



Asus PRIME Z690-A Gaming Motherboard

Product Specification

Brand	Asus
Series	PRIME
Model	Z690-A
Type	Motherboard
Chipset	Intel Z690 Chipset
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.
Memory Type	4 x DIMM Max. 128GB DDR5 6000(OC) 5800(OC) 5600(OC) 5400(OC) 5200(OC) 5000(OC) 4800 Non-ECC, Un-buffered Memory
BIOS	256 Mb Flash ROM, UEFI AMI BIOS
Graphics	1 x DisplayPort 1 x HDMI port
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
Storage	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
LAN	1 x Intel 2.5Gb Ethernet

USB Ports	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
Back 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 Ports	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