Board Layout

Top View ⥥

Buzzer

SMBus

CPU FAN

Intel

BGA 1528

DDR4 SODIMM

Bottom View ⥥

DP++/ HDMI

LAN

USB 3.1

JP1

Front Panel

Battery

USB 2 6/7

COM1

M.2-E

DIO

M.2-B(R0)

DC-in

SPI

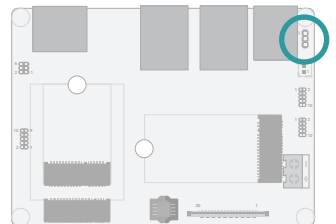M.2-B(R1)

Jumper Settings

Clear CMOS (JP1)

1
2
3

1
2
3

1-2 On: Normal (default)   2-3 On: Clear CMOS

Pin Assignments

SMBus
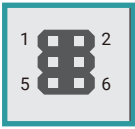
Pin	Assignment	Pin	Assignment
1	3V3SB	2	GND
3	SMB_HOST_3V3STBY_CLK	4	SMB_HOST_3V3STBY_SDA
5	SMBALERT_N	6	--

USB 6/7 (USB 2.0)
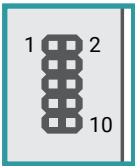
Pin	Assignment	Pin	Assignment
1	5V_USB6_7	2	5V_USB6_7
3	USB2_6_C_N	4	USB2_7_C_N
5	USB2_6_C_P	6	USB2_7_C_N
7	GND	8	GND
9	--	10	--

DIO
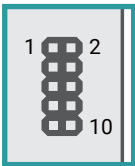
Pin	Assignment	Pin	Assignment
1	D_IOA7_C	2	D_IOA6_C
3	D_IOA5_C	4	D_IOA4_C
5	D_IOA3_C	6	D_IOA2_C
7	D_IOA1_C	8	D_IOA0_C
9	5V	10	GND

CPU FAN
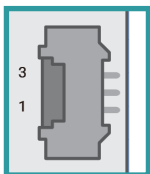
Pin	Assignment
1	Sense
2	Power
3	GND

COM1
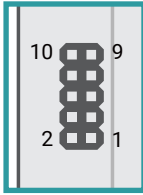
Pin	Assignment
1	MDCD1#
2	MSIN1
3	MSOUT1
4	MDTR1#
5	GND
6	MDSR1#
7	MRTS1#
8	MCTS1#
9	MRI1#
10	GND

Front Panel
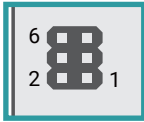
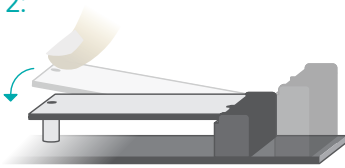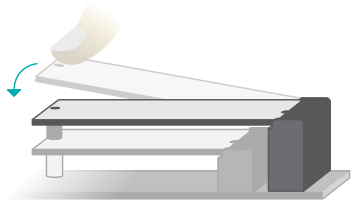| Pin	Assignment	Pin	Assignment
1	SIO_PWSIN#	2	3V3SB
3	GND	4	GND
5	SYS_RESET-	6	HD_LED

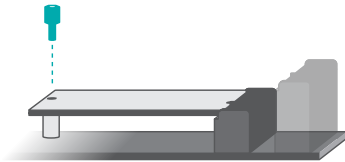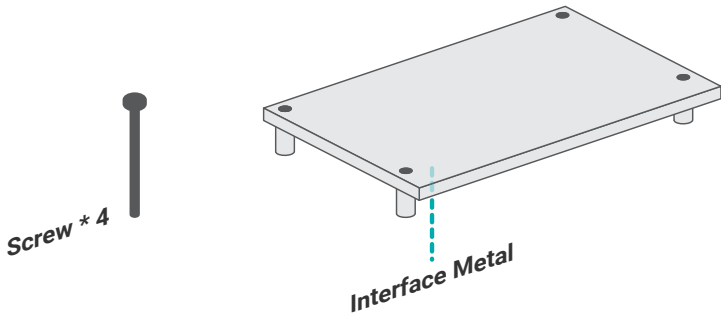# M.2 Stack Installation

Step 1:
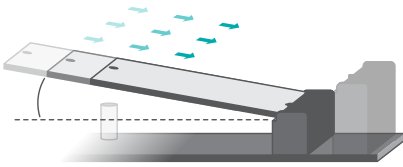
Step 4:
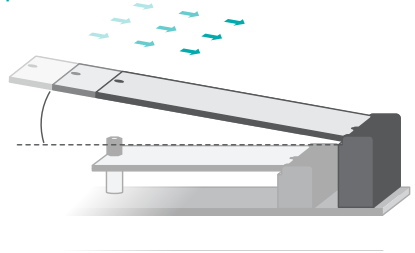
Step 2:

Step 5:

Step 3:

Step 6:

Assembly

A heat spreader is included in the standard package. The heat spreader and components required for mounting are illustrated below.
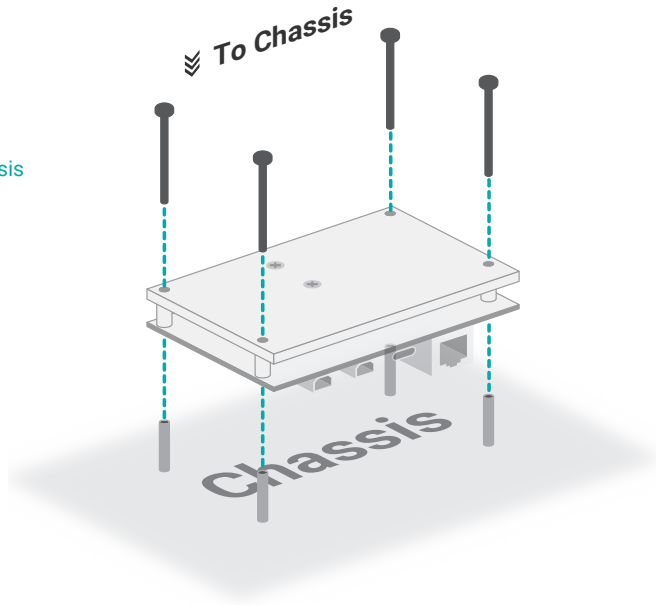

Screw * 4

Interface Metal

The heat spreader is designed to be mounted onto the module as illustrated below. Please make sure the contacting sides of the heat spreader and the module are correct — the CPU side of the module shall be facing the interface metal side and legs of the heat spreader. Rotate horozontally so the interface metal sits right on top of the CPU. Remove any plastic cover on the interface metal and apply thermal paste/adhesive if it is required.

Interface Metal Side Down

CPU Side Up
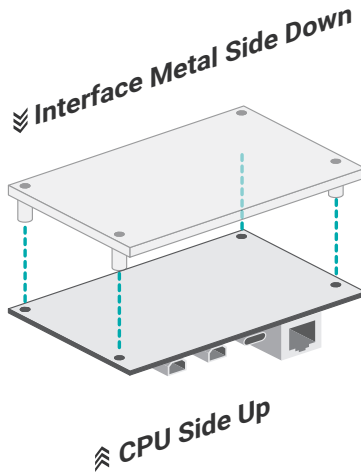
Rotate the module and heat spreader combo so that the I/O is facing the desired side, and place the combo in the position of the chassis reserved for your module.

Align the screw holes of the combo to those on the chassis. The combo can be mounted onto the chassis in two manners — 1) module side to the chassis, or 2) heat spreader side to the chassis as illustrated below. This shall depend entirely on the design of the chassis with regard to interior spacing, thermal, and I/O.

≋ *To Chassis*

■ Module side to chassis

Chassis

Chassis

■ Heat spreader side to chassis

≋ *To Chassis*