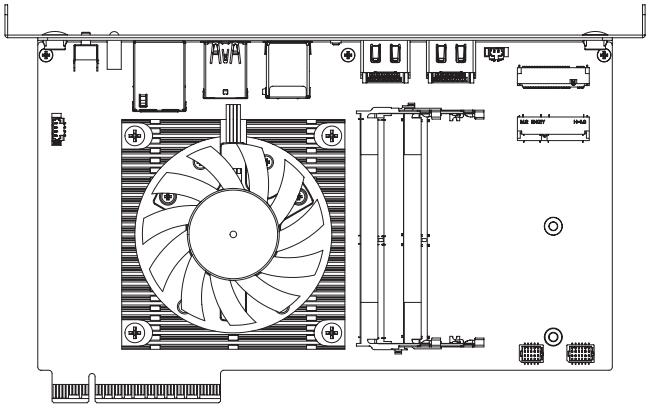
SDM-1135G7L (MTGU5AL-SI)
SDM-1115G4L (MTGU3AL-SI)

Smart Display Module Series
Quick Start Guide



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Packing List

Before setting up your product, please make sure the following items have been shipped:

Item	Quantity
SDM-1135G7L or SDM-1115G4L	1

※Optional kit :

- Followings are the optional components to be purchased only when choosing M.2 NVMe SSD for SKU combination.
- To get installation instructions, please see P.24

Item	Quantity
DIMM2 PAD (P/N : 25ST3-200086-T5R)	1
M.2 Standoff (P/N : 12KSF-F10303-20R)	1
M.2 Screw (P/N: 25KSG-130048-S0R)	1
M.2 Bracket (P/N: 25ST1-1231Z0-S7R)	1

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

About this Document

This User's Manual contains all the essential information, such as detailed descriptions and explanations on the product's hardware and software features (if any), its specifications, dimensions, jumper/connector settings/definitions, and driver installation instructions (if any), to facilitate users in setting up their product.

Users may refer to the GIGAIPC.com for the latest version of this document.

Safety Precautions

Please read the following safety instructions carefully. It is advised that you keep this manual for future references

1. All cautions and warnings on the device should be noted.
2. Make sure the power source matches the power rating of the device.
3. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
4. Always completely disconnect the power before working on the system's hardware.
5. No connections should be made when the system is powered as a sudden rush of power may damage sensitive electronic components.
6. If the device is not to be used for a long time, disconnect it from the power supply to avoid damage by transient over-voltage.
7. Always disconnect this device from any AC supply before cleaning.
8. While cleaning, use a damp cloth instead of liquid or spray detergents.
9. Make sure the device is installed near a power outlet and is easily accessible.
10. Keep this device away from humidity.
11. Place the device on a solid surface during installation to prevent falls
12. Do not cover the openings on the device to ensure optimal heat dissipation.

13. Watch out for high temperatures when the system is running.

14. Do not touch the heat sink or heat spreader when the system is running

15. Never pour any liquid into the openings. This could cause fire or electric shock.

16. As most electronic components are sensitive to static electrical charge, be sure to ground yourself to prevent static charge when installing the internal components. Use a grounding wrist strap and contain all electronic components in any static-shielded containers.

17. If any of the following situations arises, please the contact our service personnel:
    i. Damaged power cord or plug
    ii. Liquid intrusion to the device
    iii. Exposure to moisture
    iv. Device is not working as expected or in a manner as described in this manual
    v. The device is dropped or damaged
    vi. Any obvious signs of damage displayed on the device

18. **DO NOT LEAVE THIS DEVICE IN AN UNCONTROLLED ENVIRONMENT WITH TEMPERATURES BEYOND THE DEVICE'S PERMITTED STORAGE TEMPERATURES (SEE CHAPTER 1) TO PREVENT DAMAGE.**

FCC Statement

This device complies with Part 15 FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received including interference that may cause undesired operation.

Caution:

There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions and your local government's recycling or disposal directives.

Attention:

Il y a un risque d'explosion si la batterie est remplacée de façon incorrecte.
Ne la remplacer qu'avec le même modèle ou équivalent recommandé par le constructeur. Recycler les batteries usées en accord avec les instructions du fabricant et les directives gouvernementales de recyclage.

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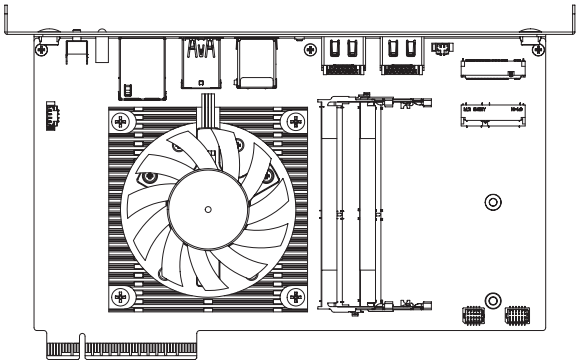
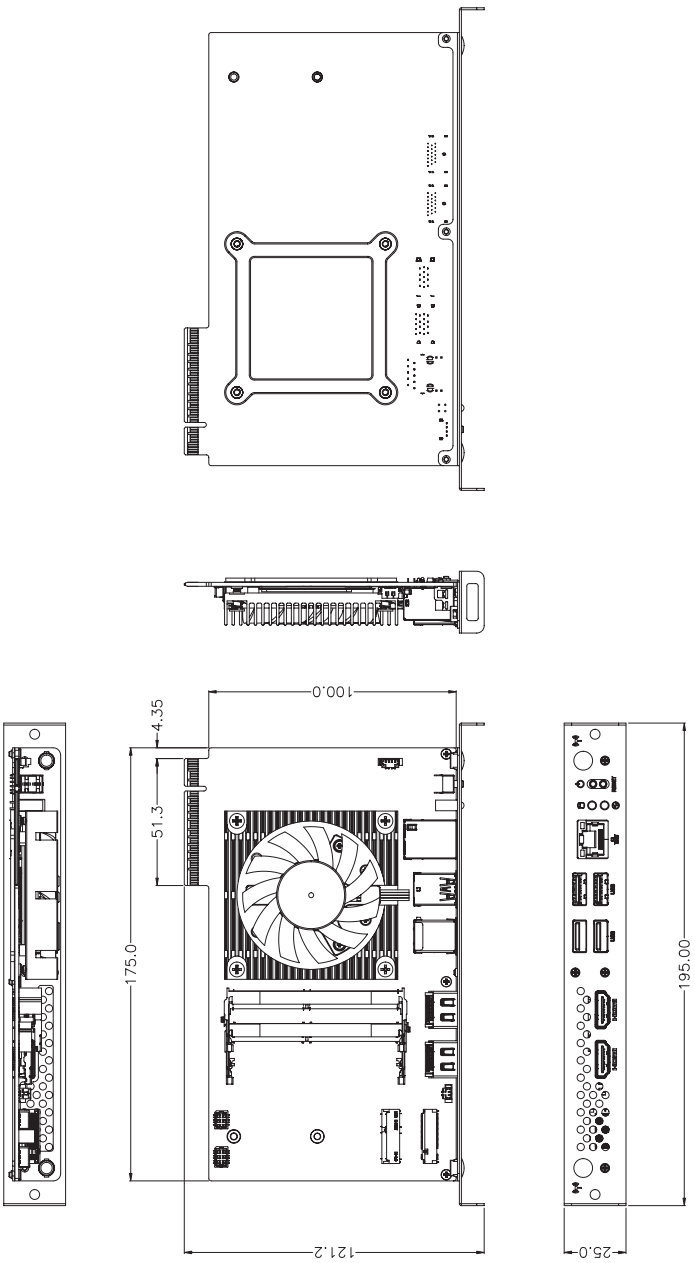
Chapter 1

Chapter 1 - Product Specifications




100.0
4.35
51.3
175.0
121.2
195.00
25.0

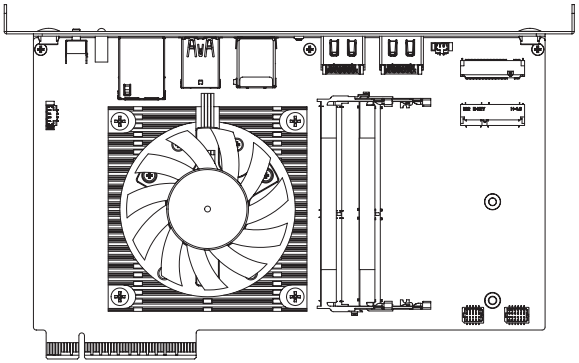
1.1 Specifications

Motherboard	SDM-1135G7L (MTGU5AL-SI)	SDM-1115G4L (MTGU3AL-SI)
Form Factor	SDM-Large 175W x 100D(mm)	
CPU	Intel® Core™ i5-1135G7 Processor 10nm SuperFin, 4 cores, 8 threads, up to 4.20 GHz TDP 28W	Intel® Core™ i3-1115G4 Processor 10nm SuperFin, 2 cores, 4 threads, up to 4.10 GHz TDP 28W
Socket	1 x FCBGA1449	
Memory	2 x DDR4 SO-DIMM sockets, Max. Capacity 64 GB Support Dual Channel DDR4 3200 MHz memory modules	
Ethernet	1 x GbE LAN port (Intel® i219V)	
Video	Integrated Graphics Processor - Intel® Iris Xᵉ Graphics: 1 x HDMI 2.0 (SDM), supporting a maximum resolution of 4096x2160 @60 Hz 1 x Display Port (SDM), supporting a maximum resolution of 4096x2160 @60 Hz 2 x HDMI 2.0 (Rear), supporting a maximum resolution of 4096x2160 @60 Hz (4 independent display outputs)	Integrated Graphics Processor - Intel® UHD Graphics: 1 x HDMI 2.0 (SDM), supporting a maximum resolution of 4096x2160 @60 Hz 1 x Display Port (SDM), supporting a maximum resolution of 4096x2160@60 Hz 2 x HDMI 2.0 (Rear), supporting a maximum resolution of 4096x2160 @60 Hz (4 independent display outputs)
Audio	Intel® integrated Audio	
Expansion Slots	1 x 2280 M.2 M-Key (PCIe x4, SATA 6Gb/s) 1 x 2230 M.2 E-Key	

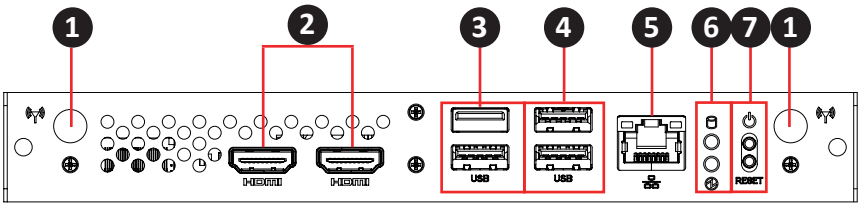
Motherboard	SDM-1135G7L (MTGU5AL-SI)	SDM-1115G4L (MTGU3AL-SI)
Rear I/O	1 x RJ45 LAN port 2 x HDMI 2.0 3 x USB 3.0 1 x USB 2.0 1 x PWR LED 1 x HDD LED 2 x Antenna(WiFi/BT)(Optional) 1 x Reset button 1 x Power button	
TPM	1 x TPM header	
OS Compatibility	Windows® 10 (x64)	
Operating Properties	Operating temperature: 0°C to 55°C Operating humidity: 0-90% (non-condensing) Non-operating temperature: -40°C to 85°C Non-operating humidity: 0%-95% (non-condensing)	

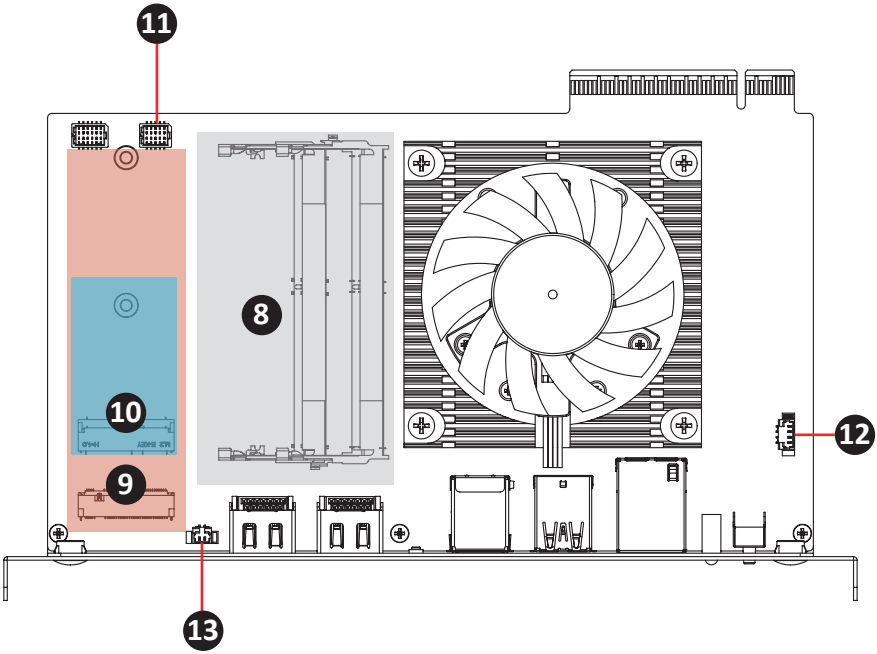
Chapter 2

Chapter 2 – Hardware Information



2.1 Jumpers and Connectors

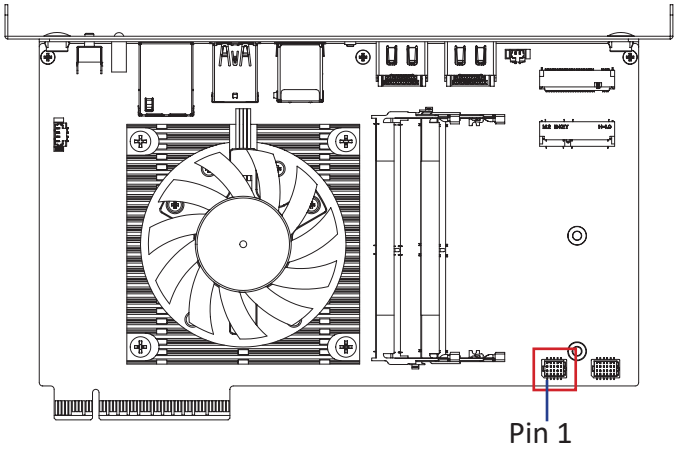




No	Code	Description
1	Antenna hole	2 x Antenna (WiFi & BT) (Option)
2	HDMI_1 HDMI_2	2 x HDMI
3	FUSB	1 x USB 2.0 (Top) 1 x USB 3.0 (Bottom)
4	FUSB31	2 x USB 3.0
5	LAN	1 x RJ45
6	PS_LED	1 x PWR LED (Top) 1 x HDD LED (Bottom)
7	PSW_RST	1 x Power button (Top) 1 x Reset button (Bottom)
8	SODIMM_A SODIMM_B	2 x DDR4 SO-DIMM sockets
9	M2M	1 x 2280 M.2 M-Key (PCIe x4, SATA 6Gb/s)
10	M2E	1 x 2230 M.2 E-Key
11	TPM	1 x Trusted Platform Module Connector
12	CPU_FAN	1 x CPU Fan connector
13	BATTERY	1 x Battery cable connector

2.2.1 TPM (Trusted Platform Module Connector)

1



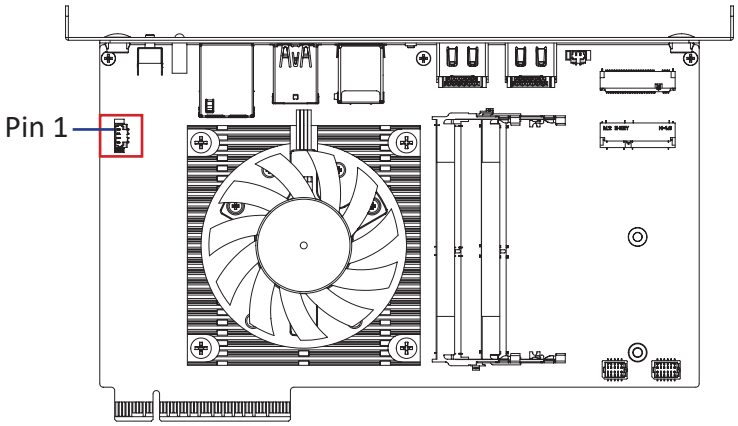
TPM Connector

Pin No.	Definition
1	Clock
2	GND
3	SPI_CS
4	TPM_SO
5	RESET
6	TPM_SI
7	NC
8	NC
9	3.3V
10	NC

Connector PN	Vendor
87216-1004-06	ACES

2.2.2 CPU_FAN (CPU Fan connector)

1



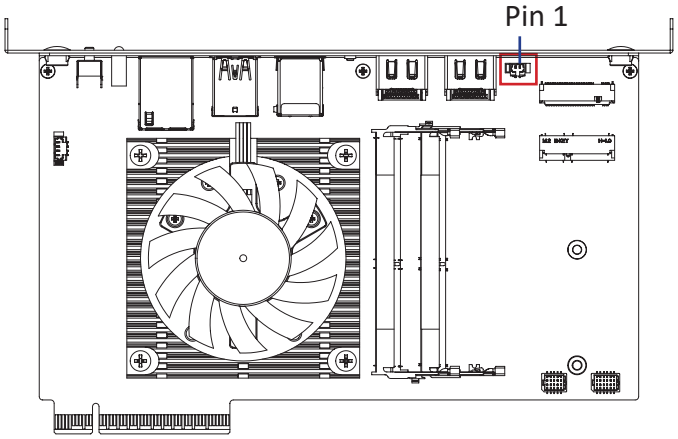
CPU FAN Connector

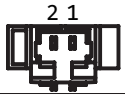
Pin No.	Definition
1	Speed control
2	Detect
3	GND
4	12V

Connector PN	Vendor
85205-0470N ACES	KYOYAKU
A1250WV-S-04PC	JOINT-TECH

2.2.3 BATTERY (Battery cable connector)

1



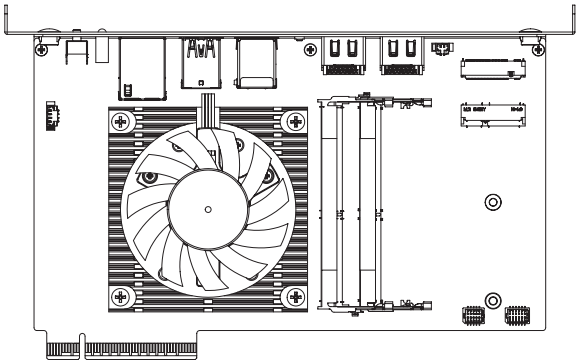
Battery cable Connector
2 1 

Pin No.	Definition
1	3.3V RTC
2	GND

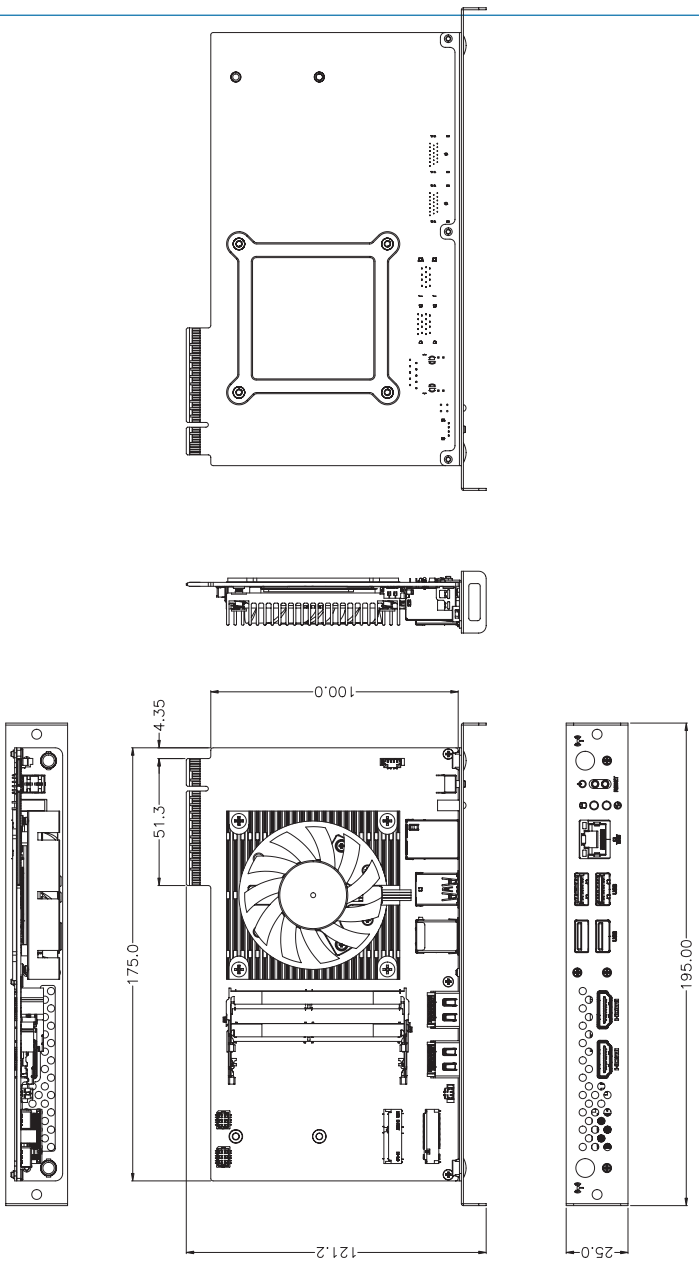
Connector PN	Vendor
85205-0270L ACES	ACES
A1250WV-S-02PC	JOINT-TECH

Chapter 3

Chapter 3 – SDM-L Installation

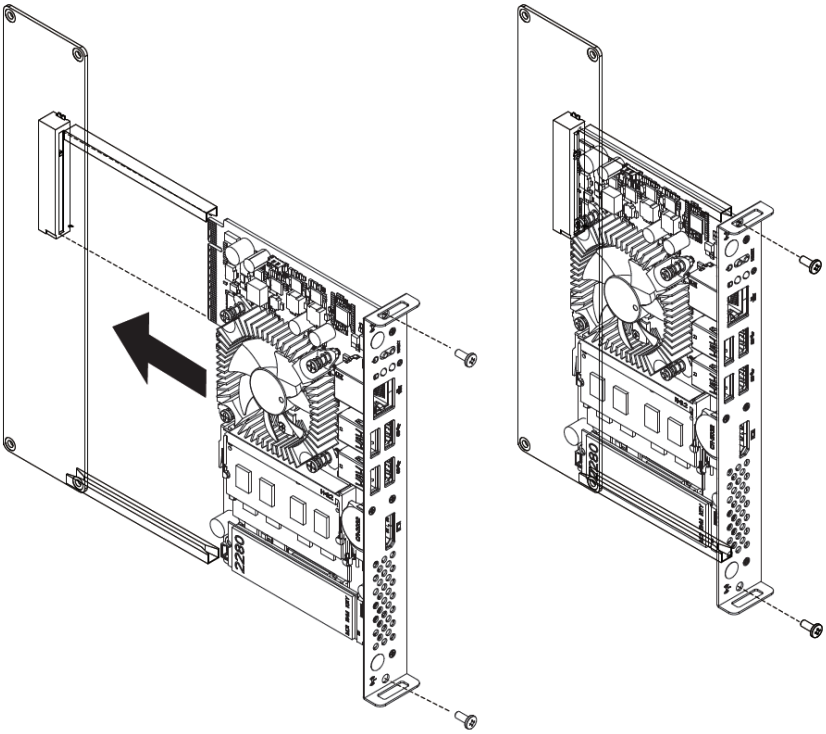


3.1 Dimension



3.2 Installation

[SDM Install]

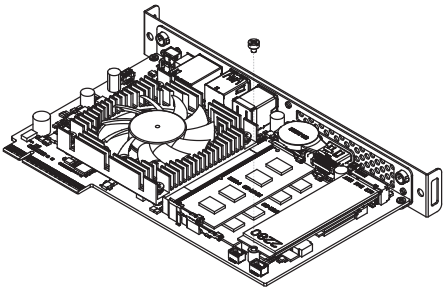


* The image is for reference only.
  The actual product could be slightly different.

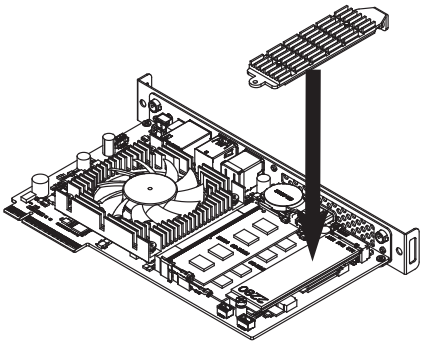
[M.2 SSD Heatplate module Install]

Following instructions are only for using M.2 NVMe SSD and the optional kit listed on P.4

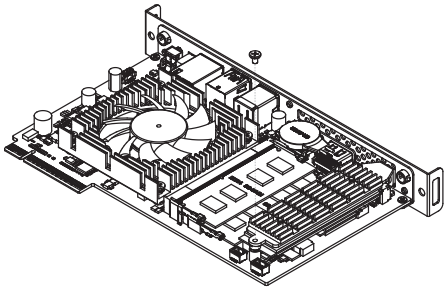
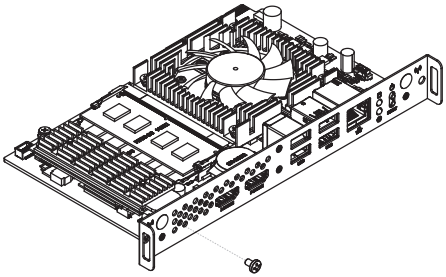
Step 1.
Remove the on-board screw (Location : MSO1).
Carefully insert M.2 2280 SSD into the M.2 slot, and use the standoff which provided in the accessory kits to secure the M.2 SSD.



Step 2.
Remove the release paper on M.2 SSD Heatplate, and attach M.2 SSD Heatplate module to the M.2 SSD.



Step 3.
Tighten up the screw which was previously removed.



Step 4.
Tighten up the screw which was provided in the accessory kits on the bracket.