



E3C256D4ID2 / E3C252D4ID2

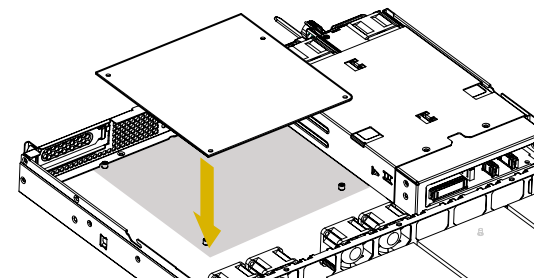


E3C256D4ID2

E3C252D4ID2

1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, **NEVER** place your server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before you handle the components.
3. Hold components by the edges and do not touch the ICs.
4. Whenever you uninstall any component, place it on a grounded anti-static pad or in the bag that comes with the component.
5. When placing screws into the screw holes to secure the server board to the chassis, please do not over-tighten the screws! Doing so may damage the server board.

Do not over-tighten the screws



Top view of the ASPEED AST2500 SoM. The board dimensions are 20.8cm (8.2 in) by 17.0cm (6.7 in). The layout includes various connectors and components, including a large central chip labeled 'REMOVE'.

Key components and connectors shown:

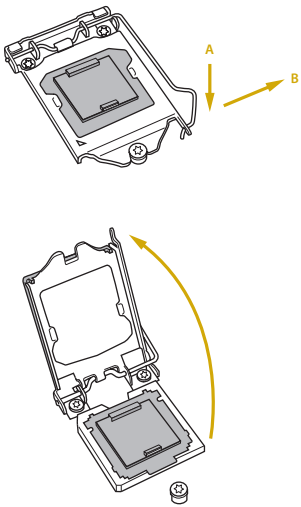
- Intel I210 LAN1, Intel I210 LAN2
- USB 3.2 Gen1 T: USB_1, B: USB_2
- IPMI_LAN
- LAN1 (Bottom) (NCSI), LAN2 (Top) (NCSI)
- TPM BIOS PH1
- M2_1
- VGA1
- CHASSIS_ID1
- UID1
- FAN1
- COM1
- BMC_SMB_1
- IPMB_1
- ASPEED AST2500
- PCIE7
- CMOS Battery
- IPMI_LED1, UID_HEADER
- DDR4_B1, DDR4_B2, DDR4_A1, DDR4_A2
- ATX4PIN1, ATX12V2
- PSU_SMB1
- SATA_PWR1
- M2_2
- Intel C256/C252
- OCU2, OCU1
- ITX_AUX_PANEL1
- SATA_SGPIO1
- PANEL1
- USB3_3_4
- BIOS ROM
- SEC_OR1
- CLR MOS1
- TR1

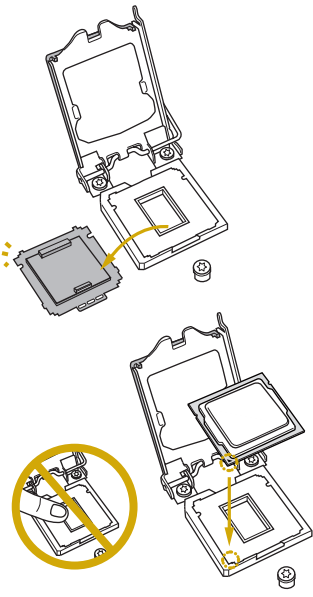
No.	Description	No.	Description
1	USB 3.2 Gen1 Ports (USB3_1_2)	4	1G LAN RJ-45 Port (LAN2)
2	LAN RJ-45 Port (IPMI_LAN)	5	VGA Port (VGA1)
3	1G LAN RJ-45 Port (LAN1)	6	UID Switch (UID1)

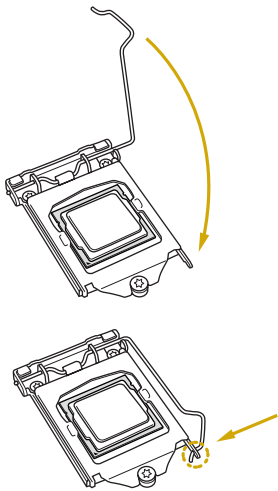
No.	Description	No.	Description
1	NCSI Header (NCSI1)	16	Clear CMOS Pad (CLRMOS1)
2	UID Button Header (UID_HEADER)	17	Thermal Sensor Header (TR1)
3	IPMI LAN LED Header (IPMI_LED1)	18	Security Override Jumper (SEC_OR1)
4	Micro-Fit Power Connector (ATX4PIN1)	19	USB 3.2 Gen1 Header (USB3_3_4)
5	ATX 12V Power Connector (ATX12V2)	20	SATA SGPIO Connector (SATA_SGPIO1)
6	2 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_B1)	21	OCuLink x4 Connector (OCU1)
7	PSU SMBus Header (PSU_SMB1)	22	OCuLink x4 Connector (OCU2)
8	2 x 288-pin DDR4 DIMM Slots (DDR4_A2, DDR4_B2)	23	PCI Express 4.0 x16 Slot (PCIE7)
9	SATA Power Connector (SATA_PWR1)	24	BMC SMBus Header (BMC_SMB_1)
10	M.2 Socket (M2_2) (Type 2280)	25	Intelligent Platform Management Bus Header (IPMB_1)
11	System Fan Connector (FAN2)	26	COM Port Header (COM1)
12	System Fan Connector (FAN3)	27	System Fan Connector (FAN1)
13	Auxiliary Panel Header (ITX_AUX_PANEL1)	28	Chassis ID Jumper (CHASSIS_ID0)
14	System Panel Header (PANEL1)	29	SPI TPM Header (TPM_BIOS_PH1)
15	OCuLink x4 Connector (OCU3) (E3C256D4ID2 only)	30	M.2 Socket (M2_1) (Type 2280) <i>*The M2_1 slot is not supported with the 10th Gen Intel® Pentium® Series Processors installed.</i>

4 Install the Processor

- 1 Open the socket levers and the CPU socket cover. Remove the CPU protection cap.


- 2 Install the processor and close the socket cover.

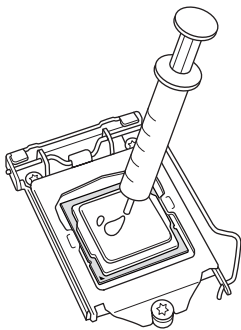

- 3 Close the socket levers.

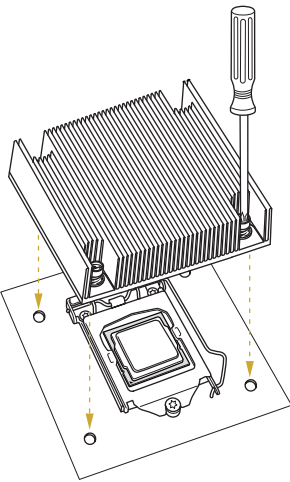


We recommend using the CPU Installation tool to avoid CPU pin-bent problem.

5 Install the Heatsink

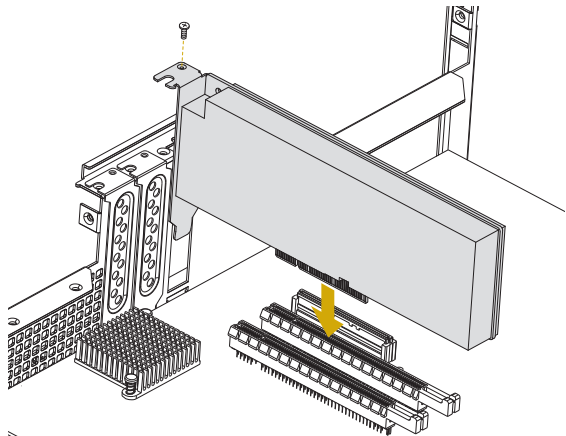
- 1 Apply the thermal grease.


- 2 Install the CPU heatsink and secure the screws.

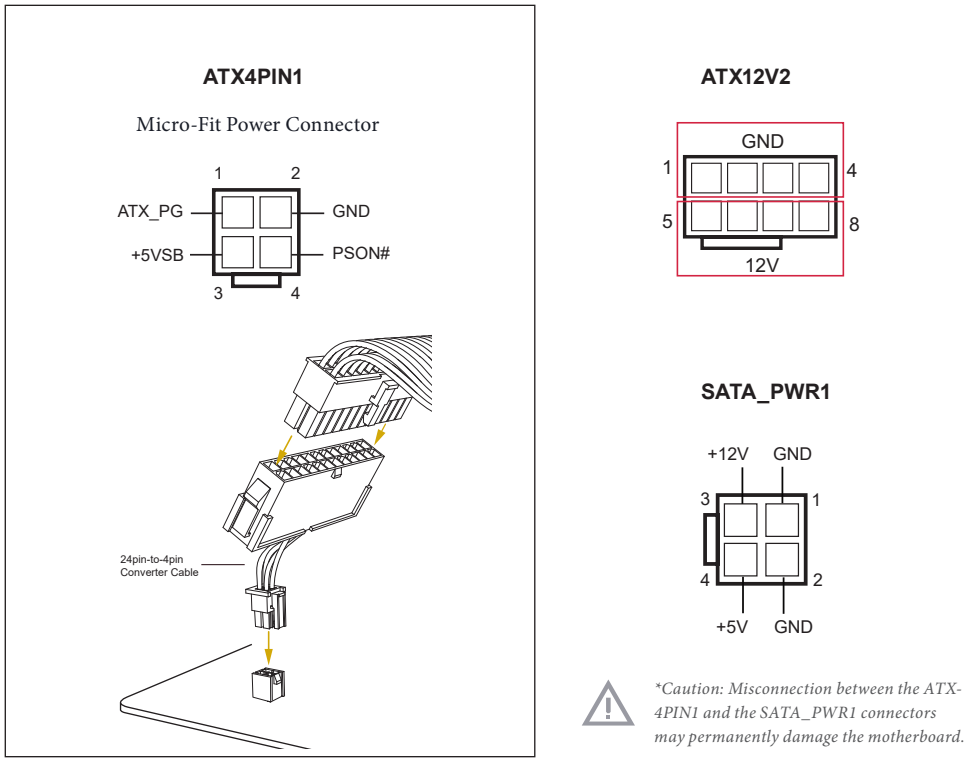


6 Install the PCIE Card

- 1 Remove the bracket facing the slot that you intend to use. Keep the screw for later use.
- 2 Align the card connector with the slot and press firmly until the card is completely seated on the slot.

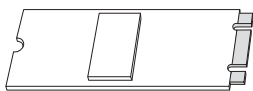

- 3 Fasten the card to the chassis with the screw.
- *Images shown are for illustrative purposes only and may differ depending on model.*

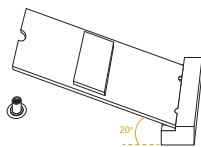
7 Power Connectors

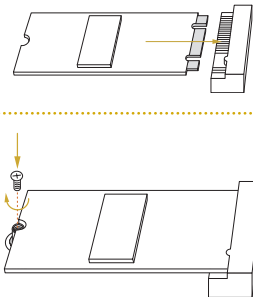


8 M.2 SSD Module Installation

- 1 Prepare a M.2 SSD module and the screw.

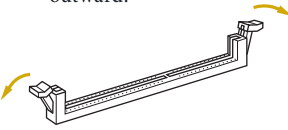

- 2 Gently insert the M.2 SSD module into the M.2 slot. Please be aware that the M.2 SSD module only fits in one orientation.

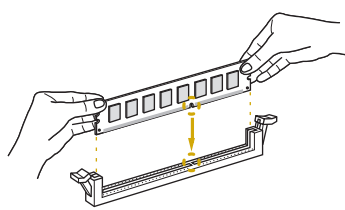

- 3 Tighten the screw with a screwdriver to secure the module into place. Please do not overtighten the screw as this might damage the module.

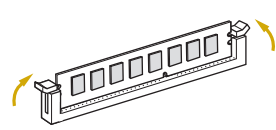


9 Install the Memory

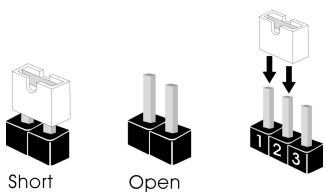
- 1 Unlock a DIMM slot by pressing the module clips outward.


- 2 Insert the memory module.


- 3 Lock the clips.



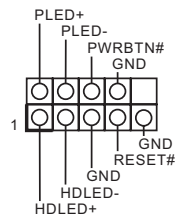
10 Jumper Cap On/Off



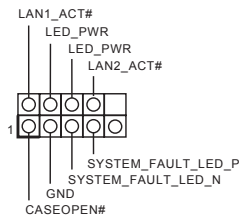
When the jumper cap is placed on the pins, the jumper is "Short". If no jumper cap is placed on the pins, the jumper is "Open".
The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

12 Panel Headers

System Panel

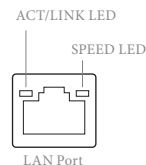


Auxiliary Panel



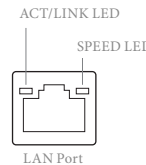
11 LAN Port LED Indications

LAN Port



Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	100Mbps connection or no link
Blinking Yellow	Data Activity	Yellow	1Gbps connection
On	Link	Green	10Gbps connection

IPMI LAN Port



Activity / Link LED		Speed LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection or no link
Blinking Yellow	Data Activity	Yellow	100Mbps connection
On	Link	Green	1Gbps connection