



SPECIFICATIONS

| | |
|---------------------------|---|
| Model Name | MPG Z590 TOMAHAWK WIFI |
| CPU Support | Supports 10 th Gen Intel® Core™ Processors, 11th Gen Intel® Core™ Processors, Pentium® Gold and Celeron® Processors |
| CPU Socket | LGA 1200 |
| Chipset | Intel® Z590 Chipset |
| Graphics Interface | 1x PCIe 4.0 x16 slot, 1x PCIe 3.0 x16 slot Support 2-way AMD® CrossFire™ Technology |
| Display Interface | Support 4K@60Hz as specified in HDMI™ 2.0b, DisplayPort 1.4 - Requires Processor Graphics |
| Memory Support | 4 DIMMs, Dual Channel DDR4-5333 (OC) |
| Expansion Slots | 2x PCIe 3.0 x1 slots |
| Storage | 1x M.2 Gen4 x4 64Gb/s slot, 2x M.2 Gen3 x4 32Gb/s slots, Support Intel® Optane™ Technology, 6x SATA 6Gb/s ports |
| USB ports | 1x USB 3.2 Gen 2x2 20Gbps (Type-C), 2x USB 3.2 Gen 2 10Gbps (Type-A + Type-C), 6x USB 3.2 Gen 1 5Gbps (Type-A), 6x USB 2.0 |
| LAN | Intel® I225-V 2.5G LAN |
| WiFi / BT | Intel® Wi-Fi 6E AX210, Bluetooth 5.2 |
| Audio | 8-Channel (7.1) HD Audio with Audio Boost 5 |

FEATURES



Extended Heatsink Design

MSI extended PWM heatsink and enhanced circuit design ensures even high-end processors to run in full speed.



Lightning Gen4 Solution

The latest Gen4 PCI-E and M.2 solution with up to 64GB/s bandwidth for maximum transfer speed.



Mystic Light

Personalize your PC with 16.8 million colors / 31 effects, controlled in one click!..



2.5G LAN

Onboard 2.5G LAN with LAN manager, delivering the best online gaming experience.



Wi-Fi 6E

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



Lightning USB 20G

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



DDR4 Boost

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



Audio Boost 5

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



Core Boost

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



M.2 Shield FROZR

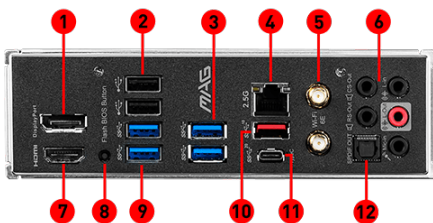
M.2 thermal accessory keeps M.2 SSDs safe while preventing throttling, making them run faster.



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CONNECTIONS



- | | |
|-----------------------------------|---------------------------------|
| 1. DisplayPort | 2. USB 2.0 |
| 3. USB 3.2 Gen 1 5Gbps Type-A | 4. 2.5G LAN Port |
| 5. Wi-Fi / Bluetooth Antenna | 6. HD Audio Connectors |
| 7. HDMI™ | 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 |