ASM-CDV

Fanless Intel® Atom™ D2550 1.86GHz CPU
Ultra Slim PC with Intel® NM10 Express Chipset

Quick Reference Guide

2nd Ed – 9 August 2013

Part No. E20175820A2R

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.

(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS "A" DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES.

THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS.

OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

Notice

This guide is designed for experienced users to setup the system within the shortest time. For detailed information, please always refer to the electronic user's manual.

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into body, or (b) support or sustain life and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

A Message to the Customer

Avalue Customer Services

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We want you to get the maximum performance from your products. So if you run into technical difficulties, we are here to help. For the most frequently asked questions, you can easily find answers in your product documentation. These answers are normally a lot more detailed than the ones we can give over the phone. So please consult the user's manual first.

To receive the latest version of the user's manual; please visit our Web site at:
http://www.avalue.com.tw/

1. Getting Started

1.1 Safety Precautions

Warning!

Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.

Caution!

Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.

1.2 Packing List

- 1 x ASM-CDV (with EBM-CDV inside)
- 1 x Quick Reference Guide
- 1 x DVD-ROM contains the followings:
  — User's Manual (this manual in PDF file)
  — Ethernet driver and utilities
  — VGA drivers and utilities
  — Audio drivers and utilities
  — Chipset drivers and utilities.
- 1 x packing set includes the followings:
  — 1 x AC to DC Adapter
  — 1 x Power cord
 — 1 x Screw kit for 2.5" HDD/SSD fixing

If any of the above items is damaged or missing, contact your retailer.

1.3 System Specifications

System	
Board	EBM-CDV
CPU	Onboard Intel® Atom™ D2550 1.86GHz CPU
BIOS	AMI 16Mbit SPI BIOS
System Chipset	Intel® NM10 Express Chipset
System Memory	One 204-pin SODIMM Supports Up to 4GB DDR3 1066MHz SDRAM
SSD	One CompactFlash Type I/II Socket
Audio	Realtek ALC892 Support 5.1-CH Audio
Ethernet	Dual Intel® 82574L Gigabit Ethernet
System Indicators	4 LED Indicators Show Power and HDD Status
Drive Bay	Mounting Kit for One 2.5" SATA HDD/ SSD (Hidden)
Expansion Interface	1 x Mini PCIe Slot (mSATA Supported)
External I/O	
COM	2 x RS-232 (COM2 RS-232/422/485 Setting by JP & SW)
LAN	2 x RJ-45
WiFi	1 Knockouts for Antenna Mounting
VGA	1 x VGA
HDMI	1 x HDMI
Audio	1 x Mic-in, 1 x Line-in, 1 x Line-out
USB	4 x USB 2.0 (Rear 2; Front 2)
Power Supply Unit	
Power Input	100 ~ 240Vac/ 50 ~ 60Hz
Power OutPut	+12Vdc/ 5A (60W)
Environmental	
Power Requirement	+12Vdc ~ +26Vdc (Lockable DC Jack)
Operating Temperature	0 ~ 50°C (32 ~ 122°F)
Storage Temperature	-40 ~ 75°C (-40 ~ 167°F)
Relative Humidity	0% ~ 90% Relative Humidity, Non-condensing
Vibration Protection	With CF/ SSD: 1.5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30min/axis
Shock Protection	With CF/ SSD: 10G, IEC 60068-2-27, Half Sine,11ms
Dimension (W x D x H)	7.2" x 10.1" x 1.0" (182mm x 257mm x 25mm)
Weight	3.3lbs (1.5Kgs)
Mounting	VESA 100 & 75

1.4 System Overview

1.4.1 Front View
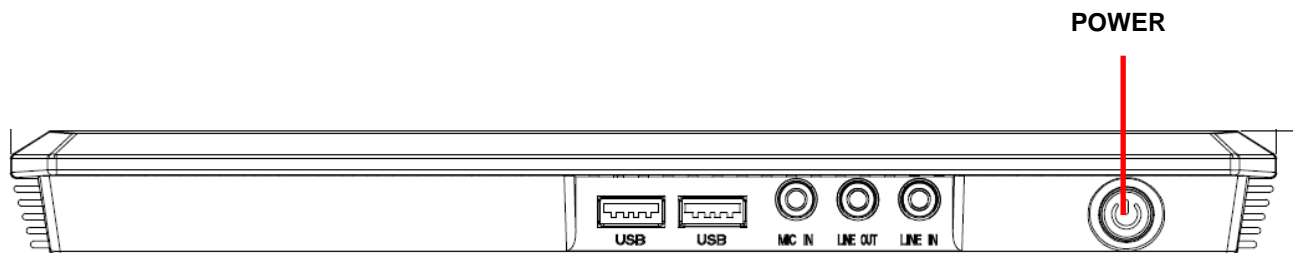
POWER

Connectors

Label	Function	Note
POWER	Power on button	
LINE IN	Line-in audio jack	
LINE OUT	Line-out audio jack	
MIC IN	Mic-in audio jack	

1.4.2 Rear View
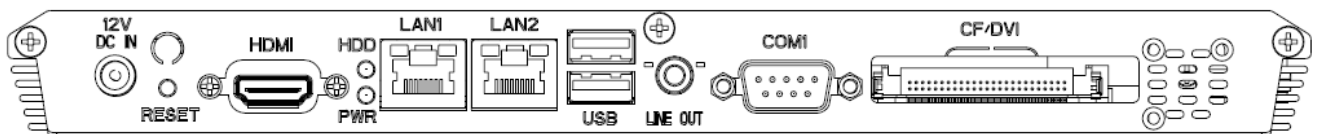
Connectors

Label	Function	Note
CF	CF Type I/II Socket with Ejector	
COM1	Serial port 1	DB-9 male connector
COM2	Serial Port 2	DB-9 male connector
LINE OUT	Line-out audio jack	
USB	2 x USB 2.0 connector	Dock USB
LAN1	2 x 10/100Base-Tx Ethernet connector	RJ-45
LAN2	2 x 10/100Base-Tx Ethernet connector	RJ-45
HDD	HDD indicator	
VGA	CRT connector	DB-15 female connector
RESET	Reset button	
DC-IN	DC Power-in connector	
HDD	HDD indicator	
HDMI	HDMI connector	
PWR	System power indicator	
Wi-Fi	USB Wi-Fi Module (optional)	
RESET	Reset button	
USB	2 x USB 2.0 connector	
VGA	CRT connector	DB-15 female connector

1.5 System Dimensions

1.5.1   Top and Front

182

257

25

USB   USB   MIC IN   LINE OUT   LINE IN
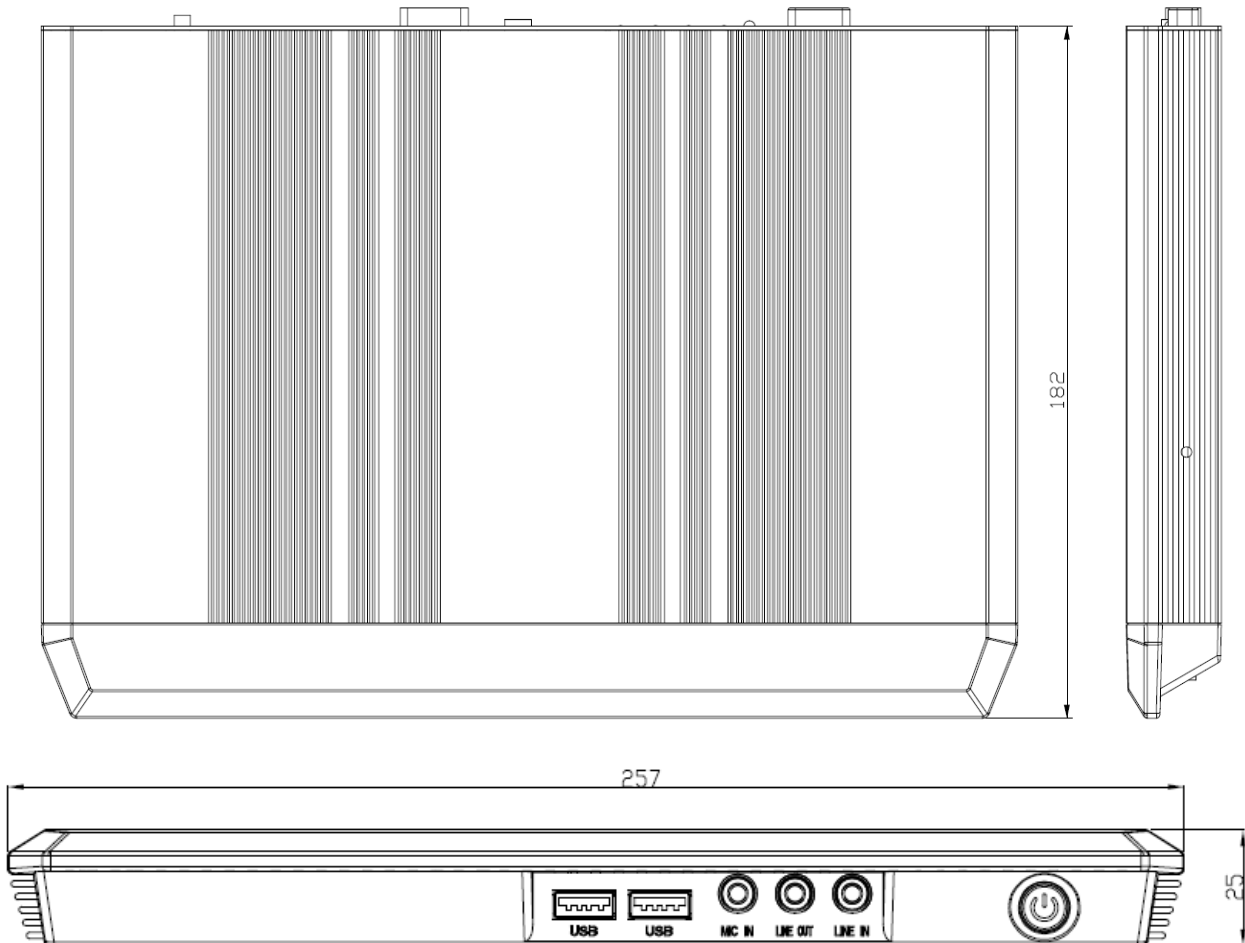
(Unit: mm)

1.5.2   Bottom and Rear
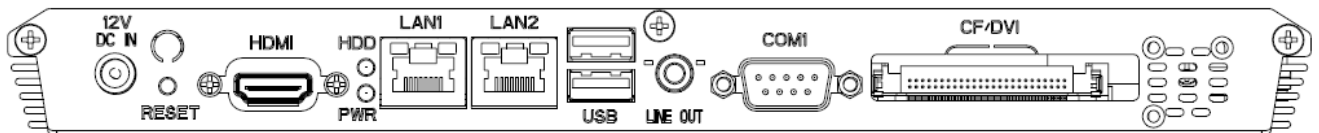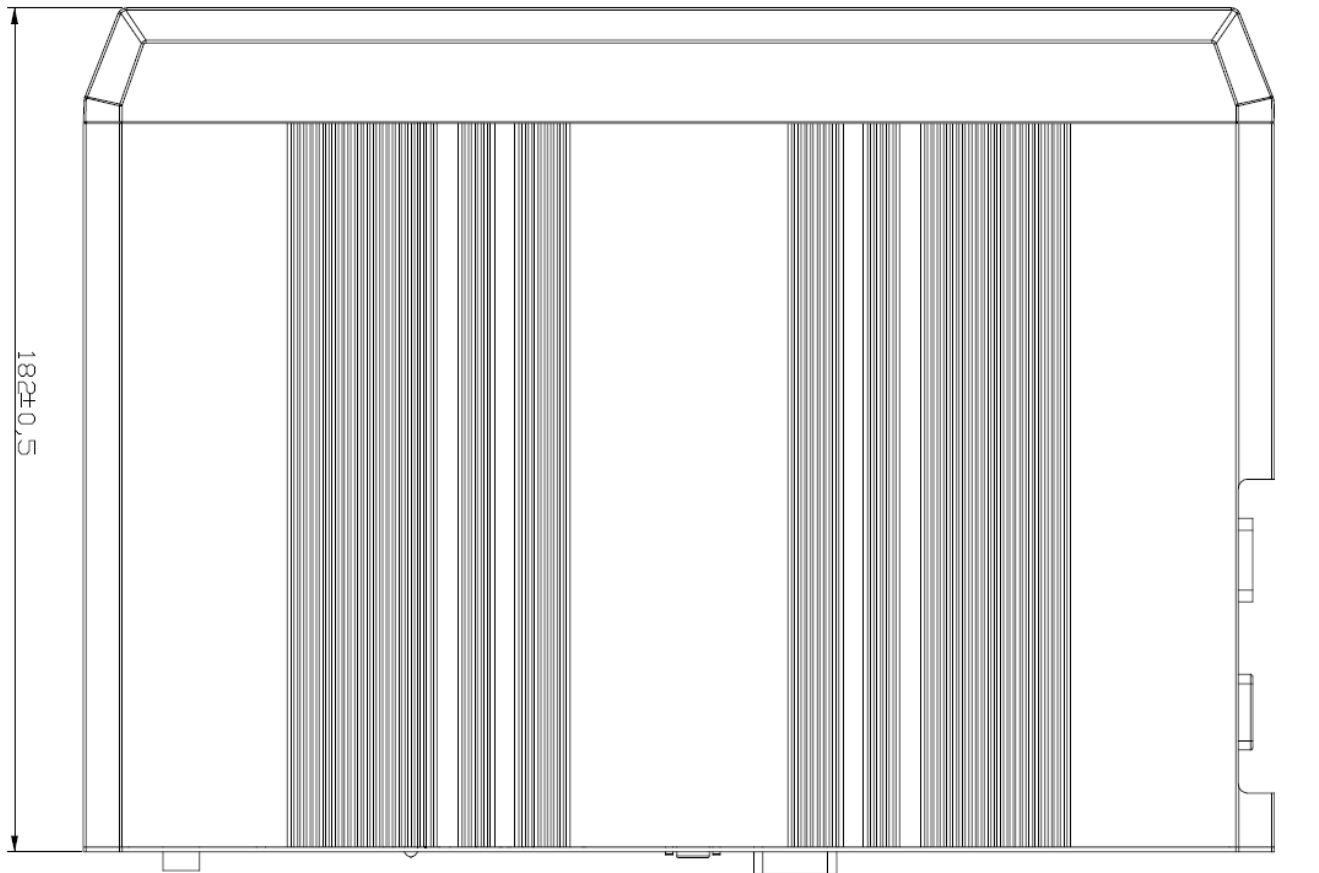
Side view
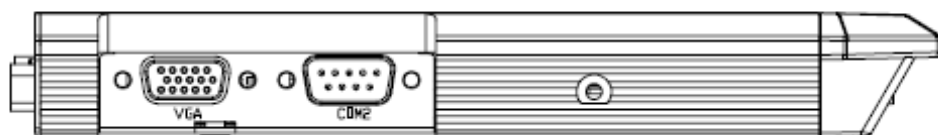
(Unit: mm)

2. Hardware Configuration

2.1 Connector Setting, Driver and BIOS Installing

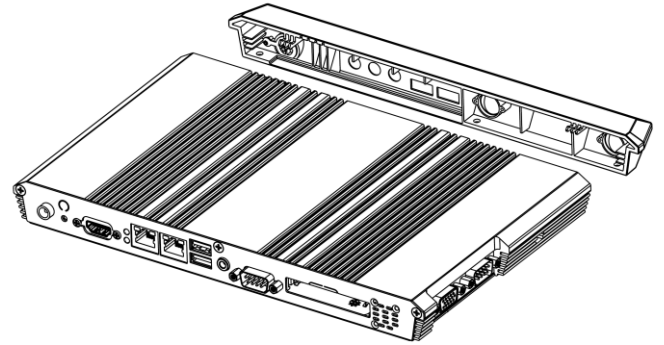- Please refer to EBM-CDV Quick Installation Guide or User's Manual.

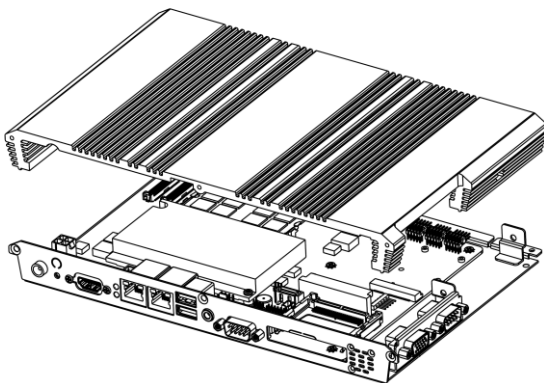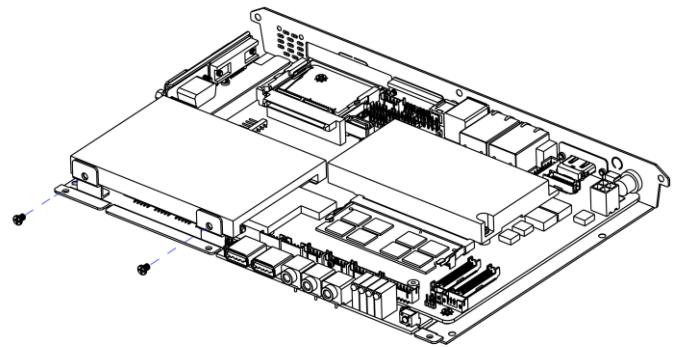**Note:** If you need more information, please visit our website:

http://www.avalue.com.tw

2.2 Installing Hard Disk & Memory
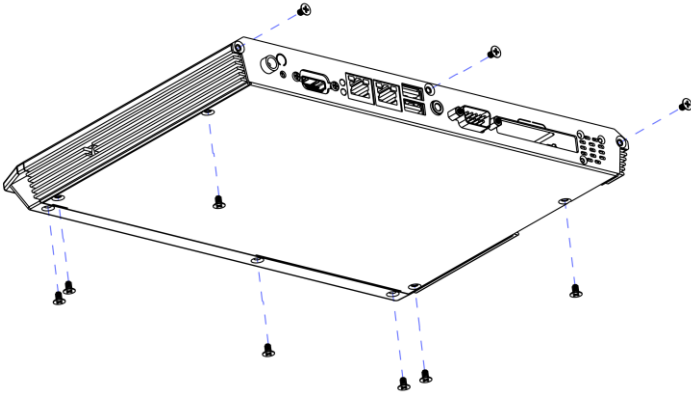
Step 1. Remove 10 screws from the case, and 4 screws from COM and VGA ports.
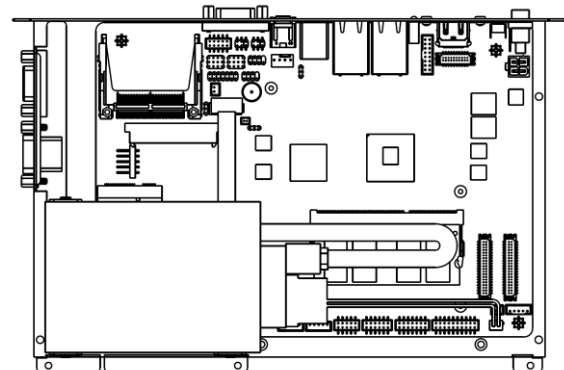

Step 2. Remove the front cover.

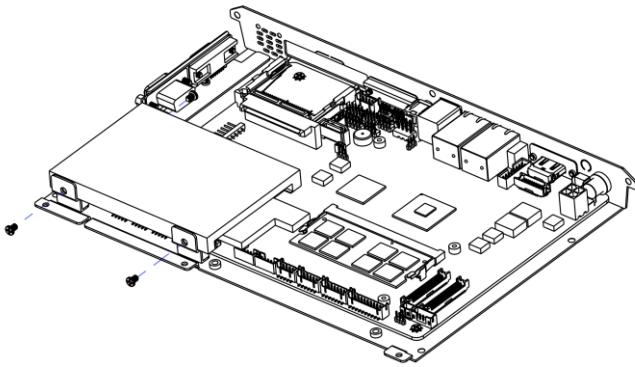

Step 3. Remove the top chassis.

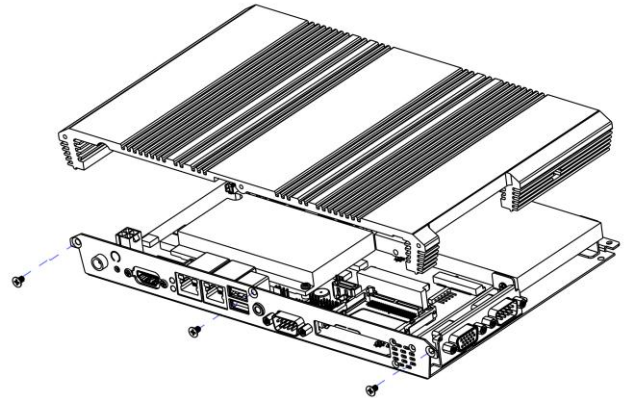**Step 4.** Install the DDR SODIMM into the memory socket.
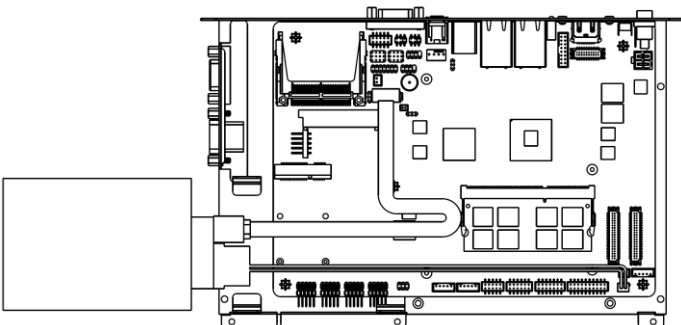
Step 5-1. HDD installation: Connect the HDD to SATA connector via SATA cable, as shown above.
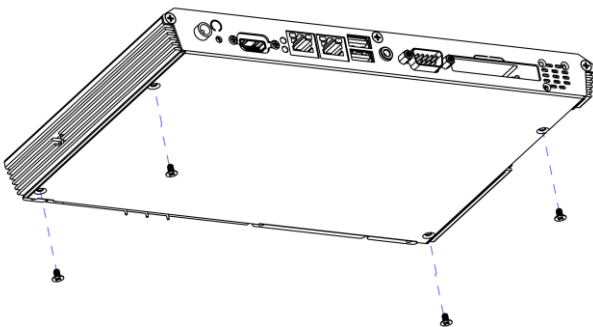

Step 5-2. Place HDD and SATA cable as shown above for a proper installation of the HDD.
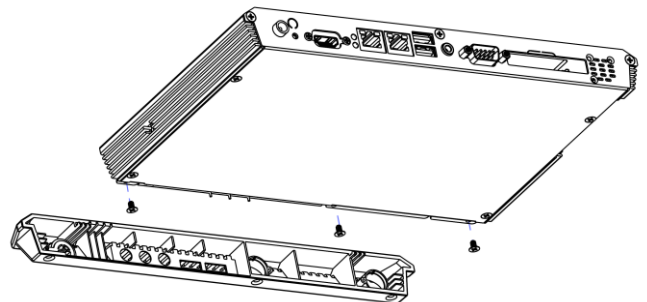
Step 5-3. Insert the HDD into the Drive Bay. Remember to properly seat the HDD so as to match screws and HDD holes.

Step 6. Reassemble the top chassis and fasten with 3 screws.

Step 7. Fasten 4 screws from the bottom chassis.

Step 8. Reassemble the rear chassis and fasten 3 screws to lock.