ASRock

H610M-HDV/ M.2 D5 Gen5

intel CORE
Supports Intel® Core™
Processor 14th, 13th & 12th Gen

intel CHIPSET H610
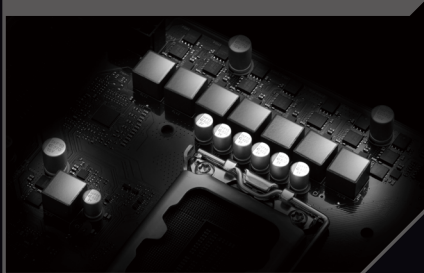
PCIe GEN5

HDMI
HIGH-DEFINITION MULTIMEDIA INTERFACE

PRODUCT BRIEF :

· Supports 14th, 13th & 12th Gen Intel® Core™ Processors (LGA1700)
· 6+1+1 Power Phase
· 2 x DDR5 DIMMs
  Supports Dual Channel, up to 5600
· 1 PCIe 5.0 x16, 1 PCIe 3.0 x1
· Graphics Output Options: 1 HDMI, 1 DisplayPort, 1 D-Sub
· Realtek ALC897 7.1 CH HD Audio Codec

· 1 Ultra M.2 (PCIe Gen3 x4)
  4 SATA3
· 4 USB 3.2 Gen1 (2 Rear, 2 Front)
  6 USB 2.0 (4 Rear, 2 Front)
· Realtek Gigabit LAN

I/O OVERVIEW
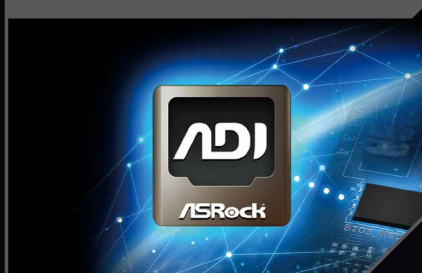
6+1+1 Power Phase

Ultra M.2 (PCIe Gen3 x4)

Ultra M.2 SSD

PCIe Gen5 x16 (Reinforced Steel Slot)

PCIe GEN5

DDR5

PCIe GEN5

3 Graphics Outputs

Auto Driver Installer

ADI
ASRock

Realtek Gigabit LAN

Detail Specification

Platform	- Micro ATX Form Factor: 9.6-in x 7.6-in, 24.4 cm x 19.3 cm - Solid Capacitor design

Unique Feature	Superb Productivity
	   - PCIe Gen5 (Graphics)
	   - Dual Channel DDR5
	Rock-Solid Durability
	   - 6+1+1 Power Phase
	   - ASRock Intel® 4-Layer Memory POOL (Planes on Outer Layers) Technology
	EZ Update
	   - ASRock Auto Driver Installer

CPU	- Supports 14th, 13th & 12th Gen Intel® Core™ Processors (LGA1700) - Supports Intel® Hybrid Technology - Supports Intel® Turbo Boost Max 3.0 Technology
Chipset	- Intel® H610

Memory	- Dual Channel DDR5 Memory Technology
	- 2 x DDR5 DIMM Slots
	- 14th and 13th Gen Intel® Core™ Processors support DDR5 non-ECC,
	  un-buffered memory up to 5600*
	- 12th Gen Intel® Core™ Processors support DDR5 non-ECC, un-buffered
	  memory up to 4800*
	- Max. capacity of system memory: 128GB
	- Supports Intel® Extreme Memory Profile (XMP) 3.0
	* Actual support may vary by CPU
	* Please refer to Memory Support List on ASRock's website for more information.
	  (http://www.asrock.com/)

Expansion Slot	CPU: - 1 x PCIe 5.0 x16 Slot (PCIE1), supports x16 mode* Chipset: - 1 x PCIe 3.0 x1 Slot (PCIE2)* * Supports NVMe SSD as boot disks

Graphics	* Intel® UHD Graphics Built-in Visuals and the VGA outputs can be supported
	  only with processors which are GPU integrated.
	- Intel® Xᵉ Graphics Architecture (Gen 12)
	- 1 x HDMI 2.1 TMDS Compatible, supports HDCP 2.3 and max. resolution
	  up to 4K 60Hz
	- 1 x DisplayPort 1.4 with DSC (compressed), supports HDCP 2.3 and
	  max. resolution up to 8K 60Hz / 5K 120Hz
	- 1 x D-Sub, supports max. resolution up to Full HD (1920x1080) 60Hz

Audio	- 7.1 CH HD Audio (Realtek ALC897 Audio Codec)
LAN	- Gigabit LAN 10/100/1000 Mb/s - Realtek 8111H
USB	Chipset: - 4 x USB 3.2 Gen1 (2 Rear, 2 Front) - 6 x USB 2.0 (4 Rear, 2 Front)
Rear Panel I/O	- 1 x PS/2 Mouse/Keyboard Port - 1 x D-Sub Port - 1 x HDMI Port - 1 x DisplayPort 1.4 - 2 x USB 3.2 Gen1 Ports - 4 x USB 2.0 Ports - 1 x RJ-45 LAN Port - HD Audio Jacks: Line in / Front Speaker / Microphone
Storage	Chipset: - 1 x Ultra M.2 Socket (M2_1, Key M), supports type 2280 PCIe Gen3x4 (32 Gb/s) mode* - 4 x SATA3 6.0 Gb/s Connectors * Supports NVMe SSD as boot disks
Connector	- 1 x SPI TPM Header - 1 x Chassis Intrusion and Speaker Header - 1 x CPU Fan Connector (4-pin) (Smart Fan Speed Control)* - 1 x Chassis/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control)** - 1 x 24 pin ATX Power Connector - 1 x 8 pin 12V Power Connector - 1 x Front Panel Audio Connector - 1 x USB 2.0 Header (Supports 2 USB 2.0 ports) - 1 x USB 3.2 Gen1 Header (Supports 2 USB 3.2 Gen1 ports) * CPU_FAN1 supports the fan power up to 1A (12W). ** CHA_FAN1/WP supports the fan power up to 2A (24W). ** CHA_FAN1/WP can auto detect if 3-pin or 4-pin fan is in use.
BIOS Feature	- 128Mb AMI UEFI Legal BIOS with GUI support
Software and UEFI	Software - ASRock Motherboard Utility (A-Tuning) * These utilities can be downloaded from ASRock Live Update & APP Shop. UEFI - ASRock EZ Mode - ASRock Full HD UEFI - ASRock My Favorites in UEFI - ASRock Auto Driver Installer - ASRock Instant Flash
OS	- Microsoft® Windows® 10 64-bit / 11 64-bit
Certifications	- FCC, CE - ErP/EuP ready (ErP/EuP ready power supply is required)
Accessories	- 1 x I/O Shield - 2 x SATA Data Cables - 1 x Screw for M.2 Socket