# X570 PRO4

## Product Brief:

- Supports AMD AM4 Socket Ryzen™ 2000 and 3000 Series processors
- 10 Power Phase Design
- Supports DDR4 4066+ (OC)
- 2 PCIe 4.0 x16, 2 PCIe 4.0 x1, 1 M.2(Key E) For WiFi
- AMD Quad CrossFireX™ and CrossFireX™
- Graphics Output Options: HDMI, DisplayPort
- 7.1 CH HD Audio (Realtek ALC1200 Audio Codec), ELNA Audio Caps
- 8 SATA3, 1 Hyper M.2 (PCIe Gen4 x4 & SATA3),
  1 Hyper M.2 (PCIe Gen4 x4)
- 2 USB 3.2 Gen2 (Rear Type A+C), 10 USB 3.2 Gen1 (4 Front, 6 Rear)
- Intel® Gigabit LAN
- ASRock Polychrome SYNC

AMD SOCKET AM4 | X570 PCIE® GEN 4.0 READY | RYZEN AMD | AMD RYZEN™ 3000 DESKTOP READY | POLYCHROME SYNC | HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE | AMD CROSSFIRE TECHNOLOGY | Intel® Gigabit Ethernet

## Dual Hyper M.2 For SSD

Supports the next generation PCI Express 4.0 M.2 SSDs, it is capable of perform twice the speed compared to previous 3rd generation, giving a lightning fast data transferring experience.
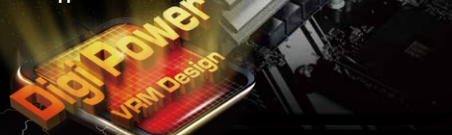
## Steel Slot with New-Gen PCI Express 4.0

The next generation PCI Express 4.0 is capable of performing twice the speed compared to previous 3rd generation. ASRock's exclusive Steel Slot with extra anchor points are revolutionary added to ensure signal stability and also making sure heavy graphics cards to be well-installed in the PCI-E slot safely.

## Super Alloy

- XXL Aluminum Alloy Heatsink
- Premium 50A Power Choke
- Sapphire Black PCB
- High Density Glass Fabric PCB
- 2oz Copper PCB

## XXL Aluminum Alloy Heatsink

Extra large aluminum alloy heat sinks that effectively take away heat from the MOSFET and chipset so that your whole system may perform more stable.

## FULL COVERAGE M.2 HEATSINK

A massive full coverage M.2 heatsink is able to dissipate heat efficiently to ensure your high speed M.2 SSD always working at its best.

## Dual USB 3.2 Gen2
### 10Gb/s (1 Type-C + 1 Type-A)

## M.2 (KEY E) For WiFi

## Intel® LAN

# X570 PRO4

## Detail Specification

| | |
|---|---|
| **Platform** | - ATX Form Factor: 12.0-in x 9.0-in, 30.5 cm x 22.9 cm<br>- Solid Capacitor design<br>- 2oz Copper PCB |
| **Unique Feature** | ASRock USB 3.2 Gen2<br>  - ASRock USB 3.2 Gen2 Type-A Port (10 Gb/s)<br>  - ASRock USB 3.2 Gen2 Type-C Port (10 Gb/s)<br>ASRock Super Alloy<br>  - XXL Aluminum Alloy Heatsink<br>  - Premium 50A Power Choke<br>  - Sapphire Black PCB<br>  - High Density Glass Fabric PCB<br>  - 2oz Copper PCB<br>ASRock Steel Slot Gen4<br>ASRock Full Coverage M.2 Heatsink<br>ASRock Hyper M.2 (PCIe Gen4x4 & SATA3)<br>ASRock POST Status Checker (PSC)<br>ASRock Full Spike Protection (for all USB, Audio, LAN Ports)<br>ASRock Live Update & APP Shop |
| **CPU** | - Supports AMD AM4 socket Ryzen™ 2000 and 3000 series processors<br>- Digi Power design<br>- 10 Power Phase design |
| **Chipset** | - AMD X570 |
| **Memory** | - Dual Channel DDR4 Memory Technology<br>- 4 x DDR4 DIMM Slots<br>- AMD Ryzen series CPUs (Matisse) support DDR4 4066+(OC)/3466(OC)/<br>  3200/2933/2667/2400/2133 ECC & non-ECC, un-buffered memory*<br>- AMD Ryzen series CPUs (Pinnacle Ridge) support DDR4 3466+(OC)/<br>  3200(OC)/2933/2667/2400/2133 ECC & non-ECC, un-buffered memory*<br>- AMD Ryzen series CPUs (Picasso) support DDR4 3466+(OC)/3200(OC)/<br>  2933/2667/2400/2133 non-ECC, un-buffered memory*<br>* For Ryzen Series CPUs (Picasso), ECC is only supported with PRO CPUs.<br>* Please refer to Memory Support List on ASRock's website for more information.<br>  (http://www.asrock.com/)<br>- Max. capacity of system memory: 64GB<br>- 15µ Gold Contact in DIMM Slots<br><br>* Please refer to below table for AMD non-XMP memory frequency support.<br>  For more details, please refer to the QVL on ASRock's website. |

Ryzen Series CPUs (Matisse):

| A1 | A2 | B1 | B2 | Frequency (MHz) |
|---|---|---|---|---|
| - | SR | - | - | 3200 |
| - | DR | - | - | 3200 |
| - | SR | - | SR | 3200 |
| - | DR | - | DR | 3200 |
| SR | SR | SR | SR | 2933 |
| SR/DR | DR | SR/DR | DR | 2667 |
| SR/DR | SR/DR | SR/DR | SR/DR | 2667 |

Ryzen Series CPUs (Pinnacle Ridge):

| A1 | A2 | B1 | B2 | Frequency (MHz) |
|---|---|---|---|---|
| - | SR | - | - | 2933 |
| - | DR | - | - | 2933 |
| - | SR | - | SR | 2933 |
| - | DR | - | DR | 2933 |
| SR | SR | SR | SR | 2933 |
| SR/DR | DR | SR/DR | DR | 2667 |
| SR/DR | SR/DR | SR/DR | SR/DR | 2133-2400 |

Ryzen Series CPUs (Picasso):

| # of DIMMs on the Channel | # of Ranks per DIMM | 1.20V |
|---|---|---|
| 1 of 1 | xR | SR: 2933 DR: 2677 |
| 1 of 2 | xR.0 | SR: 2667 DR: 2400 |
| 2 of 2 | 1R.1R | 2133 |
| 2 of 2 | 2R.xR | 1866 |

SR: Single rank DIMM, 1Rx4 or 1Rx8 on DIMM module label  
DR: Dual rank DIMM, 2Rx4 or 2Rx8 on DIMM module label     x=1 or 2

| | |
|---|---|
| **Expansion Slot** | AMD Ryzen series CPUs (Matisse)<br>  - 2 x PCI Express 4.0 x16 Slots (PCIE1/PCIE3: single at x16 (PCIE1);<br>    dual at x16 (PCIE1) / x4 (PCIE3))*<br>AMD Ryzen series CPUs (Pinnacle Ridge)<br>  - 2 x PCI Express 3.0 x16 Slots (PCIE1/PCIE3: single at x16 (PCIE1);<br>    dual at x16 (PCIE1) / x4 (PCIE3))*<br>AMD Ryzen series CPUs (Picasso)<br>  - 2 x PCI Express 3.0 x16 Slots (PCIE1/PCIE3: single at x8 (PCIE1);<br>    dual at x8 (PCIE1) / x4 (PCIE3))*<br>    * Supports NVMe SSD as boot disks<br>  - 2 x PCI Express 4.0 x1 Slots<br>  - Supports AMD Quad CrossFireX™ and CrossFireX™<br>  - 1 x M.2 Socket (Key E), supports type 2230 WiFi/BT module<br>  - 15µ Gold Contact in VGA PCIe Slot (PCIE1) |
| **Graphics** | - Integrated AMD Radeon™ Vega Series Graphics in Ryzen Series APU*<br>* Actual support may vary by CPU<br>- DirectX 12, Pixel Shader 5.0<br>- Shared memory default 2GB. Max Shared memory supports up to 16GB.<br>* The Max shared memory 16GB requires 32GB system memory installed.<br>- Dual graphics output: support HDMI and DisplayPort 1.2 ports by independent<br>  display controllers<br>- Supports HDMI 2.0 with max. resolution up to 4K x 2K (4096x2160) @ 60Hz<br>- Supports DisplayPort 1.2 with max. resolution up to 4K x 2K (4096x2160) @ 60Hz<br>- Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate<br>  Audio) with HDMI 2.0 Ports (Compliant HDMI monitor is required)<br>- Supports HDR (High Dynamic Range) with HDMI 2.0<br>- Supports HDCP 2.2 with HDMI 2.0 and DisplayPort 1.2 Ports<br>- Supports 4K Ultra HD (UHD) playback with HDMI 2.0 and DisplayPort 1.2 Ports<br>- Supports Microsoft PlayReady® |
| **Audio** | - 7.1 CH HD Audio with Content Protection (Realtek ALC1200 Audio Codec)<br>- Premium Blu-ray Audio support<br>- Supports Surge Protection<br>- ELNA Audio Caps<br>- PCB Isolate Shielding<br>- Individual PCB Layers for R/L Audio Channel |
| **LAN** | - Gigabit LAN 10/100/1000 Mb/s<br>- Giga PHY Intel® I211AT<br>- Supports Wake-On-LAN<br>- Supports Lightning/ESD Protection<br>- Supports Energy Efficient Ethernet 802.3az<br>- Supports PXE |
| **Rear Panel I/O** | - 3 x Antenna Ports (on I/O Panel Shield)<br>- 1 x PS/2 Mouse/Keyboard Port<br>- 1 x HDMI Port<br>- 1 x DisplayPort 1.2<br>- 1 x USB 3.2 Gen2 Type-A Port (10 Gb/s) (Supports ESD Protection)<br>- 1 x USB 3.2 Gen2 Type-C Port (10 Gb/s) (Supports ESD Protection)<br>- 6 x USB 3.2 Gen1 Ports (Supports ESD Protection)<br>- 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)<br>- HD Audio Jacks: Line in / Front Speaker / Microphone |
| **Storage** | - 8 x SATA3 6.0 Gb/s Connectors, support RAID (RAID 0, RAID 1 and RAID 10),<br>  NCQ, AHCI and Hot Plug<br>- 1 x Hyper M.2 Socket (M2_1), supports M Key type 2230/2242/2260/2280/22110<br>  M.2 PCI Express module up to Gen4x4 (64 Gb/s) (with Matisse) or<br>  Gen3x4 (32 Gb/s) (with Pinnacle Ridge and Picasso)*<br>- 1 x Hyper M.2 Socket (M2_3), supports M Key type 2230/2242/2260/2280/22110<br>  M.2 SATA3 6.0 Gb/s module and M.2 PCI Express module up to Gen4x4 (64 Gb/s)<br>  (with Matisse) or Gen3x4 (32 Gb/s) (with Pinnacle Ridge and Picasso)*<br>* Supports NVMe SSD as boot disks<br>* Supports ASRock U.2 Kit |
| **Connector** | - 1 x COM Port Header<br>- 1 x SPI TPM Header<br>- 1 x Power LED and Speaker Header<br>- 2 x RGB LED Headers<br>* Support in total up to 12V/3A, 36W LED Strip<br>- 1 x Addressable LED Header<br>* Supports in total up to 5V/3A, 15W LED Strip<br>- 1 x CPU Fan Connector (4-pin)<br>* The CPU Fan Connector supports the CPU fan of maximum 1A (12W) fan power.<br>- 1 x CPU/Water Pump Fan Connector (4-pin) (Smart Fan Speed Control)<br>* The CPU/Water Pump Fan supports the water cooler fan of maximum 2A (24W) fan power.<br>- 3 x Chassis/Water Pump Fan Connectors (4-pin) (Smart Fan Speed Control)<br>* The Chassis/Water Pump Fan supports the water cooler fan of maximum 2A (24W) fan power.<br>* CPU_FAN2/WP, CHA_FAN1/WP, CHA_FAN2/WP and CHA_FAN3/WP can auto detect if 3-pin or<br>  4-pin fan is in use.<br>- 1 x 24 pin ATX Power Connector<br>- 1 x 8 pin 12V Power Connector<br>- 1 x Front Panel Audio Connector<br>- 1 x AMD LED Fan USB Header<br>- 1 x Thunderbolt AIC Connector (5-pin) (Supports ASRock Thunderbolt AIC Card only)<br>- 1 x USB 2.0 Header (Supports 2 USB 2.0 ports) (Supports ESD Protection)<br>- 2 x USB 3.2 Gen1 Headers (Support 4 USB 3.2 Gen1 ports)<br>  (Supports ESD Protection) |
| **BIOS Feature** | - 256Mb AMI UEFI Legal BIOS with GUI support<br>- Supports "Plug and Play"<br>- ACPI 5.1 compliance wake up events<br>- Supports jumperfree<br>- SMBIOS 2.3 support<br>- CPU, CPU VDDCR_SOC, DRAM, VPPM, PREM VDD_CLDO, PERM<br>  VDDCR_SOC, +1.8V, VDDP, VDDG, CPU Load-Line Calibration,<br>  CPU VDDCR_SOC Load-Line Calibration Voltage Multi-adjustment |
| **Support CD** | - Drivers, Utilities, AntiVirus Software (Trial Version), Google Chrome Browser and Toolbar |
| **Software and UEFI** | **Software**<br>- ASRock A-Tuning<br>- ASRock Polychrome SYNC<br>- ASRock XFast LAN<br>* These utilities can be downloaded from<br>  ASRock Live Update & APP Shop.<br><br>**UEFI**<br>- ASRock Full HD UEFI<br>- ASRock Instant Flash<br>- ASRock Easy RAID Installer |
| **Hardware Monitor** | - Temperature Sensing: CPU, CPU/Water Pump, Chassis, Chassis/Water Pump Fans<br>- Fan Tachometer: CPU, CPU/Water Pump, Chassis, Chassis/Water Pump Fans<br>- Quiet Fan (Auto adjust chassis fan speed by CPU temperature): CPU, CPU/Water<br>  Pump, Chassis, Chassis/Water Pump Fans<br>- Fan Multi-Speed Control: CPU, CPU/Water Pump, Chassis, Chassis/Water Pump Fans<br>- Voltage monitoring: +12V, +5V, +3.3V, CPU Vcore, CPU VDDCR_SOC, DRAM,<br>  PREM VDDCR_SOC, +1.8V, VDDP |
| **OS** | - Microsoft® Windows® 10 64-bit |
| **Certifications** | - FCC, CE<br>- ErP/EuP ready (ErP/EuP ready power supply is required) |
| **Accessories** | - Quick Installation Guide, Support CD, I/O Shield<br>- 2 x SATA Data Cables<br>- 3 x Screws for M.2 Sockets<br>- 1 x Standoff for M.2 Socket |