

## TECHNICAL SPECIFICATION

- CPU

\* The Intel® Turbo Boost Technology 2.0 support depends on the CPU types.

Supports Intel® Turbo Boost Technology 2.0

Supports Intel® 14 nm CPU

\* Refer to [www.asus.com](http://www.asus.com) for CPU support list

Intel® for 8<sup>th</sup> Generation Core™ Socket 1151 Processors

- Chipset

Intel® Z370

- Memory

4 x DIMM, Max. 64GB, DDR4

2400/3866(O.C.)/4000(O.C.)/3466(O.C.)/3000(O.C.)/3200(O.C.)/2800(O.C.)/3300(O.C.)

/3600(O.C.)/3333(O.C.)/2133/3733(O.C.)/3400(O.C.)/2666 MHz Non-ECC, Un-buffered

Memory

\* Refer to [www.asus.com](http://www.asus.com) for the Memory QVL (Qualified Vendors Lists).

Supports Intel® Extreme Memory Profile (XMP)

\* Hyper DIMM support is subject to the physical characteristics of individual CPUs.

Dual Channel Memory Architecture

- Graphic

Maximum shared memory of 1024 MB

Supports Intel® InTru™ 3D, Quick Sync Video, Insider™, Clear Video HD Technology

Supports up to 3 displays simultaneously

Integrated Graphics Processor- Intel® HD Graphics support

- Supports DisplayPort with max. resolution 4096 x 2304 @ 60 Hz \*1

Multi-VGA output support : DisplayPort /DVI-D/HDMI ports

- Supports DVI-D with max. resolution 1920 x 1200 @ 60 Hz

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

- Multi-GPU Support

Supports NVIDIA® 2-Way SLI™ Technology

Supports AMD 3-Way CrossFireX™ Technology

- Expansion Slots

2 x PCIe 3.0/2.0 x16 (x16 or dual x8)

4 x PCIe 3.0/2.0 x1

1 x PCIe 3.0/2.0 x16 (max at x4 mode)

- Storage

Support Raid 5, 10, 0, 1

6 x SATA 6Gb/s port(s)

**Intel® Z370 Chipset :**

1 x M.2 Socket 3, with M Key, type 2242/2260/2280 storage devices support (SATA mode & X4 PCIE mode)\*<sup>3</sup>

1 x M.2 Socket 3, with M Key, type 2242/2260/2280 storage devices support (PCIE mode only)\*<sup>2</sup>

Intel® Optane™ Memory Ready \*<sup>4</sup>

- LAN

Anti-surge LANGuard

ROG GameFirst Technology

Intel® I219V

- Wireless Data Network

Supports MU-MIMO

Supports dual band frequency 2.4/5 GHz

Wi-Fi 802.11 a/b/g/n/ac

- Bluetooth

Bluetooth V4.2

- Audio

**Audio Feature :**

- Dedicated audio PCB layers: Separate layers for left and right channels to guard the quality of the sensitive audio signals

- Sonic Studio III

- Premium Japanese-made audio capacitors: Provide warm, natural and immersive sound with exceptional clarity and fidelity

- Optical S/PDIF out port(s) at back panel

- Sonic Radar III

- SupremeFX Shielding™ Technology

- SupremeFX Shielding Technology

- Dual Headphone Amplifiers

ROG SupremeFX 8-Channel High Definition Audio CODEC S1220A

120 dB - High quality 113 dB and SNR recording input SNR stereo playback output

- Supports up to 32-Bit/192kHz playback \*<sup>5</sup>

- Impedance sense for front and rear headphone outputs

- Supports : Jack-detection, Front Panel Jack-retasking, Multi-streaming

- USB Ports

**Intel® Z370 Chipset :**

6 x USB 3.0 port(s) (4 at back panel, blue, 2 at mid-board)

**Intel® Z270 Chipset :**

6 x USB 2.0 port(s)

**ASMedia® USB 3.1 Gen 2 controller : \*6**

1 x USB 3.1 Gen 2 front panel connector port(s)

**ASMedia® USB 3.1 Gen 2 controller :**

2 x USB 3.1 port(s) (Support 3A power output, Type-A + USB Type-C™)

- ROG Exclusive Features

**ROG Aura**

- Aura RGB Strip Headers

- Aura Lighting Control

**ROG CloneDrive**

**Overwolf**

**ROG CPU-Z**

**ROG RAMCache II**

**GameFirst IV**

- Special Features

**ASUS EZ DIY :**

- ASUS EZ Flash 3

- ASUS CrashFree BIOS 3

- ASUS USB BIOS Flashback

**Gaming Aesthetics :**

- AURA-RGB Lighting

- 3D printing friendly

**ASUS Q-Design :**

- ASUS Q-DIMM

- ASUS Q-Shield

- ASUS Q-Slot

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

**Turbo APP**

**OC Design - ASUS PRO Clock Technology**

- Full BCLK range for extreme overclocking performance

**Digi+VRM**

**TPU**

- Auto Tuning, TurboV, GPU Boost

- Fan Xpert 4 featuring Fan Auto Tuning function and multiple thermistors

**M.2 Onboard(The latest transfer technologies with up to 32Gb/s data transfer speeds)**

**ASUS Exclusive Features :**

- AI Suite 3
- Ai Charger
- ESD Guards

**Gamer's Guardian:**

- DIGI+ VRM
- DRAM Overcurrent Protection
- Stainless Steel Back I/O
- SafeSlot
- Highly Durable Components

**5-Way Optimization by Dual Intelligent Processors 5**

- Whole system optimization with a single click! 5-Way Optimization tuning key perfectly consolidates TPU, EPU, DIGI+ Power Control, Fan Xpert 4, and Turbo App together, providing better CPU performance, efficient power saving, precise digital power control, whole system cooling and even tailor your own app usages.

- Back I/O Ports

- 1 x ASUS Wi-Fi GO! module (Wi-Fi 802.11 a/b/g/n/ac and Bluetooth v4.2)
- 2 x USB 3.1 Gen 1 (blue)
- 1 x Optical S/PDIF out
- 5 x Audio jack(s)
- 1 x DVI-D
- 0 x LAN (RJ45) port(s)
- 2 x USB 3.1 Gen 2 Type-A + USB Type-C™
- 1 x HDMI
- 1 x DisplayPort

- Internal I/O Ports

- 1 x USB 3.1 Gen 2 front panel connector
- 2 x USB 2.0 connector(s) support(s) additional 4 USB 2.0 port(s)
- 6 x SATA 6Gb/s connector(s)
- 2 x RGB Header(s)
- 1 x CPU OPT Fan connector(s)
- 1 x M.2\_FAN connector
- 1 x COM port header
- 1 x M.2 Socket 3 with M Key, type 2242/2260/2280 storage devices support (SATA mode & X4 PCIE mode)
- 1 x CPU Fan connector(s)
- 1 x 14-1 pin TPM connector
- 1 x M.2 Socket 3 with M Key, type 2242/2260/2280 storage devices support (PCIE mode only)
- 1 x 5-pin EXT\_FAN(Extension Fan) connector
- 1 x Clear CMOS jumper(s)
- 1 x CPU OV

- 1 x Aura Addressable Strip Header(s)
- 1 x Thermal sensor connector(s)
- 2 x Chassis Fan connector(s)
- 1 x System panel(s) (Chassis intrusion header is inbuilt)
- 1 x 24-pin EATX Power connector(s)
- 2 x USB 3.1 Gen 1 connector(s) support(s) additional 4 USB 3.1 Gen 1 port(s)
- 3 x 3D Mount screw port(s)
- 1 x AAFP connector
- 1 x AIO PUMP Header
- 1 x 8-pin ATX 12V Power connector(s)

- Accessories

- 1 x Extension cable for Addressable LED
- 1 x Thermistor cable(s)
- 4 x SATA 6Gb/s cable(s)
- 1 x CABLE TIE BLACK
- 1 x ASUS 2T2R dual band Wi-Fi moving antennas (Wi-Fi 802.11a/b/g/n/ac compliant)
- ASUS Q-Shield
- 1 x 3D printing mount package
- ROG Fan Label
- 1 x Supporting DVD
- 1 x ASUS Fan Holder
- 1 x SLI HB BRIDGE(2-WAY-M)
- 1 x Extension Cable for RGB strips (80 cm)
- 1 x 10-in-1 ROG cable label
- 1 x ROG Strix stickers
- 1 x M.2 Screw Package
- 1 x ROG Door Hanger(s)
- User's manual
- 1 x CPU installation tool

- BIOS

128 Mb Flash ROM, UEFI AMI BIOS, PnP, 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, and ASUS DRAM SPD (Serial Presence Detect) memory information.

- Manageability

WfM2.0, DMI3.0, WOL by PME, PXE

- Operating System

Windows® 10 64-bit

- Form Factor

ATX Form Factor

12 cm x 9.6 cm ( 30.5 cm x 24.4 cm )

- Note

\*1 DP 1.2 Multi-Stream Transport compliant, supports DP 1.2 monitor daisy chain up to 3 displays.

\*2 The M.2\_1 socket shares SATA\_1 port when use M.2 SATA mode device. Adjust BIOS settings to use a SATA device.

\*3 The M.2\_2 socket shares SATA\_56 ports when use M.2 PCIE mode device in X4 mode. Adjust BIOS settings to use SATA devices.

\*4 Intel® Optane Technology only supported when using 8th Generation Intel® Processors. Before using Intel® Optane memory modules, ensure that you have updated your motherboard drivers and BIOS to the latest version from ASUS support website.

\*5 Due to limitations in HDA bandwidth, 32-Bit/192kHz is not supported for 8-Channel audio.

\*6 The USB 3.1 front panel connector shares bandwidth with PCIE\_x1\_2 and PCIE\_x1\_4. If the USB 3.1 front header is connected, PCIE\_x1\_2 and PCIE\_x1\_4 will be disabled.



- Products certified by the Federal Communications Commission and Industry Canada will be distributed in the United States and Canada. Please visit the ASUS USA and ASUS Canada websites for information about locally available products.
- All specifications are subject to change without notice. Please check with your supplier for exact offers. Products may not be available in all markets.
- Specifications and features vary by model, and all images are illustrative. Please refer specification pages for full details.
- PCB color and bundled software versions are subject to change without notice.
- Brand and product names mentioned are trademarks of their respective companies.

The product (electrical , electronic equipment, Mercury-containing button cell battery) should not be placed in municipal waste. Check local regulations for disposal of electronic products.