2-2 Product Specifications

CPU	 LGA1700 socket: Support for the 14th, 13th and 12th Generation Intel® Core™, Pentium® Gold and Celeron® Processors (Go to GIGABYTE's website for the latest CPU support list.) L3 cache varies with CPU
Chipset	Intel® Z790 Express Chipset
Memory	14th and 13th Generation Intel® Core™ i9/i7 Pocessors: Support for DDR5 5600/5200/4800/4400 MT/s memory modules 13th Generation Intel® Core™ i5/i3 and 12th Generation Intel® Core™, Pentium® Gold and Celeron® Processors: Support for DDR5 4800/4400 MT/s memory modules 4 x DDR5 DIMM sockets supporting up to 192 GB (48 GB single DIMM capacity) of system memory Dual channel memory architecture Support for ECC Un-buffered DIMM 1Rx8/2Rx8 memory modules (operate in non-ECC mode) Support for non-ECC Un-buffered DIMM 1Rx8/2Rx8/1Rx16 memory modules Support for Extreme Memory Profile (XMP) memory modules (The CPU and memory configuration may affect the supported memory types, data rate (speed), and number of DRAM modules, please refer to "Memory Support List" on GIGABYTE's website for more information.)
Onboard Graphics	Integrated Graphics Processor-Intel® HD Graphics support: 1 x HDMI port, supporting a maximum resolution of 4096x2160@60 Hz Support for HDMI 2.0 version and HDCP 2.3. 1 x DisplayPort, supporting a maximum resolution of 4096x2304@60 Hz Support for DisplayPort 1.2 version and HDCP 2.3 (Graphics specifications may vary depending on CPU support.)
Audio	Realtek® Audio CODEC High Definition Audio 2/4/5.1/7.1-channel You can change the functionality of an audio jack using the audio software. To configure 7.1-channel audio, access the audio software for audio settings. Support for S/PDIF Out
LAN LAN	• Realtek® 2.5GbE LAN chip (2.5 Gbps/1 Gbps/100 Mbps)
Wireless Communication Module	Intel® Wi-Fi 6E AX211 (PCB rev. 1.0) WiFl a, b, g, n, ac, ax, supporting 2.4/5/6 GHz carrier frequency bands BLUETOOTH 5.3 Support for 11ax 160MHz wireless standard Realtek® Wi-Fi 6E RTL8852CE (PCB rev. 1.1) WiFl a, b, g, n, ac, ax, supporting 2.4/5/6 GHz carrier frequency bands BLUETOOTH 5.3 Support for 11ax 160MHz wireless standard (Actual data rate may vary depending on environment and equipment.)



Expansion Slots CPU:

- 1 x PCI Express x16 slot, supporting PCIe 5.0 and running at x16 (PCIEX16)
 - * For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot.

Chipset:

- 1 x PCI Express x16 slot, supporting PCIe 4.0 and running at x4 (PCIEX4_1)
- 1 x PCI Express x16 slot, supporting PCIe 3.0 and running at x4 (PCIEX4 2)



Storage Interface

CPU:

- 1 x M.2 connector (Socket 3, M key, type 22110/2280 PCIe 4.0 x4/x2 SSD support) (M2A_CPU)
- · Chipset:
 - 2 x M.2 connectors (Socket 3, M key, type 22110/2280 PCle 4.0 x4/x2 SSD support) (M2P_SB, M2Q_SB)
 - 1 x M.2 connector (Socket 3, M key, type 22110/2280 SATA and PCle 4.0 x4 SSD support) (M2M_SB)
 - 6 x SATA 6Gb/s connectors
- RAID 0, RAID 1, RAID 5, and RAID 10 support for NVMe SSD storage devices
- RAID 0, RAID 1, RAID 5, and RAID 10 support for SATA storage devices
 - * Refer to "2-8 Internal Connectors," for the installation notices for the M.2 and SATA connectors.



Chipset:

- 1 x USB Type-C[®] port on the back panel, with USB 3.2 Gen 2x2 support
- 1 x USB Type-C® port with USB 3.2 Gen 2 support, available through the internal USB header
- 2 x USB 3.2 Gen 2 Type-A ports (red) on the back panel
- 5 x USB 3.2 Gen 1 ports (3 ports on the back panel, 2 ports available through the internal USB header)
- Chipset+2 USB 2.0 Hubs:
 - 8 x USB 2.0/1.1 ports (4 ports on the back panel, 4 ports available through the internal USB headers)



- 1 x 24-pin ATX main power connector
- 2 x 8-pin ATX 12V power connectors
- 1 x CPU fan header
- 1 x CPU fan/water cooling pump header
- 3 x system fan headers
- 1 x system fan/water cooling pump header
- 2 x addressable LED strip headers
- 2 x RGB LED strip headers
- 4 x M.2 Socket 3 connectors
- 6 x SATA 6Gb/s connectors
- 1 x front panel header
- 1 x front panel audio header
- 1 x USB Type-C[®] header, with USB 3.2 Gen 2 support
- 1 x USB 3.2 Gen 1 header
- 2 x USB 2.0/1.1 headers

Internal Connectors	2 x Thunderbolt™ add-in card connectors 1 x Trusted Platform Module header (For the GC-TPM2.0 SPI/GC-TPM2.0 SPI 2.0/ GC-TPM2.0 SPI V2 module only) 1 x reset button 1 x Q-Flash Plus button 1 x Clear CMOS button 1 x reset jumper 1 x Clear CMOS jumper
Back Panel Connectors	 1 x USB Type-C[®] port, with USB 3.2 Gen 2x2 support 2 x USB 3.2 Gen 2 Type-A ports (red) 3 x USB 3.2 Gen 1 ports 4 x USB 2.0/1.1 ports 2 x SMA antenna connectors (2T2R) 1 x HDMI port 1 x DisplayPort 1 x RJ-45 port 1 x optical S/PDIF Out connector 2 x audio jacks
I/O Controller	iTE® I/O Controller Chip
Hardware Monitor	Voltage detection Temperature detection Fan speed detection Water cooling flow rate detection Fan fail warning Fan speed control Whether the fan (pump) speed control function is supported will depend on the fan (pump) you install.
BIOS	 1 x 256 Mbit flash Use of licensed AMI UEFI BIOS PnP 1.0a, DMI 2.7, WfM 2.0, SM BIOS 2.7, ACPI 5.0

Unique Features	•	Support for GIGABYTE Control Center (GCC) * Available applications in GCC may vary by motherboard model. Supported functions of each application may also vary depending on motherboard specifications.
	•	Support for Q-Flash
	•	Support for Q-Flash Plus
	•	Support for Smart Backup
Bundled	+	Norton® Internet Security (OEM version)
Software	•	LAN bandwidth management software
Operating Operating	+	Support for Windows 11 64-bit
System	•	Support for Windows 10 64-bit
Form Factor	+	ATX Form Factor; 30.5cm x 24.4cm

^{*} GIGABYTE reserves the right to make any changes to the product specifications and product-related information without prior notice.

https://www.gigabyte.com/Support/Utility/Motherboard?m=ut

Please visit the SERVICE/SUPPORT\Utility page on GIGABYTE's website to download the latest version of apps.