Copper PCB

FEATURES

Quadruple M.2 Connectors

Onboard quadruple M.2 connectors for the maximum storage performance.

M.2 Shield FROZR

M.2 thermal accessory. Keeps M.2 SSDs safe while preventing throttling, making them run faster.

Lightning Gen 5

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

WIFI 6

The latest wireless solution supports 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.

Memory Boost

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

Core Boost

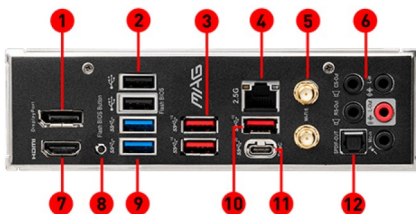With premium layout and fully digital power design to support more cores and provide better performance.

Audio Boost 5

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

SPECIFICATIONS

Model Name	MAG Z690 TOMAHAWK WIFI DDR4
CPU Support	Supports 12th 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 DDR4-5200+ (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 (Type-A + 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 6 module, Bluetooth 5.2
Audio	8-Channel (7.1) HD Audio with Audio Boost 5

CONNECTIONS

1. DisplayPort 1.4
2. USB 2.0 Port
3. USB 3.2 Gen 2 10Gbps Type-A
4. 2.5G LAN Port
5. Wi-Fi / Bluetooth Antenna
6. HD Audio Connectors
7. HDMI 2.1 Port
8. Flash BIOS Button
9. USB 3.2 Gen 1 5Gbps Type-A
10. USB 3.2 Gen 2 10Gbps Type-A
11. USB 3.2 Gen 2x2 20Gbps Type-C
12. Optical S/PDIF OUT