



P/N: 15G065209001AK V1.1

## Quick Installation Guide

### E3C256D4ID-2T / E3C256D4ID-NL / E3C252D4ID-2T



E3C256D4ID-2T



E3C256D4ID-NL



E3C252D4ID-2T

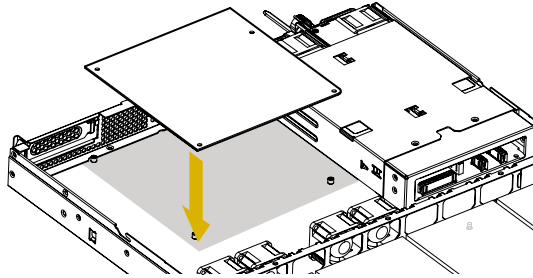
The server board User's Manual is available for download from the ASRock Rack's official website at <http://www.asrockrack.com>.

Take note of the following precautions before you install server board components or change any server board settings.

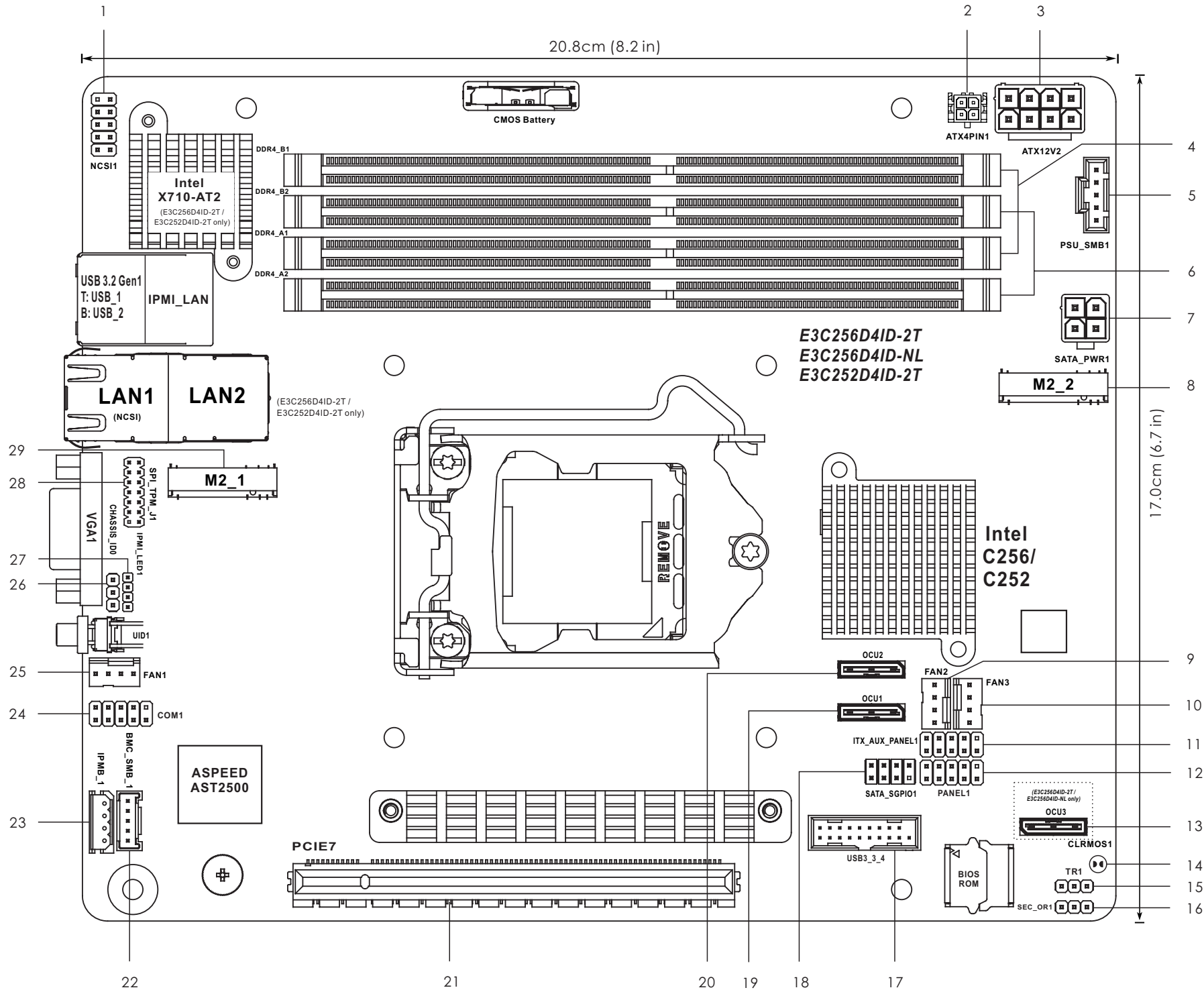
1. Unplug the power cord from the wall socket before touching any components.
2. To avoid damaging the server board's components due to static electricity, NEVER place your server board directly on the carpet or the like. Also remember to use a grounded wrist strap or touch a safety grounded object before 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.

## 1 Install the Server Board

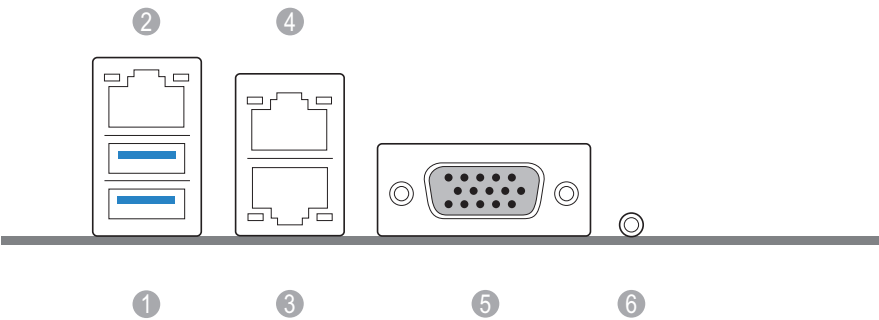
- 1 Insert the server board into the chassis.
- 2 Affix the screws clockwise into the mounting holes in all of the corners of the server board.  
Do not over-tighten the screws



## 2 Motherboard Layout



## 3 I/O Panel



| No. | Description                                                       | No. | Description                                                       |
|-----|-------------------------------------------------------------------|-----|-------------------------------------------------------------------|
| 1   | USB 3.2 Gen1 Ports (USB3_1_2)                                     | 4   | 10G LAN RJ-45 Port (LAN2)<br>(E3C256D4ID-2T / E3C252D4ID-2T only) |
| 2   | LAN RJ-45 Port (IPMI_LAN)                                         | 5   | VGA Port (VGA1)                                                   |
| 3   | 10G LAN RJ-45 Port (LAN1)<br>(E3C256D4ID-2T / E3C252D4ID-2T only) | 6   | UID Switch (UID1)                                                 |

| No. | Description                                                         |
|-----|---------------------------------------------------------------------|
| 1   | NCSI Header (NCSI1)                                                 |
| 2   | Micro-Fit Power Connector (ATX4PIN1)                                |
| 3   | ATX 12V Power Connector (ATX12V2)                                   |
| 4   | 2 x 288-pin DDR4 DIMM Slots (DDR4_A1, DDR4_B1)                      |
| 5   | PSU SMBus (PSU_SMB1)                                                |
| 6   | 2 x 288-pin DDR4 DIMM Slots (DDR4_A2, DDR4_B2)                      |
| 7   | SATA Power Connector (SATA_PWR1)                                    |
| 8   | M.2 Socket (M2_2) (Type 2280)                                       |
| 9   | System Fan Connector (FAN2)                                         |
| 10  | System Fan Connector (FAN3)                                         |
| 11  | Auxiliary Panel Header (ITX_AUX_PANEL1)                             |
| 12  | System Panel Header (PANEL1)                                        |
| 13  | OCuLink x4 Connector (OCU3)<br>(E3C256D4ID-2T / E3C256D4ID-NL only) |
| 14  | Clear CMOS Pad (CLRMOS1)                                            |

| No. | Description                                         |
|-----|-----------------------------------------------------|
| 15  | Thermal Sensor Header (TR1)                         |
| 16  | Security Override Jumper (SEC_OR1)                  |
| 17  | USB 3.2 Gen1 Header (USB3_3_4)                      |
| 18  | SATA SGPIO Connector (SATA_SGPIO1)                  |
| 19  | OCuLink x4 Connector (OCU1)                         |
| 20  | OCuLink x4 Connector (OCU2)                         |
| 21  | PCI Express 4.0 x16 Slot (PCIE7)                    |
| 22  | BMC SMBus Header (BMC_SMB_1)                        |
| 23  | Intelligent Platform Management Bus Header (IPMB_1) |
| 24  | COM Port Header (COM1)                              |
| 25  | System Fan Connector (FAN1)                         |
| 26  | Chassis ID Jumper (CHASSIS_ID0)                     |
| 27  | IPMI LAN LED Header (IPMI_LED1)                     |
| 28  | SPI TPM Header (SPI_TPM_J1)                         |
| 29  | M.2 Socket (M2_1) (Type 2280)                       |



E3C256D4ID-2T



E3C256D4ID-NL



E3C252D4ID-2T

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

**ATX4PIN1**

Micro-Fit Power Connector

**ATX12V2**

**SATA\_PWR1**

**\*Caution:** Misconnection between the ATX-4PIN1 and the SATA\_PWR1 connectors may permanently damage the motherboard.

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.

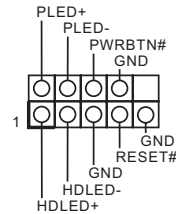
10 Jumper Cap On/Off

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".

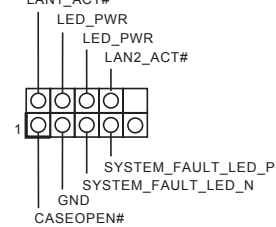
The illustration shows a 3-pin jumper whose pin1 and pin2 are "Short" when a jumper cap is placed on these 2 pins.

12 Panel Headers

System Panel

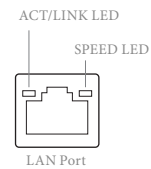


Auxiliary Panel



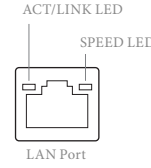
11 LAN Port LED Indications

LAN Port



(E3C256D4ID-2T / E3C252D4ID-2T only)

IPMI LAN Port



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

| 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             |