






PRODUCT BRIEF :

- Supports 13th Gen & 12th Gen Intel® Core™ Processors (LGA1700)
- 14+1+1 Power Phase, SPS for VCore+GT with Enlarged Heatsink Armor
- Supports DDR5 7200MHz (OC)
- 1 PCIe 5.0 x16, 2 PCIe 4.0 x16, 1 PCIe 3.0 x1, 1 M.2 Key E
- Graphics Output Options: HDMI, DisplayPort, eDP
- Realtek ALC897 7.1 CH HD Audio Codec, Nahimic Audio
- 4 SATA3, 1 Blazing M.2 (PCIe Gen5x4)
- 4 Hyper M.2 (PCIe Gen4x4)
- 1 USB 3.2 Gen2x2 FrontType-C
- 2 USB 3.2 Gen2 RearType-C
- 2 USB 3.2 Gen2 RearType-A
- 8 USB 3.2 Gen1 (4 Rear, 4 Front)
- 10 USB 2.0 (6 Rear, 4 Front)
- Dragon 2.5G LAN
- Supports ASRock Auto Driver Installer, Lightning Gaming Ports, Ultra USB Power




I/O OVERVIEW

 BLAZING M.2 [PCIe GEN5x4]	 PCIe GEN5 FOR GRAPHICS	 DDR5 [MAX. 128GB CAPACITY]
 DUAL PCIe X4 SLOTS	 THUNDERBOLT4 HEADER	 USB TYPE-C [1 FRONT + 2 REAR]



Ultra USB Power
Delivers clean power to your audio-related USB devices with less noise.

Lightning Gaming Ports
Allows you to connect mice/keyboard with lower jitter and latency!

14+1+1 Power Phase & SPS
VCore with SPS design, delivering smoother and neater power to the CPU.

Nichicon 12K Caps for VCore
Offers 20% longer lifespans and provide more stability and reliability.

Detail Specification

Platform	- ATX Form Factor: 12.0-in x 9.6-in, 30.5 cm x 24.4 cm - 2oz Copper PCB	Rear Panel I/O	- 2 x Antenna Mounting Points - 1 x HDMI Port - 1 x DisplayPort 1.4 - 1 x Optical SPDIF Out Port - 2 x USB 3.2 Gen2 Type-A Ports (10 Gb/s) - 2 x USB 3.2 Gen2 Type-C Ports (10 Gb/s) - 4 x USB 3.2 Gen1 Ports (USB32_23 are Lightning Gaming Ports. USB32_45 support Ultra USB Power.) - 6 x USB 2.0 Ports - 1 x RJ-45 LAN Port - 1 x Line Out Jack (Gold Audio Jack) - 1 x Microphone Input Jack (Gold Audio Jack)
Unique Feature	Superb Productivity - PCIe Gen5 (Graphics, M.2) - Dual Channel DDR5 Rock-Solid Durability - 14+1+1 Power Phase, 60A SPS for VCore+GT with Enlarged Heatsink Armor - Flexible Integrated I/O Shield - Nichicon 12K Black Caps (100% Japan made high quality conductive polymer capacitors) for VCore Ultrafast Connectivity - 2.5G LAN - ASRock Lightning Gaming Ports EZ Update - ASRock Auto Driver Installer EZ Troubleshooter - ASRock Post Status Checker	Storage	CPU: - 1 x Blazing M.2 Socket (M2_1, Key M), supports type 2260/2280 PCIe Gen5x4 (128 Gb/s) mode* - 1 x Hyper M.2 Socket (M2_2, Key M), supports type 2260/2280 PCIe Gen4x4 (64 Gb/s) mode* Chipset: - 1 x Hyper M.2 Socket (M2_3, Key M), supports type 2260/2280 PCIe Gen4x4 (64 Gb/s) mode* - 1 x Hyper M.2 Socket (M2_4, Key M), supports type 2242/2260/2280 PCIe Gen4x4 (64 Gb/s) mode* - 1 x Hyper M.2 Socket (M2_5, Key M), supports type 2260/2280 PCIe Gen4x4 (64 Gb/s) mode* - 4 x SATA3 6.0 Gb/s Connectors * Supports Intel® Volume Management Device (VMD) * Supports NVMe SSD as boot disks * If M2_1 is occupied, PCIe1 will downgrade to x8 mode. * Either M2_1 or M2_2 can be used at a time.
CPU	- Supports 13 th Gen & 12 th Gen Intel® Core™ Processors (LGA1700) - Supports Intel® Hybrid Technology - Supports Intel® Turbo Boost Max 3.0 Technology - Supports Intel® Thermal Velocity Boost (TVB) - Supports Intel® Adaptive Boost Technology (ABT)	RAID	- Supports RAID 0, RAID 1, RAID 5 and RAID 10 for SATA storage devices - Supports RAID 0, RAID 1 and RAID 5 for M.2 NVMe storage devices
Chipset	- Intel® Z790	Connector	- 1 x eDP Signal Connector - 1 x SPI TPM Header - 1 x Power LED and Speaker Header - 1 x RGB LED Header* - 3 x Addressable LED Headers** - 1 x CPU Fan Connector (4-pin)*** - 1 x CPU/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control)**** - 5 x Chassis/Water Pump Fan Connectors (4-pin) (Smart Fan Speed Control)**** - 1 x 24 pin ATX Power Connector (Hi-Density Power Connector) - 2 x 8 pin 12V Power Connectors (Hi-Density Power Connector) - 1 x Front Panel Audio Connector - 1 x Thunderbolt AIC Connector (5-pin) (Supports ASRock Thunderbolt 4 AIC Card) - 2 x USB 2.0 Headers (Support 4 USB 2.0 ports) - 2 x USB 3.2 Gen1 Headers (Support 4 USB 3.2 Gen1 ports) - 1 x Front Panel Type C USB 3.2 Gen2x2 Header (20 Gb/s) * Supports in total up to 12V/3A, 36W LED Strip ** Support in total up to 5V/3A, 15W LED Strip *** CPU_FAN1 supports the fan power up to 1A (12W). **** CPU_FAN2/WP supports the fan power up to 2A (24W). ***** CHA_FAN1~5/WP support the fan power up to 2A (24W). ***** CPU_FAN2/WP and CHA_FAN1~5/WP can auto detect if 3-pin or 4-pin fan is in use.
Memory	- Dual Channel DDR5 Memory Technology - 4 x DDR5 DIMM Slots - Supports DDR5 non-ECC, un-buffered memory up to 7200+(OC)* 1DPC 1R Up to 7200+ MHz (OC), 4800 MHz Natively. 1DPC 2R Up to 6000+ MHz (OC), 4400 MHz Natively. 2DPC 1R Up to 5600+ MHz (OC), 4000 MHz Natively. 2DPC 2R Up to 4800+ MHz (OC), 3600 MHz Natively. - Max. capacity of system memory: 192GB - Supports Intel® Extreme Memory Profile (XMP) 3.0 * Please refer to Memory Support List on ASRock's website for more information. (http://www.asrock.com/)	BIOS Feature	- 128Mb AMI UEFI Legal BIOS with GUI support
Expansion Slot	CPU: - 1 x PCIe 5.0 x16 Slot (PCIe1), supports x16 mode* Chipset: - 2 x PCIe 4.0 x16 Slots (PCIe3 and PCIe4), support x4 mode* - 1 x PCIe 3.0 x1 Slot (PCIe2)* - 1 x M.2 Socket (Key E), supports type 2230 WiFi/BT PCIe WiFi module and Intel® CNVio/CNVio2 (Integrated WiFi/BT) * If M2_1 is occupied, PCIe1 will downgrade to x8 mode. * Supports NVMe SSD as boot disks - Supports AMD CrossFire™	Software and UEFI	Software - ASRock Motherboard Utility (A-Tuning) - ASRock Dragon 2.5G LAN Software - ASRock Polychrome SYNC * 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 - ASRock Easy RAID Installer
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) - 1 x eDP 1.4, supports max. resolution up to Full HD 60Hz - 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	OS	- Microsoft® Windows® 10 64-bit / 11 64-bit
Audio	- 7.1 CH HD Audio (Realtek ALC897 Audio Codec) - Nahimic Audio	Certifications	- FCC, CE - ErP/EuP ready (ErP/EuP ready power supply is required) - CEC Tier II ready
LAN	- 2.5 Gigabit LAN 10/100/1000/2500 Mb/s - Dragon RTL8125BG - Supports Dragon 2.5G LAN Software - Smart Auto Adjust Bandwidth Control - Visual User Friendly UI - Visual Network Usage Statistics - Optimized Default Setting for Game, Browser, and Streaming Modes - User Customized Priority Control	Accessories	- 1 x User Manual - 2 x SATA Data Cables - 5 x Screws for M.2 Sockets
USB	- 1 x USB 3.2 Gen2x2 Type-C (Front) - 2 x USB 3.2 Gen2 Type-C (Rear) - 2 x USB 3.2 Gen2 Type-A (Rear) - 8 x USB 3.2 Gen1 (4 Rear, 4 Front) - 10 x USB 2.0 (6 Rear, 4 Front) * All USB ports support ESD Protection		