB3.2 Gen2 x 2 USB2.0 x 2	RS232/422/485 x 2	M.2 2280 M-Key x 1, M.2 3052 B-Key x 1, M.2 2230 E-Key x 1, PCIe[x8] x 1	TPM 2.0	+19V to +24V AC power connector	-10°C ~ 50°C	Nano SIM x 1, MXM-ACMA (A370E)
MXM-ACMA-PUC-A10-0003	Intel® Core™ i3-13100TE (with Q670E)	DDR5 SODIMM 8GB x 2	HDMI x 1, DP++ x 4	SATA 6.0 Gbps x 2	2.5GbE x 1, GbE x 1	USB3.2 Gen2 x 2 USB2.0 x 2	RS232/422/485 x 2	M.2 3052 B-Key x 1, M.2 2230 E-Key x 1, PCIe[x8] x 1	TPM 2.0	+19V to +24V AC power connector	-10°C ~ 50°C	Nano SIM x 1, MXM-ACMA (A350E)