



FEATURES



Dual Thunderbolt™ 4 ports

Thunderbolt™ 4 brings Thunderbolt to USB-C at true 40 Gb/s speeds, 8K display support, Daisy-Chaining and Multi-Port Accessory Architecture.



Direct 19+1+2 Phases Power Design

Extreme direct power solution with 19+1+2 phases and 105A Smart Power Stage unleash the maximum CPU performance.



Latest DDR5 Memory

A huge step of DDR performance enhancement with the latest DDR5 memory and MSI Memory Boost technology.



Lightning Gen 5

The latest PCIe 5.0 solution with up to 128GB/s bandwidth for maximum transfer speed.



Quintuple M.2 Connectors

Onboard 5x M.2 connectors with quad PCIe 4.0 solution, strengthened by double-sided M.2 Shield Frozr.



Outstanding Cooling Solution

Aluminum Cover, VRM Heat-pipe, 7W/mK thermal pads, Double-sided M.2 Shield Frozr and Aluminum Backplate ensure the extreme performance with low temp.



Dual Front Lightning USB 20G

USB 3.2 Gen 2x2 port offers 20Gbps transmission speed, 4x faster than USB 3.2 Gen 1, available when connecting the front USB Type-C.



Dual 2.5G LAN

Onboard dual 2.5Gbps LAN with LAN manager provides incredible data transfer speed faster than general Gigabit LAN, delivering the best online gaming experience.



Wi-Fi 6E

The latest wireless solution supports 6GHz spectrum, MU-MIMO and BSS color technology, delivering speeds up to 2400Mbps.



SMT PCIE and Memory Slot

The advanced SMT(Surface Mount Technology) welding process reduces the defect rate of slot solder joints, deliver the clean and pure signal.



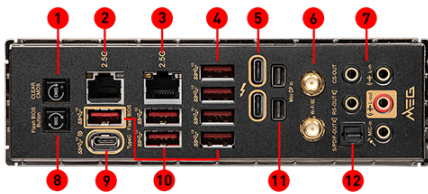
8 Layer PCB with 2oz Thickened Copper

An Enhanced PCB design provides higher performance and long-lasting system stability without any compromise.

SPECIFICATIONS

Model Name	MEG Z690 ACE
CPU Support	Supports 12th Gen Intel® Core™ Processors, Pentium® Gold and Celeron® Processors
CPU Socket	LGA 1700
Chipset	Intel® Z690 Chipset
Graphics Interface	2x PCIe 5.0 x16 slots 1x PCIe 4.0 x16 slot AMD® CrossFire™ Technology
Display Interface	1x Type-C Display port - Requires Processor Graphics 2x Thunderbolt™ 4 (Type-C) - Requires Processor Graphics or Input from mini DisplayPort
Memory Support	4 DIMMs, Dual Channel DDR5-6666+MHz (OC)
Storage	4x M.2 Gen4 x4 64Gbps slots, 1x M.2 Gen3 x4 32Gbps slot, 6x SATA 6Gb/s ports
USB ports	2x USB 3.2 Gen 2x2 20Gbps (2 Type-C), 8x USB 3.2 Gen 2 10Gbps (7 Type-A + 1 Type-C), 4x USB 3.2 Gen 1 5Gbps (4 Type-A), 4x USB 2.0
LAN	2x Intel® I225-V 2.5G LAN
WiFi / BT	Intel® Wi-Fi 6E module, Bluetooth 5.2
Audio	8-Channel (7.1) HD Audio with Audio Boost 5 HD

CONNECTIONS



1. Clear CMOS Button
2. 2.5G LAN
3. 2.5G LAN
4. USB 3.2 Gen 2 10Gbps (Type-A)
5. Thunderbolt 4 40Gbps (Type-C)
6. Wi-Fi / Bluetooth
7. HD Audio Connectors
8. Flash BIOS Button
9. USB 3.2 Gen 2 10Gbps (Type-C)
10. USB 3.2 Gen 2 10Gbps (Type-A)
11. Mini DisplayPort Input (for Thunderbolt passthrough)
12. Optical S/PDIF-Out