

SUPERMICR® A+ Server AS -2126HS-TN Quick Reference Guide

Board Layout

Description	Description
1 P1 NVMe 48, PCIe 2A: NVMe Ports 4/5, supported by CPU1	33 BTE: Onboard Battery
2 JA0M0B1	34 JBT1: CMOS Clear
3 JBD1: Onboard VGA/USB/IO Module Connector	35 JPW13: 3V12V Backplane Power Connector
4 JACM1: Supervisor Advanced Input/Output (AIO) PCIe 5.0 x16 Connector	36 FAN1 5-Pin Header
5 JCP1D1	37 FAN2 5-Pin Header
6 JPM1: Trusted Platform Module/Port 80 Connector	38 JPM2C2: 4-Pin BMC External PC Header for Backplane
7 JCB1: NC1 S1 Connector	39 JPM2C2: 4-Pin BMC External PC Header for Backplane
8 LED BMC BMC Heartbeat LED	40 JMW2C2: 4-Pin PC Header for NVMe Backplane Hot-Swap Support
9 JLT: Chassis Ingress Header	41 FAN4 5-Pin Header
10 M2-C1: M.2 PCIe Interface (NVMe only)	42 P2 NVMe 1416, PCIe 7B: NVMe Ports 14/15, XGM, supported by CPU2
11 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector	43 JPM2C2: 4-Pin BMC External PC Header for Liquid Cooling Module (LCM) Selection Header
12 P2 NVMe 23, PCIe 4B: SATA 8-18: NVMe Ports 2/3, P2 SATA 8-15, supported by CPU2	44 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
13 JMSDC1: 4-Pin BMC External PC Header for Rear Card	45 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
14 P2 SLOTT1: PCIe 5.0 x16 Slot, CPU2	46 P2 NVMe 1416, PCIe 7A: NVMe Ports 12/13, XGM, supported by CPU2
15 M2-C2: M.2 PCIe Interface (NVMe only)	47 P1 NVMe 58, PCIe 3A: NVMe Ports 8/9, XGM, supported by CPU1
16 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector	48 FAN3 5-Pin Header
17 FAN12B1 5-Pin Header	49 P1 NVMe 1811, PCIe 3B: NVMe Ports 10/11, XGM, supported by CPU1
18 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector	50 FAN3 5-Pin Header
19 P2 NVMe 01, PCIe 4A: SATA 9-7: NVMe Ports 0/1, P2 SATA 9-7, supported by CPU2	51 JPM2C2: 4-Pin BMC External PC Header for Backplane
20 P2 Power Supply Module Connector	52 JMW2C1: 4-Pin PC Header for NVMe Backplane Hot-Swap Support
21 P2 NVMe 45, PCIe 5A: NVMe Ports 4/5, supported by CPU2	53 FAN7 5-Pin Header
22 P2 NVMe 67, PCIe 5B: NVMe Ports 6/7, supported by CPU2	54 FAN8 5-Pin Header
23 P2 NVMe 68, PCIe 5A: NVMe Ports 6/8, supported by CPU2	55 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
24 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector	56 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
25 P2 NVMe 07, PCIe 5C: NVMe Ports 0/7, supported by CPU2	57 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
26 P2 NVMe 08, PCIe 5C: NVMe Ports 0/8, supported by CPU2	58 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
27 P2 NVMe 09, PCIe 5C: NVMe Ports 0/9, supported by CPU2	59 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
28 P2 NVMe 10, PCIe 5C: NVMe Ports 10/11, supported by CPU2	60 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
29 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector	61 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector
30 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector	62 P1 NVMe 01, PCIe 1A: SATA 8-15: NVMe Ports 0/1, P1 SATA 8-15, supported by CPU1
31 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector	63 P1 NVMe 02, PCIe 1B: SATA 8-7: NVMe Ports 2/3, P1 SATA 8-7, supported by CPU1
32 JPM12: 12V 8-Pin GPU/SPRAOAC Power Connector	64 FAN9 4-Pin Header

Memory Support

DIMM Population Guide

Type	1 DIMM per Channel											
	F1	E1	D1	C1	B1	A1	G1	H1	I1	J1	K1	L1
2 CPUs & 2 DIMMs	CPU1											
	CPU2											
2 CPUs & 4 DIMMs	CPU1					V	V					
	CPU2					V	V					
2 CPUs & 8 DIMMs	CPU1			V	V	V	V					
	CPU2			V	V	V	V					
2 CPUs & 12 DIMMs	CPU1			V	V	V	V	V	V			
	CPU2			V	V	V	V	V	V			
2 CPUs & 16 DIMMs	CPU1	V	V	V	V	V	V	V	V	V		
	CPU2	V	V	V	V	V	V	V	V	V		
2 CPUs & 20 DIMMs	CPU1	V	V	V	V	V	V	V	V	V	V	
	CPU2	V	V	V	V	V	V	V	V	V	V	
2 CPUs & 24 DIMMs	CPU1	V	V	V	V	V	V	V	V	V	V	V
	CPU2	V	V	V	V	V	V	V	V	V	V	V

Note: Fully populate the motherboard with validated memory modules to achieve the best memory performance.

System Information

Pull-out tag with BMC unique password.

Each system comes with a unique default password for the ADMIN user. This can be found on a sticker on the motherboard and a sticker underneath the service tag on chassis. If necessary, the password can be reset by the Supermicro IPMICFG tool.

For more information, please visit <https://www.supermicro.com/en/solutions/management-software/bmc-resources>

Caution and Product Resources

SAFETY INFORMATION:
IMPORTANT: See installation instructions and safety warning before connecting system to power supply.
http://www.supermicro.com/about/policies/safety_information.cfm

CAUTION:
Always be sure all power supplies for this system have the same power output. If mixed power supplies are installed, the system will not operate.

CAUTION:
This unit has redundant power sources. Please disconnect all the power cords before servicing.

WARNING:
To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets. If any CPU socket empty, install protective plastic CPU cap.

PRODUCT RESOURCES:
For more information go to: <http://www.supermicro.com/support>

Front View & Interface

Item	Description	Item	Description
1	Power Button	5	Power Fail LED
2	UID Button	6	HDD LED
3	Power LED	7	NIC1 LED
4	NIC2 LED	8	Information LED

Rear View

* Slots 1, 2, 5, 6, 7, 8 are not available with 24 NVMe configuration.

Item	Description	Slot	Description	Slot	Description
1	Power Supply 1	CPU 1	Option 1	Option 1	Option 2
2	Power Supply 2	CPU 2	Option 2	Option 2	Option 3
3	BMC LAN Port	1	PCI-E 5.0 x16 (FH, 10.5" L)	2	PCI-E 5.0 x8 (FH, 10.5" L)
4	USB 3.0 Ports	3	Not available	4	Not available
5	VGA Port	5	PCI-E 5.0 x16 (FH, 10.5" L)	6	PCI-E 5.0 x8 (FH, 10.5" L)
		6	Not available	7	Not available
		7	PCI-E 5.0 x8 (FH, 10.5" L)	8	PCI-E 5.0 x8 (FH, 10.5" L)
		8	PCI-E 5.0 x8 (FH, 10.5" L)		

Power supply full redundancy is based on selected power supply, system configuration, and application load.

Slot Description
A1 PCI-E 5.0 x16 AIOM Slot

LBL-4034-T-QRG Rev. 1.0

CPU Installation

- Remove the Processor Force Frame**
Unscrew the screws holding down the force frame in the sequence of 3-2-1.
- Raise the Force Frame**
- Lift the Rail Frame**
- Remove the External Cap**
- Align the Carrier Frame / CPU Package and Slide Down**
- Remove the PnP Cover Cap**
- Lower the Force Frame**
- Secure the Force Frame**
Using a Torx T20 screwdriver set to 12.5-15.0 kgfcm (10.8-13.0 lbf-in), tighten the screws securing the force frame in sequence of 3-2-1.

NVMe Drive Cable Routing

#	Connector on Board	Backplane	Drive Bay	SMC Cable P/N
1	JMCIO1 (MBD-H14DSH)	NVMe1	2-3	CBL-MCIO-1250M5-Z
2	JMCIO2 (MBD-H14DSH)	NVMe1	0-1	CBL-MCIO-1250M5-Z
3	JMCIO3 (MBD-H14DSH)	NVMe1	4-5	CBL-MCIO-1240M5
4	JMCIO4 (MBD-H14DSH)	NVMe1	6-7	CBL-MCIO-1250M5-Z

#	Connector on Board	Backplane	Drive Bay	SMC Cable P/N
1	JMCIO1 (MBD-H14DSH)	NVMe1 (BP#1)	0-1	CBL-MCIO-1240M5L
2	JMCIO2 (MBD-H14DSH)	NVMe2 (BP#1)	2-3	CBL-MCIO-1250M5-Z
3	JPC1E1 (MBD-H14DSH)	NVMe3 (BP#1)	4-5	CBL-GNZ4-1250M5-Y
4	JMCIO4 (MBD-H14DSH)	NVMe2 (BP#2)	10-11	CBL-MCIO-1250M5-Z
5	JMCIO3 (MBD-H14DSH)	NVMe1 (BP#2)	8-9	CBL-MCIO-1250M5
6	JMCIO5 (MBD-H14DSH)	NVMe3 (BP#2)	12-13	CBL-MCIO-1240M5
7	JMCIO6 (MBD-H14DSH)	NVMe4 (BP#2)	14-15	CBL-MCIO-1250M5-Z
8	JMCIO7 (MBD-H14DSH)	NVMe1 (BP#3)	16-17	CBL-MCIO-1260M5
9	JMCIO8 (MBD-H14DSH)	NVMe2 (BP#3)	18-19	CBL-MCIO-1250M5-Z
10	JMCIO9 (MBD-H14DSH)	NVMe3 (BP#3)	20-21	CBL-MCIO-1240M5L
11	JMCIO10 (MBD-H14DSH)	NVMe4 (BP#3)	22-23	CBL-MCIO-1240M5L

SATA Drive Cable Routing

#	Connector on Board	Backplane	Drive Bay	SMC Cable P/N
1	JMCIO1 (MBD-H14DSH)	CN1 & CN2	0-7	CBL-MCIO-1265A54Y
2	JMCIO2 (MBD-H14DSH)	JPMB1	0-7	CBL-CDAT-1082T-62

#	Connector on Board	Backplane	Drive Bay	SMC Cable P/N
1	JMCIO1 (MBD-H14DSH)	CN1 & CN2 (BP#1)	0-15	CBL-MCIO-1265A54Y
2	JMCIO2 (MBD-H14DSH)	CN1 & CN2 (BP#1)	0-7	CBL-MCIO-1265A54Y
3	JMCIO3 (MBD-H14DSH)	CN1 & CN2 (BP#3)	16-23	CBL-MCIO-1255A4Y
4	JMVCC1 (MBD-H14DSH)	JPMB1 (BP#1/2/3)	0-15/16/17-18,23	CBL-CDAT-1082T-62

Storage AOC Drive Cable Routing

#	Connector on Board	Backplane	Drive Bay	SMC Cable P/N
1	SAS AOC CN1	CN1 & CN2 (BP#2)	8-15	CBL-SAST-1276F-100
2	JMVCC1 (MBD-H14DSH)	JPMB1	0-7	CBL-CDAT-1082T-62

#	Connector on Board	Backplane	Drive Bay	SMC Cable P/N
1	SAS AOC CN1	CN1 & CN2 (BP#1)	0-7	CBL-SAST-1266F-100
2	SAS AOC1 CN2	CN1 & CN2 (BP#2)	8-15	CBL-SAST-1276F-100
3	SAS AOC2 CN1	CN1 & CN2 (BP#3)	16-23	CBL-SAST-1296F-100
4	JMVCC1 (MBD-H14DSH)	JPMB1	0-7/8-15/16-23	CBL-CDAT-1082T-62

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