

Specifications- ASUS ROG STRIX Z270E

- CPU

Intel® Socket 1151 for 7th/6th Generation Core™ i7/Core™ i5/Core™ i3/Pentium®/Celeron® Processors

Supports Intel® 14 nm CPU

Supports Intel® Turbo Boost Technology 2.0

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

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

- Chipset

Intel® Z270

- Memory

4 x DIMM, Max. 64GB, DDR4

3866(O.C.)/3733(O.C.)/3600(O.C.)/3466(O.C.)/3400(O.C.)/3333(O.C.)/3300(O.C.)/3200(O.C.)/3000(O.C.)/2800(O.C.)/2666(O.C.)/2400/2133 MHz Non-ECC, Un-buffered Memory

Dual Channel Memory Architecture

Supports Intel® Extreme Memory Profile (XMP)

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

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

- Graphic

Integrated Graphics Processor- Intel® HD Graphics support

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

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

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

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

Maximum shared memory of 1024 MB

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

Supports up to 3 displays simultaneously

- 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)

1 x PCIe 3.0/2.0 x16 (x4 mode)

4 x PCIe 3.0/2.0 x1

- Storage

Intel® Z270 Chipset :

1 x M.2 Socket 3, with M Key, type 2242/2260/2280 storage devices support (PCIe mode only)*²

1 x M.2 Socket 3, with M Key, type 2242/2260/2280/22110 storage devices support (both SATA & PCIe mode)*³

6 x SATA 6Gb/s port(s)

Support Raid 0, 1, 5, 10

Supports Intel® Smart Response Technology*⁴

Intel® Optane™ Memory Ready *⁵

- LAN

Intel® I219V

Anti-surge LANGuard

ROG GameFirst Technology

- Wireless Data Network

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

Supports dual band frequency 2.4/5 GHz

Supports MU-MIMO

- Bluetooth

Bluetooth V4.1

- Audio

ROG SupremeFX 8-Channel High Definition Audio CODEC S1220A

- Dual Headphone Amplifiers

- Impedance sense for front and rear headphone outputs

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

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

- SupremeFX Shielding Technology

- Supports up to 32-Bit/192kHz playback *⁶

Audio Feature :

- SupremeFX Shielding™ Technology

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

- Dedicated audio PCB layers: Separate layers for left and right channels to guard the quality of the sensitive audio signals
- Premium Japanese-made audio capacitors: Provide warm, natural and immersive sound with exceptional clarity and fidelity
- Sonic Radar III
- Sonic Studio III

- USB Ports

Intel® Z270 Chipset :

6 x USB 3.1 Gen 1 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 controller : *7

1 x USB 3.1 front panel connector port(s)

ASMedia® USB 3.1 controller :

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

- ROG Exclusive Features

ROG RAMCache II

ROG CPU-Z

ROG CloneDrive

Overwolf

GameFirst IV

ROG Aura

- Aura Lighting Control
- Aura RGB Strip Headers

- Special Features

OC Design - ASUS PRO Clock Technology

- Full BCLK range for extreme overclocking performance

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.

TPU

- Auto Tuning, TurboV, GPU Boost
- Fan Xpert 4 featuring Fan Auto Tuning function and multiple thermistors

Gamer's Guardian:

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

- SafeSlot

ASUS Exclusive Features :

- AI Suite 3
- Ai Charger
- ESD Guards
- PC Cleaner

ASUS EZ DIY :

- ASUS CrashFree BIOS 3
- ASUS EZ Flash 3

ASUS Q-Design :

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

Gaming Aesthetics :

- 3D printing friendly
- AURA-RGB Lighting

Digi+VRM

Turbo APP

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

- Back I/O Ports

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

- Internal I/O Ports

- 1 x AAFP connector
- 2 x RGB Header(s)
- 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)
- 1 x M.2 Socket 3 with M Key, type 2242/2260/2280 storage devices support (PCIe mode only)
- 1 x M.2 Socket 3 with M Key, type 2242/2260/2280/22110 storage devices support (SATA mode & X4 PCIe mode)
- 6 x SATA 6Gb/s connector(s)
- 1 x CPU Fan connector(s)

- 1 x CPU OPT Fan connector(s)
- 2 x Chassis Fan connector(s)
- 1 x 24-pin EATX Power connector(s)
- 1 x 8-pin ATX 12V Power connector(s)
- 1 x Front panel connector(s)
- 1 x System panel(s) (Chassis intrusion header is inbuilt)
- 1 x 5-pin EXT_FAN(Extension Fan) connector
- 1 x Thermal sensor connector(s)
- 1 x CPU OV
- 1 x Clear CMOS jumper(s)
- 1 x ROG extension (ROG_EXT) header(s)
- 1 x 14-1 pin TPM connector
- 1 x COM port header
- 1 x High AMP Fan header (4-pin)
- 1 x T_Sensor Connector
- 1 x AIO PUMP Header
- 3 x 3D Mount screw port(s)
- 1 x USB 3.1 Gen 2 front panel connector

- Accessories

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

- 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

Windows® 8.1 64-bit *8

Windows® 7 32-bit *8

Windows® 7 64-bit *8

- Form Factor

ATX Form Factor

12 inch x 9.6 inch (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 These functions will work depending on the CPU installed.

*5 Intel® Optane Technology only supported when using 7th 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.

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

*7 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.

*8 Windows® 8.1 64-bit and Windows® 7 32/64-bit are only supported when using 6th Generation Intel® Processors.

*9 ROG GameFirst IV is only available for Windows® 10/8.1 64-bit

*10 Support for the Bluetooth specification depends on the Windows version. Win7/8.1 support up to Bluetooth 4.0.