1744NP-14 -4L

Product Features

BKHD-1744NP-14-4L is a high-performance, compact embedded motherboard built on the 12th/13th Gen Intel processor platform (FCBGA1744). It integrates 4x 2.5GbE high-speed Ethernet ports, supports dual-channel DDR5 memory, and provides PCIe 4.0–based NVMe high-speed storage along with flexible expansion interfaces. Balancing computing power, network bandwidth, and industrial-grade reliability, this platform serves as an ideal hardware core for next-generation high-end networking equipment, edge AI computing platforms, and space-constrained high-performance embedded applications.
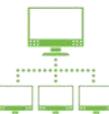
Application Scenarios

Cybersecurity

Edge Computing

Industrial Automation

Virtualization Platform

Processor	Product Collection	Intel 12th/13th Gen Processors
	Sockets Supported	FCBGA1744
Memory specifications	Memory Type	DDR5 SO–DIMM
	Maximum Capacity	2x 32GB
	Maximum Frequency	4800 MT/s
Storage specifications	SATA	1*SATA 3.0 (6Gb/s)
	M.2	1*M.2 Key–M 2280 (PCIe 4.0 x4)
Network features	Ethernet	4*2.5GbE
	Controller	4*Intel I226V
Extension interface	PCIe	1*PCIe x8 (PCIe 3.0 x4 rate)
	M.2 Key–B	1*M.2 Key–B 3052 (PCIe 3.0 x1/USB signal)
	M.2 Key–E	1*M.2 Key–E 2230 (PCIe 3.0 x1/USB/CNVi signal)
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, 1*USB–C 2.0
	Display	1*DP/1*HD
	Console	1*RJ45 COM RS232
	Ethernet	4*RJ45
	SIM	1*SIM Card solt
	Fan	1*SYS_FAN

	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
	Pin	1*F_USB2.0
		1*J_GPIO
		1*J_TPM
Power supply mode	DC	12V
Motherboard size	Specification	130*140 (mm)
Work Environment	Temperature	–20~55℃
	Humidity	5%~90% (Relative humidity, no condensation)

H14-1744NP-4L

Product Features

H14-1744NP-4L is a compact, high-performance industrial computer powered by 12th/13th Gen Intel processors. Featuring a rugged metal enclosure and fanless passive cooling, it delivers silent, reliable operation in space-constrained environments. With 4x 2.5Gb Ethernet ports, multiple USB interfaces, and flexible expansion options, it is well suited for edge computing, industrial networking, digital signage, and compact server applications.
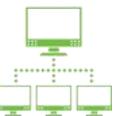
Application Scenarios

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Processor	Product Collection	Intel 12th/13th Gen Processors
	Sockets Supported	FCBGA1744
Memory specifications	Memory type	DDR5 SO–DIMM
	Maximum capacity	2x 32GB
	Maximum frequency	4800 MT/s
Storage specifications	SATA	1*SATA 3.0 (6Gb/s)
	M.2	1*M.2 Key–M 2280
Interface	Front Panel	
	Power	1*Jack DC_IN
	Display	1*HD/1*DP
	Ethernet	4*RJ45
	USB	2*USB–A 2.0
	Antenna hole	2*Reserved
	Expansion Port	Reserved
	Back Panel	
	USB	2*USB–A 3.0, 1*USB–C
	Button	1*Start or Restart
	Fan	1*SYS_FAN
	SIM	1*SIM Card slot
	Console	1*RJ45 COM
Extension interface	PCIe	1*PCIe x8
	M.2 Key–B	1*M.2 Key–B 3052
	M.2 Key–E	1*M.2 Key–E 2230
Cooling Method	Passive Cooling, Fanless (Need air flow)	
System Specifications	Chassis Size	150*143*84(mm)
	Weight	Equipment Weight 1.90 KG; Package Weight 2.60 KG (including accessories)
Power Mode	DC	12V 7A or Higher
Work Environment	Temperature	0~50℃
	Humidity	5%~90% (Relative humidity, no condensation)