

ROG Crosshair VIII Impact

rog.asus.com/motherboards/rog-crosshair/rog-crosshair-viii-impact-model/spec



CPU

AMD AM4 Socket for AMD Ryzen™ 5000 Series/ 4000 G-Series/ 3000 Series/ 3000 G-Series/ 2000 Series/ 2000 G-Series Desktop Processors

* Refer to www.asus.com for CPU support list

Chipset

AMD X570

Memory

2 x DIMM, Max. 64GB, DDR4
5100(O.C.)/4866(O.C.)/4800(O.C.)/4600(O.C.)/4400(O.C.)/4266(O.C.)/4133(O.C.)/4000(O.C.)/3866(O.C.)/3733(O.C.)/3600(O.C.)/3466(O.C.) MHz Un-buffered Memory

4 x DIMM, Max. 128GB, DDR4
4866(O.C.)/4800(O.C.)/4600(O.C.)/4400(O.C.)/4266(O.C.)/4133(O.C.)/4000(O.C.)/3866(O.C.)/3733(O.C.)/3600(O.C.)/3466(O.C.)/3400(O.C.) MHz Un-buffered Memory

AMD Ryzen™ 4000 G-Series Processor

AMD Ryzen™ 2000 Series Processors

2 x DIMM, Max. 64GB, DDR4 3600(O.C.)/3466(O.C.)/3400(O.C.)/3200(O.C.)/3000(O.C.)/2933/2800/2666/2400/2133 MHz Un-buffered Memory

2 x DIMM, Max. 64GB, DDR4 3200(O.C.)/3000(O.C.)/2933/2800/2666/2400/2133 MHz Un-buffered Memory

* Double Capacity DRAM support depends on the DRAM models

Dual Channel Memory Architecture

* Refer to www.asus.com for the Memory QVL (Qualified Vendors Lists).

Expansion Slots

AMD Ryzen™ 5000 Series/ 3000 Series Desktop Processors

AMD Ryzen™ 3000 G-Series / 2000 G-Series Processors

AMD Ryzen™ 4000 G-Series / 2000 Series Processors

1 x PCIe 4.0 x16 (x16 mode)

1 x PCIe 3.0 x16 (x16 mode)

1 x PCIe 3.0 x16 (x8 mode)

Storage

AMD Ryzen™ 4000 G-Series / 3000 G-Series / 2000 Series / 2000 G-Series Processors :

AMD Ryzen™ 5000 Series/ 3000 Series Desktop Processors :

1 x M.2_2 socket 3, with M Key, Type 2242/2260/2280 (PCIe 4.0 x4 and SATA modes) storage devices support

1 x M.2_2 socket 3, with M key, type 2242/2260/2280 storage devices support (SATA & PCIe 3.0 x 4 mode)

AMD X570 chipset :

1 x M.2_1 socket 3, with M Key, Type 2242/2260/2280 (PCIe 4.0 x4 and SATA modes) storage devices support

4 x SATA 6Gb/s port(s),

Support Raid 0, 1, 10

LAN

Intel® I211-AT

ASUS LAN Guard

ROG GameFirst Technology

Wireless Data Network

Intel® Wi-Fi 6 AX200

Supports channel bandwidth: HT20/HT40/HT80/HT160

2 x 2 Wi-Fi 6 (802.11 a/b/g/n/ac/ax) with MU-MIMO supports dual frequency band 2.4/5GHz

Up to 2.4Gbps transfer speed

Bluetooth

Bluetooth® 5.0

Audio

ROG SupremeFX8-Channel High Definition Audio CODEC

- Impedance sense for front and rear headphone outputs
- Supports : Jack-detection, Multi-streaming, Front Panel Jack-retasking
- High quality 120dB SNR stereo playback output and 113dB SNR recording input
- SupremeFX Shielding Technology
- ESS® ES9023P
- Supports up to 32-Bit/192kHz playback

Audio Feature :

- Sonic Studio III + Sonic Studio Virtual Mixer
- DTS® Sound Unbound
- Optical S/PDIF out port(s) at back panel
- Sonic Radar III

* Due to limitations in HDA bandwidth, 32-Bit/192kHz is not supported for 8-Channel audio.

USB Ports

AMD Ryzen™5000 Series / 4000 G-Series/ 3000 Series Processors :

AMD Ryzen™3000 G-Series / 2000 Series / 2000 G-Series Processors :

2 x USB 3.2 Gen 2 port(s)

2 x USB 3.2 Gen 1 port(s)

2 x USB 2.0 port(s)

4 x USB 3.2 Gen 1 port(s)

1 x USB 3.2 Gen 2 front panel connector port(s)

4 x USB 3.2 Gen 2 port(s)

AMD X570 chipset :

ROG Exclusive Features

- Infineon TDA21472 Power Stage

Extreme Engine Digi+ :

- MicroFine Alloy Chokes

- 10K Black Metallic Capacitors

ROG Extreme OC kit :

- OptiMem III

- Safe Boot button

- Slow Mode

- LN2 Mode

Extreme Tweaker

ROG Patented Pre-mounted I/O Shield

ROG Exclusive Software

- RAMCache III

- RAMDisk

- CPU-Z

- GameFirst V

Special Features

- USB BIOS FlashBack™

ASUS Dual Intelligent Processors 5-Way Optimization by Dual Intelligent Processors 5 :

- 5-Way Optimization tuning key perfectly consolidates TPU, EPU, DIGI+ VRM, Fan Expert 4, and Turbo App

AURA :

- Aura Lighting Effects Synchronization with compatible ASUS ROG devices

ASUS Exclusive Features :

- AI Suite 3

- Ai Charger

- ASUS CrashFree BIOS 3

- Armoury Crate

- ASUS NODE: hardware control interface

- ASUS EZ Flash 3

- ASUS C.P.R.(CPU Parameter Recall)

- Clear CMOS Button

- Reset Button

- Start Button

- ReTry button

ASUS Q-Design :

- ASUS Q-Code

- ASUS Q-LED (CPU, DRAM, VGA, Boot Device LED)

- ASUS Q-Slot
- ASUS Q-DIMM

Back I/O Ports

- 1 x USB BIOS FlashBack™ Button(s)
- 2 x USB 3.2 Gen 1 (up to 5Gbps) ports
- 6 x USB 3.2 Gen 2 (up to 10Gbps) ports ()
- 1 x Q-Code LED
- 3 x LED-illuminated audio jacks
- 1 x Optical S/PDIF out
- 1 x Clear CMOS button(s)
- 1 x ASUS Wi-Fi Module
- Anti-surge LAN (RJ45) port

Internal I/O Ports

- 2 x Radiator Fan Headers
- 1 x Aura RGB Strip Headers
- 2 x M.2 Socket 3 with M key, type 2242/2260/2280 storage devices support
- 2 x Addressable Gen 2 header(s)
- 1 x USB 2.0 connector(s) support(s) additional 2 USB 2.0 port(s)
- 4 x SATA 6Gb/s connector(s)
- 1 x CPU Fan connector(s)
- 1 x Chassis Fan connector(s)
- 1 x W_PUMP+ connector
- 1 x 24-pin EATX Power connector(s)
- 1 x 8-pin EATX 12V Power connectors
- 1 x Front panel audio connector(s) (AAFP)
- 1 x Slow Mode switch(es)
- 1 x Reset button(s)
- 1 x Node Connector(s)
- 1 x LN2 Mode jumper(s)
- 1 x Safe Boot button
- 1 x ReTry button
- 1 x System panel connector
- 1 x T_Sensor Connector
- 1 x W_IN header
- 1 x W_OUT header
- 1 x W_FLOW header
- 1 x Start button
- 1 x USB 3.2 Gen 2 (up to 10Gbps) connector
- 1 x USB 3.2 Gen 1 (up to 5Gbps) connector support additional 2 USB ports

Accessories

1 x ROG SO-DIMM.2 with heatsinks

1 x 2-in-1 Rubber pad

1 x Panel cable

2 x M.2 screw kit (short screw and mount)

User's manual

4 x SATA 6Gb/s cable(s)

1 x Supporting DVD

1 x ROG big sticker

1 x Wi-Fi Antenna(s)

1 x Extension Cable for RGB strips (80 cm)

1 x Extension cable for Addressable LED

1 x ROG coaster(s)

1 x ROG Thank you card

BIOS

256 Mb Flash ROM, UEFI AMI BIOS, PnP, WfM2.0, SM BIOS 3.2, ACPI 6.2

Manageability

WOL, PXE

Operating System

Windows® 10 64-bit

Form Factor

Mini-DTX Form Factor

8 inch x 6.7 inch (20.3 cm x 17 cm)

Note

ROG CROSSHAIR VIII IMPACT

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