GIGABYTE

# GIGABYTE Z790 AORUS ELITE X AX motherboard Intel Z790 LGA 1700 ATX

**Brand :** GIGABYTE

**Product code:** Z790 AORUS ELITE X AX

**Product name :** Z790 AORUS ELITE X AX

- Supports Intel® Core™ 14th and 13th processors
- Digital twin 16+1+2 phases VRM solution
- Dual Channel DDR5 4*DIMMs with XMP 3.0 memory module support
- PCIe UD Slot X PCIe 5.0 x16 slot with 10X strength for graphics card
- EZ-Latch Click M.2 heatsinks with screwless design
- EZ-Latch Plus M.2 slots with quick release design
- UC BIOS User-Centred intuitive UX with Quick Access function
- Ultra-Fast Storage 4*PCIe 4.0 x4 M.2 slots
- Efficient Overall Thermal VRM Thermal Armor Advanced & M.2 Thermal Guard L
- Fast Networking 2.5GbE LAN & Wi-Fi 6E with Ultra-high gain antenna
- Extended Connectivity DP, HDMI, Front USB-C® 10Gb/s, Rear USB-C® 20Gb/s
- Precision Audio ALC1220 & Audiophile Grade Capacitors

Intel Z790, 4 x DDR5, 1 x HDMI, 1 x DisplayPort, GbE LAN, 6 x SATA, ATX, Wi-Fi

| 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 |

| Memory | |
|---|---|
| Supported memory types * | DDR5-SDRAM |
| Number of memory slots * | 4 |
| Memory slots type | DIMM |
| Memory channels | Dual-channel |
| ECC | ✓ |
| Non-ECC | ✓ |
| Supported memory clock speeds | 8266, 8200, 8000, 7950, 7900, 7800, 7600, 7400, 7200, 7000, 6800, 6600, 6400, 6200, 6000, 5800, 5600, 5400, 5200, 4800, 4000 MHz |
| Supported memory clock speed (max) | 8266 MHz |
| Maximum internal memory * | 192 GB |
| Unbuffered memory | ✓ |

| 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 | ✓ |
| RAID levels | 0, 1, 5, 10 |

| Graphics | |
|---|---|
| Parallel processing technology support * | Not supported |
| Maximum resolution | 4096 x 2304 pixels |
| HDCP | ✓ |

| Rear panel I/O ports | |
|---|---|
| USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity * | 3 |
| USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity * | 2 |
| 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 | ✓ |
| S/PDIF out port | ✓ |
| WiFi-AP antenna jack | 2 |
| USB connector type | USB Type-A, USB Type-C |

| Network | |
|---|---|
| Ethernet LAN | ✓ |
| Ethernet interface type | 2.5 Gigabit Ethernet |
| Wi-Fi * | ✓ |
| 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 | Realtek RTL8852CE |
| Bluetooth | ✓ |
| Bluetooth version | 5.3 |

| Features | |
|---|---|
| Motherboard chipset * | Intel Z790 |
| Audio output channels * | 7.1 channels |
| PC health monitoring | Fan, Temperature, Voltage, Water cooling |
| Component for * | PC |

| 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 | ✓ |
| Front panel connector | ✓ |
| ATX Power connector (24-pin) | ✓ |
| CPU fan connector | ✓ |
| EPS power connector (8-pin) | ✓ |
| TPM connector | ✓ |
| Thunderbolt headers | 2 |
| 12V power connector | ✓ |
| RGB LED pin header | ✓ |

| Rear panel I/O ports | |
|---|---|
| USB 2.0 ports quantity * | 4 |

| Features | |
|---|---|
| Motherboard form factor * | ATX |
| Motherboard chipset family * | Intel |
| Windows operating systems supported | Windows 10 x64, Windows 11 x64 |

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

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

| Weight & dimensions | |
|---|---|
| Width | 305 mm |
| Depth | 244 mm |

| Packaging content | |
|---|---|
| Cables included | SATA |
| Bundled software | Norton Internet Security |

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