Gigabyte Z790 AORUS ELITE AX DDR4 (REV 1.0) motherboard

Artikel	268951
Herstellernummer	Z790 AORUS ELITE AX DDR4 (REV 1.0)
EAN	4719331849955
Gigabyte	

UNPARALLELED PERFORMANCE

With the fast-moving technology changes, GIGABYTE always follows the latest trends and provides customers with advanced features and latest technologies. GIGABYTE motherboards are equipped with upgraded power solution, latest storage standards and outstanding connectivity to enable optimized performance for gaming.

Twin Digital VRM Design

To ensure maximum Turbo Boost and overclocking performance of Intel's new generation CPU, GIGABYTE AORUS series motherboard equip the best VRM design ever built with the highest quality components.

Design Ready for PCIe 5.0

PCIe 5.0 Design supports double the bandwidth of PCIe 4.0 and ensures that compatible with cutting-edge GPUs released in the next few years to their full capability.

Single 32GB Support

The maximum memory capacity on the Z690 motherboard is 128GB. After Intel updated the memory reference code, a single slot can support up to 32GB. Therefore with populated 2 DIMM per channel on both channel, total memory capacity is 128GB, which was only available on High End Desktop (HEDT) platforms. For users who always run out of memory capacity, there is more bandwidth now for memory-intensive application such as rendering and video editing.

Triple 7G/s Gen4 M.2 PCIe SSDs in RAID 0

The exclusive 3 PCIe 4.0 M.2 from CPU and 2nd Generation 7000 MB/s SSD provides unparalleled Read/ Write performance up to 21053 and 15499 MB/s.

OUTSTANDING THERMAL DESIGN

GIGABYTE Motherboards' unparalleled performance is guaranteed by innovative and optimized thermal design to ensure the best CPU, Chipset, SSD stability and low temperatures under full load application and gaming performance.

M.2 Thermal Guard III

M.2 Thermal Guard III constructed with 6X optimized heat dissipation surface to prevent throttling and bottleneck that high-speed/ large capacity of PCIe 5.0 M.2 SSDs may cause, especially under heavy workload.The special design of heatsink grooves in the direction of CPU further enhances the in-chassis air flow and optimizes the heat convection efficiency.

SMART FAN 6

Smart Fan 6 contains several unique cooling features that ensure gaming PC maintain its performance while staying cool and quiet. Multiple fan headers can support PWM/DC fan and pump, and users can easily define each fan curve based on different temperature sensors across the board via intuitive user interface.

CONNECTIVITY

GIGABYTE Motherboards enable the ultimate connection experience with blazing data-transfer speeds through the next generation

network, storage, and Wi-Fi connectivity.

PERSONALIZATION
GIGABYTE motherboards bundle several useful and intuitive software to help users to control every aspect of motherboard and provide customizable lighting effect with outstanding aesthetics to fit your unique personality.

ULTRA DURABLE
GIGABYTE Ultra Durable™ design provides product durability and high-quality manufacturing process. GIGABYTE motherboards use the best components and reinforce every slots to make each of them solid and durable.

EZ-Latch
With GIGABYTE EZ-Latch, you can DIY your PC in no time, quick and easy.

Q-Flash Plus
Update the BIOS easily without installing the CPU, memory and graphics card.
With GIGABYTE Q-Flash Plus, you don't need to install the CPU, memory and graphics card nor enter the BIOS menu to flash the BIOS. Just download and save a new BIOS file (rename to gigabyte.bin) on the USB flash drive, then press the dedicated Q-Flash Plus button and you're good to go!

Zusammenfassung

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Gigabyte Z790 AORUS ELITE AX DDR4 (REV 1.0), Intel, LGA 1700, Intel® Celeron®, Intel® Core™ i3, Intel® Core™ i5, Intel® Core™ i7, Intel® Core™ i9,..., LGA 1700, DDR4-SDRAM, 128 GB

Gigabyte Z790 AORUS ELITE AX DDR4 (REV 1.0). Processor manufacturer: Intel, Processor socket: LGA 1700, Compatible processor series: Intel® Celeron®, Intel® Core™ i3, Intel® Core™ i5, Intel® Core™ i7, Intel® Core™ i9,.... Supported memory types: DDR4-SDRAM, Maximum internal memory: 128 GB, Memory slots type: DIMM. Supported storage drive interfaces: M.2, PCI Express 4.0, SATA III, Supported storage drive types: HDD & SSD, RAID levels: 0, 1, 5, 10. Parallel processing technology support: Crossfire, Maximum resolution: 4096 x 2304 pixels. USB connector type: USB Type-A, USB Type-C

Merkmale

Expansion slots

PCI Express x16 slots	3
Number of M.2 (M) slots	4

Packaging content

Cables included	SATA
Bundled software	Norton Internet Security

Weight & dimensions

Width	305 mm
Depth	244 mm

Graphics

Parallel processing technology support	Crossfire

BIOS

BIOS type	UEFI AMI
BIOS memory size	256 Mbit
ACPI version	5.0
Clear CMOS jumper	Yes
Clear CMOS button	Yes
Desktop Management Interface (DMI) version	2.7
System Management BIOS (SMBIOS) version	2.7

Features

Motherboard chipset	Intel Z790
Audio output channels	7.1 channels
PC health monitoring	Fan, Temperature, Voltage, Water cooling
Component for	PC
Motherboard form factor	ATX
Motherboard chipset family	Intel
Windows operating systems supported	Windows 10 x64, Windows 11 x64

Maximum resolution	4096 x 2304 pixels
HDCP	Yes

Processor

Processor manufacturer	Intel
Processor socket	LGA 1700
Compatible processor series	Intel® Celeron®, Intel® Core™ i3, Intel® Core™ i5, Intel® Core™ i7, Intel® Core™ i9, Intel® Pentium® Gold
Supported processor sockets	LGA 1700

Storage controllers

Supported storage drive types	HDD & SSD
Supported storage drive interfaces	M.2, PCI Express 4.0, SATA III
Number of storage drives supported	10
RAID support	Yes
RAID levels	0, 1, 5, 10

Network

Ethernet LAN	Yes
Ethernet interface type	2.5 Gigabit Ethernet
Wi-Fi	Yes
Top Wi-Fi standard	Wi-Fi 6E (802.11ax)
Wi-Fi standards	802.11a, 802.11b, 802.11g, Wi-Fi 4 (802.11n), Wi-Fi 5 (802.11ac), Wi-Fi 6 (802.11ax), Wi-Fi 6E (802.11ax)
WLAN controller model	Intel Wi-Fi 6E AX211
Bluetooth	Yes
Bluetooth version	5.3

Memory

Supported memory types	DDR4-SDRAM
Number of memory slots	4
Memory slots type	DIMM
Memory channels	Dual-channel
ECC	Yes
Non-ECC	Yes
Supported memory clock speeds	7600,7400,7200,4000,4800,5200,5400,5600,5800,6000,6200,6400,6600,6800,7000 MHz
Supported memory clock speed (max)	7600 MHz
Maximum internal memory	128 GB
Unbuffered memory	Yes

Internal I/O

USB 2.0 connectors	2
USB 3.2 Gen 1 (3.1 Gen 1) connectors	1
USB 3.2 Gen 2 (3.1 Gen 2) connectors	1
Number of SATA III connectors	6
Front panel audio connector	Yes
Front panel connector	Yes
ATX Power connector (24-pin)	Yes
CPU fan connector	Yes
EPS power connector (8-pin)	Yes
TPM connector	Yes
Thunderbolt headers	2
12V power connector	Yes
RGB LED pin header	Yes

Rear panel I/O ports

USB 2.0 ports quantity	4
USB 3.2 Gen 1 (3.1 Gen 1) Type-3 A ports quantity	
USB 3.2 Gen 2 (3.1 Gen 2) Type-2 A ports quantity	
USB 3.2 Gen 2x2 Type-C ports quantity	1
Ethernet LAN (RJ-45) ports	1
HDMI ports quantity	1
HDMI version	2.0

DisplayPorts quantity	1
DisplayPort version	1.2
Headphone outputs	2
Microphone in	Yes
S/PDIF out port	Yes
WiFi-AP antenna jack	2
USB connector type	USB Type-A, USB Type-C