



X299 Micro ATX 2

Part No: 121-SX-E296-KR

INTRODUCTION



The X299 MICRO ATX 2 is a reimagined mATX board designed to support the power, performance, and cooling necessary to power Intel®'s most powerful i9 CPUs for the X299 Chipset. With a 14 Phase power design, a thick VRM heatsink/fan, two 8pin EPS power connectors, an additional 6pin PCIe power connector, and external BCLK, this motherboard was born for the enthusiast desiring maximum power in a small form factor. The X299 MICRO ATX 2 supports current storage standards, including M.2 NVMe, Intel® Optane™, Intel® VROC and SATA 6Gb/s to give you blazing fast access to your data, while Intel® Dual-Band WiFi/BT and an Intel® i219V NIC keeps you connected. If you need a small motherboard capable of pure performance, the X299 MICRO ATX 2 strikes the perfect balance for features and power.

## DESIGN DETAILS

**Microprocessor support:** Intel® Socket 2066 Processors (Cascade Lake-X and Skylake-X only)

**Operating Systems:** Supports Windows 10 64bit

**System Memory support:** Supports Quad-Channel DDR4 up to 4000MHz+ (OC) Supports up to 128GB of DDR4 memory.

**USB 2.0 Ports:** 4x from Intel® X299 PCH – 4x internal via 2 FP headers. Supports transfer speeds up to 480 Mbps with full backwards compatibility.

**USB 3.1 Gen 1 Ports:** 8x from Intel® X299 PCH – 6x external, 2x internal via 1 FP headers. Supports transfer speeds up to 5Gbps with full backwards compatibility.

**USB 3.1 Gen 2 Ports:** 2x from ASMedia ASM3142 – 2x external Type-A. Supports transfer speeds up to 10Gbps with full backwards compatibility

**SATA Ports:** Intel® X299 PCH Controller 6x SATA 3/6 Gbit/s (600 MB/s) data transfer rate  
- Support for RAID0, RAID1, RAID5, AND RAID10  
- Supports hot plug

**Onboard Audio:** Realtek Audio (ALC1220) Supports 7.1 Channel HD Audio with Optical Out

**Onboard LAN:** 1x Intel® i219V Gigabit (10/100/1000)

Ethernet PHY

**WiFi/BT:** Dual-Band Intel® AC-8265 WiFi + BT

**Power Functions:** Supports ACPI (Advanced Configuration and Power Interface) Supports S0 (normal), S3 (suspend to RAM), S4 (Suspend to disk - depends on OS), and S5 (soft - off)

**PCIe Expansion Slots:** 2x PCIe x16 slot 2x16\*, 1x PCIe x4 slot.

**PCIe 3.0 Support:** Low power consumption and power management features

**SLI and Crossfire Support:** 2-Way SLI, 3-Way Crossfire

**Additional Expansion Slots:**

1x M.2 Key-M 80mm slot PCIe/NVMe  
1x M.2 Key-E slot (contains WiFi/BT module)

**Fan Headers:** 6x 4-pin PWM controlled headers

**\*LANES PER SLOT DEPEND UPON YOUR CPU, PLEASE SEE PAGE 22 IN YOUR MANUAL FOR LANE BREAKDOWN BASED ON CPU.**

## KEY SPECS

- Supports Intel® Core™ Socket 2066 Processors (Cascade Lake-X and Skylake-X only)
- 150% Increased Gold Content
- Intel® X299 Chipset
- Enthusiast Layout Supporting 2-Way SLI®
- 4 DIMM Quad-Channel up to 128GB 4000MHz+
- PCI Express® 3.0 Ready
- 4 USB 2.0 Ports (4 from 2 internal headers)
- 8 USB 3.1 G1 Ports (6 rear panel, 2 from 1 internal header)
- 2 USB 3.1 G 2 Ports (2 rear panel Type-A)
- Intel® Optane™ Support via optional PCIe adapter (not included)
- 6 SATA
- 1 M.2 Key-M 80mm up to 32Gbps (PCIe/NVMe)
- 1 M.2 Key-E 32mm (contains WiFi/BT module)
- 802.11AC Dual Band + Intel i219V Gigabit NIC (10/100/1000)
- mATX Form Factor

## DIMENSIONS

- **Width:** 9.6 in – 243.8 mm
- **Length:** 9.6 in – 243.8 mm
- **Form Factor:** mATX Form Factor

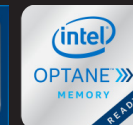
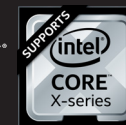
## ACCESSORIES

- EVGA Quick Installation Guide
- Rear Case I/O Panel
- 2 SATA 6G Data Cables
- WiFi/BT Antenna
- M.2 Key-M Thermal Pad
- Case Badge
- USB Flash Drive
- + Contains Driver and Manual



### PRODUCT WARRANTY

This product is covered under EVGA's 3 year limited warranty which covers parts and labor. Further warranty extension is available upon registration within 30 days of purchase. For more details please visit: [www.evga.com/warranty](http://www.evga.com/warranty).





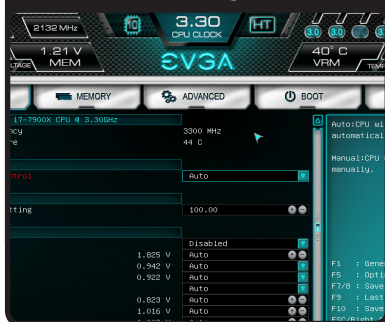


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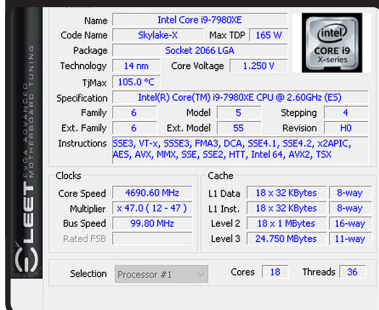
### FEATURES

#### FULL UEFI GUI BIOS INTERFACE



#### E-LEET TUNING UTILITY

Adjust your overclocking in OS



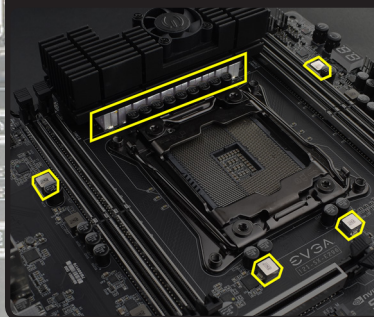
#### 8 LAYER PCB

Improved overclock stability and PCB cooling



#### 14 PHASE PWM

Cleanest variable power switching



#### HIGHER GOLD CONTENT (150%)

Lower inductance, better power delivery!



#### REINFORCED PCIe / DIMM SLOTS

Reinforced for the heaviest of graphics cards



#### INTEL® VROC SUPPORT

Virtual RAID on CPU for next-gen speeds



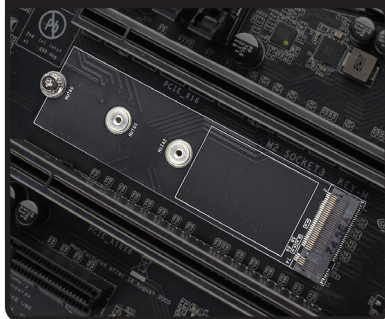
#### INTEL WiFi/BT + ANTENNA

NEW integrated EVGA module for wireless connections



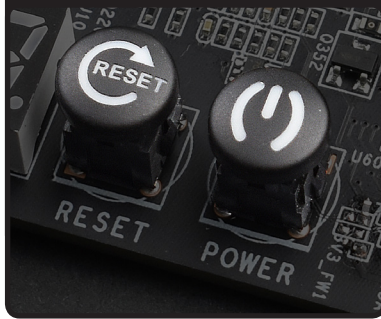
#### M.2 SLOT

Next generation SSD form factor



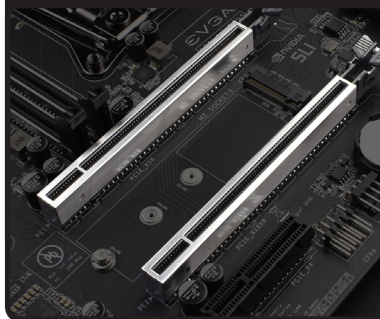
#### ONBOARD POWER / RESET

CMOS reset buttons at your fingertips.



#### 2-Way SLI Ready

Able to handle the most demanding games



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