



# msi

MOTHERBOARDS

## MPG Z690 CARBON EK X

GAME IN STYLE



### SPECIFICATIONS

<b>Model Name</b>	MPG Z690 CARBON EK X
<b>CPU Support</b>	Supports 12th Gen Intel® Core™ Processors, Pentium® Gold and Celeron® Processors
<b>CPU Socket</b>	LGA 1700
<b>Chipset</b>	Intel® Z690 Chipset
<b>Graphics Interface</b>	2x PCIe 5.0 x16 slots, 1x PCIe 3.0 x16 slot Support AMD® CrossFire™ Technology
<b>Display Interface</b>	Support 4K@60Hz as specified in HDMI 2.1, DisplayPort 1.4 - Requires Processor Graphics
<b>Memory Support</b>	4 DIMMs, Dual Channel DDR5-6666+ (OC)
<b>Storage</b>	4x M.2 Gen4 x4 64Gbps slots, 1x M.2 Gen3 x4 32Gbps slot, supports Intel® Optane™ Technology 6 x SATA 6Gbps
<b>USB ports</b>	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
<b>LAN</b>	Intel® I225-V 2.5G LAN
<b>Wireless / Bluetooth</b>	Intel® Wi-Fi 6E module, Bluetooth 5.2
<b>Audio</b>	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

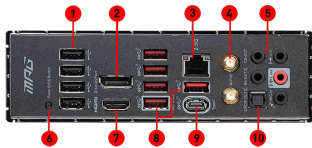
Built-in USB 3.2 Gen 2x2 port, offers 20Gbps transmission speed, 4X faster than USB 3.2 Gen 1.



#### 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