



msi

MOTHERBOARDS

MPG Z690 CARBON EK X

GAME IN STYLE



SPECIFICATIONS

Model Name	MPG Z690 CARBON EK X
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 3.0 x16 slot Support AMD® CrossFire™ Technology
Display Interface	Support 4K@60Hz as specified in HDMI 2.1, DisplayPort 1.4 - Requires Processor Graphics
Memory Support	4 DIMMs, Dual Channel DDR5-6666+ (OC)
Storage	4x M.2 Gen4 x4 64Gbps slots, 1x M.2 Gen3 x4 32Gbps slot, supports Intel® Optane™ Technology 6 x SATA 6Gbps
USB ports	1x USB 3.2 Gen 2x2 20Gbps (1 Type-C), 6x USB 3.2 Gen 2 10Gbps (5 Type-A + 1 Type-C), 2x USB 3.2 Gen 1 5Gbps (2 Type-A), 8x USB 2.0
LAN	Intel® I225-V 2.5G LAN
Wireless / Bluetooth	Intel® Wi-Fi 6E module, Bluetooth 5.2
Audio	8-Channel (7.1) HD Audio with Audio Boost 5

FEATURES



CPU+ VRM + M.2 Water Cooling

A custom-designed EK monoblock that offers pristine cooling for CPU, VRM power and M.2 section.



Flow Indicator

Instant loop operation and coolant flow overview.



Lightning Gen 5

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



Core Boost

With premium layout and fully digital power design to support more cores and provide better performance.



Memory Boost

Advanced technology to deliver pure data signals for the best performance, stability and compatibility.



Mystic Light RGB LED

Personalize your PC with 16.8 million colors / fancy lighting effects, controlled in one click!



Wi-Fi 6E

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



2.5G Network Solution

Featuring premium 2.5G LAN with LAN manager to deliver better network experience.



Lightning USB 20G

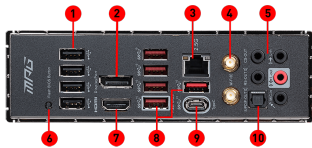
Built-in USB 3.2 Gen 2x2 port, offers 20Gbps transmission speed, 4X faster than USB 3.2 Gen 1.



Audio Boost 5

Isolated audio with a high quality audio processor & amp for the most immersive gaming experience

CONNECTIONS



1. USB 2.0
2. DisplayPort
3. 2.5G LAN
4. Wi-Fi/Bluetooth
5. Audio Connectors
6. Flash BIOS Button
7. HDMI
8. USB 3.2 Gen 2 10Gbps Type-A
9. USB 3.2 Gen 2x2 20Gbps Type-C
10. Optical S/PDIF Out