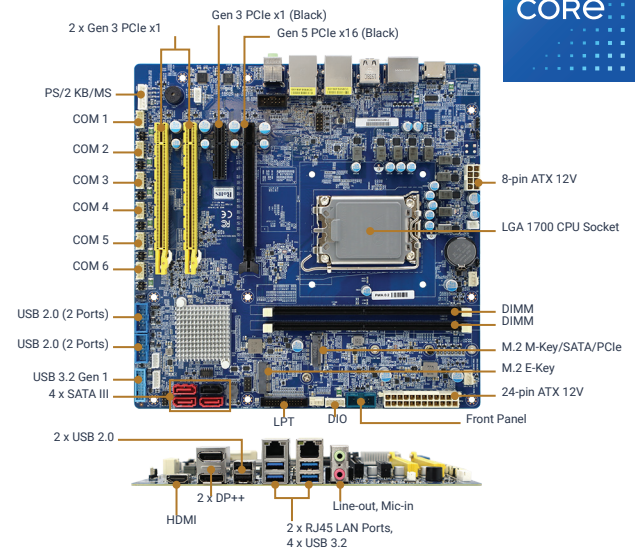


Features

- LGA 1700 socket supports Intel® Core™ processors (Series 2), codenamed Bartlett Lake
- LGA 1700 Socket supports 12th/13th/14th Gen Intel® Core™ i 9/7/5/3 Processor, codenamed Alder Lake/Raptor Lake/Raptor Lake Refresh
- Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent)
- Intel® H610E PCH, x4 Gen4 DMI
- 2 x DIMM slots support Dual Channel DDR5 memory speed up to 5600MHz with UDIMM, up to 64GB
- Intel® I225-LM 2.5GbE
- 1 x Gen 5 PCIe x16, 1 x Gen 3 PCIe x1, 2 x Gen 3 PCIe x1
- 1 x M.2 NVMe M-Key, 1 x M.2 E-Key Supports CNVi
- TPM 2.0
- Supports 3 Independent Display: 1 x HDMI, 2 x DP++
- 6 x COM, 4 x SATA III
- 6 x USB 3.2 Gen 1, 6 x USB 2.0
- I²C, SMBus, PS/2, LPT, 8-bit GPIO
- Supports Win 10, Win 11, Linux

Specifications



System

CPU	LGA1700 socket now extends support to Intel® Core™ Series 2 processors, formerly codenamed Bartlett Lake, via BIOS update 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 Processor up to 16 Cores 24 Threads Hybrid
Chipset	Intel® H610E PCH
System Memory	2 x DIMM slots support Dual Channel DDR5 5600MHz up to 64GB <ul style="list-style-type: none"> ● 12th Gen i3/i5/i7/i9: up to DDR5 4800 MT/s ● 13th Gen i3/i5: up to DDR5 4800 MT/s (CPU dependent) ● 13th Gen i7/i9: up to DDR5 5600 MT/s (CPU dependent) ● 14th Gen i3/i5: up to DDR5 4800 MT/s (CPU dependent) ● 14th Gen i7/i9: up to DDR5 5600 MT/s (CPU dependent) Note: BIOS update required. Please consult with BCM Tech Support for more information
BIOS	Socket Type 256Mb SPI BIOS
DMI	x4 Gen4 DMI
Expansion	1 x Gen 5 PCIe x16 (x16 Physical Black) (Slot 1) 1 x Gen 3 PCIe x1 (x4 Physical Open Ended) (Slot 2) 2 x Gen 3 PCIe x1 (x16 Physical Yellow) (Slot 3 & 4) 1 x M.2 M-Key 2242/2280/22110 NVMe (PCIe x4 + SATA III) 1 x M.2 E-Key 2230 with CNVi Support (PCIe x1 share with slot4 + USB 2.0)
TPM	Infineon® TPM 2.0
Watchdog Timer	H/W Reset, 5~255 seconds/5~255 minutes
H/W Status Monitor	CPU temperature monitoring, Voltages monitoring, CPU fan speed control
Supported OS	Windows 10, Windows 11, Linux

Display

Chipset	Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent)
Multi-Display	Supports 3 Independent Display

Audio

Audio Codec	Realtek HD Audio Codec
Amplifier	6W Per Channel Amplifier

Ethernet

LAN 1	Intel® Ethernet Controller I219-V
LAN 2	Intel® Ethernet Controller I225-LM (2.5GbE)

External I/O

Display	1 x HDMI 2 x DP++
USB	2 x USB 2.0 Type A 4 x USB 3.2 Type A
LAN	2 x RJ45
Audio	Line-out, Mic-in

Internal I/O

USB	2 x USB 2.0 Headers (4 Ports) 1 x USB 3.2 Gen 1 Header (2 Ports)
COM	5 x RS-232 1 x RS-232/422/485
SATA	3 x SATA III (Red) 1 x SATA III (Black) shared with M.2
I²C	1 x I²C Header
SMBus	1 x SMBus Header
PS/2	1 x PS/2 Header
Other	1 x SPI, 1 x Amplifier, Front Audio, Front Panel, 8-bit GPIO, LPT, CPU Fan, Chassis Fan, 1 x 2400Hz buzzer

Mechanical & Environment

Power Connector	1 x 24-pin ATX Connector 1 x 8-pin ATX 12 Connector
Power Type	AT/ATX (Default ATX)
Operating Temp.	0°C ~ 60°C (32°F ~ 140°F)
Storage Temp.	-20°C ~ 80°C (-4°F ~ 176°F)
Operating Humidity	5% ~ 90% Relative Humidity, Non-condensing
Storage Humidity	5% ~ 90% Relative Humidity, Non-condensing
Dimensions	9.6" x 9.6" (244mm x 244mm)
Certification Information	RoHS Compliant, CE, FCC Class B
Weight	1.45 lbs (0.66 KG)

Ordering Info

RX610H	Intel® H610E based Micro ATX Motherboard
Included	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: 09/17/2025



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