



1264NP-12 -4L

Product Features

BKHD-1264NP-12-4L is a compact Nano-ITX industrial-grade embedded motherboard designed for networking, edge computing, and IoT scenarios. It's ideal for building small routers, firewalls, small NAS devices, or cloud gateways. Equipped with an Intel Alder Lake-N series processor and four 2.5GbE ports, it offers high power efficiency, excellent scalability, and industrial-grade performance. It's ideal for small and medium-sized enterprises, industrial automation, or mobile deployments requiring high networking and custom integration requirements.

Application Scenarios



Cybersecurity



IoT Edge Gateway



Industrial Control Automation



Embedded Terminal

Processor	Product Collection	Intel Processor N-series
	Sockets Supported	FCBGA1264
Memory specifications	Memory type	DDR5 SO-DIMM
	Maximum capacity	16GB
	Maximum frequency	4800 MT/s
Storage specifications	SATA	1*SATA 3.0 (6Gb/s)
	M.2	1*M.2 Key-M 2280
Network features	Ethernet	4*2.5GbE
	Controller	4*Intel I226V
Extension interface	mPCIe	1*mPCIe (PCIe/USB 2.0)
	M.2	1*M.2 Key-E 2230 (CNVi)
Display functions	Port	1*DP/1*HD
	Chip	Intel UHD Graphics
Backplane I/O	USB	2*USB-A 3.0/2*USB-A 2.0
	Display	1*DP/1*HD
	COM	1*RJ45 COM RS232
	LAN	4*RJ45
	SIM	1*SIM Card solt
	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 solts
	Fan	1*CPU_FAN
Power supply mode	DC	12V
Motherboard size	Specification	120 mm*120 mm
Work Environment	Temperature	-20~55℃
	Humidity	5%~90% (Relative humidity, no condensation)



G30S-1264 NP-4L

Product Features

The G30S-1264NP-4L is a compact fanless network appliance powered by Intel N-series low-power processors. It features four 2.5GbE high-speed ports, DDR5 memory support, SATA and M.2 hybrid storage, and flexible expansion options. Designed for high-bandwidth, low-latency applications, it delivers silent and reliable performance in space-constrained environments. Ideal for edge computing, network security, software routing, and IoT gateways.

Application Scenarios



Cybersecurity



IoT Edge Gateway



Industrial Control Automation



Embedded Terminal

Processor	Product Collection	Intel Processor N-series	
	Sockets Supported	FCBGA1264	
Memory specifications	Memory type	DDR5 SO-DIMM	
	Maximum capacity	16GB	
	Maximum frequency	4800 MT/s	
Storage specifications	SATA	1*SATA 3.0 (6Gb/s)	
	M.2	1*M.2 Key-M 2280	
Network features	Ethernet	4*2.5GbE	
	Controller	4*Intel I226V	
Interface	Front Panel	Network	4*RJ45
		Console	1*RJ45 COM
	Back Panel	Power	1*Jack DC_IN
USB		2*USB-A 3.0/2*USB-A 2.0	
Display		1*HD/1*DP	
Extension interface	SIM	1*SIM Card slot	
		Antenna hole	2*Reserved
mPCIe	1*mPCIe (PCIe/USB 2.0)		
	M.2	1*M.2 Key-E 2230 (CNVi)	
Cooling Method	Passive Cooling, Fanless (Need air flow)		
System Specifications	Chassis Size	136*126*40 (mm)	
	Weight	Equipment Weight 0.65 KG; Package Weight 1.25 KG (including accessories)	
Power Mode	DC	12V 4A or Higher	
Work Environment	Temperature	0~50℃	
	Humidity	5%~90% (Relative humidity, no condensation)	



G48S-1264 NP-4L

Product Features

The G48S-1264NP-4L is a compact fanless network appliance built on Intel N-series low-power processors. It features four 2.5GbE high-speed Ethernet ports, DDR5 memory support, SATA and M.2 hybrid storage, and flexible expansion options within a durable metal chassis. Designed for high-bandwidth, low-latency applications, it delivers silent, stable performance in space-constrained environments. Ideal for edge computing, network security, software routing, and IoT gateways.

Application Scenarios



Cybersecurity



IoT Edge Gateway

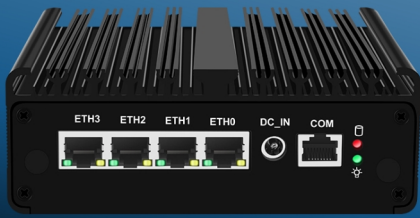


Industrial Control Automation



Embedded Terminal

Processor	Product Collection	Intel Processor N-series		
	Sockets Supported	FCBGA1264		
	Memory type	DDR5 SO-DIMM		
Memory specifications	Maximum capacity	16GB		
	Maximum frequency	4800 MT/s		
	Storage specifications	SATA	1*SATA 3.0 (6Gb/s)	
Network features	M.2	1*M.2 Key-M 2280		
	Ethernet	4*2.5GbE		
	Controller	4*Intel I226V		
Interface	Network	4*RJ45		
	Front Panel	Console	1*RJ45 COM	
	Power	1*Jack DC_IN		
	USB	2*USB-A		
		3.0/2*USB-A 2.0		
	Back Panel	Display	1*HD/1*DP	
SIM	1*SIM Card slot			
Antenna hole	2*Reserved			
Extension interface	mPCIe	1*mPCIe (PCIe/USB 2.0)		
	M.2	1*M.2 Key-E 2230 (CNVi)		
Cooling Method	Passive Cooling, Fanless (Need air flow)			
System Specifications	Chassis Size	134*125*40 (mm)		
	Weight	Equipment Weight 0.65 KG; Package Weight 1.25 KG (including accessories)		
Power Mode	DC	12V 4A or Higher		
Work Environment	Temperature	0~50°C		
	Humidity	5%~90% (Relative humidity, no condensation)		



H30S-1264 NP-4L

Product Features

The H30S-1264NP-4L is a compact fanless network appliance built on Intel N-series low-power processors. It features four 2.5GbE high-speed Ethernet ports, DDR5 memory support, SATA and M.2 hybrid storage, and flexible expansion options within a durable metal chassis. Designed for high-bandwidth, low-latency applications, it delivers silent, stable performance in space-constrained environments. Ideal for edge computing, network security, software routing, and IoT gateways.

Application Scenarios



Cybersecurity



IoT Edge Gateway



Industrial Control Automation



Embedded Terminal

Processor	Product Collection	Intel Processor N-series		
	Sockets Supported	FCBGA1264		
	Memory type	DDR5 SO-DIMM		
Memory specifications	Maximum capacity	16GB		
	Maximum frequency	4800 MT/s		
	Storage specifications	SATA	1*SATA 3.0 (6Gb/s)	
Storage specifications	M.2	1*M.2 Key-M 2280		
	Network features	Ethernet	4*2.5GbE	
Network features	Controller	4*Intel I226V		
	Interface	Network	4*RJ45	
Front Panel		Console	1*RJ45 COM	
Power		1*Jack DC_IN		
Interface	USB	2*USB-A 3.0/2*USB-A 2.0		
	Back Panel	Display	1*HD/1*DP	
	SIM	1*SIM Card slot		
Interface	Antenna hole	2*Reserved		
	Extension interface	mPCIe	1*mPCIe (PCIe/USB 2.0)	
	M.2	1*M.2 Key-E 2230 (CNVi)		
Cooling Method	Passive Cooling, Fanless (Need air flow)			
System Specifications	Chassis Size	138*126*48 (mm)		
	Weight	Equipment Weight 0.75 KG; Package Weight 1.25 KG (including accessories)		
Power Mode	DC	12V 4A or Higher		
Work Environment	Temperature	0~50°C		
	Humidity	5%~90% (Relative humidity, no condensation)		



G31S-1264 NP-4L

Product Features

The G31S-1264NP-4L is a fanless network appliance powered by Intel N-series processors. It features four 2.5GbE ports, DDR5 memory support, SATA and M.2 hybrid storage, and a durable metal chassis. Designed for high-bandwidth, low-latency applications, it delivers silent and reliable performance for edge computing, network security, software routing, and IoT gateways. Compared to ultra-compact models, its slightly larger design provides improved thermal performance and expansion capacity while maintaining fanless operation, making it an ideal platform for demanding networking deployments.

Application Scenarios



Cybersecurity



IoT Edge Gateway



Industrial Control Automation



Embedded Terminal

Processor	Product Collection	Intel Processor N-series	
	Sockets Supported	FCBGA1264	
	Memory type	DDR5 SO-DIMM	
Memory specifications	Maximum capacity	16GB	
	Maximum frequency	4800 MT/s	
Storage specifications	SATA	1*SATA 3.0 (6Gb/s)	
	M.2	1*M.2 Key-M 2280	
Network features	Ethernet	4*2.5GbE	
	Controller	4*Intel I226V	
Interface	Network	4*RJ45	
	Front Panel	Console	1*RJ45 COM
	Power	1*Jack DC_IN	
Back Panel	USB	2*USB-A 3.0/2*USB-A 2.0	
	Display	1*HD/1*DP	
Extension interface	SIM	1*SIM Card slot	
	Antenna hole	2*Reserved	
Cooling Method	mPCIe	1*mPCIe (PCIe/USB 2.0)	
	M.2	1*M.2 Key-E 2230 (CNVi)	
System Specifications	Chassis Size	178*126*56 (mm)	
	Weight	Equipment Weight 1.15 KG; Package Weight 1.85 KG (including accessories)	
Power Mode	DC	12V 4A / 12V 7A (Core i3) or Higher	
Work Environment	Temperature	0~50℃	
	Humidity	5%~90% (Relative humidity, no condensation)	



G31F-1264 NP-4L

Product Features

The G31F-1264NP-4L is an actively cooled network appliance built on Intel N-series processors. It features four 2.5GbE ports, DDR5 memory support, SATA and M.2 hybrid storage, and rich expansion interfaces. Equipped with a smart cooling fan, it ensures stable performance under sustained high workloads. Designed for high-bandwidth, low-latency applications, it is ideal for edge computing, network security, software routing, virtualization, and IoT gateways. Combining strong thermal performance, reliable networking, and a compact design, it is a robust platform for demanding, continuous operation environments.

Application Scenarios



Cybersecurity



IoT Edge Gateway



Industrial Control Automation



Embedded Terminal

Processor	Product Collection	Intel Processor N-series	
	Sockets Supported	FCBGA1264	
	Memory type	DDR5 SO-DIMM	
Memory specifications	Maximum capacity	16GB	
	Maximum frequency	4800 MT/s	
Storage specifications	SATA	1*SATA 3.0 (6Gb/s)	
	M.2	1*M.2 Key-M 2280	
Network features	Ethernet	4*2.5GbE	
	Controller	4*Intel I226V	
Interface	Network	4*RJ45	
	Front Panel	Console	1*RJ45 COM
	Power	1*Jack DC_IN	
	USB	2*USB-A 3.0/2*USB-A 2.0	
	Back Panel	Display	1*HD/1*DP
	SIM	1*SIM Card slot	
	Antenna hole	2*Reserved	
Extension interface	mPCIe	1*mPCIe (PCIe/USB 2.0)	
	M.2	1*M.2 Key-E 2230 (CNVi)	
Cooling Method	Active, Cooling Fan, 1*Smart Chassis fan		
System Specifications	Chassis Size	178*126*56 (mm)	
	Weight	Equipment Weight 1.25 KG; Package Weight 1.95 KG (including accessories)	
Power Mode	DC	12V 4A / 12V 7A (Core i3) or Higher	
Work Environment	Temperature	0~50℃	
	Humidity	5%~90% (Relative humidity, no condensation)	