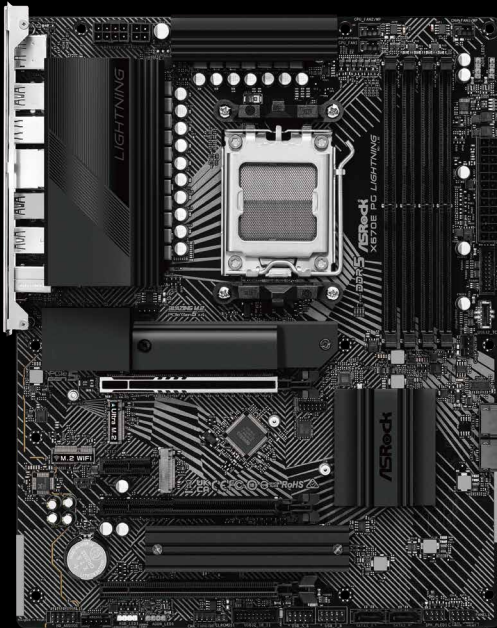




PHANTOM GAMING



X670E PG LIGHTNING GAMING

AMD SOCKET AM5

X670E

AMD RYZEN

HDMI

POLYCHROME SYNC

PRODUCT BRIEF :

- Supports AMD Socket AM5 Ryzen™ 7000 Series Processors
- 14+2+1 Phase SPS Power Design
- 4 x DDR5 DIMMs, supports up to 6600+(OC)
- 1 PCIe 5.0 x16 , 1 PCIe 4.0 x16 , 1 PCIe 4.0 x16 , 1 PCIe 4.0 x1 , 1 M.2 Key-E for WiFi
- Graphics Output Options: 1 HDMI, 1 DisplayPort
- 7.1 CH HD Audio (Realtek ALC897 Audio Codec), Nahimic Audio
- 1 Blazing M.2 (PCIe Gen5x4), 1 Hyper M.2 (PCIe Gen4x4), 1 Ultra M.2 (PCIe Gen3x4 & SATA3), 1 M.2 (PCIe Gen4x2), 4 SATA3
- 1 USB 3.2 Gen2 Type-A (Rear), 10 USB 3.2 Gen1 (6 Rear, 4 Front), 8 USB 2.0 (4 Rear, 4 Front)
- Realtek 2.5G LAN

I/O OVERVIEW



14 + 2 + 1 Power Phase SPS

Delivering smoother and neater power to the CPU.



Optimized Performance with 8-Layer PCB

8-layer PCB provides better signal and thermal performance for insane AMD Socket AM5 Ryzen™ 7000 series processors.



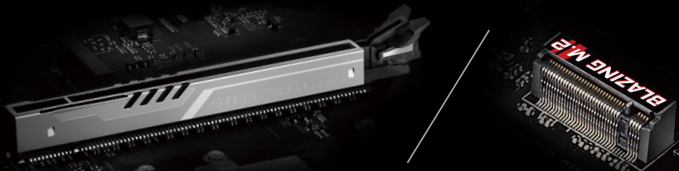
Pre-Installed I/O Shield Lightning Gaming Ports



Optimized for high report rate gaming keyboard/mouse

PCIe Gen5 Technology PCIe x16 slot & M.2 Sockets

Ready to unleash the full potential of future high end graphics cards and ultra fast SSDs.



Dragon 2.5Gbps LAN

Enjoy the faster connectivity experience for gaming, file transfers and backups.



Detail Specification

Platform	- ATX Form Factor: 12.0-in x 9.6-in, 30.5 cm x 24.4 cm - 8 Layer PCB	Rear Panel I/O	- 2 x Antenna Mounting Points - 1 x HDMI Port - 1 x DisplayPort 1.4 - 1 x USB 3.2 Gen2x2 Type-C Port (20 Gb/s) - 1 x USB 3.2 Gen2 Type-A Port (10 Gb/s) - 6 x USB 3.2 Gen1 Ports (USB32_34 are Lightning Gaming Ports) - 4 x USB 2.0 Ports - 1 x RJ-45 LAN Port - 1 x BIOS Flashback Button - HD Audio Jacks: Line in / Front Speaker / Microphone
Unique Feature	<p>Superb Productivity</p> <ul style="list-style-type: none"> - PCIe Gen5 (Graphics, M.2) - Dual Channel DDR5 <p>Rock-Solid Durability</p> <ul style="list-style-type: none"> - Server-Grade Low-Loss PCB - 14+2+1 Power Phase, 70A SPS - Pre-Installed I/O Shield <p>Ultrafast Connectivity</p> <ul style="list-style-type: none"> - 2.5G LAN - ASRock Lightning Gaming Ports <p>EZ Update</p> <ul style="list-style-type: none"> - BIOS Flashback Button - ASRock Auto Driver Installer 	Storage	<p>CPU:</p> <ul style="list-style-type: none"> - 1 x Blazing M.2 Socket (M2_1, Key M), supports type 2280 PCIe Gen5x4 (128 Gb/s) mode* <p>Chipset:</p> <ul style="list-style-type: none"> - 1 x Ultra M.2 Socket (M2_2, Key M), supports type 2280 SATA3 6.0 Gb/s & PCIe Gen3x4 (32 Gb/s) modes* - 1 x M.2 Socket (M2_3, Key M), supports type 2280 PCIe Gen4x2 (32 Gb/s) mode* - 1 x Hyper M.2 Socket (M2_4, Key M), supports type 2260/2280 PCIe Gen4x4 (64 Gb/s) mode* - 4 x SATA3 6.0 Gb/s Connectors <p>* Supports NVMe SSD as boot disks * Supports ASRock U.2 Kit</p>
CPU	- Supports AMD Socket AM5 Ryzen™ 7000 Series Processors	RAID	- Supports RAID 0, RAID 1 and RAID 10 for SATA storage devices - Supports RAID 0, RAID 1 and RAID 10 for M.2 NVMe storage devices
Chipset	- AMD X670	Connector	<ul style="list-style-type: none"> - 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)**** - 4 x Chassis/Water Pump Fan Connectors (4-pin) (Smart Fan Speed Control)***** - 1 x 24 pin ATX Power Connector - 1 x 8 pin 12V Power Connector (Hi-Density Power Connector) - 1 x 4 pin 12V Power Connector (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) (ReDriver) <p>* 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_FAN1-4/WP support the fan power up to 2A (24W). ***** CPU_FAN2/WP and CHA_FAN1-4/WP can auto detect if 3-pin or 4-pin fan is in use.</p>
Memory	<ul style="list-style-type: none"> - Dual Channel DDR5 Memory Technology - 4 x DDR5 DIMM Slots - Supports DDR5 non-ECC, un-buffered memory up to 6600+(OC)* - Max. capacity of system memory: 128GB - Supports Extreme Memory Profile (XMP) and EXTended Profiles for Overclocking (EXPO) memory modules <p>* Please refer to Memory Support List on ASRock's website for more information. (http://www.asrock.com/)</p>	BIOS Feature	- 256Mb AMI UEFI Legal BIOS with GUI support
Expansion Slot	<p>CPU:</p> <ul style="list-style-type: none"> - 1 x PCIe 5.0 x16 Slot (PCIe1), supports x16 mode* - 1 x PCIe 4.0 x16 Slot (PCIe3), supports x4 mode* <p>Chipset:</p> <ul style="list-style-type: none"> - 1 x PCIe 4.0 x1 Slot (PCIe2)* - 1 x PCIe 4.0 x16 Slot (PCIe4), supports x1 mode* - 1 x M.2 Socket (Key E), supports type 2230 WiFi/BT PCIe WiFi module <p>* Supports NVMe SSD as boot disks - Supports AMD CrossFire™ - 15µ Gold Contact in VGA PCIe Slot (PCIe1)</p>	Software and UEFI	<p>Software</p> <ul style="list-style-type: none"> - ASRock Motherboard Utility (Phantom Gaming Tuning) - ASRock Phantom Gaming LAN Software - ASRock Polychrome SYNC <p>* These utilities can be downloaded from ASRock Live Update & APP Shop.</p> <p>UEFI</p> <ul style="list-style-type: none"> - ASRock Full HD UEFI - ASRock Auto Driver Installer - ASRock Instant Flash
Graphics	<p>Integrated AMD RDNA™ 2 graphics (Actual support may vary by CPU)</p> <ul style="list-style-type: none"> - 1 x HDMI 2.1 TMDS Compatible, supports HDR, 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 4K 120Hz 	OS	- Microsoft® Windows® 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)
LAN	<ul style="list-style-type: none"> - 2.5 Gigabit LAN 10/100/1000/2500 Mb/s - Dragon RTL8125BG - Supports Phantom Gaming LAN Software <ul style="list-style-type: none"> - 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	<ul style="list-style-type: none"> - 1 x User Manual - 2 x SATA Data Cables - 4 x Screws for M.2 Sockets - 1 x Standoff for M.2 Socket
USB	<ul style="list-style-type: none"> - 2 x USB 3.2 Gen2x2 Type-C (1 Rear, 1 Front) - 1 x USB 3.2 Gen2 Type-A (Rear) - 10 x USB 3.2 Gen1 (6 Rear, 4 Front) - 8 x USB 2.0 (4 Rear, 4 Front) <p>* All USB ports support ESD Protection</p>		