GIGABYTE

Gigabyte Z690 AORUS MASTER Intel Z690 LGA 1700 Extended ATX

Brand : Gigabyte   **Product code:** Z690 AORUS MASTER 1.0

Product name : Z690 AORUS MASTER

- Support 12th Gen Intel® Series Processors
- Dual Channel Non-ECC Unbuffered DDR5, 4 DIMMs
- Direct 19+1+2 Phases VRM Design with 105A Power Stage and Tantalum Polymer Capacitor
- DDR5 XTREME MEMORY Design with SMD DIMM and Shielded Memory Routing
- Advanced Thermal Solution with NanoCarbon Fins-Array III Heatsink, Direct-Touch Heatpipe II and NanoCarbon Baseplate
- Intel® WIFI 6E 802.11ax 2T2R & BT5 with AORUS Antenna
- Audio Solution with ESS Sabre ES9118 125dB on Rear Audio
- AQUANTIA® 10GbE BASE-T LAN
- 5 x Ultra-Fast NVMe PCIe 4.0/3.0 x4 M.2 with Thermal Guards
- RGB FUSION 2.0 with Multi-Zone Addressable LED Light Show Design, Support Addressable LED & RGB LED Strips

E-ATX, Intel Z690 Express chipset, LGA 1700 Socket, 4xDDR5 DIMM slots, 7.1 ch audio, 10-Gigabit LAN, Wi-Fi 6E, Bluetooth 5.2, AMI UEFI BIOS

Processor

Processor manufacturer *	Intel
Processor socket *	LGA 1700
Compatible processor series *	Intel® Core™ i5, Intel® Core™ i7, Intel® Core™ i9
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	4000,4800,5200,5400,5600,5800,6000,6200,6400 MHz
Maximum internal memory *	128 GB
Unbuffered memory	✓

Storage controllers

Supported storage drive types	HDD & SSD
Supported storage drive interfaces *	M.2, PCI Express 3.0, PCI Express 4.0, SATA III
Number of storage drives supported	11
RAID support	✓
RAID levels	0, 1, 5, 10

Graphics

Parallel processing technology support *	2-Way CrossFireX, Quad-GPU CrossFireX
Maximum resolution	4096 x 2304 pixels
HDCP	✓

Internal I/O

USB 2.0 connectors *	2
USB 3.2 Gen 1 (3.1 Gen 1) connectors *	2
USB 3.2 Gen 2 (3.1 Gen 2) connectors *	1

Rear panel I/O ports

USB 3.2 Gen 2 (3.1 Gen 2) Type-C ports quantity *	1
USB 3.2 Gen 2x2 Type-C ports quantity	1
Ethernet LAN (RJ-45) ports *	1
DisplayPorts quantity	1
DisplayPort version	1.2
Headphone outputs	5
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	10 Gigabit Ethernet
LAN controller	Marvell AQtion AQC113C
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	Intel Wi-Fi 6E AX210
Bluetooth	✓
Bluetooth version	5.2

Features

Motherboard chipset *	Intel Z690
Audio chip	Realtek ALC1220-VB
Audio output channels *	7.1 channels
PC health monitoring	Fan, Noise, Temperature, Voltage, Water cooling
Component for *	PC
Motherboard form factor *	Extended ATX
Motherboard chipset family *	Intel

Internal I/O

Number of SATA III connectors *	6
Front panel audio connector	✓
Front panel connector	✓
ATX Power connector (24-pin)	✓
CPU fan connector	✓
Number of chassis fan connectors	4
EPS power connector (8-pin)	✓
TPM connector	✓
Thunderbolt headers	2
12V power connector	✓
RGB LED pin header	✓

Rear panel I/O ports

USB 3.2 Gen 1 (3.1 Gen 1) Type-A ports quantity *	4
USB 3.2 Gen 2 (3.1 Gen 2) Type-A ports quantity *	5

Features

Windows operating systems supported	Windows 10 x64, Windows 11 x64
Harmonized System (HS) code	84733020

Expansion slots

PCI Express x16 slots	3
Number of M.2 (M) slots	5

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	259 mm
Height	70 mm

Packaging content

Cables included	SATA
Bundled software	Norton Internet Security, cFosSpeed

Other features

Weight	1 kg

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