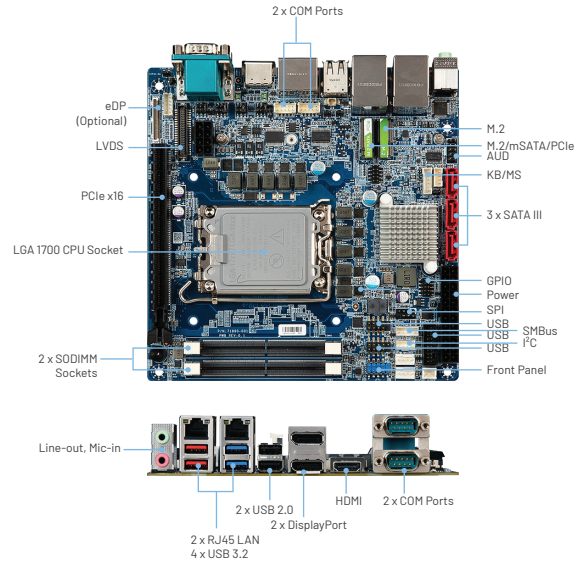


Features

- LGA 1700 socket supports 12th Gen Intel® Alder Lake/ 13th Gen Intel® Raptor Lake/ 14th Gen Meteor Lake Intel® Core™ 9/7/5/3 Processor
- Supports Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent)
- Intel® H610E PCH, x4 Gen4 DMI
- 2 x SODIMM sockets support DDR5 5600MHz up to 64GB
- Gen 4 PCIe x16, M.2 NVMe and CNVi
- TPM 2.0
- Intel® I225-V Ethernet Controller
- HDMI 1.4b 4k, 2 x DP++ 1.4a 4k, LVDS/eDP
- Supports 3 Independent Displays
- 6 x USB 3.2 Gen 1x1, 6 x USB 2.0
- 4 x COM, 3 x SATA III, I²C, SMBus, SPI, PS/2
- ATX Power



Specifications

System	
CPU	LGA 1700 socket supports 12th Gen Alder Lake/ 13th Gen Raptor Lake/ 14th Gen Raptor Lake Refresh Intel® Core™ i 9/7/5/3, Pentium, Celeron Processors up to 16 Cores 24 Threads Hybrid
Chipset	Intel® H610E PCH
DMI	x4 Gen4 DMI
System Memory	2 x SODIMM sockets support Dual Channel DDR5 5600MHz up to 64GB
BIOS	AMI uEFI BIOS, 256Mb SPI Flash ROM
Super I/O	Fintek F81966AB-I
Audio	Realtek HD Audio
Ethernet	LAN 1: Intel® I219-LM Ethernet Controller LAN 2: Intel® I225-V Ethernet Controller
Watchdog Timer	1 ~ 255 sec timer
Expansion	1 x Gen 4 PCIe x16 1 x M.2 M-Key 2242/2280 NVMe (PCIe x4 + SATA III) 1 x M.2 E-Key 2230 with CNVi Support (PCIe x 1 + USB 2.0)
TPM	TPM 2.0
Watchdog Timer	1 Sec ~ 255 Sec Timer
Supported OS	Windows 10, Linux
Display	
Chipset	Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent)
Interface	HDMI 1.4b 4K@60Hz Dual Mode DisplayPort (DP++) 1.4a 4K@60Hz 18/24-bits Dual Channel LVDS, optional eDP
Multi-Display	Support 3 Independent Displays

External I/O	
Display	1 x HDMI 2 x DP++
USB	4 x USB 3.2 Gen 1x1 Ports 2 x USB 2.0 Type A
LAN	2 x RJ45
COM Port	2 x RS-232/422/485
Audio	Line-out, Mic-in
Internal I/O	
Display	1 x LVDS Header 1 x eDP Header (Optional)
USB	1 x USB 3.2 Gen 1x1 Header (2 Ports) 2 x USB 2.0 Headers (4 Ports)
COM Port	2 x RS-232 Headers with Voltage Selection
SATA	3 x SATA III Connectors
GPIO	1 x 8-bits GPIO Header
Other	1 x SPI Header 1 x I ² C Header 1 x SMBus Header 1 x Front Audio Header 3W Per Channel Amplifier 1 x Front Panel Header 1 x PS/2 Header

Mechanical & Environment

Power Connector	1 x 24-pin ATX Connector 1 x 8-pin ATX 12 Connector
Power Type	AT / ATX mode Switchable Through Jumper
Operating Temp	0°C to 60°C (32°F ~ 140°F)
Storage Temp	-20° C ~ 80° C (-4°F ~ 176°F)
Operating Humidity	5% to 90% Non-condensing
Form Factor	Mini-ITX
Dimensions	6.7" x 6.7" (170mm x 170mm)
Certification Information	FCC Class B/CE RoHS Compliant
Weight	0.88 lbs

Ordering Info

MX610H	Intel® H610E Mini-ITX Motherboard, ATX Power
Accessories	1 x I/O Shield
183000000006	2.00mm pitch 12" length serial cable
182437200040	2.54mm pitch 14" length dual port USB 2.0 cable w/ full height bracket
182000000073	2.00mm pitch 19.7" length dual port serial cable w/ full height bracket

* All product specifications and images are subject to change without notice. Last update: 03/12/2024



BCM Advanced Research
11 Chrysler, Irvine, CA 92618 USA
An Industry Leader in Industrial Motherboards &
Embedded Computing

www.bcmcom.com
BCMSales@bcmcom.com
(949) 470-1888