

1.2 Specifications

- Platform**
- Micro ATX Form Factor
 - Solid Capacitor design

- CPU**
- Supports 12th Gen Intel® Core™ Processors (LGA1700)
 - Digi Power design
 - 6 Power Phase design
 - Supports Intel® Hybrid Technology
 - Supports Intel® Turbo Boost Max 3.0 Technology

- Chipset**
- Intel® B660

- Memory**
- Dual Channel DDR4 Memory Technology
 - 2 x DDR4 DIMM Slots
 - Supports DDR4 non-ECC, un-buffered memory up to 5066+(OC)*
- * Supports DDR4 3200 natively.
- * Please refer to Memory Support List on ASRock's website for more information. (<http://www.asrock.com/>)
- Supports ECC UDIMM memory modules (operate in non-ECC mode)
 - Max. capacity of system memory: 64GB
 - Supports Intel® Extreme Memory Profile (XMP) 2.0

- Expansion Slot**
- 1 x PCIe Gen4x16 Slot*
- * Supports NVMe SSD as boot disks
- 2 x PCIe Gen3x1 Slots
 - 1 x M.2 Socket (Key E), supports type 2230 WiFi/BT PCIe WiFi module

- Graphics**
- * Intel® UHD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated.
- Intel® X^e Graphics Architecture (Gen 12)
 - Three graphics output options: D-Sub, HDMI and DisplayPort 1.4
 - Supports HDMI 2.1 TMDS Compatible with max. resolution up to 4K x 2K (4096x2160) @ 60Hz

- Supports DisplayPort 1.4 with DSC (compressed) max. resolution up to 8K (7680x4320) @ 60Hz / 5K (5120x3200) @ 120Hz
- Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz
- Supports HDCP 2.3 with HDMI 2.1 TMDS Compatible and DisplayPort 1.4 Ports

Audio

- 7.1 CH HD Audio (Realtek ALC897/887 Audio Codec)
- Supports Surge Protection

LAN

- Gigabit LAN 10/100/1000 Mb/s
- Giga PHY Intel® I219V
- Supports Wake-On-LAN
- Supports Lightning/ESD Protection
- Supports Energy Efficient Ethernet 802.3az
- Supports UEFI PXE

Rear Panel I/O

- 2 x Antenna Mounting Points
- 1 x PS/2 Mouse/Keyboard Port
- 1 x D-Sub Port
- 1 x HDMI Port
- 1 x DisplayPort 1.4
- 3 x USB 3.2 Gen1 Type-A Ports (Supports ESD Protection)
- 1 x USB 3.2 Gen1 Type-C Port (Supports ESD Protection)
- 2 x USB 2.0 Ports (Supports ESD Protection)
- 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)
- HD Audio Jacks: Line in / Front Speaker / Microphone

Storage

- 4 x SATA3 6.0 Gb/s Connectors*
- * If M2_2 is occupied by a SATA-type M.2 device, SATA3_3 will be disabled.
- 1 x Hyper M.2 Socket (M2_1, Key M), supports type 2260/2280 PCIe Gen4x4 (64 Gb/s) mode**
 - 1 x Ultra M.2 Socket (M2_2, Key M), supports type 2260/2280 SATA3 6.0 Gb/s & PCIe Gen3x4 (32 Gb/s) modes**

- ** Supports Intel® Optane™ Technology (M2_2 only)
- ** Supports Intel® Volume Management Device (VMD)
- ** Supports NVMe SSD as boot disks
- ** Supports ASRock U.2 Kit

RAID

- Supports RAID 0, RAID 1, RAID 5 and RAID 10 for SATA storage devices

Connector

- 1 x COM Port Header
- 1 x SPI TPM Header
- 1 x Chassis Intrusion and Speaker Header
- 1 x CPU Fan Connector (4-pin)
- * The CPU Fan Connector supports the CPU fan of maximum 1A (12W) fan power.
- 1 x CPU/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control)
- * The CPU/Water Pump Fan supports the water cooler fan of maximum 2A (24W) fan power.
- 2 x Chassis/Water Pump Fan Connectors (4-pin) (Smart Fan Speed Control)
- * The Chassis/Water Pump Fan supports the water cooler fan of maximum 2A (24W) fan power.
- * CPU_FAN2/WP and CHA_FAN1~2/WP can auto detect if 3-pin or 4-pin fan is in use.
- 1 x 24 pin ATX Power Connector
- 1 x 8 pin 12V Power Connector
- 1 x Front Panel Audio Connector
- 2 x USB 2.0 Headers (Support 3 USB 2.0 ports) (Supports ESD Protection)
- 1 x USB 3.2 Gen1 Header (Supports 2 USB 3.2 Gen1 ports) (Supports ESD Protection)

BIOS

Feature

- AMI UEFI Legal BIOS with multilingual GUI support
- ACPI 6.0 Compliant wake up events
- SMBIOS 2.7 Support
- CPU Core/Cache, CPU GT, DRAM, VCCIN AUX, +1.05V PROC, +0.82V PCH, +1.05V PCH Voltage Multi-adjustment

Hardware Monitor

- Fan Tachometer: CPU, CPU/Water Pump, Chassis/Water Pump Fans
- Quiet Fan (Auto adjust chassis fan speed by CPU temperature): CPU, CPU/Water Pump, Chassis/Water Pump Fans
- Fan Multi-Speed Control: CPU, CPU/Water Pump, Chassis/Water Pump Fans
- CASE OPEN detection
- Voltage monitoring: CPU Vcore, +1.05 PCH, DRAM, VCIN AUX, +1.05V PROC, +0.82V PCH, +12V, +5V, +3.3V

OS

- Microsoft® Windows® 10 64-bit / 11 64-bit

Certifications

- FCC, CE
- ErP/EuP Ready (ErP/EuP ready power supply is required)

* For detailed product information, please visit our website: <http://www.asrock.com>



Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using third-party overclocking tools. Overclocking may affect your system's stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.