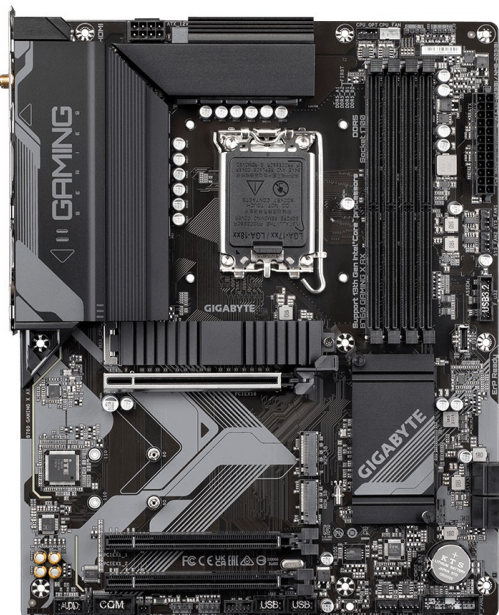


# Gigabyte B760 GAMING X AX motherboard

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**Artikel**  
**Herstellernummer**  
**EAN**  
Gigabyte

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B760 GAMING X AX  
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## 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.

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

GIGABYTE B760 Motherboards are ready to work with the PCIe 4.0 devices which are expected to experience triple bandwidth than the current PCIe 3.0 devices. To reach the high speed and maintain good signal integrity, GIGABYTE R&D uses the low impedance PCB to provide the maximum performance.

## Shielded Memory Routing

All memory routing is under the PCB inner layer shielded by a large ground layer to protect from external interference.

## Impedance Optimized Topology

By optimizing memory trace width, length and style from HPC simulation to actual implementation, overall impedance is lowered between CPU memory controller and memory modules to achieve higher DDR5 speed.

## Low Signal Loss PCB

Server grade mid-loss or low-loss PCB material is chosen to lower signal loss inside PCB and maintain DDR5 high speed signal transmission.

## DDR5 Auto Booster

Automatically Boost the Native DDR5 frequency to 5000MHz while the system is under heavy loading by a single click.

## XMP 3.0 User Profile

Define and create your own SPD profile into Native and XMP 3.0 memory modules or apply the pre-tuned profiles to XMP 3.0 User Profile. Two user-defined profiles can be saved, loaded either locally or from/to an external storage device.

- Two empty SPD profiles can be defined by users and carry to next computer
- Transfer DDR5 XMP Booster profiles into XMP 3.0 User Profiles
- Quick memory performance simulation based on user input clock and timing parameters
- Profile save and load function to share your memory parameters online

## Triple PCIe 4.0 x4 M.2

GIGABYTE Motherboards are focused on delivering M.2 technology to enthusiasts who want to maximize their system's potential.

## GIGABYTE PerfDrive

PerfDrive technology integrates multiple GIGABYTE exclusive BIOS settings to allow users to balance between different levels of

performance, power consumption, and temperature according to their needs easily when using 13th gen Intel® Core™ processors.

### **OUTSTANDING THERMAL DESIGN**

GIGABYTE Motherboards' Un-throttled 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.

#### **Real One-piece Build**

TMOS is a TRUE single piece heatsink. Its one-piece design and larger surface drastically improve the cooling performance against competitors' multi-piece design.

#### **Multi-Cut Design**

TMOS features several channels and inlets on the heatsink. This design allows for the air flow to go through which leads to a great improvement of the heat transfer performance.

#### **M.2 Thermal Guard**

With durability in mind, GIGABYTE provides a thermal solution for M.2 SSD devices. The M.2 Thermal Guard prevents throttling and bottlenecks from high speed M.2 SSDs as it helps to dissipate heat before it becomes an issue.

### **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.

#### **Cooling Features**

##### **- High Current Support**

Each fan headers support PWM and DC fan and Water Cooling Pump , and up to 24W (12V x 2A) with Over-Current Protection

##### **- Precision Control**

Multiple temperature/fan speed control points for precise fan curve

##### **- Dual Curve Mode**

Slope/Stair dual mode for different user scenario

##### **- Fan Stop**

Fan can stop completely below users' specified temperature point

#### **Smart Fan 6 BIOS UI**

##### **1. Improve fan curve UI**

We increase control points from 5 to 7 and larger fan speed graph for precise and easier fan curve control.

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Fan curve can be quickly switch with Slope and Stair modes for different user scenario. Slope is traditional and intuitive linear fan speed curve. With newly added Stair non-linear mode, fan keeps at same speed between specified temperature interval.

##### **3. Manual Input**

For advanced users, we provide fan speed manual input for more precise control.

##### **4. EZ Tuning**

User can place 4 EZ Tuning points at rough temperature/fan speed, and Smart Fan 6 can quickly generate a fan curve.

##### **5. Fan curve profile**

Fan curve profile can be saved in BIOS ROM, profile will be kept after updating BIOS.

GIGABYTE Motherboards enable the ultimate connection experience with blazing data-transfer speeds through the next generation network, storage, and Wi-Fi connectivity.

### **802.11ax Wi-Fi 6E**

Latest Wireless solution 802.11ax Wi-Fi 6E with new dedicated 6GHz band, enables gigabit wireless performance, provides smooth video streaming, better gaming experience, few dropped connections and speeds up to 2.4Gbps. Moreover, Bluetooth 5 provides 4X range over BT 4.2 and with faster transmission.

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2. 5.5X throughput than 802.11ac 1x1
3. 4X better network capacity, no traffic jams especially in those dense area with lots of devices
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### **First adopter on 2.5GbE LAN onboard**

#### **2X Faster than ever**

- Adoption of 2.5G LAN provide up to 2.5GbE network connectivity, with at least 2 times faster transfer speeds compared to general 1GbE networking, perfectly designed for gamers with ultimate online gaming experience.
- Support Multi-Gig(10/100/1000/2500Mbps) RJ-45 Ethernet

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USB 3.2 Gen 2 provides USB 3.2 Gen 2 ports with speeds up to 10Gbps. With twice the bandwidth compared to its previous generation as well as backwards compatibility with USB 2.0 and USB 3.2 Gen 1, the much improved USB 3.2 Gen 2 protocol is available over the new reversible USB Type-C™ and the traditional USB Type-A connector for better compatibility over a wider range of devices.

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Add constantly used items into the favorite menu for quick access.

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Show all kinds of storage information including SATA, PCIE and M.2 interface.

### **Changelog**

List all changes before saving and exiting bios. Quickly review overall settings modification.

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Clearly show each loadline calibration setting in an intuitive curve graph.

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Unlock the latch of the PCIe slot easily when remove the graphics card in the PCIe slot.

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**Update the BIOS easily without installing the CPU, memory and graphics card.**

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## **Zusammenfassung**

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Gigabyte B760 GAMING X AX, Intel, LGA 1700, Intel® Celeron®, Intel® Core™ i3, Intel® Core™ i5, Intel® Core™ i7, Intel® Core™ i9,...., LGA 1700, DDR5-SDRAM, 128 GB

Gigabyte B760 GAMING X AX. 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: DDR5-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. 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	3

### Packaging content

Cables included	SATA
Bundled software	Norton Internet Security

### Weight & dimensions

Width	305 mm
Depth	244 mm

### Graphics

Parallel processing technology support	Not supported
Maximum resolution	4096 x 2304 pixels
HDCP	Yes

### Processor

### BIOS

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

### Features

Motherboard chipset	Intel B760 Express
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

### Network

Ethernet LAN	Yes
Ethernet interface type	2.5 Gigabit Ethernet
Wi-Fi	Yes

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

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	RZ608
Bluetooth	Yes
Bluetooth version	5.2

## 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	7
RAID support	Yes
RAID levels	0, 1, 5, 10

## Memory

Supported memory types	DDR5-SDRAM
Number of memory slots	4
Memory slots type	DIMM
Memory channels	Dual-channel
ECC	Yes
Non-ECC	Yes
Supported memory clock speeds	4000,4800,5200,5400,5600,5800,6000,6200,6400,6600,6800,7000,7200,7400,7600 MHz
Maximum internal memory	128 GB
Unbuffered memory	Yes

## Rear panel I/O ports

USB 2.0 ports quantity	5
USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity	
USB 3.2 Gen 1 (3.1 Gen 1) Type-1	
C ports quantity	
USB 3.2 Gen 2 (3.1 Gen 2) Type-1	
A ports quantity	
Ethernet LAN (RJ-45) ports	1
HDMI ports quantity	1
HDMI version	2.0
DisplayPorts quantity	1
DisplayPort version	1.2
Headphone outputs	6
Microphone in	Yes
WiFi-AP antenna jack	2
USB connector type	USB Type-A, USB Type-C

## 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	4
S/PDIF out connector	Yes
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
Serial port headers	1
12V power connector	Yes
RGB LED pin header	Yes

Preisänderungen und Irrtümer vorbehalten. Alle Produkte solange der Vorrat reicht.