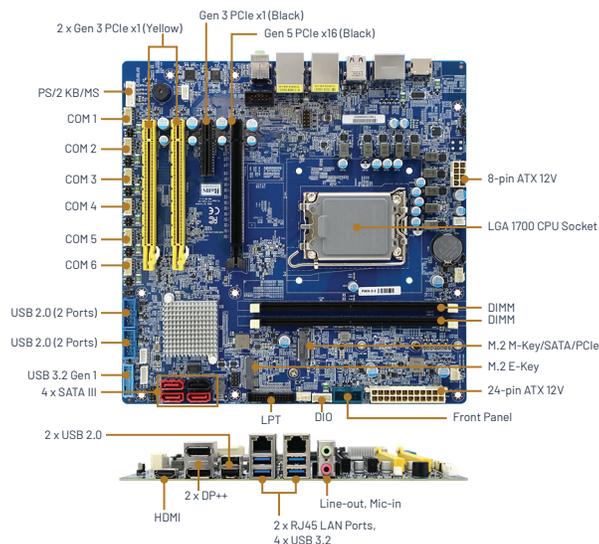


## Features

- 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
- I<sup>2</sup>C, SMBus, PS/2, LPT, 8-bit GPIO
- Supports Win 10, Win 11, Linux



## Specifications

System	
<b>CPU</b>	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
<b>Chipset</b>	Intel® H610E PCH
<b>System Memory</b>	2 x DIMM slots support Dual Channel DDR5 5600MHz up to 64GB <ul style="list-style-type: none"> <li>● 12th Gen i3/i5/i7/i9: up to DDR5 4800 MT/s</li> <li>● 13th Gen i3/i5: up to DDR5 4800 MT/s (CPU dependent)</li> <li>● 13th Gen i7/i9: up to DDR5 5600 MT/s (CPU dependent)</li> <li>● 14th Gen i3/i5: up to DDR5 4800 MT/s (CPU dependent)</li> <li>● 14th Gen i7/i9: up to DDR5 5600 MT/s (CPU dependent)</li> </ul> Note: BIOS update required. Please consult with BCM Tech Support for more information
<b>BIOS</b>	Socket Type 256Mb SPI BIOS
<b>DMI</b>	x4 Gen4 DMI
<b>Expansion</b>	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)
<b>TPM</b>	Infineon® TPM 2.0
<b>Watchdog Timer</b>	H/W Reset, 5~255 seconds/5~255 minutes
<b>H/W Status Monitor</b>	CPU temperature monitoring, Voltages monitoring, CPU fan speed control
<b>Supported OS</b>	Windows 10, Windows 11, Linux
Display	
<b>Chipset</b>	Intel® Integrated UHD Graphic with Xe Architecture (CPU Dependent)
<b>Multi-Display</b>	Supports 3 Independent Display
Audio	
<b>Audio Codec</b>	Realtek HD Audio Codec
<b>Amplifier</b>	6W Per Channel Amplifier

Ethernet	
<b>LAN 1</b>	Intel® Ethernet Controller I219-V
<b>LAN 2</b>	Intel® Ethernet Controller I225-LM (2.5GbE)
External I/O	
<b>Display</b>	1 x HDMI 2 x DP++
<b>USB</b>	2 x USB 2.0 Type A 4 x USB 3.2 Type A
<b>LAN</b>	2 x RJ45
<b>Audio</b>	Line-out, Mic-in
Internal I/O	
<b>USB</b>	2 x USB 2.0 Headers (4 Ports) 1 x USB 3.2 Gen 1 Header (2 Ports)
<b>COM</b>	5 x RS-232 1 x RS-232/422/485
<b>SATA</b>	3 x SATA III (Red) 1 x SATA III (Black) shared with M.2
<b>I<sup>2</sup>C</b>	1 x I <sup>2</sup> C Header
<b>SMBus</b>	1 x SMBus Header
<b>PS/2</b>	1 x PS/2 Header
<b>Other</b>	1 x SPI, 1 x Amplifier, Front Audio, Front Panel, 8-bit GPIO, LPT, CPU Fan, Chassis Fan, 1 x 2400Hz buzzer

## Mechanical & Environment

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

## Ordering Info

<b>RX610H</b>	Intel® H610E based Micro ATX Motherboard
<b>Included</b>	1 x I/O Shield
<b>183000000006</b>	2.00mm pitch 12" length serial cable
<b>182437200040</b>	2.54mm pitch 14" length dual port USB 2.0 cable w/ full height bracket
<b>182000000073</b>	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: 07/22/2024



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