



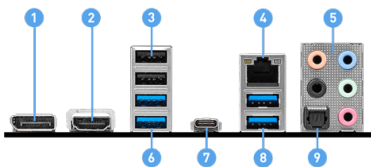
## SPECIFICATIONS

<b>Model Name</b>	PRO Z690-P 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@30Hz as specified in HDMI™ 1.4b, DisplayPort 1.4 - Requires Processor Graphics
<b>Memory Support</b>	4 DIMMs, Dual Channel DDR4-5000+MHz(OC)
<b>Expansion Slots</b>	3x PCIe 3.0 x1 slots 1x M.2 2230 with E-Key for Wi-Fi Module
<b>Storage</b>	2x M.2 Gen4 x4 64Gbps slots supports Intel® Optane™ Technology 4x SATA 6Gbps ports
<b>USB ports</b>	1x USB 3.2 Gen 2x2 20Gbps (1 Type-C) 8x USB 3.2 Gen 1 5Gbps (8 Type-A) 6x USB 2.0
<b>LAN</b>	Realtek® RTL8125BG 2.5G LAN
<b>Audio</b>	8-Channel (7.1) HD Audio with Audio Boost

## FEATURES

- Lightning Gen 5**  
 The latest PCIe 5.0 solution with up to 128GB/s bandwidth for maximum transfer speed.
- 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 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.
- 8+4 Pin Stromzufuhr**  
 Für bessere Stromversorgung von Mehrkern-Prozessoren.
- Core Boost**  
 With premium layout and fully digital power design to support more cores and provide better performance.
- Memory Boost**  
 Advanced technology to deliver pure data signals for the best performance, stability and compatibility.
- EZ Debug LED**  
 Easiest way to troubleshoot.
- Frozr AI Cooling**  
 Detect CPU & GPU temperatures and automatically adjust system fan duty to a proper value.

## CONNECTIONS



1. DisplayPort
2. HDMI™
3. USB 2.0
4. LAN port
5. Audio Connectors
6. USB 3.2 Gen 1 5Gbps Type-A
7. USB 3.2 Gen 2x2 20Gbps Type-C
8. USB 3.2 Gen 1 5Gbps Type-A
9. Optical S/PDIF Out