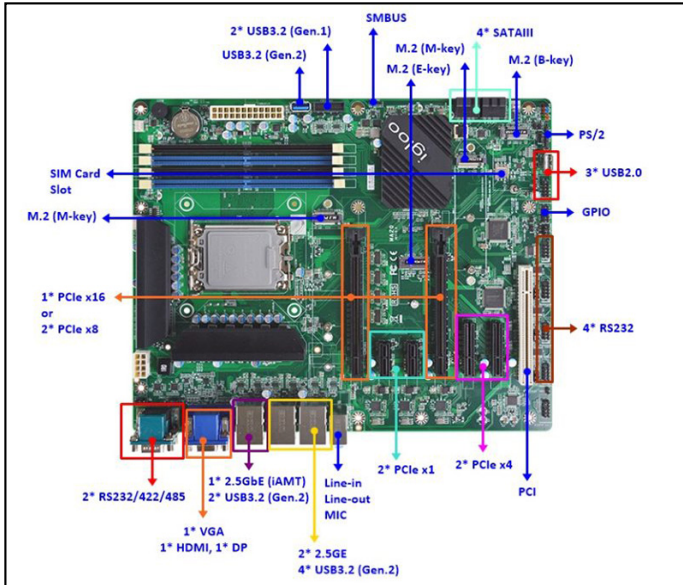


ATX Motherboard with Intel® LGA1700 12/13/14th Gen Socket Processor and Intel® Q670E Chipset



Features

- Powered by Intel® LGA1700 12/13/14th Gen Socket Processor (Alder Lake-S, TDP 125W)
- Supports 4 x DDR5 4800MHz UDIMM memory up to 192GB
- Offer 3 x Intel® 2.5GbE for fast and reliable networking
- Triple display outputs with 1 x 4K HDMI, 1 x 4K DP, and 1 x VGA
- Flexible storage options: 4 x SATA III (RAID 0,1,5,10) and 2 x M-Key (PCIe Gen4x4)
- Additional Expansion: 1 x PCIe Gen4 x16, 2 x PCIe Gen4x4, 2 x PCIe Gen3x1, 1 x PCI, 1 x M.2 E-Key, and 1 x B-Key
- Comprehensive I/O: 12 x USB (7 x USB 3.2 Gen2), 6 x COM, and 1 x GPIO
- Supports Intel® PTT (fTPM) and optional TPM 2.0 (dTPM) onboard

Specifications

SYSTEM	
MB FORM FACTOR	ATX
CPU	Intel® LGA1700 12/13/14th Gen Socket Processor (Formerly Alder Lake-S, TDP 125W)
CHIPSET	Intel® Q670E
MEMORY	4 x DDR5 4800/4000MHz Dual Channel U-DIMM, up to 192GB
BIOS	AMI 256Mb Flash ROM
WATCHDOG TIMER	255 Levels
SECURITY	TPM2.0 (Optional)
DIMENSION (W X D)	305.0 (W) x 244.0 (D) mm (12" x 9.6")
OS SUPPORT	Windows® 11 (64bit) Windows® 10 (64bit) Linux
POWER	
POWER REQUIREMENT	ATX Power Supply
POWER ON MODE	AT / ATX
CONNECTOR	24+8-pin ATX PWR
DISPLAY	
GPU	Intel® UHD Graphics
DP	1 x DP1.4a (Max Resolution: 4096 x 2304@60Hz)
HDMI	1 x HDMI 2.0b (Max Resolution: 4096 x 2160@60Hz)
VGA	1 x VGA (Max Resolution: 1920 x 1080 @60Hz)
MULTIPLE DISPLAY	Support 3 Displays
AUDIO	
CODEC	Realtek Audio Codec
Line-in	1 x Audio Jack for Line-In
Line-out	1 x Audio Jack for Line-Out
MIC-in	1 x Audio Jack for MIC-In
LAN	
ETHERNET	1 x RJ45 for Intel® I226-LM 2.5GbE 2 x RJ45 for Intel® I226-V 2.5GbE
USB PORT	
USB	6 x USB 3.2 Gen2 Internal USB Type A (Vertical) for 1 x USB 3.2(Gen.2) Internal Header for 2 x USB 3.2 Internal Header for 2 x USB 2.0 Internal USB Type A (Vertical) for 1 x USB 2.0
SERIAL PORT	
COM	2 x DB-9 for RS-232/422/485 Internal Header for 4 x RS-232
INTERNAL I/O	
GPIO	8-Bit
SMBUS	Yes
ADDITIONAL	1 x Chassis Intrusion 1 x PS/2 1 x Audio Header 1 x AT Mode Selection
STORAGE	
SATA	4 x SATA III 1 x SATA Power Connector
RAID	RAID 0, 1, 5, 10
EXPANSION	
M.2	1 x M-Key 2242/2280 (PCIe 4.0 x4) Support NVMe 1 x M-Key 2242/2280 (PCIe 4.0 x4/SATA interface) support NVMe 1 x E-Key 2230 (USB 2.0/PCIe 3.0 x1) Support CNVi 1 x B-Key 3042/3052 (PCIe Gen.3 x1/USB3.2 Gen.2/USB2.0 interface) support 4G/5G Module
PCI-E	1 x PCIe Gen.4 x16 or 2 x PCIe Gen.4 x 8 2 x PCIe Gen.4 x4 2 x PCIe Gen.3 x1 1 x PCI
SIM	1 x Nano SIM Card Slot
ENVIRONMENT & CERTIFICATION	
SHOCK	15G, 11ms duration
VIBRATION	1 Grms/ 5- 500Hz/ Operation
OPERATING TEMPERATURE	0°C ~ 60°C (32°F ~ 140°F)
STORAGE TEMPERATURE	-20°C ~ 85°C (-4°F ~ 185°F)
OPERATING HUMIDITY	10 ~ 90% Relative Humidity, Non-condensing
CERTIFICATION	CE/FCC Class A LVD
ESG DECLARATION	EU RoHS China RoHS REACH

MA20-Q6700



ATX

Dimension Unit: mm

