



SPECIFICATIONS

Model Name	PRO Z690-P DDR4
CPU Support	Supporta processori di 12/13/14esima Gen Intel® Core™, Pentium® Gold e Celeron®
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@30Hz as specified in HDMI™ 1.4b, DisplayPort 1.4 - Requires Processor Graphics
Memory Support	4 DIMMs, Dual Channel DDR4-5000+MHz(OC)
Expansion Slots	3x PCIe 3.0 x1 slots 1x M.2 2230 with E-Key for Wi-Fi Module
Storage	2x M.2 Gen4 x4 64Gbps slots supports Intel® Optane™ Technology 4x SATA 6Gbps ports
USB ports	1x USB 3.2 Gen 2x2 20Gbps (1 Type-C) 8x USB 3.2 Gen 1 5Gbps (8 Type-A) 6x USB 2.0
LAN	Realtek® RTL8125BG 2.5G LAN
Audio	8-Channel (7.1) HD Audio with Audio Boost

FEATURES



Optimum Thermal Solution

Wavy Fin Design, Direct Touch Cross Heat-pipe, MOSFET Baseplate, double-sided M.2 Shield Frozr, and Frozr AI software ensure the extreme performance with low temp.



8+4 Pin power supply

By providing 8+4 pin connectors to ensure adequate power supply to unleash ultimate multi-core CPU performance.



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.



Frozr AI Cooling

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



2.5G Network Solution

Featuring premium 2.5G LAN to deliver better network experience.



Extended Heatsink Design

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



Lightning Gen 5

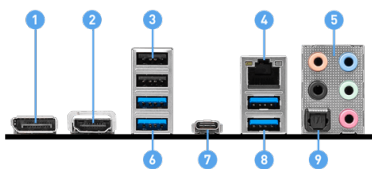
The latest PCIe 5.0 solution with up to 128GB/s bandwidth for maximum transfer speed.



Lightning USB 20G

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

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 | |