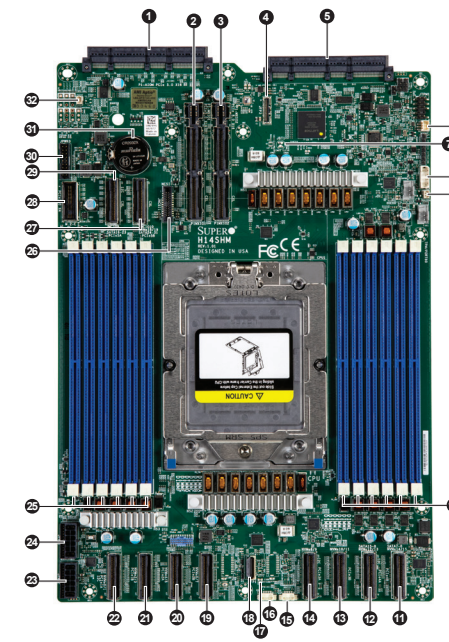


SUPERMICR[®] A+ Server AS -116CS-TN Quick Reference Guide

Board Layout



| Item | Description | Item | Description |
|------|---|------|---|
| 1 | JAIOM1: PCIe 5.0 x16 AIOM Slot Connector | 17 | LED2: Power LED |
| 2 | P1MXIO1: Multi-Trak I/O PCIe 5.0 x16 | 18 | JFP1: Front Control Board Header |
| 3 | P1MXIO2: Multi-Trak I/O PCIe 5.0 x16 | 19 | NVMe6/7: NVMe port |
| 4 | JFP3: DC-MHS secondary front panel connector for display and USB2 | 20 | NVMe4/5: NVMe port |
| 5 | JDCSCM1: DC-SCI Connector for DC-SCM Module | 21 | NVMe2/3: NVMe port |
| 6 | JL1: Chassis Intrusion Header | 22 | NVMe0/1: NVMe port |
| 7 | JBT1: CMOS Clear | 23 | JPWR2: 12V 24-pin motherboard power connector |
| 8 | JIPMB1: External BMC I/O header (for an IPMI card) | 24 | JPWR1: 12V 24-pin motherboard power connector |
| 9 | JSEN3: 2-pin leak detection sensors for Liquid Cooling Module | 25 | DIMMA-F: Memory module slots |
| 10 | DIMMG-L: Memory module slots | 26 | JNCSI1: NC-SI Header |
| 11 | NVMe14/15: NVMe/SATA port | 27 | NVMe18/19: NVMe/SATA port |
| 12 | NVMe12/13: NVMe/SATA port | 28 | M.2-C: M.2 PCIe 3.0 interface for M.2 carrier (NVMe only) |
| 13 | NVMe10/11: NVMe port | 29 | NVMe16/17: NVMe/SATA port |
| 14 | NVMe8/9: NVMe port | 30 | JPWR3: 18-pin management connector with 12V standby power |
| 15 | JNVIC1: I/O header for NVMe backplane hot-swap support | 31 | BT1: Onboard Battery |
| 16 | JBPNI2C1: BMC external I/O header for backplane | 32 | JSEN2: 2-pin leak detection sensors for Liquid Cooling Module |

CPU Installation

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

Memory Support

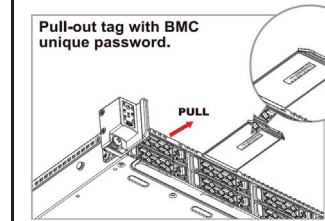
| Type | 1 DIMM Per Channel | | | | | | | | | | | |
|----------|--------------------|----|----|----|----|----|----|----|----|----|----|----|
| | F1 | E1 | D1 | C1 | B1 | A1 | G1 | H1 | I1 | J1 | K1 | L1 |
| 1 DIMM | | | | | | V | | | | | | |
| 2 DIMMs | | | | | | V | V | | | | | |
| 4 DIMMs | | | | V | V | V | V | V | | | | |
| 6 DIMMs | | | | V | V | V | V | V | V | | | |
| 8 DIMMs | | V | V | V | V | V | V | V | V | | V | |
| 10 DIMMs | | V | V | V | V | V | V | V | V | V | V | |
| 12 DIMMs | V | 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.

Front View & Interface

| Item | Description | Item | Description | Item | Description |
|------|---|------|----------------|------|-----------------|
| 1 | Front Control Panel | 3 | Power Button | 7 | HDD LED |
| 2 | Service/Asset Tag with BMC Password Reset | 4 | Power LED | 8 | UID Button |
| | | 5 | NIC2 LED | 9 | NIC1 LED |
| | | 6 | Power Fail LED | 10 | Information LED |

System Information



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>



Scan for product landing page.

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:

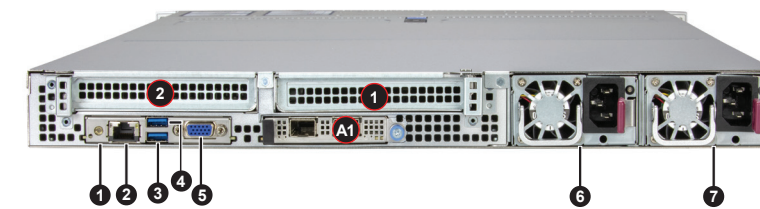
To reduce risk of electric shock/damage to equipment, disconnect power from server by disconnecting all power cords from electrical outlets. If any CPU socket empty, install protective plastic CPU cap.

PRODUCT RESOURCES:

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



Rear View



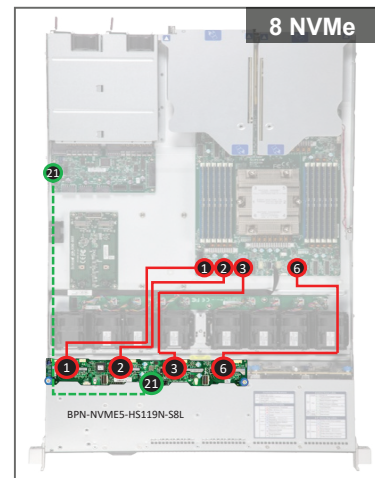
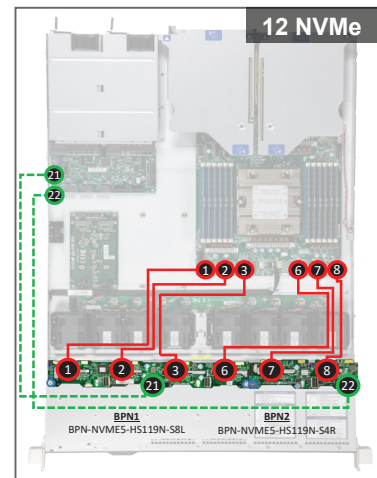
| Item | Description | Item | Description | Item | Slot Description |
|------|---|------|---------------------------|------|--------------------------|
| 1 | UID Button/LED (through DC-SCM) | 5 | VGA Port (through DC-SCM) | A1 | PCIe 5.0 x16 AIOM Slot |
| 2 | Dedicated BMC LAN Port (through DC-SCM) | 6 | Power Supply 1 | 1 | PCIe 5.0 x16 Slot (FHLL) |
| 3 | USB 3.0 Port (through DC-SCM) | 7 | Power Supply 2 | 2 | PCIe 5.0 x16 Slot (FHLL) |
| 4 | USB 2.0 Port for debugging (through DC-SCM) | | | | |

LBL-2773-T-QRG



Rev 1.0a

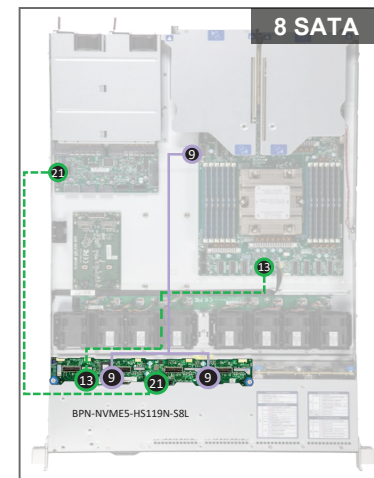
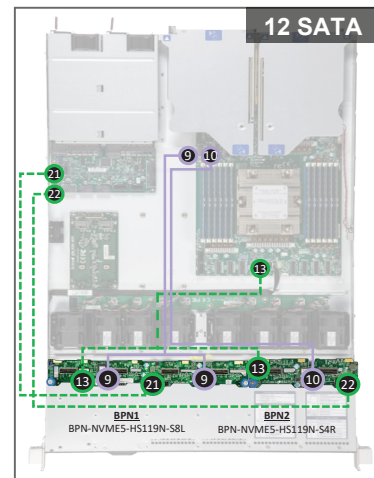
NVMe Drive Cable Routing



| # | Connector on Board | Backplane | Drive Bay | SMC Cable PIN |
|---|--------------------|-----------|------------|-------------------|
| 1 | NVMe0/1 | BPNI CN1 | NVMe 0-1 | CBL-MCIO-1339MSR |
| 2 | NVMe2/3 | BPNI CN2 | NVMe 2-3 | CBL-MCIO-1330MS |
| 3 | NVMe4/5 | BPNI CN3 | NVMe 4-5 | CBL-MCIO-1330MS |
| 4 | NVMe10/11 | BPNI CN4 | NVMe 6-7 | CBL-MCIO-1245MSRE |
| 5 | NVMe12/13 | BPNI CN1 | NVMe 8-9 | CBL-MCIO-1340MS-1 |
| 6 | NVMe14/15 | BPNI CN2 | NVMe 10-11 | CBL-MCIO-1220MS |
| 7 | FDB JPW8 | BPNI JPW8 | Power | CBL-PWEX-1142-60 |
| 8 | FDB JPW9 | BPNI JPW9 | Power | CBL-PWEX-1136-70 |

| # | Connector on Board | Backplane | Drive Bay | SMC Cable PIN |
|---|--------------------|-----------|-----------|-------------------|
| 1 | NVMe0/1 | CN1 | NVMe 0-1 | CBL-MCIO-1339MSR |
| 2 | NVMe2/3 | CN2 | NVMe 2-3 | CBL-MCIO-1330MS |
| 3 | NVMe4/5 | CN3 | NVMe 4-5 | CBL-MCIO-1330MS |
| 4 | NVMe10/11 | CN4 | NVMe 6-7 | CBL-MCIO-1245MSRE |
| 5 | FDB JPW8 | JPW1 | Power | CBL-PWEX-1142-60 |

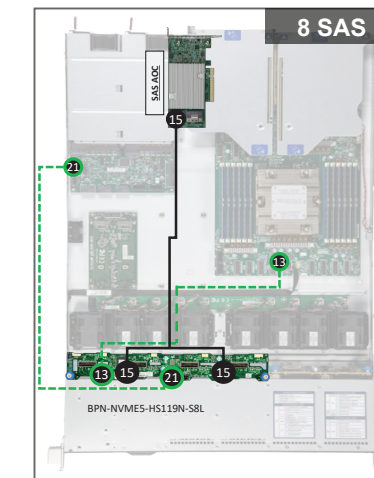
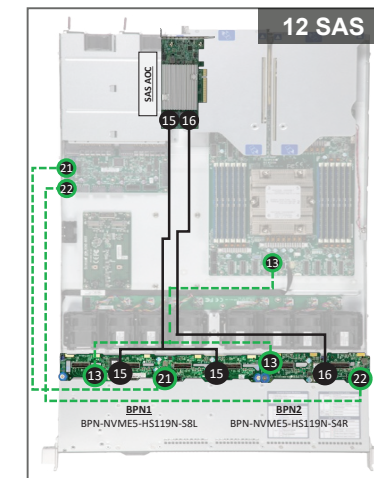
SATA Drive Cable Routing



| # | Connector on Board | Backplane | Drive Bay | SMC Cable PIN |
|----|--------------------|------------------|-----------|-------------------|
| 9 | NVMe16/17 | BPNI JSM1 & JSM2 | SATA 0-7 | CBL-MCIO-1255L4Y |
| 10 | NVMe18/19 | BPNI JSM1 & JSM2 | NVMe 8-11 | CBL-MCIO-1255L4Y |
| 11 | JBPNI2C1 | BPNI J25 | PC | CBL-CDAT-1062Y-45 |
| 12 | FDB JPW8 | BPNI JPW8 | Power | CBL-PWEX-1142-60 |
| 13 | FDB JPW9 | BPNI JPW9 | Power | CBL-PWEX-1136-70 |

| # | Connector on Board | Backplane | Drive Bay | SMC Cable PIN |
|----|--------------------|-------------|-----------|-------------------|
| 9 | NVMe16/17 | JSM1 & JSM2 | SATA 0-7 | CBL-MCIO-1255L4Y |
| 13 | JBPNI2C1 | J25 | PC | CBL-CDAT-1062Y-45 |
| 12 | FDB JPW8 | JPW1 | Power | CBL-PWEX-1142-60 |

Storage AOC Drive Cable Routing



| # | Connector on Board | Backplane | Drive Bay | SMC Cable PIN |
|----|--------------------|------------------|-----------|--------------------|
| 15 | To AOC CN1 | BPNI JSM1 & JSM2 | SAS 0-7 | CBL-SAST1273LP-100 |
| 16 | To AOC CN2 | BPNI JSM1 & JSM2 | SAS 8-11 | CBL-SAST1273LP-100 |
| 17 | JBPNI2C1 | BPNI J25 | PC | CBL-CDAT-1062Y-45 |
| 18 | FDB JPW8 | BPNI JPW8 | Power | CBL-PWEX-1142-60 |
| 19 | FDB JPW9 | BPNI JPW9 | Power | CBL-PWEX-1136-70 |

| # | Connector on Board | Backplane | Drive Bay | SMC Cable PIN |
|----|--------------------|-------------|-----------|--------------------|
| 15 | To AOC CN1 | JSM1 & JSM2 | SAS 0-7 | CBL-SAST1273LP-100 |
| 13 | JBPNI2C1 | J25 | PC | CBL-CDAT-1062Y-45 |
| 18 | FDB JPW8 | JPW1 | Power | CBL-PWEX-1142-60 |

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