

MOTHERBOARDS **MEG Z690 ACE** LUSTROUS AESTHETICS, PURE PERFORMANCE





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	2x PCle 5.0 x16 slots
Interface	1x PCle 4.0 x16 slot
	Support NVIDIA [®] SLI [™] / 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

FEATURES



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

Dual Thunderbolt[™] 4 ports

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



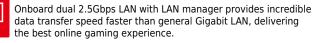
Aluminum Cover, VRM Heat-pipe, 7W/mK thermal pads, Doublesided M.2 Shield Frozr and Aluminum Backplate ensure the extreme performance with low temp.

Dual Front Lightning USB 20G



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

Dual 2.5G LAN



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 longlasting system stability without any compromise.

2. 2.5G LAN

6. Wi-Fi / Bluetooth

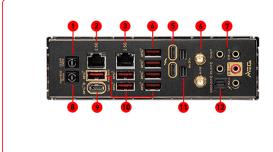
8. Flash BIOS Button

12. Optical S/PDIF-Out

4. USB 3.2 Gen 2 10Gbps (Type-A)

10. USB 3.2 Gen 2 10Gbps (Type-A)

CONNECTIONS



- 1. Clear CMOS Button
- 3. 2.5G LAN
- 5. Thunderbolt 4 40Gbps (Type-C)
- 7. HD Audio Connectors
- 9. USB 3.2 Gen 2 10Gbps (Type-C Display port)

11. Mini DisplayPort Input (for Thunderbolt passthrough)

Senerated 2021-11-08, check for the latest version www.msi.com/datasheet. The information provided in this document is intended for informational purposes only and is subject to change without notice.

