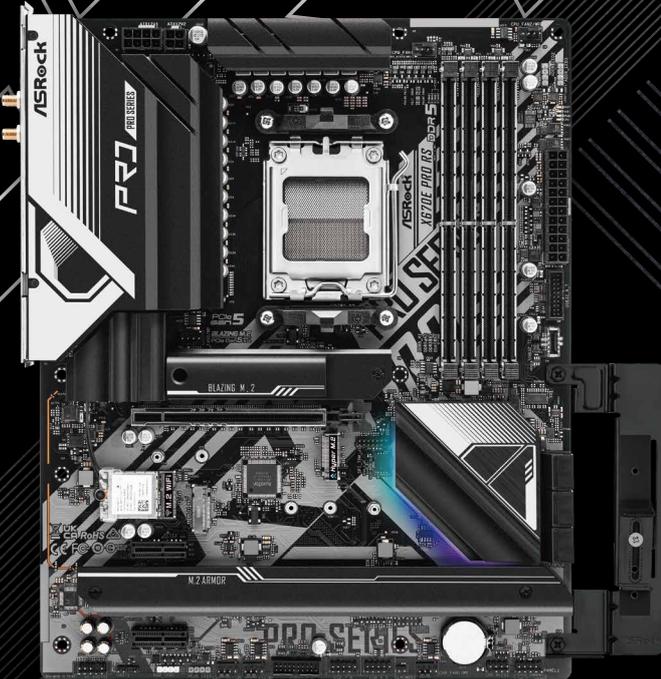# PRO SERIES

ASRock

X670E PRO RS

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 , 2 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),
  3 Hyper M.2 (PCIe Gen4x4),
  1 M.2 (PCIe Gen3x2 & SATA3),
  6 SATA3
- 1 USB 3.2 Gen2x2 Type-C (Front),
  1 USB 3.2 Gen2 Type-C (Rear),
  1 USB 3.2 Gen2 Type-A (Rear),
  8 USB 3.2 Gen1 (4 Rear, 4 Front),
  8 USB 2.0 (4 Rear, 4 Front)
- Realtek 2.5G LAN
- 802.11ax Wi-Fi 6E + Bluetooth

AMD SOCKET AM5 | X670E | AMD RYZEN | HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE | POLYCHROME SYNC

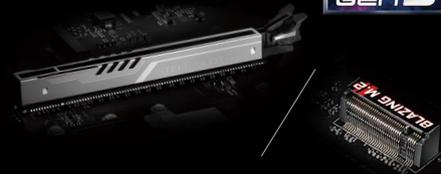### 14 + 2 + 1 POWER PHASE SPS (SMART POWER STAGE)

Delivering smoother and neater power to the CPU.

SPS Dr.Mos

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.

PCIe GEN5

DDR5 MEMORY WITH REINFORCED DIMM SLOT

The reinforced DIMM slot gives better physical strength.

DDR5

OPTIMIZED PERFORMANCE WITH 8-LAYER PCB

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

8 L PCB

ASROCK GRAPHICS CARD HOLDER

Slide up and down to perfect the position!

WiFi 6E (802.11ax)

Better and faster internet traffic with lower latency!

* The availability of Wi-Fi 6E (6GHz) may vary between different countries.

6E

Wi-Fi 6E only

DRAGON 2.5Gbps LAN

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

2.5X Faster

Detail Specification

Platform	- ATX Form Factor: 12.0-in x 9.6-in, 30.5 cm x 24.4 cm - 8 Layer PCB

Unique Feature	Superb Productivity
	   - PCIe Gen5 (Graphics, M.2)
	   - Dual Channel DDR5
	Rock-Solid Durability
	   - Server-Grade Low-Loss PCB
	   - 14+2+1 Power Phase, 60A SPS with Enlarged Heatsink Armor
	   - Flexible Integrated I/O Shield
	Ultrafast Connectivity
	   - 2.5G LAN, 802.11ax Wi-Fi 6E Module
	EZ Update
	   - BIOS Flashback Button
	   - ASRock Auto Driver Installer

CPU	- Supports AMD Socket AM5 Ryzen™ 7000 Series Processors
Chipset	- AMD X670
Memory	- 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 * 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: - 2 x PCIe 4.0 x1 Slots (PCIE2 and PCIE3)* - 1 x M.2 Socket (Key E), supports type 2230 WiFi/BT PCIe WiFi module * Supports NVMe SSD as boot disks - 15μ Gold Contact in VGA PCIe Slot (PCIE1)
Graphics	Integrated AMD RDNA™ 2 graphics (Actual support may vary by CPU) - 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
Audio	- 7.1 CH HD Audio (Realtek ALC897 Audio Codec) - Nahimic Audio

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

Wireless LAN	- 802.11ax Wi-Fi 6E Module - Supports IEEE 802.11a/b/g/n/ac/ax - Supports Dual-Band 2x2 with extended 6GHz band* support * Wi-Fi 6E (6GHz band) will be supported by Microsoft® Windows® 11. The availability will depend on the different regulation status of each country and region. It will be activated (for supported countries) through Windows Update and software updates once available. * A 6GHz compatible router is required for 6E functionality. - 2 antennas to support 2 (Transmit) x 2 (Receive) diversity technology - Supports Bluetooth + High speed class II - Supports MU-MIMO
USB	- 1 x USB 3.2 Gen2x2 Type-C (Front) - 1 x USB 3.2 Gen2 Type-C (Rear) - 1 x USB 3.2 Gen2 Type-A (Rear) - 8 x USB 3.2 Gen1 (4 Rear, 4 Front) - 8 x USB 2.0 (4 Rear, 4 Front) * All USB ports support ESD Protection
Rear Panel I/O	- 2 x Antenna Ports - 1 x HDMI Port - 1 x DisplayPort 1.4 - 1 x Optical SPDIF Out Port - 1 x USB 3.2 Gen2 Type-A Port (10 Gb/s) (ReDriver) - 1 x USB 3.2 Gen2 Type-C Port (10 Gb/s) (ReDriver) - 4 x USB 3.2 Gen1 Ports - 4 x USB 2.0 Ports - 1 x RJ-45 LAN Port - 1 x BIOS Flashback Button - 1 x Line Out Jack (Gold Audio Jack) - 1 x Microphone Input Jack (Gold Audio Jack)
Storage	CPU: - 1 x Blazing M.2 Socket (M2_1, Key M), supports type 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 M.2 Socket (M2_4, Key M), supports type 2242/2260/2280 SATA3 6.0 Gb/s & PCIe Gen3x2 (16 Gb/s) modes* - 1 x Hyper M.2 Socket (M2_5, Key M), supports type 2260/2280 PCIe Gen4x4 (64 Gb/s) mode* - 6 x SATA3 6.0 Gb/s Connectors * Supports NVMe SSD as boot disks * Supports ASRock U.2 Kit
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
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)**** - 4 x Chassis/Water Pump Fan Connectors (4-pin) (Smart Fan Speed Control)***** - 1 x 24 pin ATX Power Connector (Hi-Density 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 - 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_FAN1~4/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.
BIOS Feature	- 256Mb AMI UEFI Legal BIOS with GUI support
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 Full HD UEFI - ASRock Auto Driver Installer - ASRock Instant Flash
OS	- Microsoft® Windows® 11 64-bit
Certifications	- FCC, CE - ErP/EuP ready (ErP/EuP ready power supply is required)
Accessories	- 1 x User Manual - 2 x SATA Data Cables - 1 x ASRock WiFi 2.4/5/6 GHz Antenna - 4 x Screws for M.2 Sockets - 1 x Graphics Card Holder