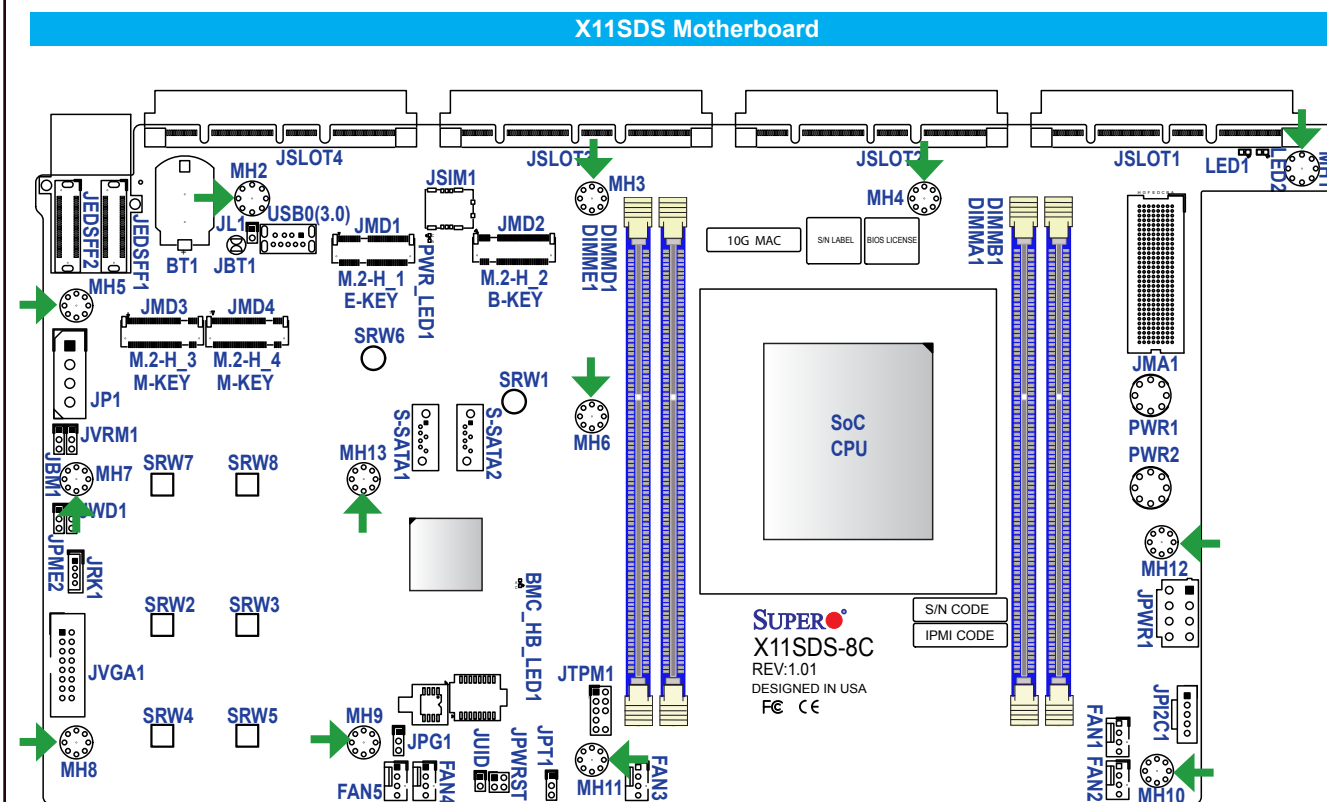
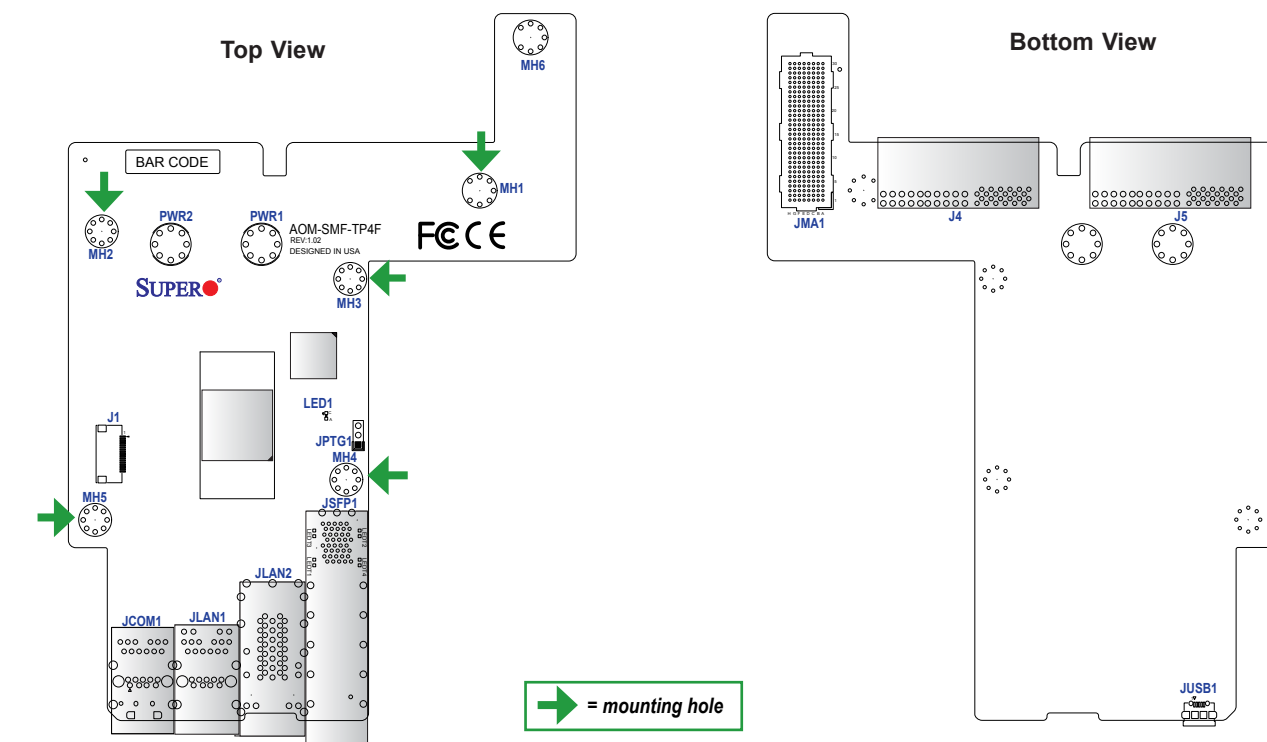


## Motherboard Layout and Features



## AOM-SMF-TP4F Add-on Module



 **Note:** Graphics shown in this quick reference guide are for illustration only. Your components may or may not look exactly the same as drawings shown in this guide.

## X11SDS

### Jumpers, Connectors, and LED Indicators

| Jumpers |                                |                     |
|---------|--------------------------------|---------------------|
| Jumper  | Description                    | Default Setting     |
| JBM1    | IPMI Shared LAN Enable/Disable | Pins 1-2 (Enabled)  |
| JBT1    | CMOS Clear                     | Open: Normal        |
| JPG1    | Onboard VGA Enable/Disable     | Pins 1-2 (Enabled)  |
| JPT1    | Onboard TPM 2.0 Enable/Disable | Pins 2-3 (Disabled) |
| JPME2   | Manufacturing Mode Select      | Pins 1-2 (Normal)   |
| JVRM1   | VRM SMB Data (to BMC or PCH)   | Pins 1-2 (Normal)   |
| JWD1    | Watch Dog Timer                | Pins 1-2 (Reset)    |

| Connectors        |                                                                                                              |
|-------------------|--------------------------------------------------------------------------------------------------------------|
| Connector         | Description                                                                                                  |
| BT1               | Onboard Battery                                                                                              |
| FAN1 - FAN5       | CPU/System Fan Headers                                                                                       |
| JEDSFF1, JEDSFF2  | EDSFF Short Header (Shared with M.2 M-Keys)                                                                  |
| JL1               | Chassis Intrusion Header                                                                                     |
| JMA1              | Receptacle for AOM-SMF-TP4F                                                                                  |
| JMD1              | M.2 Slot E-Key 2230 (PCI-E 3.0 x2/USB2.0)                                                                    |
| JMD2              | M.2 Slot B-Key 2242/3042 (PCI-E 3.0 x2/SATA3.0/USB3.0)                                                       |
| JMD3              | M.2 Slot M-Key 2242/80/110 (PCI-E 3.0 x4/SATA3.0)<br>Shared with JEDSFF1                                     |
| JMD4              | M.2 Slot M-Key 2242/80/110 (PCI-E 3.0 x4/SATA3.0)<br>Shared with JEDSFF2                                     |
| JP1               | 4-pin Power Connector for HDD use                                                                            |
| JPI²C1            | Power I²C System Management Bus (Power SMB) Header                                                           |
| JPWR1             | 8-pin +12V DC Power Connector                                                                                |
| JPWRST            | Power and Reset Button                                                                                       |
| JRK1              | Intel RAID Key Header (supporting AIOM Slots)                                                                |
| JSIM1             | Nano SIM Card Socket                                                                                         |
| JSLOT1 - JSLOT4   | Supermicro Advanced I/O Module (AIOM)<br><b>*Please unplug power before removing/installing module cards</b> |
| JTPM1             | Trusted Platform Module (TPM)/Port 80 Connector                                                              |
| JUID              | UID Switch Header                                                                                            |
| JVGA1             | VGA Header                                                                                                   |
| PWR1 - PWR2       | Bus Bar Connector (to AOM-SMF-TP4F)                                                                          |
| S-SATA1 - S-SATA2 | SATA 3.0 Ports                                                                                               |
| SRW1 - SRW8       | M.2 Holding Screws                                                                                           |
| USB0              | USB3.0 Type A Header                                                                                         |

| LED Indicators |                            |                                    |
|----------------|----------------------------|------------------------------------|
| LED            | Description                | Status                             |
| BMC_HB_LED1    | BMC Heartbeat              | Blinking Green: BMC Normal         |
| PWR_LED1       | Power LED                  | Solid Green: Power On              |
| LED1           | UID LED                    | Solid Blue: Unit Identified        |
| LED2           | Overheat/PWR Fail/Fan Fail | Solid Red: Overheat                |
|                |                            | Blinking Red: PWR Fail or Fan Fail |

 **Note:** Refer to Chapter 1 of the User Manual for detailed information on jumpers, connectors, and LED indicators.

## AOM-SMF-TP4F

| Jumpers |                        |                    |
|---------|------------------------|--------------------|
| Jumper  | Description            | Default Setting    |
| JPTG1   | 10G LAN Enable/Disable | Pins 1-2 (Enabled) |

| Connectors  |                                      |
|-------------|--------------------------------------|
| Connector   | Description                          |
| J1          | Front Control Panel Cable Header     |
| JCOM1       | Serial Console Port and USB 3.0 Port |
| JLAN1       | 1G RJ45 Port and USB 3.0 Port        |
| JLAN2       | Dual 10G RJ45 Ports                  |
| JMA1        | Receptacle for X11SDS-8C/16C         |
| JSFP1       | Dual 10G SFP+ Ports                  |
| JUSB1       | Micro USB Serial Console Port        |
| PWR1 - PWR2 | Bus Bar Connector (to X11SDS)        |

| LED Indicators |             |                       |
|----------------|-------------|-----------------------|
| LED            | Description | Status                |
| LED1           | Power LED   | Solid Green: Power On |

## CPU Support

The X11SDS Series motherboard supports an Intel® Xeon D-2100 SoC processor.

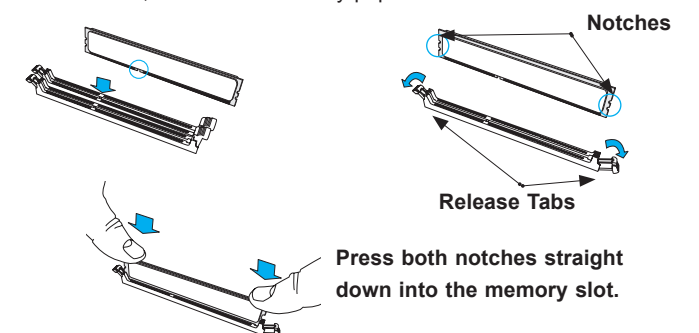
## Memory Support

The X11SDS Series motherboard supports up to 256GB of ECC RDIMM or 512GB of ECC LRDIMM DDR4 memory in four slots.

## DIMM Memory Installation

When installing memory modules, the DIMM slots should be populated in the following order: DIMMA1, DIMMB1, DIMMD1, DIMME1.

- Always use DDR4 memory of the same type, size, and speed. Mixed DIMM speeds can be installed. However, all DIMMs will run at the speed of the slowest DIMM.
- The motherboard will support odd-numbered modules (one or three modules installed). However, to achieve the best memory performance, a balanced memory population is recommended.



 **Note:** Refer to Chapter 2 of the User Manual for detailed information on memory support and CPU/motherboard installation instructions.