



# 1744NP-12-6L

## Product Features

*The 1744NP-12-6L is a high-performance embedded motherboard based on the Intel® 12th/13th Generation processor platform (FCBGA1744). Designed in a Nano-ITX form factor, it integrates six 2.5GbE high-speed Ethernet ports, supports dual-channel DDR5 high-speed memory, and features a PCIe 4.0 M.2 SSD interface. With powerful graphics capabilities and flexible expansion options, it delivers exceptional computing and networking performance for next-generation network security appliances, edge computing systems, and virtualization platforms.*

## Application Scenarios



Cybersecurity



Branch Network Nodes



Industrial IoT Gateway



Virtualization Platform

Processor	Product Collection	Intel 12th/13th Gen Processors
	Sockets Supported	FCBGA1744
	Memory Type	DDR5 SO-DIMM
Memory specifications	Maximum Capacity	2x 32GB
	Maximum Frequency	4800 MT/s
	SATA	1*SATA 3.0 (6Gb/s)
Storage specifications	M.2	1*M.2 Key-M 2280 (PCIe 4.0 x4)
	Ethernet	6*2.5GbE
Network features	Controller	6*Intel I226V
	M.2	1*M.2 Key-E 2230 (CNVi)
Extension interface	mPCIe	1*mPCIe (PCIe 3.0)
	Port	1*DP 1.4a, 1*HD 2.1
Display functions	Chip	Intel Iris Xe Graphics
	USB	4*USB-A 3.0
Backplane I/O	Display	1*DP/1*HD
	Console	1*RJ45 COM RS232
	Ethernet	6*RJ45
	SIM	1*SIM Card slot
	Power supply	1*Jack DC 5.5/2.5mm
Onboard I/O	SATA	1*SATA Data connector/1*SATA Power socket

	SIM	1*SIM Card slots
	Fan	1*CPU_FAN
	Pins	1*F_Panel
		1*J_GPIO
Power supply mode	DC	12V
Motherboard size	Specification	120*120 (mm)
Work Environment	Temperature	-20~55℃
	Humidity	5%~90% (Relative humidity, no condensation)



# G31S-1744NP -6L

## Product Features

*The G31S-1744NP-6L is a high-performance fanless embedded industrial computer based on Intel's 12th/13th generation processors. Featuring a compact metal chassis and integrated 6x 2.5GbE high-speed network ports, it offers exceptional computing performance, excellent network processing capabilities, and silent and reliable operation, making it an ideal choice for building network equipment, edge computing nodes, and industrial control applications in space-constrained environments.*

## Application Scenarios



Cybersecurity



Branch Network Nodes



Industrial IoT Gateway



Virtualization Platform

Processor	Product Collection	Intel 12th/13th Gen Processors		
	Sockets Supported	FCBGA1744		
	Memory Type	DDR5 SO-DIMM		
Memory specifications	Maximum Capacity	2x 32GB		
	Maximum Frequency	4800 MT/s		
Storage specifications	SATA	1*SATA 3.0		
	M.2	1*M.2 Key-M 2280		
Interface	Front Panel	Ethernet	6*RJ45	
		Power supply	1*Jack DC 5.5/2.5mm	
	Back Panel	USB	4*USB-A 3.0	
		Console	1*RJ45 COM	
		Display	1*DP/1*HD	
		Antenna	2*Groups (Reserve)	
Extension interface	M.2	1*M.2 Key-E 2230 (CNVi)		
	mPCIe	1*mPCIe (PCIe 3.0)		
Cooling Method	Passive Cooling, Fanless (Need air flow)			
System Specifications	Chassis Size	178*126*55 (mm)		
	Equipment Weight	Equipment Weight 1.15 KG; Package Weight 1.85 KG (including accessories)		
Power Mode	DC	12V 7A or Higher (Pentium)		
Work Environment	Temperature	0~50℃		
	Humidity	5%~90% (Relative humidity, no condensation)		



# G31F-1744NP -6L

## Product Features

*The G31F-1744NP-6L is a high-performance embedded network appliance powered by 12th/13th Gen Intel processors. It supports dual-channel DDR5 memory and integrates 6x 2.5Gb Ethernet ports. Built with a durable metal chassis and an intelligent temperature-controlled cooling system, it combines exceptional computing power, outstanding network performance, and smart thermal management. It is ideally suited for firewalls, SD-WAN, virtualization nodes, and edge computing gateways that demand superior performance and long-term stability.*

## Application Scenarios



Cybersecurity



Branch Network Nodes



Industrial IoT Gateway



Virtualization Platform

Processor	Product Collection	Intel 12th/13th Gen Processors		
	Sockets Supported	FCBGA1744		
	Memory Type	DDR5 SO-DIMM		
Memory specifications	Maximum Capacity	2x 32GB		
	Maximum Frequency	4800 MT/s		
Storage specifications	SATA	1*SATA 3.0		
	M.2	1*M.2 Key-M 2280		
Interface	Front Panel	Ethernet	6*RJ45	
		Power supply	1*Jack DC 5.5/2.5mm	
	Back Panel	USB	4*USB-A 3.0	
		Console	1*RJ45 COM	
		Display	1*DP/1*HD	
		Antenna	2*Groups (Reserve)	
Extension interface	M.2	1*M.2 Key-E 2230 (CNVi)		
	mPCIe	1*mPCIe (PCIe 3.0)		
Cooling Method	Active Cooling, 1*Intelligent TPM Fan			
System Specifications	Chassis Size	178*126*56 (mm)		
	Equipment Weight	Equipment Weight 1.25 KG; Package Weight 1.95 KG (including accessories)		
Power Mode	DC	12V 7A (Pentium) / 10A (Core)		
Work Environment	Temperature	0~50°C		
	Humidity	5%~90% (Relative humidity, no condensation)		