



SPECIFICATIONS

Model Name	PRO Z690-P WIFI
CPU Support	Supports 12th Gen Intel® Core™ Processors, Pentium® Gold and Celeron® Processors
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 DDR5-6200+MHz(OC)
Expansion Slots	2x PCIe 3.0 x16 slots 2x PCIe 3.0 x1 slots
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
Wireless / Bluetooth	Intel® Wi-Fi 6 module, Bluetooth 5.2
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.



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.



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 power supply

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



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

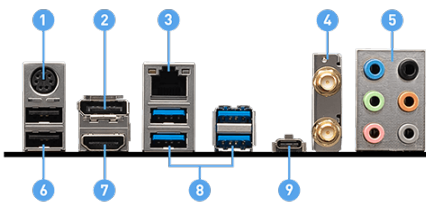
Easiest way to troubleshoot.



Frozr AI Cooling

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

CONNECTIONS



- | | |
|----------------------------------|-------------------------------|
| 1. Keyboard / Mouse | 2. DisplayPort |
| 3. LAN port | 4. Wi-Fi / Bluetooth |
| 5. Audio connectors | 6. USB 2.0 |
| 7. HDMI™ | 8. USB 3.2 Gen 1 5Gbps Type-A |
| 9. USB 3.2 Gen 2x2 20Gbps Type-C | |