



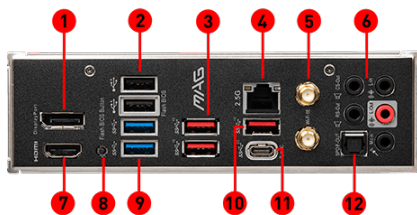
SPECIFICATIONS

Model Name	MAG Z690 TOMAHAWK WIFI
CPU Support	Supports 12 th Gen Intel® Core™ Processors, Pentium® Gold and Celeron® Processors
CPU Socket	LGA 1700
Chipset	Intel® Z690 Chipset
Graphics Interface	1x PCIe 5.0 x16 slot, 1x PCIe 3.0 x16 slot Supports 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 DDR5-6400+ (OC)
Expansion Slots	1x PCIe 3.0 x16 slot, 1x PCIe 3.0 x1 slot
Storage	3x M.2 Gen4 x4 64Gbps slots, 1x M.2 Gen3 x4 32Gbps slot, Support Intel® Optane™ Technology, 6x SATA 6Gb/s ports
USB ports	1x USB 3.2 Gen 2x2 20Gbps (Type-C), 4x USB 3.2 Gen 2 10Gbps (3 Type-A + 1 Type-C), 4x USB 3.2 Gen 1 5Gbps (Type-A), 6x USB 2.0
LAN	1x 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

- Lightning Gen 5**
 The latest PCIe 5.0 solution with up to 128GB/s bandwidth for maximum transfer speed.
- Quadruple M.2 Connectors**
 Onboard quadruple M.2 connectors for the maximum storage performance.
- Latest DDR5 Memory**
 A huge step of DDR performance enhancement with the latest DDR5 memory and MSI Memory Boost technology.
- Memory Boost**
 Advanced technology to deliver pure data signals for the best performance, stability and compatibility.
- M.2 Shield FROZR**
 M.2 thermal accessory keeps M.2 SSDs safe while preventing throttling, making them run faster.
- 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 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 for the most immersive gaming experience

CONNECTIONS



- DisplayPort 1.4
- USB 2.0 Port
- USB 3.2 Gen 2 10Gbps Type-A
- 2.5G LAN Port
- Wi-Fi / Bluetooth Antenna
- HD Audio Connectors
- HDMI™ 2.1 Port
- Flash BIOS Button
- USB 3.2 Gen 1 5Gbps Type-A
- USB 3.2 Gen 2 10Gbps Type-A
- USB 3.2 Gen 2x2 20Gbps Type-C
- Optical S/PDIF OUT