

ROG MAXIMUS X APEX

Specifications

- CPU

Intel® Socket 1151 for 8th Generation Core™ Processors

- Chipset

Intel® Z370

- Memory

2 x DIMM, Max. 32GB, DDR4

4500(O.C.)/4333(O.C.)/4266(O.C.)/4200(O.C.)/4133(O.C.)/4000(O.C.)/3866(O.C.)/3733(O.C.)/3466(O.C.)/3400(O.C.)/3333(O.C.)/3200(O.C.)/3000(O.C.)/2800(O.C.)/2666/2400/2133 MHz Non-ECC, Un-buffered Memory

- Graphic

Integrated Graphics Processor- Intel® HD Graphics support

Multi-VGA output support : HDMI/DisplayPort ports

- Supports HDMI with max. resolution 4096 x 2160 @ 24 Hz

- Supports DisplayPort 1.2 with max. resolution 4096 x 2304 @ 60 Hz

Maximum shared memory of 1024 MB

- Multi-GPU Support

Supports NVIDIA® 2-Way SLI™ Technology

Supports AMD 4-Way CrossFireX Technology

Supports AMD 3-Way CrossFireX™ Technology

Supports AMD 2-Way CrossFireX Technology

- Expansion Slots

3 x PCIe 3.0 x16 (x16 or dual x8 or x8/x4/x4)

1 x PCIe 3.0 x16 (max at x4 mode)

2 x PCIe 3.0/2.0 x1

- Storage

1 x ROG DIMM.2 Module support(PCH_DIMM.2), with M key, type 2242/2260/2280/22110 storage devices support (PCIe 3.0 x 4 mode)
1 x ROG DIMM.2 Module support(PCH_DIMM.2), with M key, type 2242/2260/2280/22110 storage devices support (SATA & PCIe 3.0 x 4 mode)
4 x SATA 6Gb/s port(s)
Support Raid 0, 1, 5, 10
Supports Intel® Smart Response Technology

Intel® Optane™ Memory Ready

- LAN

Intel® I219V, Dual interconnect between the Integrated Media Access Controller (MAC) and Physical Layer (PHY)

- Audio

ROG SupremeFX 8-Channel High Definition Audio CODEC S1220A
- Impedance sense for front and rear headphone outputs
- Supports : Jack-detection, Multi-streaming, Front Panel Jack-retasking
- High quality 120 dB and 113 dB SNR recording input
Audio Feature :
- SupremeFX Shielding™ Technology
- Gold-plated jacks

- USB Ports

Intel® Z370 Chipset :
8 x USB 3.1 Gen 1 port(s) (6 at back panel, blue)
Intel® Z370 Chipset :
6 x USB 2.0 port(s)
ASMedia® USB 3.1 Gen 2 controller :
2 x USB 3.1 Gen 2 port(s) (Type-A + USB Type-C™, Reversible)

- ROG Exclusive Features

Condensation detection
Clear CMOS button
ROG RAMCache II
ROG CPU-Z
ROG CloneDrive
MemOK! Button
Slow Mode
Overwolf

ROG Aura

- Aura Lighting Control
- Aura RGB Strip Headers

Extreme Engine Digi+ :

- MicroFine Alloy Chokes
- NexFET™ Power Block MOSFET
- 10K Black Metallic Capacitors

ROG Extreme OC kit :

- ReTry button
- Safe Boot button
- Start button
- Reset button
- Slow Mode
- LN2 Mode
- PCIe x16 Lane Switch
- EZ Plug

Double Power :

- Dual 8 -pin CPU

ProbeIt**UEFI BIOS features :**

- O.C. Profile
- Tweakers' Paradise
- ROG SSD Secure Erase
- Graphic Card Information Preview

USB BIOS Flashback**Overclocking Protection :**

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

- Special Features

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

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

ASUS Exclusive Features :

- AI Suite 3
- Anti-Surge

ASUS EZ DIY :

- ASUS CrashFree BIOS 3
- ASUS EZ Flash 3
- ASUS USB BIOS Flashback

ASUS Q-Design :

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

- ASUS Q-DIMM
- ASUS Q-Connector
- Gaming Aesthetics :**
- 3D printing friendly
- AURA-RGB Lighting

- Back I/O Ports

- 1 x PS/2 keyboard (purple)
- 1 x PS/2 mouse (green)
- 1 x DisplayPort
- 1 x HDMI
- 1 x LAN (RJ45) port(s)
- 1 x Optical S/PDIF out
- 1 x Clear CMOS button(s)
- 1 x USB BIOS Flashback Button(s)
- 5 x Gold-plated audio jacks
- 6 x USB 3.1 Gen 1 (blue)
- 1 x USB 3.1 Gen 2 (red)Type-A
- 1 x USB 3.1 (black)USB Type-C™
- 1 x 5G LAN(RJ45) port(s)

- Internal I/O Ports

- 1 x Q_Code
- 1 x AAFP connector
- 4 x Aura RGB Strip Headers
- 1 x USB 3.1 Gen 1 connector(s) support(s) additional 2 USB 3.1 Gen 1 port(s)
- 3 x USB 2.0 connector(s) support(s) additional 6 USB 2.0 port(s)
- 4 x SATA 6Gb/s connector(s)
- 1 x CPU Fan connector(s)
- 1 x CPU OPT Fan connector(s)
- 3 x Chassis Fan connector(s)
- 1 x AIO_PUMP connector
- 1 x W_PUMP+ connector
- 1 x 24-pin EATX Power connector(s)
- 2 x 8-pin ATX 12V Power connector(s)
- 1 x 4-pin EZ_PLUG Power connector(s)
- 1 x MemOK! button(s)
- 1 x Slow Mode switch(es)
- 9 x ProbeIt Measurement Points
- 2 x Thermal sensor connector(s)
- 1 x Power-on button(s)
- 1 x Reset button(s)
- 1 x BIOS Switch button(s)
- 1 x LN2 Mode jumper(s)

- 1 x ROG extension (ROG_EXT) header(s)
- 1 x Safe Boot button
- 1 x ReTry button
- 1 x 14-1 pin TPM connector
- 1 x PCIe x16 lane switch
- 1 x 3D Mount screw port(s)
- 1 x W_IN header
- 1 x W_OUT header
- 1 x W_FLOW header
- 1 x DIMM.2 Slot supports 2 M.2 drives (2242-22110)
- 3 x 4-pin Full Speed Fan connectors
- 3 x onboard LED ON/OFF jumper(s)
- 1 x PAUSE Switch
- 1 x RSVD Switch

- Accessories

- User's manual
- I/O Shield
- 4 x SATA 6Gb/s cable(s)
- 1 x Supporting DVD
- 1 x ROG DIMM.2 Fan Stand Pack (s)
- 1 x SLI HB BRIDGE(2-WAY-L)
- 1 x ROG big sticker
- 2 x M.2 screw kit (short screw and mount)
- 1 x DIMM.2 extension card with 2 x M key, type 2242/2260/2280/22110 storage devices support (SATA & PCIE 3.0 x 4 mode)
- 1 x Q-connector(s) (10 in 1)
- 1 x Extension Cable for RGB strips (80 cm)
- 1 x ROG coaster(s)
- 1 x Customizable Name Plate Accessory Pack
- 1 x ROG OC fan bracket Pack

- BIOS

- 2 x 128 Mb Flash ROM, UEFI AMI BIOS, PnP, DMI3.0, WfM2.0, SM BIOS 3.0, ACPI 6.0, Multi-language BIOS, ASUS EZ Flash 3, CrashFree BIOS 3, F11 EZ Tuning Wizard, F6 Qfan Control, F3 My Favorites, Last Modified log, F12 PrintScreen, F3 Shortcut functions and ASUS DRAM SPD (Serial Presence Detect) memory information.

- Operating System

Windows® 10 64-bit

- Form Factor

Extended ATX Form Factor

12 inch x 10.7 inch (30.5 cm x 27.2 cm) X-SHAPED PCB