



## FEATURES



### M.2 Shield FROZR

Strengthened built-in M.2 thermal solution. Keeps M.2 SSDs safe while preventing throttling, making them run faster.



### WiFi 6

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



### 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.



### EZ Debug LED

Easiest way to troubleshoot.



### Extended Heatsink Design

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



### 2.5G Network Solution

Featuring premium 2.5G LAN with LAN manager to deliver better network experience.



### Frozr AI Cooling

Detect CPU & GPU temperatures and automatically adjust system fan duty to a proper value.



### Lightning Gen 5

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



### Lightning USB 20G

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

## SPECIFICATIONS

<b>Model Name</b>	PRO Z690-A WIFI DDR4
<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>	1x PCIe 5.0 x16 slot 1x PCIe 3.0 x16 slot Supports 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 DDR4-5200+MHz(OC)
<b>Expansion Slots</b>	1x PCIe 3.0 x16 slot 1x PCIe 3.0 x1 slot
<b>Storage</b>	3x M.2 Gen4 x4 64Gbps slots 1x M.2 Gen3 x4 32Gbps slot 6x SATA 6Gbps ports
<b>USB ports</b>	1x USB 3.2 Gen 2x2 20Gbps (1 Type-C) 2x USB 3.2 Gen 2 10Gbps (1 Type-A + 1 Type-C) 6x USB 3.2 Gen 1 5Gbps (6 Type-A) 8x USB 2.0
<b>LAN</b>	Intel® I225-V 2.5G LAN
<b>Wireless / Bluetooth</b>	Intel® Wi-Fi 6 module, Bluetooth 5.2
<b>Audio</b>	8-Channel (7.1) HD Audio with Audio Boost

## CONNECTIONS



- |                                   |                                 |
|-----------------------------------|---------------------------------|
| 1. Keyboard / Mouse               | 2. DisplayPort                  |
| 3. USB 2.0                        | 4. LAN port                     |
| 5. WIFI / Bluetooth               | 6. Audio connector              |
| 7. Flash BIOS Button              | 8. USB 2.0                      |
| 9. HDMI                           | 10. USB 3.2 Gen 1 5Gbps Type-A  |
| 11. USB 3.2 Gen 2x2 20Gbps Type-C | 12. USB 3.2 Gen 2 10Gbps Type-A |