



The EVGA Z490 DARK sets the standard for motherboards based on the Intel® Z490 chipset. Designed for ultra-enthusiasts looking to pull every last ounce of performance from the new 10th Gen Intel® 10-Core CPUs, the Z490 DARK features an 18-Phase VRM design, along with two right-angle 8pin High Current connectors to provide maximum power for overclocking. Two SMT DIMMs enable high-frequency and low latency RAM overclocking. The 10-layer PCB is studded with multiple sensors to track a variety of temperatures and voltages across the board, which can be displayed on the dual-LED displays. The Z490 DARK also contains one Intel® 2.5 GbE NIC, one Intel® Gigabit NIC, a mini-Display Port, PCIe disable switches, triple BIOS support, 8 smart fan headers, and many more premium features. Lastly, a motherboard is only as good as its BIOS, and the EVGA Z490 DARK features EVGA's newest UEFI/BIOS GUI with a focus on overclocking and functionality in a lean, straightforward package.

## DESIGN DETAILS

**Supported CPUs** - Intel® Socket 1200, 10th Generation Intel® Core i9/i7/i5 Processors

**Socket Type** - Intel® Socket LGA1200  
**PCH** - Intel® Z490

**DIMM QTY** - 2 DIMM Dual-Channel  
**Memory Type** - DDR4 4800MHz+  
**Memory Capacity** - 64GB

**SATA 6.0Gb/s Ports/Controller** - 6/Intel® Z490 PCH  
**RAID Support** - RAID 0, 1, 5, and 10  
**SATA 6.0Gb/s Ports/Controller** - 2/ASMedia ASM1061

**USB 2.0 Ports/Controller** - 7 Ports (6 from internal headers / 1 from Update Port for flashing BIOS)/ Intel® Z490 USB Hub  
**USB 3.2 Gen1 Ports/Controller** - 4 (2 from internal header) / Intel® Z490 PCH  
**USB 3.2 Gen2 Ports/Controller** - 5x USB3.2 Gen2 Type-A/1x USB3.2 Gen2 Type-C (external)/ 1x USB3.2 Gen2 Type-C (internal header)

**Network Speed** - 10/100/1000/2500 + 10/100/1000 Network  
**Ports/Controller** - Intel i225V PHY + Intel® i219V PHY  
**WiFi/BT** - WiFi/BT - Intel® AX201 WiFi 6 /BT 5.1 module, preinstalled in the M.2 Key-E 32mm Slot

**Audio** - 7.1 Channel Realtek + EVGA NU Audio  
**Audio Controller** - Realtek ALC1220 + SV3H615  
**Display Output** - mini-DisplayPort

**PCIe Slot Arrangement** - 3x16, 1x4  
**PCIe x16 Mechanical Slots** - 3  
**PCIe x16 Mechanical Arrangement** - 1x16/8, 1x8/4, 1x4

**PCIe x4 Mechanical Slots** - 1

**U.2** - 1x U.2 Port  
**M.2 Key-M** - 2x 110mm (Up to 32Gbps)  
**M.2 Key-E** - 1x 32mm (Vertical)  
**Fan Headers** - 8x 4-Pin (2x CPU PWM, 6x PWM/DC)

**BIOS Type** - Latest UEFI BIOS with mouse/ keyboard control, OC Robot, In-BIOS Stress Test  
**Software** - EVGA ELEET X1 Tuning Utility

## KEY SPECS

- Supports Intel® Core™ 10th Generation Processor Family for LGA1200 socket
- 150% Increased Gold Content
- Intel® Z490 Chipset
- NVIDIA® SLI® Ready Enthusiast Layout
- 2 DIMM Dual-Channel up to 64GB 4800MHz+
- PCI Express® 3.0 Ready
- 7 USB 2.0 Ports (6 from internal headers/ 1 from Update Port)
- 4 USB 3.2 Gen1 Ports (2 rear panel, 2 from 1 internal header)
- 7 USB 3.2 Gen2 Ports (5 Type-A rear panel, 1 Type-C rear panel, 1 Type-C Header)
- 1 PS/2 (Mouse+Keyboard support)
- Intel® Optane Support
- 8 SATA 6.0Gb/s (6 on Intel® Z490 PCH/ 2 from ASMedia ASM1061)
- 1 U.2 Port
- 2 M.2 Key-M 110mm up to 32Gbps
- 1 M.2 Key-E 32mm
- 1 Mini-DisplayPort
- 1 Intel® i225V Gigabit NIC (10/100/1000/2500)
- 1 Intel® i219V Gigabit NIC (10/100/1000)
- 1 Intel® AX201 WiFi 6/ BT 5.1 module, preinstalled

## DIMENSIONS

- Width: 10.9in - 277mm
- Length: 12in - 305mm
- Form Factor: E-ATX Form Factor

## ACCESSORIES

- EVGA Quick Installation Guide
- Rear Case I/O Panel
- 2 SATA 6G Data Cables
- 2x M.2 Thermal Pad
- 2x Antenna for WiFi
- Benchstand + Screws/Standoffs
- 2x Probelts Connectors
- Flexible SLI® Bridge
- 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)





# Z490 DARK

Part No: 131-CL-E499-KR

INTRODUCTION

### FULL UEFI GUI BIOS INTERFACE

Focused on functionality



### ELEET X1 TUNING UTILITY

Adjust your overclocking in OS



### 10 LAYER PCB

Improved overclock stability and PCB cooling



### 18 PHASE PWM

Cleanest variable power switching



### HIGHER GOLD CONTENT (150%)

Lower contact resistance, better power delivery

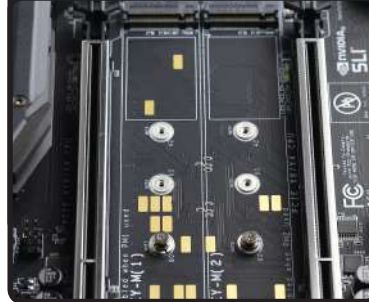


### USB3.2 Gen2 + Intel® 2.5GbE NIC

Integrated WiFi 6/BT 5.1 Mini-DisplayPort



### Intel® Optane™ Memory Ready



### ONBOARD POWER / RESET

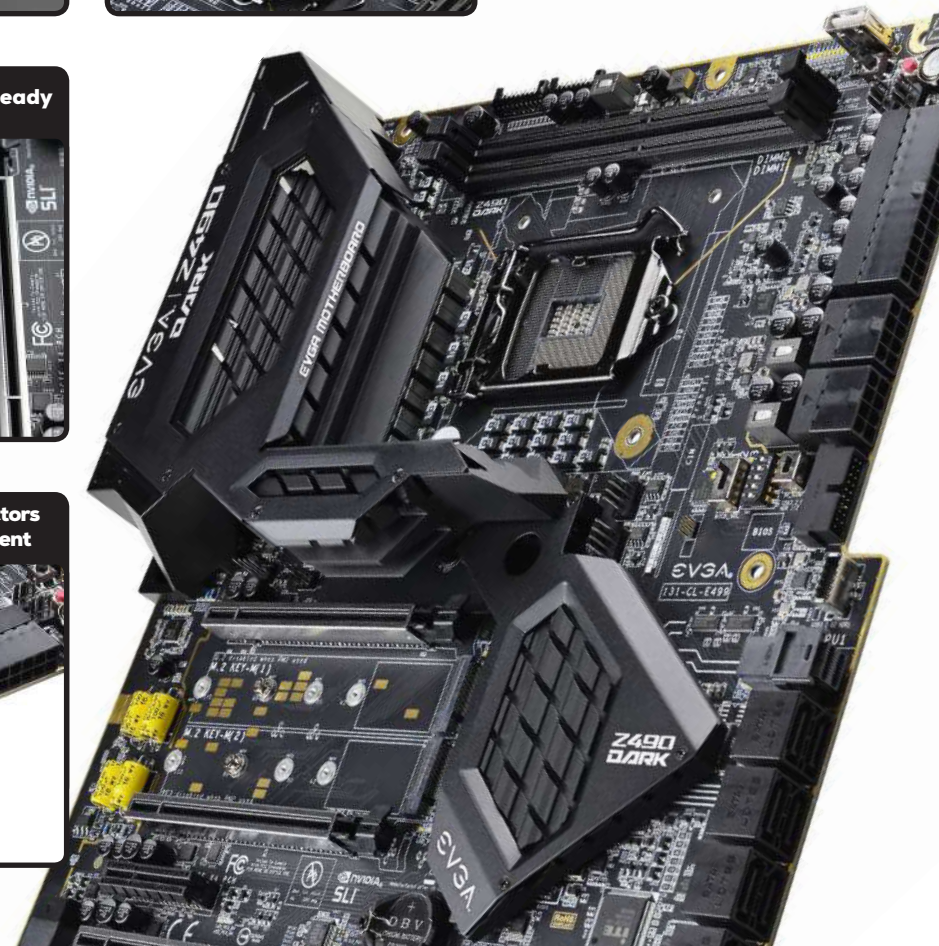
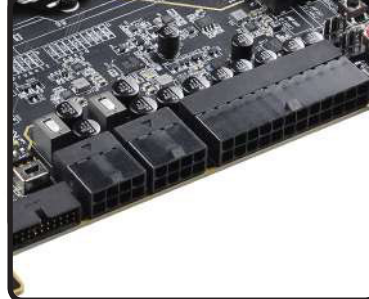
Dual Voltage/CPU Temperature Monitors



### NVIDIA® SLI® Ready with Reinforced PCIe Slots



### Right-Angled Power Connectors to Simplify Cable Management



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