



SPECIFICATIONS

Model Name	Z590-A PRO
CPU Support	Supports 10 th Gen Intel® Core™ Processors, 11 th Gen Intel® Core™ Processors, Pentium® Gold and Celeron® Processors
CPU Socket	LGA 1200
Chipset	Intel® Z590 Chipset
Graphics Interface	1x PCIe 4.0 x16 slot 1x PCIe 3.0 x16 slot
Display Interface	Support 4K@60Hz as specified in HDMI™ 2.0b, DisplayPort 1.4 - Requires Processor Graphics
Memory Support	4 DIMMs, Dual Channel DDR4-5333MHz(OC)
Expansion Slots	2x PCIe 3.0 x1 slots
Storage	1x M.2 Gen4 x4 slot 2x M.2 Gen3 x4 slots 6x SATA 6Gb/s ports
USB ports	1x USB 3.2 Gen 2x2 20Gbps (Type-C) 2x USB 3.2 Gen 2 10Gbps (1 Type-C + 1 Type-A) 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

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.



M.2 Shield FROZR

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



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.



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

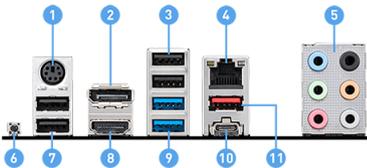
Detect CPU & GPU temperatures and automatically adjust system fan duty to a proper value.



DDR4 Boost

Advanced technology to deliver pure data signals for the best gaming performance and stability.

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 | |