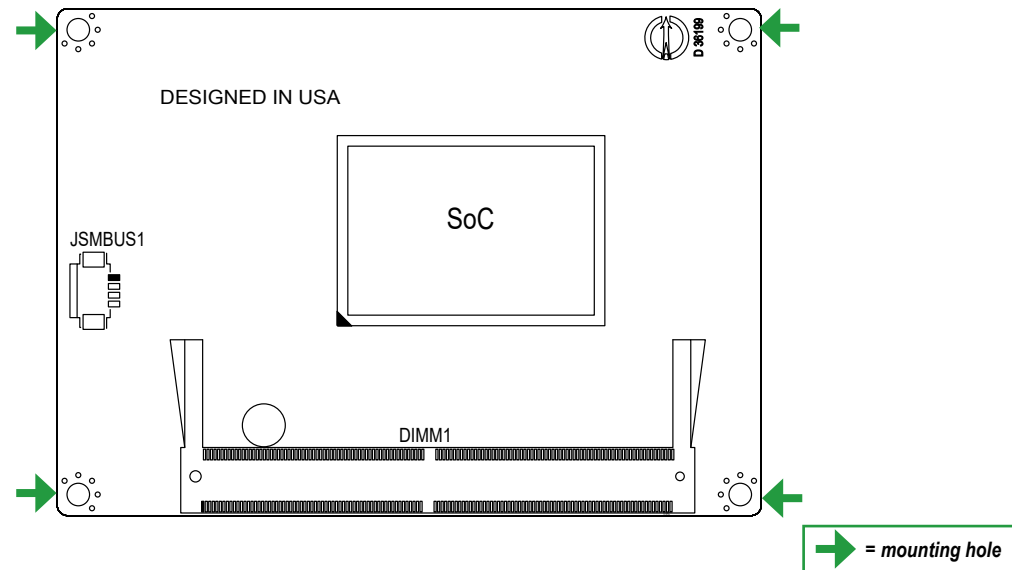


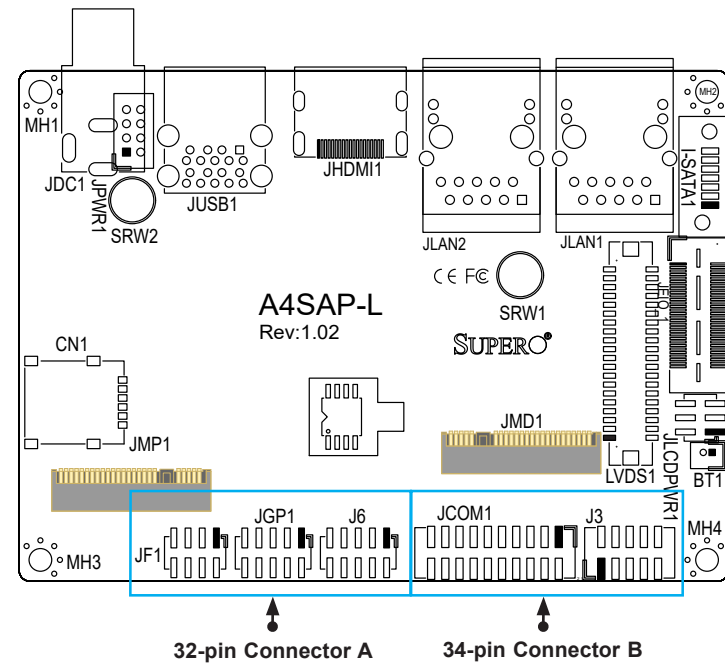


Motherboard Layout and Features

Top Layout



Bottom Layout



Package Contents

Single Package Content for A4SAP-E/-L

- One A4SAP-E/-L Motherboard
- One Quick Reference Guide
- One Power Input Cable
- One SATA Data Cable
- One SATA Power Cable
- One USB 2.0 Cable
- One Audio Cable
- One COM Port Cable
- One Passive Heatsink

Single Package Content for A4SAP-H

- One A4SAP-H Motherboard
- One Quick Reference Guide
- One Audio Cable
- One COM Port Cable
- One Passive Thermal Solution

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

Jumpers and Connectors

Jumpers

Jumper	Description	Jumper Setting (Default *)
JLCDPWR1	FORCE POWER ON	Pins 2-4* (FORCE POWER ON) Pins 4-6 (POWER BUTTON ON)
	LVDS VCC Power Selection	Pins 1-3* (+3.3 V) Pins 3-5 (+5 V)

Connectors

Connector	Description
BT1	Battery Connector (To clear CMOS, remove the battery, short pins 1-2 for more than three seconds, and install the battery.)
CN1	Nano SIM Card Slot
I-SATA1	SATA 3.0 Port
J3	Front Panel Audio Header (Line-out, Mic-in)
J6	USB 2.0 x2 Header
JCOM1	COM Header
JDC1	+12 V DC Jack Power Connector (A4SAP-H only)
JEIO_1	Supermicro Extension I/O Header (DP/HDMI, one PCIe x1, two USB 2.0, eSPI, SATA (A4SAP-H only), SMBus, +5 Vsb, +12 Vsb)
JF1	Front Control Panel Header
JHDMI1	High Definition Multimedia Interface (HDMI) Port
JGP1	General Purpose I/O Header
JLAN1, JLAN2	1G LAN Ports (A4SAP-E/-L) 2.5G LAN Ports (A4SAP-H)
JMD1	M.2 E-Key 2230 Slot (PCIe x1/USB 2.0)
JMP1	M.2 B-Key 2242/3042 Slot with Nano SIM (PCIe x1/SATA 3.0/USB 2.0/USB 3.0)
JPWR1	2x4-pin 12 V Power Connector (A4SAP-E/-L only)
JSMBUS1	SMBus or I ² C and +5 V/+1 A SATA Power Box Header
JUSB1	Two USB 3.2 Ports
LVDS1	Dual Channel 48-bit LVDS Connector
32-pin Connector A	Front panel, 8-bit GPIO and USB 2.0 x 2 (JF1 + JGP1 + J6) (A4SAP-H only)
34-pin Connector B	RS232/422/485 x 2 and Audio (JCOM1 + J3) (A4SAP-H only)
MH1-MH4	Mounting Holes
SRW1, SRW2	M.2 Mounting Holes

I/O Ports

A4SAP-E/-L				A4SAP-H				
1	2	3	5	1	2	3	5	6
#	Definition	#	Definition	#	Definition	#	Definition	#
1	LAN1	3	HDMI	5	USB1 (USB 3.2)			
2	LAN2	4	USB2 (USB 3.2)	6	JDC1 (A4SAP-H)			

Note: Refer to the Component Installation section of the user manual for detailed information on jumpers, connectors, and LED indicators.

Processor and Memory Support

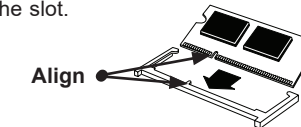
The A4SAP-H/-L supports the Intel® Processor N97.
 The A4SAP-E supports the Intel Atom® Processor x7433RE.

Memory Support

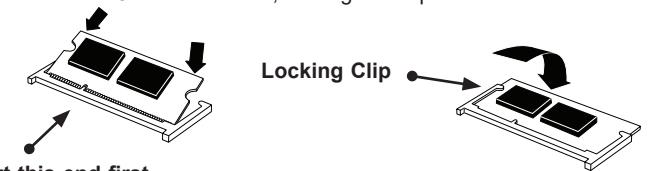
The A4SAP-H/-E/-L motherboard supports up to 16 GB of Non-ECC DDR5 SO-DIMM with speeds of up to 4800 MT/s in one memory slot.

SO-DIMM Memory Installation

1. Position the SO-DIMM module's bottom key so it aligns with the receptive point on the slot.



2. Insert the SO-DIMM module vertically at about a 45-degree angle. Press down until the module locks into place. The side clips will automatically secure the SO-DIMM module, locking it into place.



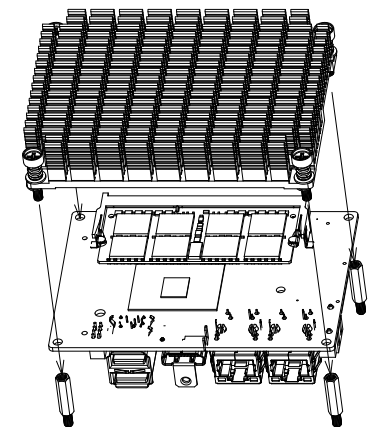
Insert this end first

SO-DIMM Memory Uninstallation

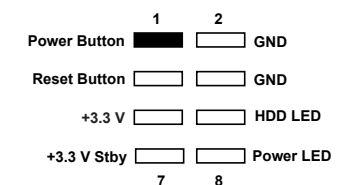
1. Push the side clips at the end of the slot to release the SO-DIMM module. Pull the SO-DIMM module up to remove it from the slot.

Heatsink Installation

1. After the memory installation is complete, install the heatsink.
2. The thermal solution kit that comes with the motherboard includes one heatsink with thermal grease and four copper standoffs that are 19 mm in height.
3. To install the heatsink, remove the plastic cover on the bottom of the heatsink to expose the thermal grease. Then place the heatsink directly on the processor and make sure the thermal grease is in contact with the processor.
4. Turn the motherboard over and tighten the standoffs with the corresponding screws.



Front Control Panel (JF1)



Note: Refer to the Component Installation section of the user manual for detailed information on memory support and processor/motherboard installation instructions.