

MB-GH610MS2HD4

Gigabyte H610M S2H DDR4 H610 Express Chipset Gen 12 LGA 1700 Micro ATX Motherboard

Product Overview

Gigabyte H610M S2H DDR4: all-in-one LGA 1700 alder lake mb - with 6 1 1 phase digital VRM, hybrid core optimization, Addressable LED Strip Support, SmartFan6 with 4x temperature sensors 3x hybrid fan headers, solid pin power connectors (ATX 8pin)



Specifications

Features:

6 1 1 Phases Hybrid Power Design

Cleaner and more efficient power delivery to the CPU with better thermal performance ensure stability under high CPU frequencies and heavy loading.

- 6 1 1 Phases Low RDS(on) MOSFETs
- Solid capacitors to improve transient response and minimize oscillation.
- 8-pin Solid Pin CPU Power Connector.

Single 32GB Support

The maximum memory capacity on the H610 motherboard is 64 GB. After Intel updated the memory reference code, a single slot can support up to 32GB. Therefore with populated 2 DIMM per channel on both channel, total memory capacity is 64GB, which was only available on High End Desktop (HEDT) platforms. For users who always run out of memory capacity, there is more bandwidth now for memory-intensive application such as rendering and video editing.

High Speed Gigabit LAN with Automatic Bandwidth Allocation

Realtek 8118 LAN is a high performance and friendly network chip for gaming players with automatic bandwidth allocation to ensure the highest network priority of the game or application. It can provide users the most comprehensive features and the fastest and smoothest Internet experience.

NVMe PCIe Gen3 x4 M.2 Connector

GIGABYTE Motherboards are focused on delivering M.2 technology to enthusiasts who want to maximize their system's potential.

High Definition Digital Outputs

Enjoy true HD display capability using the most commonly integrated digital output technologies on today's HD displays and

ComX Computers

Product Specification Sheet

TVs.

High-End Audio Capacitors

GIGABYTE motherboards use high-end audio capacitors. These high quality capacitors help deliver high resolution and high fidelity audio to provide the most realistic sound effects for gamers.

Audio Noise Guard

GIGABYTE motherboards feature an audio noise guard that essentially separates the board's sensitive analog audio components from potential noise pollution at the PCB level.

Solid Pin Power Connectors

H610 motherboards feature solid plated ATX 12V 8pin power connectors to offer a stable power supply during CPU overloading.

Solid Pin Power connector advantages

- Larger contact area for electricity
- More metal quantity to sustain higher power and generated heat
- Ultra durable and longer lifespan

START SULFURIZATION PROTECTION

Sulfur compounds in the air can penetrate tiny onboard resistors creating chemical change and causing these resistors to open or short. If either of these occurs the motherboard will fail to function. By equipping resistors with an Anti-Sulfur Design GIGABYTE gives Ultra Durable Motherboards a whole new meaning.

BIOS

The BIOS is essential for users during initial setup to allow for the most optimal settings. With a new GUI and easier to use functionalities, GIGABYTE has been able to reinvent the BIOS to give users a better experience while setting up their new system.

APP CENTER

GIGABYTE APP CENTER is a useful portal of all GIGABYTE MB utilities and drivers, you can choose any utility you want to install from APP CENTER and keep updated with the latest utilities and drivers version.

EasyTune™

GIGABYTE's EasyTune™ is a simple and easy-to-use interface that allows users to fine-tune their system settings or adjust system and memory clocks and voltages in a Windows environment. With Smart Quick Boost, one click is all it takes to automatically overclock your system, giving an added performance boost when you need it the most.

System Information Viewer

GIGABYTE System Information Viewer is a central location that gives you access to your current system status. Monitor components such as the clocks and processor, set your preferred fan speed profile, create alerts when temperatures get too high or record your system's behavior; these are the possibilities of the System Information Viewer.

Specifications:

© 2022 Respective owners and brand holders. This table has been carefully researched and generated by ComXpert International CC (<http://www.comx.co.za>), however, errors and omissions may occur. Only references to South Africa apply. All products are sourced in South Africa from the official suppliers and the warranty is that of the local supplier. E&OE. This table and our site's content may be used on condition that this notice and link remains intact and unaltered.

Specifications

Product Code
MB-GH610MS2HD4

ComX Computers

Product Specification Sheet

CPU	1. LGA1700 socket: Support for 12th Generation Intel Core, Pentium Gold and Celeron Processors
	2. L3 cache varies with CPU
Chipset	1. Intel H610 Express Chipset
Memory	1. Support for DDR4 3200/3000/2933/2666/2400/2133 MHz memory modules
	2. 2 x DDR4 DIMM sockets supporting up to 64 GB (32 GB single DIMM capacity) of system memory
	3. Dual channel memory architecture
	4. Support for ECC Un-buffered DIMM 1Rx8/2Rx8 memory modules (operate in non-ECC mode)
	5. Support for non-ECC Un-buffered DIMM 1Rx8/2Rx8/1Rx16 memory modules
	6. Support for Extreme Memory Profile (XMP) memory modules
Onboard Graphics	Integrated Graphics Processor-Intel HD Graphics support:
	1. 1 x D-Sub port, supporting a maximum resolution of 1920x1200@60 Hz
	2. 1 x DVI-D port, supporting a maximum resolution of 1920x1200@60 Hz
	* The DVI-D port does not support D-Sub connection by adapter.
	3. 1 x HDMI port, supporting a maximum resolution of 4096x2160@60 Hz
	* Support for HDMI 2.1 version and HDCP 2.3.
	** Support native HDMI 2.1 TMDS compatible ports
	4. 1 x DisplayPort, supporting a maximum resolution of 4096x2304@60 Hz
	* Support for DisplayPort 1.2 version and HDCP 2.3
Audio	1. Realtek Audio CODEC
	2. High Definition Audio
	3. 2/4/5.1/7.1-channel
	* To configure 7.1-channel audio, you need to open the audio software and select Device advanced settings > Playback Device to change the default setting first. Please visit GIGABYTE's website for details on configuring the audio software.
LAN	1. Realtek GbE LAN chip (1 Gbps/100 Mbps)
Expansion Slots	1. 1 x PCI Express x16 slot, running at x16
	* For optimum performance, if only one PCI Express graphics card is to be installed, be sure to install it in the PCIEX16 slot.
	(The PCI Express x16 slot conforms to PCI Express 4.0 standard.)
	2. 1 x PCI Express x1 slot
	(The PCI Express x1 slot conforms to PCI Express 3.0 standard.)
Storage Interface	Chipset:
	1. 1 x M.2 connector (Socket 3, M key, type 2260/2280 PCIe 3.0 x4/x2 SSD support)
	2. 4 x SATA 6Gb/s connectors

USB	Chipset:
	1. 4 x USB 3.2 Gen 1 ports (2 ports on the back panel, 2 ports available through the internal USB header)
	2. 4 x USB 2.0/1.1 ports on the back panel
	Chipset USB 2.0 Hub:
	1. 4 x USB 2.0/1.1 ports available through the internal USB headers
Internal I/O Connectors	1. 1 x 24-pin ATX main power connector
	2. 1 x 8-pin ATX 12V power connector
	3. 1 x M.2 Socket 3 connector
	4. 4 x SATA 6Gb/s connectors
	5. 1 x CPU fan header
	6. 2 x system fan headers
	7. 1 x RGB LED strip header
	8. 1 x front panel header
	9. 1 x front panel audio header
	10. 1 x USB 3.2 Gen 1 header
	11. 2 x USB 2.0/1.1 headers
	12. 1 x Trusted Platform Module header (For the GC-TPM2.0 SPI/GC-TPM2.0 SPI 2.0 module only)
	13. 1 x serial port header
	14. 1 x Clear CMOS jumper
Back Panel Connectors	1. 1 x PS/2 keyboard port
	2. 1 x PS/2 mouse port
	3. 1 x D-Sub port
	4. 1 x DVI-D port
	5. 1 x DisplayPort
	6. 1 x HDMI 2.0 port
	7. 2 x USB 3.2 Gen 1 ports
	8. 4 x USB 2.0/1.1 ports
	9. 1 x RJ-45 port
	10. 3 x audio jacks
I/O Controller	1. iTE I/O Controller Chip

ComX Computers

Product Specification Sheet

H/W Monitoring	1. Voltage detection
	2. Temperature detection
	3. Fan speed detection
	4. Overheating warning
	5. Fan fail warning
	6. Fan speed control
	* Whether the fan speed control function is supported will depend on the cooler you install.
BIOS	1. 1 x 256 Mbit flash
	2. Use of licensed AMI UEFI BIOS
	3. PnP 1.0a, DMI 2.7, WfM 2.0, SM BIOS 2.7, ACPI 5.0
Unique Features	1. Support for APP Center
	* Available applications in APP Center may vary by motherboard model. Supported functions of each application may also vary depending on motherboard specifications.
	@BIOS
	Ambient LED
	EasyTune
	Fast Boot
	Game Boost
	ON/OFF Charge
	Smart Backup
	System Information Viewer
	2. Support for Q-Flash
	3. Support for Xpress Install
Bundled Software	1. Norton Internet Security (OEM version)
	2. LAN bandwidth management software
Operating System	1. Support for Windows 11 64-bit
	2. Support for Windows 10 64-bit
Form Factor	1. Micro ATX Form Factor; 23.0cm x 21.5cm

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page: <https://www.comx.co.za/MB-GH610MS2HD4-Gigabyte-H610M-S2H-DDR4-H610-Express-Buy-p-263660.php>

Images and specifications are provided for reference and are subject to change without notice. E&OE.

Terms of Use: <https://www.comx.co.za/terms-of-use.php>

Terms of Sale: <https://www.comx.co.za/terms-of-sale.php>

PDF generated: 2026-10-18 03:21:04.

ComX Computers

Product Specification Sheet

This PDF was generated automatically and may include content prepared or assisted by automated or AI-based systems. While reasonable care is taken to ensure accuracy, errors or omissions may occur.

For the most current and accurate product information, please refer to the product information available on our website. If any specification or other information differs from information published elsewhere, please confirm the details with us before relying on the information or making a purchasing decision.

If you identify an error or discrepancy, please report it to us so that we may investigate and correct it where necessary.