

ROG Strix X299-E Gaming II

rog.asus.com/motherboards/rog-strix/rog-strix-x299-e-gaming-ii-model/spec



CPU

Intel® Socket 2066 Core™ X-Series Processors

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

Chipset

Intel® X299

Memory

8 x DIMM, Max. 256GB, DDR4
4266(O.C.)/4133(O.C.)/4000(O.C.)/3600(O.C.)/3400(O.C.)/3333(O.C.)/3300(O.C.)/3200(O.C.)/3000(O.C.)/2800(O.C.)/2666/2400/2133
MHz Non-ECC, Un-buffered Memory

8 x DIMM, Max. 256GB, DDR4
4266(O.C.)/4133(O.C.)/4000(O.C.)/3866(O.C.)/3800(O.C.)/3733(O.C.)/3600(O.C.)/3466(O.C.)/3400(O.C.)/3333(O.C.)/3300(O.C.)/3200(O.C.)
MHz Non-ECC, Un-buffered Memory

Quad Channel Memory Architecture

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

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

Multi-GPU Support

Supports NVIDIA® 3-Way SLI® Technology

Supports NVIDIA® 2-Way SLI® Technology

Supports AMD 3-Way CrossFireX™ Technology

Supports AMD 2-Way CrossFireX Technology

Expansion Slots

1 x PCIe 3.0 x1 *1

3 x PCIe 3.0 x16 (x16, x16/x16, x16/x16/x4)

3 x PCIe 3.0 x16 (x16, x16/x16, x16/x16/x8)

3 x PCIe 3.0 x16 (x16, x16/x8, x16/x8/x4)

(Intel® Core™ i9 10000 X-Series CPU)

(Intel® Core™ i9 9000/7000 and i7 9000 X-Series CPU)

(Intel® Core™ i7 7000 X-Series CPU)

48-Lane CPU-

44-Lane CPU-

28-Lane CPU-

Intel® X299 Chipset

1 x PCIe 3.0 x4

Storage

2 x M.2 Socket 3, with M key, type 2242/2260/2280/22110 storage devices support (PCIe 3.0 x 4 mode)*2

Intel® Virtual RAID on CPU (VROC)

1 x M.2 x4 Socket 3, with M key, type 2242/2260/2280/22110 storage devices support (both SATA & PCIe mode),

Intel® Optane™ Memory Ready *3

Intel® Core™ X-Series Processors Family :

Intel® X299 Chipset :

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

Support Raid 0, 1, 5, 10

Intel® Rapid Storage Technology supports

LAN

Intel® I219V

Realtek® RTL8125-CG 2.5G LAN

Anti-surge LANGuard

ROG GameFirst Technology

Wireless Data Network

Intel® Wi-Fi 6 AX200

Bluetooth

Bluetooth® 5.0

Audio

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

- Supports up to 32-Bit/192kHz playback *4

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

- SupremeFX Shielding Technology

Audio Feature :

- SupremeFX Shielding™ Technology

- DTS® Sound Unbound

- 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 + Sonic Studio Virtual Mixer

USB Ports

4 x USB 3.2 Gen 2 (up to 10Gbps) port(s) (4 at back panel, , 3 x Type-A + 1 x Type-C)

ASMedia® USB 3.2 Gen 2 controller :

6 x USB 3.2 Gen 1 (up to 5Gbps) port(s) (2 at back panel, , 4 at mid-board)

Intel® X299 Chipset :

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

8 x USB 2.0 port(s) (4 at back panel, , 4 at mid-board)

ROG Exclusive Features

USB BIOS FlashBack™**ROG CPU-Z****Overwolf****ROG Exclusive Software**

- GameFirst V

- Overwolf

Special Features

- ASUS USB BIOS FlashBack™

- 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 Xpert 4, and Turbo Core App

- Onboard Button : Power

OC Design - ASUS PRO Clock II Technology**AI Overclocking****LiveDash OLED****AURA :**

- Aura Lighting Control

- Aura RGB Strip Headers

- Addressable Gen 2 Header

ASUS Exclusive Features :

- AI Suite 3

- Ai Charger

- ASUS UEFI BIOS EZ Mode featuring friendly graphics user interface

- Armoury Crate

- ASUS NODE: hardware control interface

ASUS EZ DIY :

- ASUS EZ Flash 3

- ASUS UEFI BIOS EZ Mode

- Multi-language BIOS

ASUS Q-Design :

- ASUS Q-Code

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

- ASUS Q-Slot

- ASUS Q-DIMM

- ASUS Q-Connector

Back I/O Ports

4 x USB 2.0 (one port can be switched to USB BIOS FlashBack™)

1 x USB BIOS FlashBack™ Button(s)

4 x USB 3.2 Gen 2 (up to 10Gbps) ports (Type-A + USB Type-C™)

1 x Wi-Fi antenna port(s)

1 x LAN (RJ45) port(s)

1 x Optical S/PDIF out

5 x Audio jack(s)

1 x Anti-surge 2.5G LAN (RJ45) port

2 x USB 3.2 Gen 1 (up to 5Gbps) ports Type-A

Internal I/O Ports

2 x USB 3.2 Gen 1 (up to 5Gbps) connector support additional 4 USB ports

1 x CPU_OV jumper

1 x M.2 Socket 3 with M key, type 2242/2260/2280/22110 storage devices support (SATA & PCIE 3.0 x 4 mode)

2 x M.2 Socket 3 with M key, type 2242/2260/2280/22110 storage devices support (PCIE 3.0 x 4 mode)

1 x VROC_HW_Key

1 x System panel(s) (Q-Connector)

1 x AAFP connector

2 x Aura RGB Strip Headers

2 x USB 2.0 connector(s) support(s) additional 4 USB 2.0 port(s)

8 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 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 Front panel connector(s)

1 x Thermal sensor connector(s)

1 x Power-on button(s)

1 x Clear CMOS jumper(s)

1 x M.2 Fan Header

2 x Addressable Gen 2 header(s)

1 x Node Connector(s)

Accessories

1 x ROG Door Hanger(s)

1 x Vertical M.2 bracket set

1 x M.2 screw kit (long screw and mount)

User's manual

4 x SATA 6Gb/s cable(s)

1 x M.2 Screw Package

1 x Supporting DVD

1 x ROG Strix stickers

1 x Q-Connector

1 x Cable ties pack(s)

1 x Wi-Fi Antenna(s)

1 x Extension Cable for RGB strips (80 cm)

1 x Extension cable for Addressable LED

1 x Thermistor cable(s)

1 x ROG Thank you card

BIOS

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

Manageability

WOL, PXE

Support Disc

Drivers

ASUS Utilities

EZ Update

Anti-virus software (OEM version)

Operating System

Windows® 10 64-bit

Form Factor

ATX Form Factor

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

Note

*1 PCIe 3.0 x1 slot share with USB3.2 Gen2 front panel connector.

*2 M.2_2 and M.2_3 support 44-Lane CPU (Intel® Core™ i7 9000 X-Series CPU and above).

*3 The M.2 PCIe mode sources from Intel® X299 Chipset supports Intel® Optane Memory

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

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