

Gaming Armor

Power

- Hi-Density Power Connector (8 pin)

Memory

- 15μ Gold Contact in DIMM Slots

VGA Card

- 15μ Gold Contact in VGA PCIe Slot (PCIE1)

Internet

- Intel[®] LAN

Cooling

- 2oz Copper PCB

Audio

- Creative Sound Blaster[™] Cinema 3

Unique Feature

ASRock Super Alloy

- Premium Power Choke
- Dual-N MOSFET
- Nichicon 12K Black Caps (100% Japan made high quality conductive polymer capacitors)
- Matte Black PCB
- High Density Glass Fabric PCB
- 2oz Copper PCB

Intel[®] 802.11ac WiFi

ASRock Steel Slots

ASRock Ultra M.2 (PCIe Gen3 x4 & SATA3)

ASRock Full Spike Protection (for all USB, Audio, LAN Ports)

ASRock Live Update & APP Shop

- CPU
- Supports AMD Socket AM4 A-Series APUs (Bristol Ridge) and Ryzen Series CPUs (Summit Ridge)
 - Digi Power design
 - 8 Power Phase design
 - Supports 95W Water Cooling

- Chipset
- AMD Promontory B350

- Memory
- Dual Channel DDR4 Memory Technology
 - 2 x DDR4 DIMM Slots
 - AMD Ryzen series CPUs support DDR4 3466+(OC) / 3200(OC) / 2933(OC) / 2667 / 2400 / 2133 ECC & non-ECC, un-buffered memory*
 - AMD 7th Gen A-Series APUs support DDR4 2400/2133 ECC & non-ECC, un-buffered memory*
 - Max. capacity of system memory: 32GB**
 - 15μ Gold Contact in DIMM Slots

*Please refer to below table for DDR4 UDIMM maximum frequency support.

A-Series APUs:

UDIMM Memory Slot		Frequency(MHZ)
A1	B1	
-	SR	2400
SR	-	2400
-	DR	2400
DR	-	2400
SR	SR	2400
DR	DR	2400

Ryzen Series CPUs:

UDIMM Memory Slot		Frequency(MHZ)
A1	B1	
-	SR	2667
SR	-	2667
-	DR	2667
DR	-	2667
SR	SR	2667
DR	DR	2667

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

**Due to the operating system limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® 32-bit OS. For Windows® 64-bit OS with 64-bit CPU, there is no such limitation. Please refer to Memory Support List on ASRock's website for more information.

BIOS

- 128Mb AMI UEFI Legal BIOS with GUI support
- Supports "Plug and Play"
- ACPI 5.1 compliance wake up events
- Supports jumperfree
- SMBIOS 2.3 support
- CPU, DRAM, PCH 1.05V, PROM 2.5V, Voltage Multi-adjustment

Graphics

- Integrated AMD Radeon™ R-Series Graphics in A-series APU*
- DirectX 12, Pixel Shader 5.0
- Max. shared memory 2GB
- Supports 2 x HDMI with max. resolution up to 4K x 2K (4096x2160) @ 24Hz / (3840x2160) @ 30Hz
- Supports Auto Lip Sync, Deep Color (12bpc), xvYCC and HBR (High Bit Rate Audio) with HDMI Ports (Compliant HDMI monitor is required)
- Supports HDCP with HDMI Ports

- Supports Full HD 1080p Blu-ray (BD) playback with HDMI Ports

*Actual support may vary by CPU

Audio

- 7.1 CH HD Audio with Content Protection (Realtek ALC1220 Audio Codec)
- Premium Blu-ray Audio support
- Supports Surge Protection
- Nichicon Fine Gold Series Audio Caps
- 120dB SNR DAC with Differential Amplifier
- Pure Power-In
- Direct Drive Technology
- PCB Isolate Shielding
- Impedance Sensing on Line Out port
- Individual PCB Layers for R/L Audio Channel
- Gold Audio Jacks
- Supports Creative Sound Blaster™ Cinema 3

LAN

- Gigabit LAN 10/100/1000 Mb/s
- GigaLAN Intel® I211AT
- Supports Wake-On-LAN
- Supports Lightning/ESD Protection
- Supports Energy Efficient Ethernet 802.3az
- Supports PXE

Wireless LAN	<ul style="list-style-type: none"> - Intel® 802.11ac WiFi Module (Free Bundle) - Supports IEEE 802.11a/b/g/n/ac - Supports Dual-Band (2.4/5 GHz) - Supports high speed wireless connections up to 433Mbps - Supports Bluetooth 4.2 / 3.0 + High speed class II
Slots	<p>AMD Ryzen series CPUs</p> <ul style="list-style-type: none"> - 1 x PCI Express 3.0 x16 Slot (PCIE1: x16 mode)* <p>AMD 7th A-Series APUs</p> <ul style="list-style-type: none"> - 1 x PCI Express 3.0 x16 Slot (PCIE1: x8 mode)* - 1 x Vertical M.2 Socket (Key E) with the bundled WiFi-802.11ac module (on the rear I/O) - 15µ Gold Contact in VGA PCIe Slot (PCIE1) <p>*Supports PCIe riser cards to extend one x16 slot to two x8 slots if you install AMD Ryzen series CPUs Supports NVMe SSD as boot disks</p>
Storage	<ul style="list-style-type: none"> - 4 x SATA3 6.0 Gb/s Connectors, support RAID (RAID 0, RAID 1 and RAID 10), NCQ, AHCI and Hot Plug - 1 x Ultra M.2 Socket, supports M Key type 2280 M.2 SATA3 6.0 Gb/s module and M.2 PCI Express module up to Gen3 x4 (32 Gb/s) (with Ryzen Series CPU) or Gen3 x2 (16 Gb/s) (with A-Series APU)* <p>*Supports NVMe SSD as boot disks</p>
Connector	<ul style="list-style-type: none"> - 1 x LPC Header - 1 x AMD Fan LED Header*

- 1 x CPU Fan Connector (4-pin)**
- 1 x Chassis Fan Connector (4-pin)
- 1 x Chassis Optional/Water Pump Fan Connector (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 Front Panel Audio Connector
- 1 x AMD LED Fan USB Header
- 1 x USB 2.0 Header (Supports 2 USB 2.0 ports) (Supports ESD Protection)
- 1 x USB 3.1 Gen1 Header (Supports 2 USB 3.1 Gen1 ports) (Supports ESD Protection)

*The AMD Fan LED Header supports LED strips of maximum load of 3A (36W) and length up to 2.5M.

**The CPU Fan Connector supports the CPU fan of maximum 1A (12W) fan power.

***The Chassis Optional/Water Pump Fan supports the water cooler fan of maximum 1.5A (18W) fan power. CHA_FAN1/W_PUMP can auto detect if 3-pin or 4-pin fan is in use.

Rear Panel I/O

- 2 x Antenna Ports
- 1 x PS/2 Mouse/Keyboard Port
- 2 x HDMI Ports
- 1 x Optical SPDIF Out Port
- 2 x USB 2.0 Ports (Supports ESD Protection)*
- 1 x USB 3.1 Gen1 Type-A Port (Supports ESD Protection)
- 1 x USB 3.1 Gen1 Type-C Port (Supports ESD Protection)
- 2 x USB 3.1 Gen1 Ports (Supports ESD Protection)
- 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED)

- HD Audio Jacks: Rear Speaker / Central / Bass / Line in / Front Speaker / Microphone (Gold Audio Jacks)

*1 x Fatal1ty Mouse Port (USB 2.0) is included

Software and UEFI

Software

- ASRock F-Stream
- ASRock RGB LED
- ASRock Key Master
- ASRock APP Charger
- ASRock XFast LAN

UEFI

- ASRock Full HD UEFI
- ASRock Instant Flash
- ASRock Internet Flash
- ASRock Easy RAID Installer

*These utilities can be downloaded from ASRock Live Update & APP Shop.

Support CD

- Drivers, Utilities, AntiVirus Software (Trial Version), Google Chrome Browser and Toolbar

Accessories

- Quick Installation Guide, Support CD, I/O Shield
- 2 x SATA Data Cables
- 2 x ASRock WiFi 2.4/5 GHz Antennas
- 1 x Screw for M.2 Socket

Hardware Monitor	<ul style="list-style-type: none">- Temperature Sensing: CPU, Chassis, Chassis Optional/Water Pump Fans- Fan Tachometer: CPU, Chassis, Chassis Optional/Water Pump Fans- Quiet Fan (Auto adjust chassis fan speed by CPU temperature): CPU, Chassis, Chassis Optional/Water Pump Fans- Fan Multi-Speed Control: CPU, Chassis, Chassis Optional/Water Pump Fans- Voltage monitoring: +12V, +5V, +3.3V, CPU Vcore
Form Factor	<ul style="list-style-type: none">- Mini-ITX Form Factor: 6.7-in x 6.7-in, 17.0 cm x 17.0 cm- 2oz Copper PCB
OS	<ul style="list-style-type: none">- Microsoft® Windows® 10 64-bit
Certifications	<ul style="list-style-type: none">- FCC, CE- ErP/EuP ready (ErP/EuP ready power supply is required)