

# A620M PRO RS



## PRODUCT BRIEF :

- Supports AMD Socket AM5 Ryzen™ 7000 Series Processors
- 6+2+1 Power Phase, Dr.MOS
- Supports DDR5 6000+ MHz (OC)
- 1 PCIe 4.0 x16, M.2 Key E for WiFi
- Integrated AMD RDNA™ 2 Graphics \*1
- Graphics Output Options: HDMI, DisplayPort
- Realtek ALC897 7.1 CH HD Audio Codec, Nahimic Audio
- 4 SATA3, 2 Hyper M.2 (PCIe Gen4x4) , 1 M.2 (PCIe Gen3x2)
- 2 USB 3.2 Gen1 Type-C (1 Rear, 1 Front), 5 USB 3.2 Gen1 Type-A (3 Rear, 2 Front)
- Realtek Gigabit LAN
- Supports ASRock Auto Driver Installer, BIOS Flashback

\*1 Actual support may vary by CPU



### DR. MOS

Intelligently delivering higher current for each phase, thus providing improved thermal result and superior performance.

Dr.Mos

### DELUXE M.2 OPTIONS

Multiple M.2 slots for SSD giving fast and ample storage solution.



### USB 3.2 TYPE-C (FRONT + REAR)

Providing a blazing fast data transfer interface with reversible USB Type-C design that fits the connector either way.



### M.2 (KEY E) FOR WiFi

Users may upgrade wireless module by M.2 (Key E) slot.



\*WiFi Module is not included.

### NAHIMIC AUDIO

Optimized for who is looking for an outstanding sound experience in high definition.



### AUTO DRIVER INSTALLER

The LAN driver has already prepacked in BIOS ROM, simply follow the instructions and install all necessary drivers automatically right after installing the operation system!



### PRE-INSTALLED I/O SHIELD

ASRock pre-installs the I/O shield for you as an assembly helper to speed up the set-up process.





## Detail Specification

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Platform</b>       | - Micro ATX Form Factor: 9.6-in x 9.6-in, 24.4 cm x 24.4 cm                                                                                                                                                                                                                                                                                                                                                                          | <b>Rear Panel I/O</b>    | - 2 x Antenna Mounting Points<br>- 1 x HDMI Port<br>- 1 x DisplayPort 1.4<br>- 3 x USB 3.2 Gen1 Type-A Ports<br>- 1 x USB 3.2 Gen1 Type-C Port<br>- 4 x USB 2.0 Ports<br>- 1 x RJ-45 LAN Port<br>- 1 x BIOS Flashback Button<br>- HD Audio Jacks: Line in / Front Speaker / Microphone                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Unique Feature</b> | Superb Productivity<br>- Dual Channel DDR5<br>Rock-Solid Durability<br>- 6+2+1 Power Phase, 50A Dr.MOS<br>- Pre-Installed I/O Shield<br>EZ Update<br>- BIOS Flashback Button<br>- ASRock Auto Driver Installer<br>EZ Troubleshooter<br>- ASRock Post Status Checker                                                                                                                                                                  | <b>Storage</b>           | CPU:<br>- 1 x Hyper M.2 Socket (M2_1, Key M), supports type 2260/2280 PCIe Gen4x4 (64 Gb/s) mode*<br>- 1 x Hyper M.2 Socket (M2_2, Key M), supports type 2260/2280 PCIe Gen4x4 (64 Gb/s) mode*<br>Chipset:<br>- 1 x M.2 Socket (M2_3, Key M), supports type 2260/2280 PCIe Gen3x2 (16 Gb/s) mode*<br>- 4 x SATA3 6.0 Gb/s Connectors<br><br>* Supports NVMe SSD as boot disks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>CPU</b>            | - Supports AMD Socket AM5 Ryzen™ 7000 Series Processors                                                                                                                                                                                                                                                                                                                                                                              | <b>RAID</b>              | - Supports RAID 0, RAID 1 and RAID 10 for SATA storage devices<br>- Supports RAID 0, RAID 1 and RAID 10 for M.2 NVMe storage devices*<br>* Requires additional M.2 NVMe expansion cards to support RAID 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Chipset</b>        | - AMD A620                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Connector</b>         | - 1 x SPI TPM Header<br>- 1 x Power LED and Speaker Header<br>- 1 x RGB LED Header*<br>- 3 x Addressable LED Headers**<br>- 1 x CPU Fan Connector (4-pin)**<br>- 1 x CPU/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control)****<br>- 3 x Chassis/Water Pump Fan Connectors (4-pin) (Smart Fan Speed Control)*****<br>- 1 x 24 pin ATX Power Connector<br>- 1 x 8 pin 12V Power Connector (Hi-Density Power Connector)<br>- 1 x Front Panel Audio Connector<br>- 2 x USB 2.0 Headers (Support 4 USB 2.0 ports)<br>- 1 x USB 3.2 Gen1 Header (Supports 2 USB 3.2 Gen1 ports)<br>- 1 x Front Panel Type C USB 3.2 Gen1 Header<br>* Supports in total up to 12V/3A, 36W LED Strip<br>** Support in total up to 5V/3A, 15W LED Strip<br>*** CPU_FAN1 supports the fan power up to 1A (12W).<br>**** CPU_FAN2/WP supports the fan power up to 2A (24W).<br>***** CHA_FAN1~3/WP support the fan power up to 2A (24W).<br>***** CPU_FAN2/WP and CHA_FAN1~3/WP can auto detect if 3-pin or 4-pin fan is in use. |
| <b>Memory</b>         | - Dual Channel DDR5 Memory Technology<br>- 4 x DDR5 DIMM Slots<br>- Supports DDR5 non-ECC, un-buffered memory up to 6000+(OC)*<br>- Max. capacity of system memory: 128GB<br>- Supports Extreme Memory Profile (XMP) and EXTended Profiles for Overclocking (EXPO) memory modules<br>* Please refer to Memory Support List on ASRock's website for more information. ( <a href="http://www.asrock.com/">http://www.asrock.com/</a> ) | <b>Graphics</b>          | Integrated AMD RDNA™ 2 graphics (Actual support may vary by CPU)<br>- 1 x HDMI 2.1 TMDS/FRL 8G Compatible, supports HDR, HDCP 2.3 and max. resolution up to 4K 120Hz<br>- 1 x DisplayPort 1.4 with DSC (compressed), supports HDCP 2.3 and max. resolution up to 4K 120Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Expansion Slot</b> | CPU:<br>- 1 x PCIe 4.0 x16 Slot (PCIe1), supports x16 mode*<br>Chipset:<br>- 1 x M.2 Socket (Key E), supports type 2230 WiFi/BT PCIe WiFi module<br><br>* Supports NVMe SSD as boot disks<br>- 15µ Gold Contact in VGA PCIe Slot (PCIe1)                                                                                                                                                                                             | <b>BIOS Feature</b>      | - 256Mb AMI UEFI Legal BIOS with GUI support                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Audio</b>          | - 7.1 CH HD Audio (Realtek ALC897 Audio Codec)<br>- Nahimic Audio                                                                                                                                                                                                                                                                                                                                                                    | <b>Software and UEFI</b> | Software<br>- ASRock Motherboard Utility (A-Tuning)<br>- ASRock Polychrome SYNC<br>- ASRock XFast LAN<br>* These utilities can be downloaded from ASRock Live Update & APP Shop.<br><br>UEFI<br>- ASRock Full HD UEFI<br>- ASRock Auto Driver Installer<br>- ASRock Instant Flash                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>LAN</b>            | - Gigabit LAN 10/100/1000 Mb/s<br>- Realtek 8111H                                                                                                                                                                                                                                                                                                                                                                                    | <b>OS</b>                | - Microsoft® Windows® 10 64-bit / 11 64-bit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>USB</b>            | - 2 x USB 3.2 Gen1 Type-C (1 Rear, 1 Front)<br>- 5 x USB 3.2 Gen1 Type-A (3 Rear, 2 Front)<br>- 8 x USB 2.0 (4 Rear, 4 Front)<br>* All USB ports support ESD Protection                                                                                                                                                                                                                                                              | <b>Certifications</b>    | - FCC, CE<br>- ErP/EuP ready (ErP/EuP ready power supply is required)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Accessories</b>       | - 1 x User Manual<br>- 2 x SATA Data Cables<br>- 4 x Screws for M.2 Sockets<br>- 1 x Standoff for M.2 Socket                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |