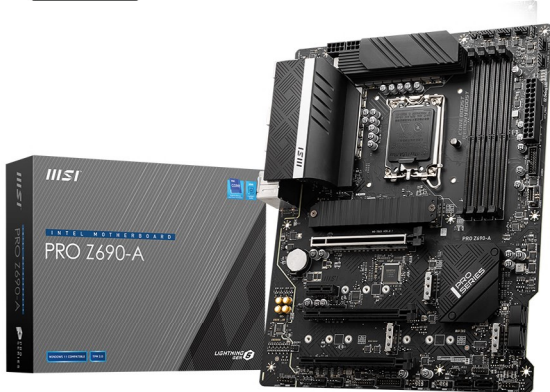




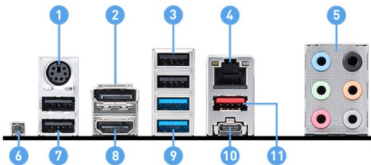
Copper PCB



SPECIFICATIONS

Model Name	PRO Z690-A
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@60Hz as specified in HDMI 2.1, DisplayPort 1.4 - Requires Processor Graphics
Memory Support	4 DIMMs, Dual Channel DDR5-6400+MHz(OC)
Expansion Slots	1x PCIe 3.0 x16 slot 1x PCIe 3.0 x1 slot
Storage	3x M.2 Gen4 x4 64Gbps slots 1x M.2 Gen3 x4 32Gbps slot 6x SATA 6Gbps ports
USB ports	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
LAN	Intel® I225-V 2.5G LAN
Audio	8-Channel (7.1) HD Audio with Audio Boost

CONNECTIONS



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

FEATURES



Extended Heatsink Design

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



M.2 Shield FROZR

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



EZ Debug LED

Easiest way to troubleshoot.



Froze 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.



2.5G Network Solution

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



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.