



Z690-MATX

Product Features

The Z690-MATX is a high-performance server motherboard designed on the Intel 600 Series chipset. It seamlessly combines the powerful computing capability of Intel 12th and 13th Gen desktop processors with massive storage connectivity and outstanding networking performance. Designed for high-performance NAS systems, virtualization servers, workstations, and professional computing platforms requiring high storage density, multiple network ports, and strong expandability, it is an ideal foundation for building edge servers, storage servers, and multi-port computing platforms.

Application Scenarios



Network Nodes



Storage Workstations



Edge Computing



Virtualization Platforms

Processor	Product Collection	Intel 600 Series Desktop Chipsets
	Sockets Supported	FCBGA1744
	Memory Type	DDR4 DIMM
Memory specifications	Maximum Capacity	4x 32GB
	Maximum Frequency	3200 MT/s
Storage specifications	SATA	8*SATA 3.0 (6Gb/s)
	M.2	2*M.2 Key-M 2280 (PCIe 4.0 x4), 2*M.2 Key-M 2280 (PCIe 3.0 x4)
Network features	Ethernet	4*2.5GbE
	Controller	4*Intel I226V
Extension interface	PCIe	2*PCIe x16 (PCIe 4.0 x8 rate)
	PCIe	1*PCIe x4 (PCIe 4.0 x4)
Display functions	Port	1*DP/1*HD
	Chip	Intel UHD Graphics (Based on processor)
Super IO	Chip	NCT5585D
	USB	4*USB-A 3.0, 5*USB-A 2.0, 1*USB Type-E
	Display	1*DP/1*HD
Backplane I/O	Ethernet	4*RJ45
	Audio	1*Line Out, 1*MIC-IN
	Power supply	1*ATX 24 Pin+8 Pin Socket
Onboard I/O	SATA	8*SATA Data connector

	Fan	1*CPU_FAN, 4*SYS_FAN
	Pin	1*F_PANEL
		1*F_AUDIO
		1*F_USB 2.0, 1*F_USB 3.0
		1*Case Open
Power supply mode	ATX	24 Pin+8 Pin
Motherboard size	Specification	245*245 (mm) Micro-ATX
Work Environment	Temperature	Operating: -10~60℃; Storage: -20℃~75℃
	Humidity	5%~95% (Relative humidity, no condensation)