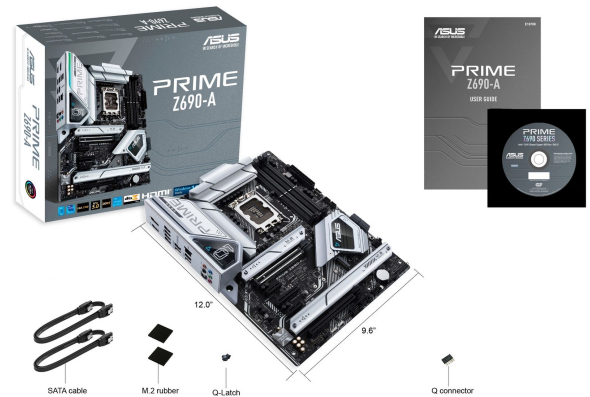


MB-AZ690PA

Asus Prime Z690-A Intel 12th Gen Socket LGA 1700 ATX Motherboard

Product Overview

Asus Prime Z690-A Intel 12th Gen Socket LGA 1700 ATX Motherboard, Z690 Chipset, 4x DIMM Memory slots, 1x DisplayPort, 1x HDMI Port, 1x PCI-e 5.0/4.0/3.0 x16 slots, 1x PCI-e 3.0 x16 slot (Supports x4 mode), 1x PCI-e 3.0 x4 slot, 2x PCI-e 3.0 x1 slots, Supports 4 x M.2 slots and 4x SATA 6Gb/s Ports, 1x Intel 2.5GB Ethernet, 1x USB 3.2 Gen 2x2 Ports (1x USB Type-C), 3x USB 3.2 Gen 2 Ports (2x Type-A + 1x USB Type-C), 4x USB 3.2 Gen 1 Ports (4x Type-A), Realtek S1220a 7.1 surround sound high definition audio, 5x audio jacks, 1x optical S/PDIF out Port





Specifications

Overview:

PRIME Z690-A

Intel Z690 (LGA 1700) ATX motherboard with PCIe 5.0, four M.2 slots, 16+1 DrMOS power stages, DDR5, HDMI, DisplayPort, Intel 2.5 Gb Ethernet, USB 3.2 Gen 2x2 Type-C, front USB 3.2 Gen 2 Type-C, Thunderbolt 4 support and Aura Sync RGB lighting

- Intel LGA 1700 socket:Ready for 12th Gen Intel processors
- Enhanced power solution:16+1 DrMOS, ProCool sockets, alloy chokes and durable capacitors for stable power delivery
- AI Overclocking:Optimizes performance based on CPU and cooler loads to achieve results that are extremely close to manual tuning by experts
- AI Cooling:Manages and controls all motherboard fans, automatically optimizing settings based on current system load and temperature
- Two-Way AI Noise-Cancelation:Reduces background noise from the microphone and audio output for crystal-clear communication in games or video conferences
- Comprehensive cooling:Large VRM heatsinks, M.2 heatsinks, M.2 backplate with Q-Latch, hybrid fan headers and Fan Xpert 4
- Next-gen connectivity:DDR5 memory, PCIe 5.0, Intel 2.5 Gb Ethernet, USB 3.2 Gen2x2 Type-C, front panel USB 3.2 Gen 2 Type-C, Thunderbolt 4 header support, 4 PCIe 4.0 M.2

Specifications:

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Specifications	
Product Code	MB-AZ690PA
CPU	Supports Intel Turbo Boost Technology 2.0 and Intel Turbo Boost Max Technology 3.0
	** Intel Turbo Boost Max Technology 3.0 support depends on the CPU types.
Chipset	Z690

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Product Specification Sheet

Memory	4 x DIMM, Max. 128GB, DDR5 6000(OC) / 5800(OC) / 5600(OC) / 5400(OC) / 5200(OC) / 5000(OC) / 4800 Non-ECC, Un-buffered Memory
	Dual Channel Memory Architecture
	Supports Intel Extreme Memory Profile (XMP)
	OptiMem II
	* Supported memory types, data rate(Speed), and number of DRAM module vary depending on the CPU and memory configuration
Graphics	1 x DisplayPort
	1 x HDMI port
	* Graphics specifications may vary between CPU types.
	** Supports max. 8K@60Hz as specified in DisplayPort 1.4.
	*** Supports 4K@60Hz as specified in HDMI 2.1.
Expansion Slots	Intel 12th Gen Processors
	1 x PCIe 5.0/4.0/3.0 x16 slot(s)
	Intel Z690 Chipset
	1 x PCIe 3.0 x16 slot (supports x4 mode)
	1 x PCIe 3.0 x4 slot
	2 x PCIe 3.0 x1 slots
	* Please check PCIe bifurcation table in support site.
	** Supports Intel Optane Memory H Series on PCH-attached PCIE slot.
Storage	Supports 4 x M.2 slots and 4 x SATA 6Gb/s ports
	Intel 12th Gen Processors
	M.2_1 slot (Key M), type 2242/2260/2280/22110
	- Intel 12th Gen processors support PCIe 4.0 x4 mode.
	Intel Z690 Chipset
	M.2_2 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 mode)
	M.2_3 slot (Key M), type 2242/2260/2280/22110 (supports PCIe 4.0 x4 mode)
	M.2_4 slot (Key M), type 2242/2260/2280 (supports PCIe 4.0 x4 & SATA modes)
	4 x SATA 6Gb/s ports
	* Intel Rapid Storage Technology supports NVMe RAID 0/1/5, SATA RAID 0/1/5/10.
	** Intel Rapid Storage Technology supports Intel Optane Memory H Series on PCH attached M.2 slots.
Ethernet	1 x Intel 2.5Gb Ethernet
	ASUS LANGuard

USB	Rear USB:Total 8 ports
	1 x USB 3.2 Gen 2x2 port(s) (1 x USB Type-C)
	3 x USB 3.2 Gen 2 port(s) (2 x Type-A + 1 x USB Type-C)
	4 x USB 3.2 Gen 1 port(s) (4 x Type-A)
	Front USB:Total 7 ports
	1 x USB 3.2 Gen 2 connector(s) (support(s) USB Type-C)
	1 x USB 3.2 Gen 1 header(s) support(s) additional 2 USB 3.2 Gen 1 ports
	2 x USB 2.0 header(s) support(s) additional 4 USB 2.0 ports
Audio	Realtek S1220A 7.1 Surround Sound High Definition Audio CODEC
	- Impedance sense for front and rear headphone outputs
	- Internal audio Amplifier to enhance the highest quality sound for headphone and speakers
	- Supports: Jack-detection, Multi-streaming, Front Panel Jack-retasking
	- High quality 120 dB SNR stereo playback output and 113 dB SNR recording input (Line-in)
	- Supports up to 32-Bit/192 kHz playback
	Audio Features
	- Audio Shielding
	- Power pre-regulator reduces power input noise to ensure consistent performance
	- Rear optical S/PDIF out port
	- Premium audio capacitors
	- Dedicated audio PCB layers
	- Audio cover
	- Unique de-pop circuit
	* Due to limitations in HDA bandwidth, 32-Bit/192 kHz is not supported for 7.1 Surround Sound audio.
Back Panel I/O Ports	1 x USB 3.2 Gen 2x2 port(s) (1 x USB Type-C)
	3 x USB 3.2 Gen 2 port(s) (2 x Type-A, 1 x Type-C)
	4 x USB 3.2 Gen 1 port(s) (4 x Type-A)
	1 x DisplayPort
	1 x HDMI port
	1 x Intel 2.5Gb Ethernet port
	5 x Audio jacks
	1 x Optical S/PDIF out port

Internal I/O Connectors	Fan and Cooling related
	1 x 4-pin CPU Fan header(s)
	1 x 4-pin CPU OPT Fan header(s)
	1 x 4-pin AIO Pump header(s)
	4 x 4-pin Chassis Fan header(s)
	1 x W_PUMP+ header(s)
	Power related
	1 x 24-pin Main Power connector
	2 x 8-pin +12V Power connector
	Storage related
	4 x M.2 slots (Key M)
	4 x SATA 6Gb/s ports
	USB
	1 x USB 3.2 Gen 2 connector (support(s) USB Type-C)
	1 x USB 3.2 Gen 1 header(s) support(s) additional 2 USB 3.2 Gen 1 ports
	2 x USB 2.0 header(s) support(s) additional 4 USB 2.0 ports
	Miscellaneous
	3 x Addressable Gen 2 header(s)
	1 x AURA RGB header(s)
	1 x Clear CMOS button
	1 x COM Port header
	1 x CPU Over Voltage jumper
	1 x Front Panel Audio header (AAFP)
	1 x Power button
	1 x SPI TPM header (14-1pin)
	1 x 20-3 pin System Panel header with Chassis intrude function
	1 x Thermal Sensor header
	1 x Thunderbolt header

Special Features	ASUS 5X PROTECTION III
	- DIGI+ VRM (- Digital power design with DrMOS)
	- Enhanced DRAM Overcurrent Protection
	- ESD Guards
	- LANGuard
	- Overvoltage Protection
	- SafeSlot
	- Stainless-Steel Back I/O
	ASUS Q-Design
	- M.2 Q-Latch
	- Q-Connector
	- Q-DIMM
	- Q-LED (CPU [red], DRAM [yellow], VGA [white], Boot Device [yellow green])
	- Q-Slot
	ASUS Thermal Solution
	- M.2 heatsink backplate
	- M.2 heatsink
	- VRM heatsink design
	ASUS EZ DIY
	- Box headers
	- Clear CMOS button
	- CPU socket lever protector
	- ProCool
	- Pre-mounted I/O shield
	AURA Sync
	- AURA RGB header(s)
	- Addressable Gen 2 header(s)

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Product Specification Sheet

Software Features	ASUS Exclusive Software
	Armoury Crate
	- AURA Creator
	- AURA Sync
	- Fan Xpert 4
	- Two-Way AI Noise Cancelation
	AI Suite 3
	-Easy Optimization with AI Overclocking
	TPU
	EPU
	DIGI+ VRM
	Turbo app
	ASUS CPU-Z
	DTS:X Ultra
	Norton Anti-virus software (Free Trial version)
	WinRAR
	UEFI BIOS
	AI Overclocking Guide
	ASUS EZ DIY
	- ASUS CrashFree BIOS 3
	- ASUS EZ Flash 3
	- ASUS UEFI BIOS EZ Mode
	FlexKey
	MemTest86
BIOS	256 Mb Flash ROM, UEFI AMI BIOS
Manageability	WOL by PME, PXE
Accessories	Cables
	2 x SATA 6Gb/s cables
	Miscellaneous
	1 x M.2 Rubber Package(s)
	1 x Q-connector
	1 x M.2 Q-Latch package(s)
	Installation Media
	1 x Support DVD
	Documentation
	1 x User guide

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Product Specification Sheet

Form Factor	ATX
	30.5cm x 24.4cm

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page:

<https://www.comx-computers.co.za/MB-AZ690PA-Asus-Prime-Z690-A-Intel-12th-Gen-Socket-Buy-p-265958.php>

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