



# **SPECIFICATIONS**

Model Name	MAG Z690 TOMAHAWK WIFI
CPU Support	Supports 12 <sup>th</sup> Gen Intel® Core™ Processors, Pentium® Gold
	and Celeron® Processors
CPU Socket	LGA 1700
Chipset	Intel® Z690 Chipset
Graphics	1x PCle 5.0 x16 slot, 1x PCle 3.0 x16 slot
Interface	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)
<b>Expansion Slots</b>	1x PCle 3.0 x16 slot, 1x PCle 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 /	Intel <sup>®</sup> Wi-Fi 6E module, Bluetooth 5.2
Bluetooth	
Audio	8-Channel (7.1) HD Audio with Audio Boost 5

## **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.



## **Latest DDR5 Memory**

A huge step of DDR performance enhancement with the latest DDR5 memory and MSI Memory Boost technology.



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.



## **Memory Boost**

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



### Audio Boost 5

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

## CONNECTIONS



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