Point-of-sale system
POS2100

User's manual

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User's manual Revision History

Changes to the POS2100 D25 User's manual are listed below.

Rev No.	Revision History	Date /author
PBUM-BLUO (Rev001;140221)	D25	2014.02.21

Preface

This User's Guide gives information about main unit/IO port layout, basic setup, component installation, and board layout for point of sale system "POS2100 D25"

Intended Audience

The User's Guide is intended for technically qualified personnel.
It is not intended for general audiences.

Document Organization

The chapters in this Product User's manual are arranged as follows:

1. product package contents
2. system configuration
3. Harness (cable connector)
4. BIOS Setup
5. Installing and Replacing POS SYSTEM Components: instructions on how to install the motherboard and other POS hardware components.
6. Product specification

SYMBOL; MARK

C E	**CE MARK** This device complies with the requirements of the EEC directive 2004/108/EC with regard to "Electromagnetic compatibility" and 2006/95/EC "Low Voltage Directive".
FC	**FCC** This device complies with part 15 of the 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.
KC	**KC** Korea Certification mark. Certificate No. -
	WEEE **Recycling and disposal of electric and electronic devices and their components** This product should not be mixed with other commercial wastes for disposal.

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POS2100 D25

* Other names and brands may be claimed as the property of others.

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Warranty

We guarantee our POS terminal product and its parts against defects in materials and workmanship, under proper use, for a standard period of 2 years from the original date of purchase.

During this period, we will repair or replace defective and/or faulty products or parts without charge to the customer for parts and labor.

The 1st year includes servicing and new or refurbished replacement parts free of charge, with one-way shipping costs borne by the seller. The customer shall, however, be responsible for the return delivery costs. The 2nd year also includes free of charge servicing and parts, but a limited warranty requires the entire shipping cost to be borne by the customer.

Products out of the warranty period or scope shall be diagnosed at the customer's expense.

In the case of product damage due to error on part of the consumer, incorrect usage, carelessness or natural phenomenon, the customer shall bear the full cost for both repair and delivery.

Safety Instructions

1. To disconnect the machine from the electrical power supply, turn off the power switch and remove the power cord plug from the wall socket.
2. The wall socket must be easily accessible and in close proximity to the machine.
3. Read these instructions carefully. Save these instructions for future reference.
4. Follow all warnings and instructions marked on the product.
5. Do not use this product near water.
6. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
7. Slots and openings in the cabinet and the back or bottom are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered.
8. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface.
9. This product should never be placed near or over a radiator or heat register or in a built-in installation unless proper ventilation is provided.
10. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

Notice

1. Always ensure that the correct power voltage is used as a precaution against fire and electrical shock.
2. Avoid exposing product to direct sunlight. Do not use product in areas of high humidity.
   Doing so may cause low reliability and/or operational malfunction.
3. Be careful of static electricity on PCB of system with anti-static appliances. Doing so may cause inferior reliability and shorted product life.
4. Keep product away from highly static areas. This may lead to inferior performance and reduced life cycle.
5. Do not interfere with, or obstruct metal components inside product. Doing so may cause the risk of fire or electric shock.
6. Do not pull on power cable or peripheral devices' connector cable. Doing so may cause fire, electric shock or electronic system malfunction.
7. Use caution when around other electronic devices with possible high frequency or electro-magnetic effects e.g. Audio, Electronic-range etc.   Doing so will lead to the serious risk of product malfunctioning or a system error occurring.
8. Ensure that batteries are replaced correctly. Failure to do this may result in sudden explosions.
9. Dispose of used batteries properly according to the instructions.

Liability Limitation

● Installation and maintenance

We recommend that you inquire about product installation, maintenance and repair service from the official service center and agent office.
AXON takes no responsibility for malfunctions or system errors occurring after service and/or system check carried out by unofficial service providers.

● High frequency appliances

This product is qualified by FCC, CE and KC compliances, and is thus governed by these qualifications' safety regulations.
However, the product can affect and be affected by other high frequencies generated around it. As such, AXON does not consider liability for any system error or disorder due to this issue.

● Electronic noise emitting equipment

We recommend using the product away from electronic noise emitting equipment such as heaters, motors, fluorescent lights, TVs etc. as it may cause interruption or interference with normal operation.

● Installation location

For optimal performance, the product should be kept in an environment of lower than 65% humidity and in a temperature of 10 ~ 30 ℃. Please also keep away from direct sun-light.

● Cleaning procedure

Cleaning with chemical based products (in particular those containing benzyl or chemical thinning agents) can damage the exterior surfaces of the product. We recommend using a soft damp cloth and wiping gently, taking particular care when dealing with the LCD display screen.

● Product limitations

1. The use of this product for anything other than POS tasks is strictly prohibited.
   The product is not supported for regular PC and interface operation.
2. This product is for business use only, and not for usage in the home.
3. Both hardware and software are both fully configured.
4. Normal operating is guaranteed on a steady power connection.

Installation Recommendations

1. Avoid installing during thunderstorms. (Possibility of dangerous exposure to electricity.)
2. Install away from damp spaces or water-leaks.
3. Beware of static occurrence during installation.
4. Use only ground connected and quality certified power cords and cables.
5. Keep out of direct sun-light, extremely high or low temperatures, or high humidity areas.
6. Install product away from areas prone to shocks or vibration.
7. Install product away from sewing machines, welding equipment, electric stoves, audio equipment and other high frequency generating equipment.
8. Installation and use in close proximity to an air-conditioning unit is not recommended.
9. Do not connect cables underneath carpets or floorboards.
10. Only use power cables supplied by pre-approved and certified venders.
11. Never use power cords from high power source appliances.
    e.g. Electronic heaters, Electric stoves, Audio equipment, Air-conditioners, Refrigerators etc.
12. The use of multiple connections in a shared power outlet/socket is not recommended.

1. Product Overview

(1) Inside Your Package

1. Please check your package and confirm its contents.
2. The POS terminal main unit, power cable, user manual and driver CD are included in the package. If any items are missing or damaged, please contact your dealer for assistance.

» All user manuals and drivers are available for download on our website: www.easyset.org
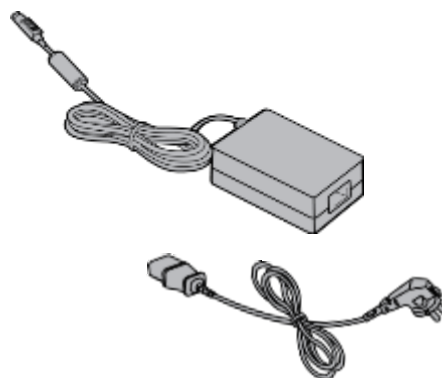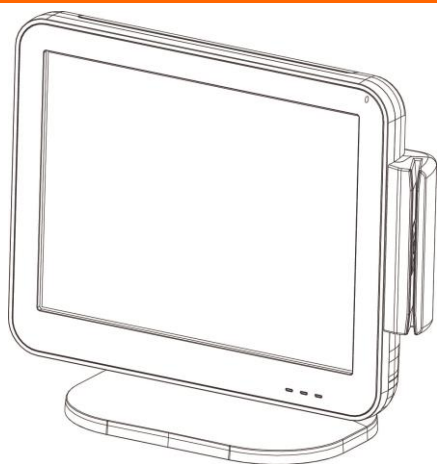
	Adapter / Power cord
Installation guide	**Drivers CD**
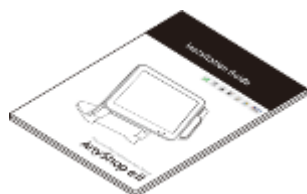
Optional Devices: 2nd LCD monitor 12.1"
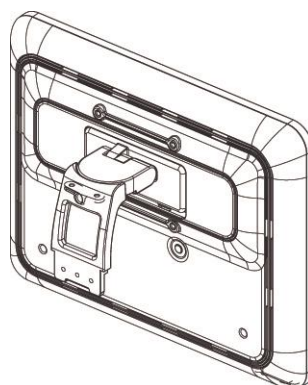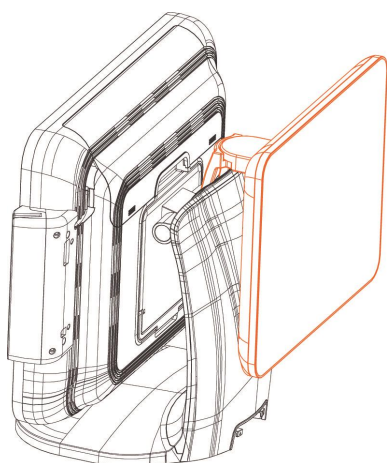
Optional Devices: 2nd LCD monitor 10.4"

Optional Devices: 2nd LCD monitor 10.1"

Optional Devices: CDP (Customer display)
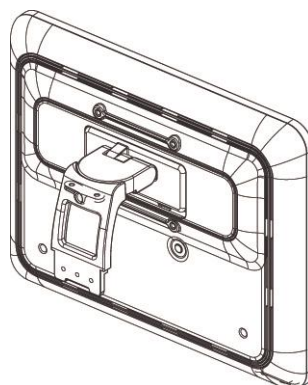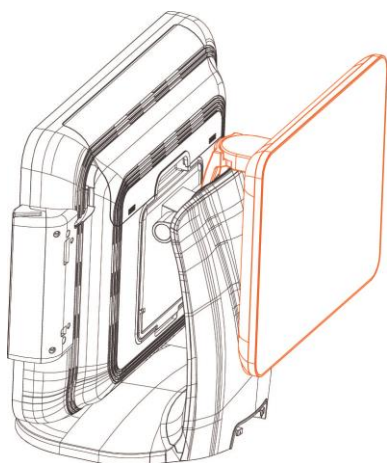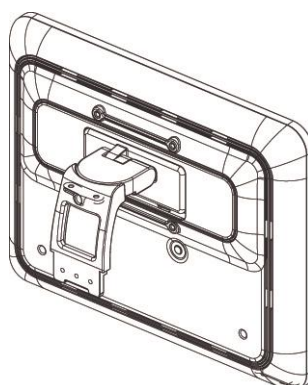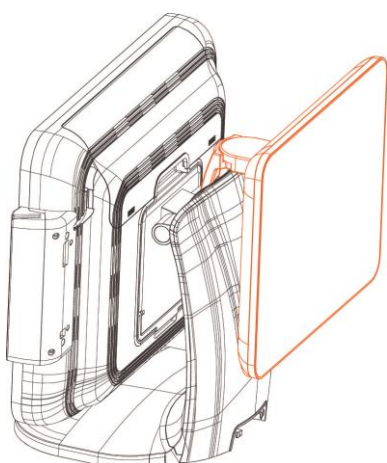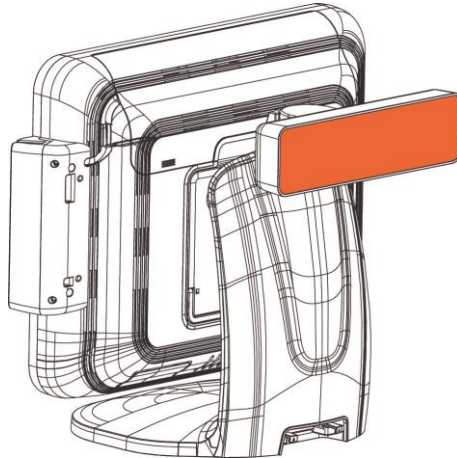
(2) Pre-installation Preparation

1. Remove protective film from touch-screen to prevent possible operating difficulties.
2. Attach all optional parts before setting up the main POS unit.

(3) Product Outline

• Each part of product may differ depending on the specific POS model.
• Model-specific data sheets are provided on our website at www.easyset.org

(4) Configuration

Refer to following diagram to identify the components on this side of the system.

Front view
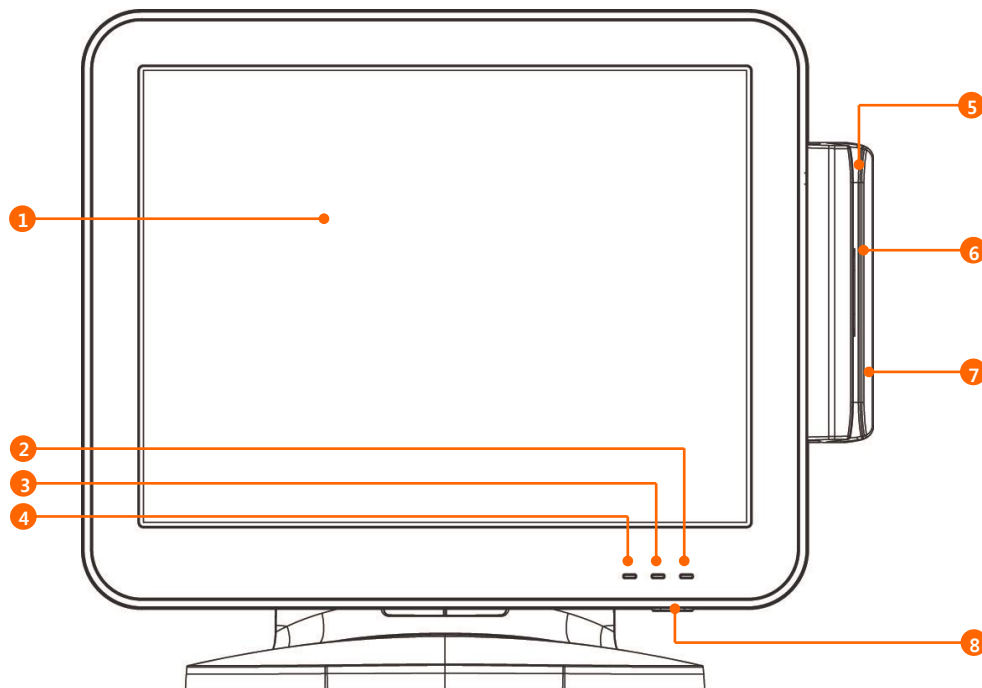
1. LCD & Touch panel display
2. LAN LED
3. Storage(Default: SSD) LED
4. Power LED
5. Magnetic stripe reader(MSR); Option
6. Smart card reader(SCR); Option
7. Dallas I-button reader; Option
8. Power switch

Side view
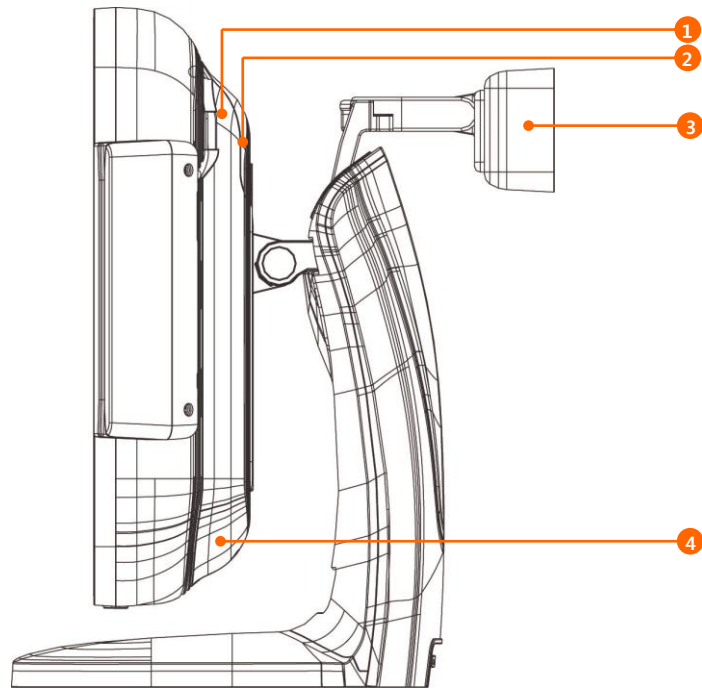
1. I/O port cover
2. Storage (Default: SSD)
3. Customer display; Option
4. Dual speaker

(5) I/O port: Details

* I/O ports may differ according to product model or options.

I/O view
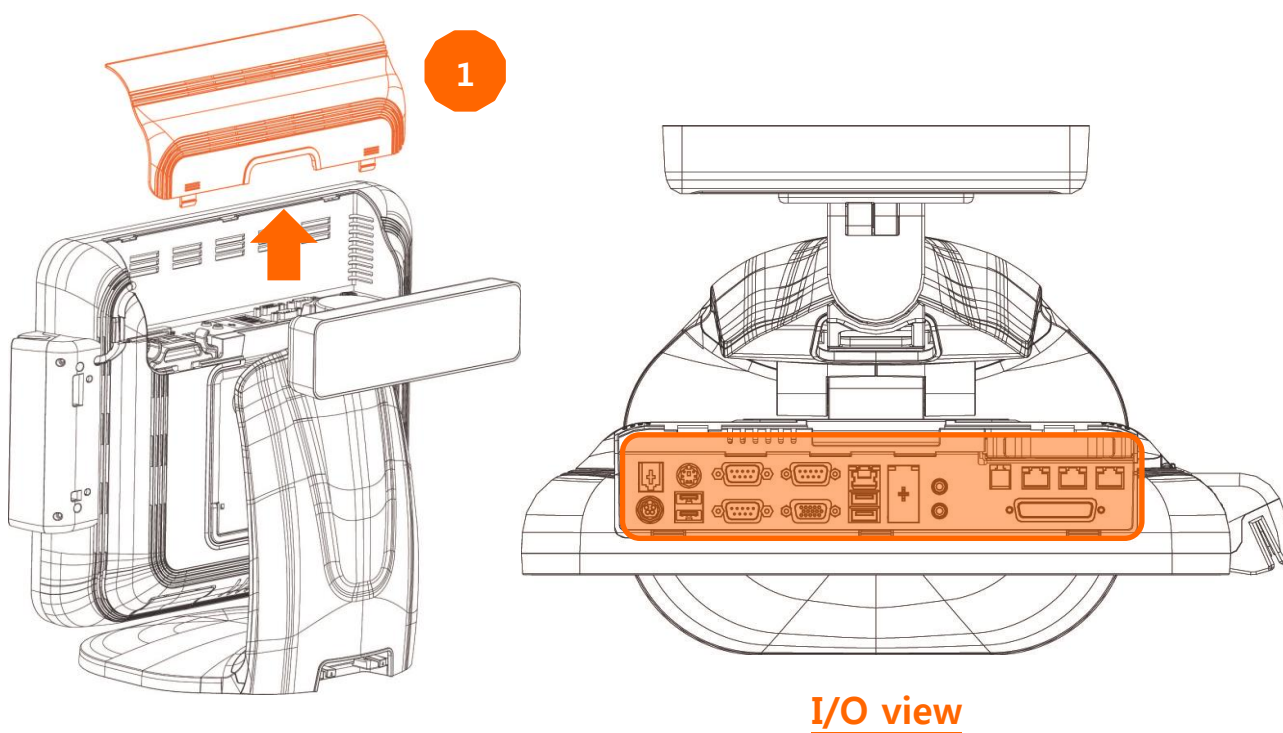
1. Raise the I/O COVER.

Standard I/O port

PS/2	COM2	COM3	LAN	Audio Out

12VDC IN	USB 2port	COM1	VGA	USB 2port	Mic IN
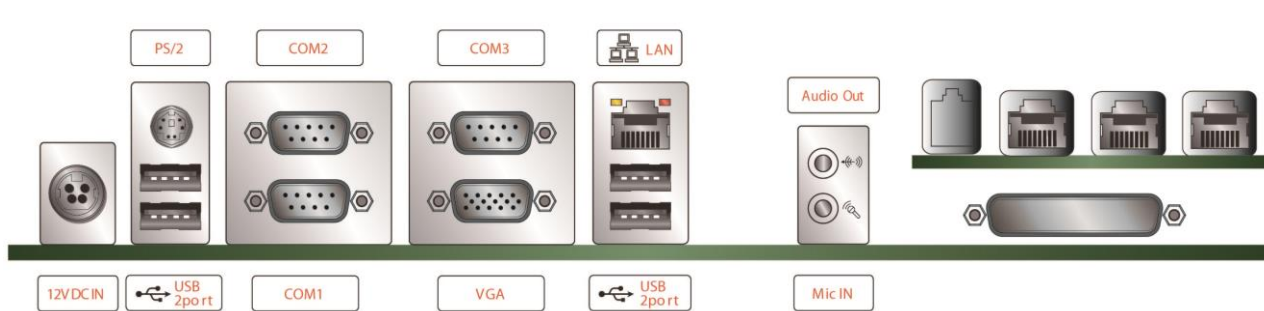
(6) Setting up: Keyboard & Mouse Connection

Connecting the keyboard and mouse to the PS/2 port on the bottom panel.
or connecting the USB type keyboard and mouse to the USB port on the bottom panel.
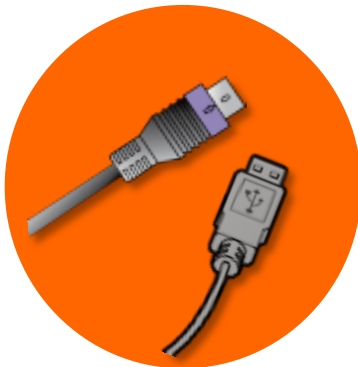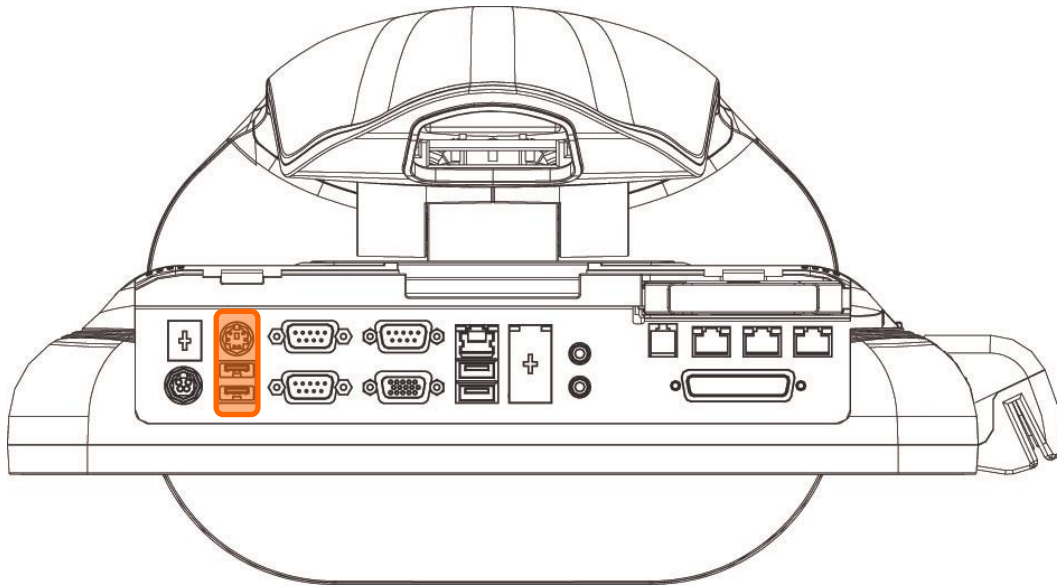
(7) Setting up: Connection USB Port

USB ports are provided in the POS unit, two at the rear I/O and four at the side, all of which support the standard USB 2.0.
Some USB devices (optional devices) are only functional with specific driver software installed.
If multiple USB devices are used together, this may result in abnormal functionality.
Using a USB hub with external adapter for supplying power is recommended.
Dependent on the type of device, it is possible for the USB device to be recognized later than normal.

USB port (6port support)
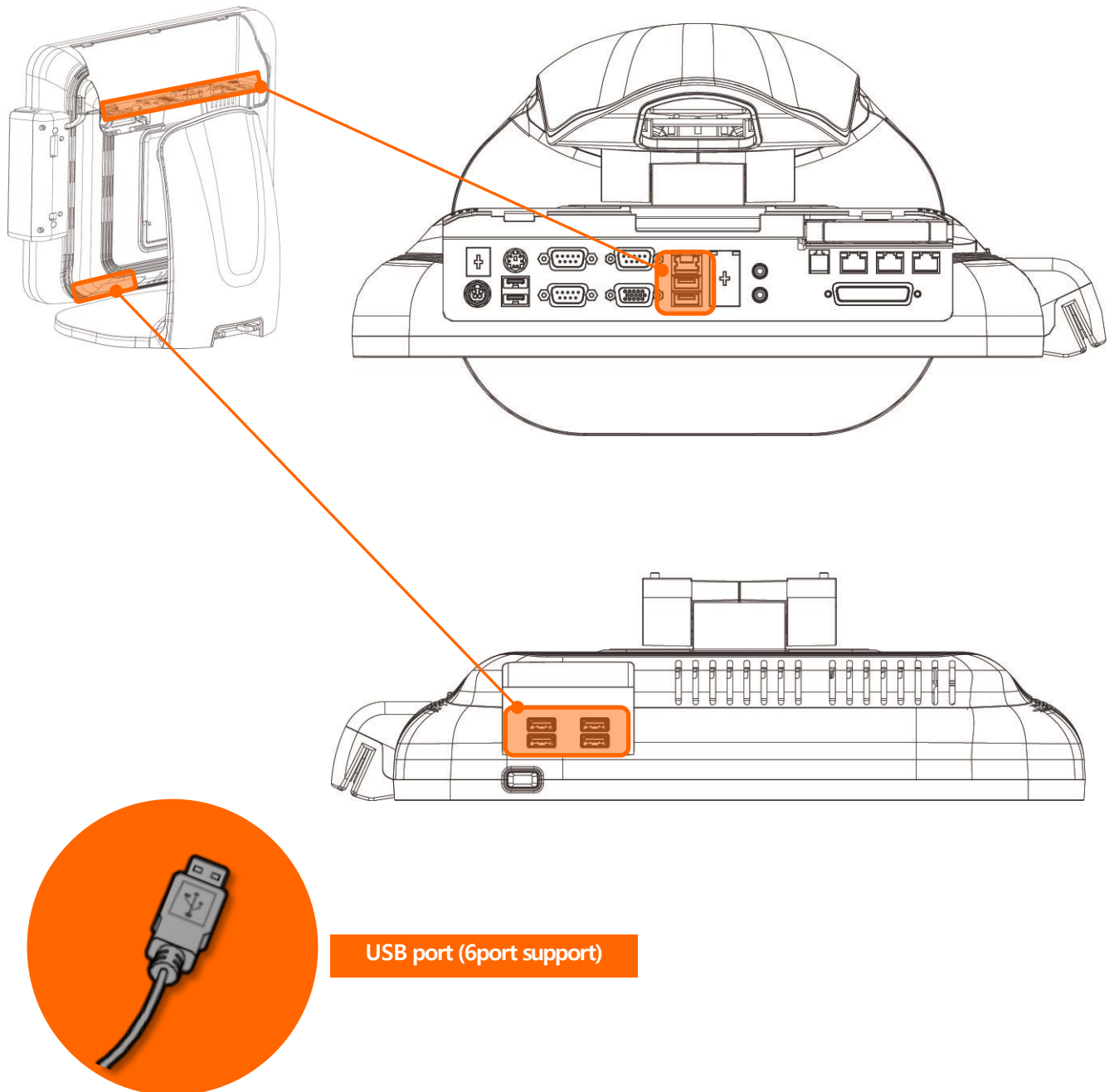
(8) Setting up: Connection via Ethernet Port (LAN)

The Ethernet port located at the rear I/O supports 10/100/1000Mbps using an RJ45 connector cable.
When connected properly, the LAN LED light will be switched on.
Through a network hub.
Refer to the table below for the LAN port LED indications.
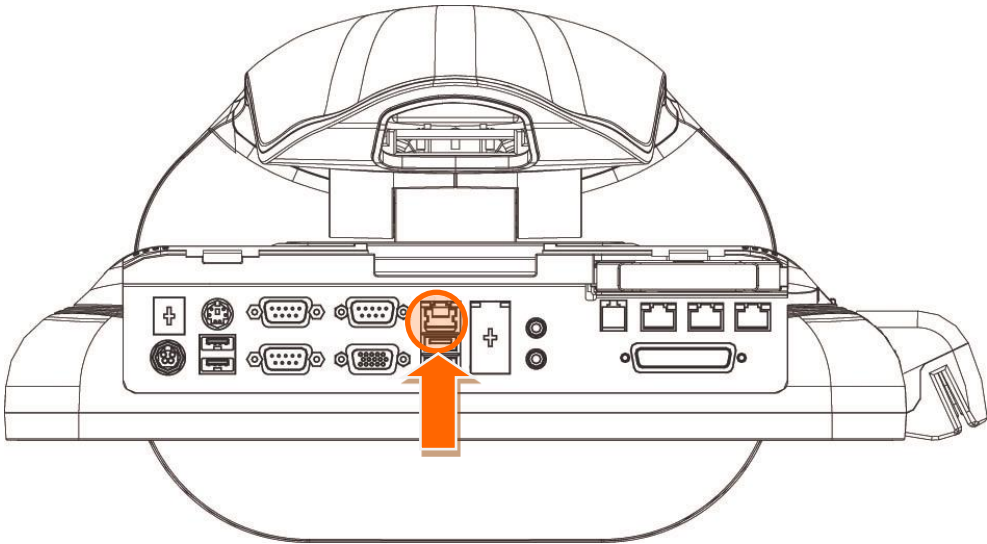
LINK/ACT LED	LINK /ACT LED		SPEED LED	
	Status	Description	Status	Description
	OFF	No link	OFF	10Mbps connection
	YELLOW	Linked	ORANGE	100Mbps connection
SPEED LED	BLINKING	Data activity	GREEN	1Gbps connection

(9) Setting up: Line-out, Mic-in, Line-in connection

- **Line In port (light blue):** This port connects a tape, CD, DVD player, Sources.
- **Line Out port (lime):** This port connects a headphone or a speaker.In4-channel, 6-channel and 8-channel configuration, the function of this port becomes Front Speaker Out.
- **Microphone port (pink):** This port connects a microphone.

3.5Φ type
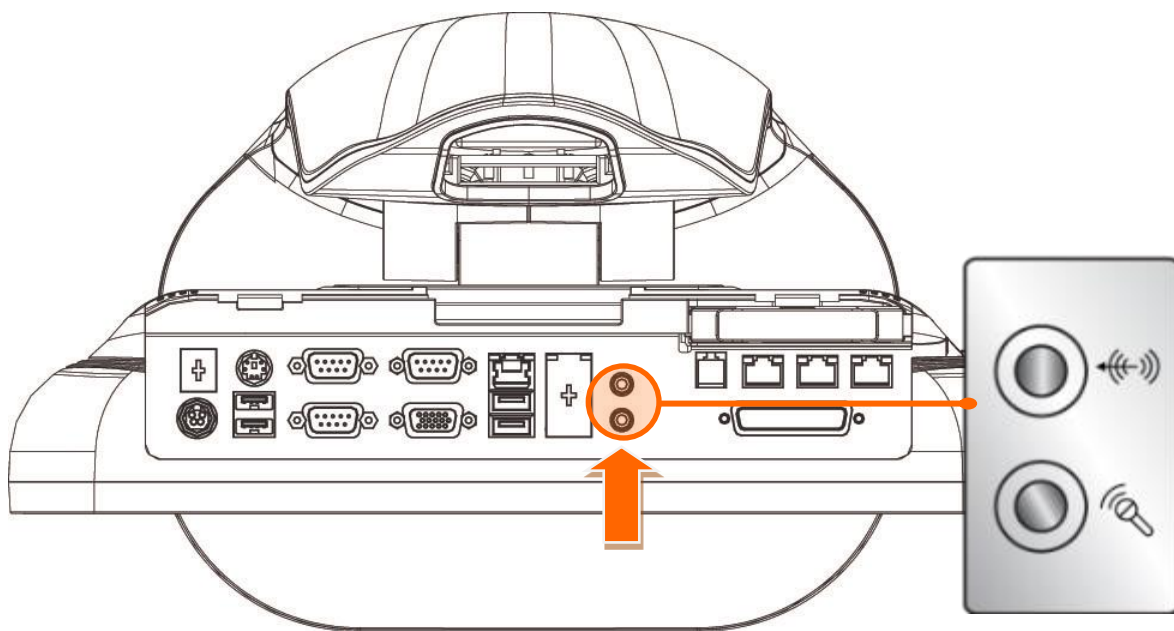
(10) Setting up: Printer Connection

Connect printer cable to either Serial &USB port as required.
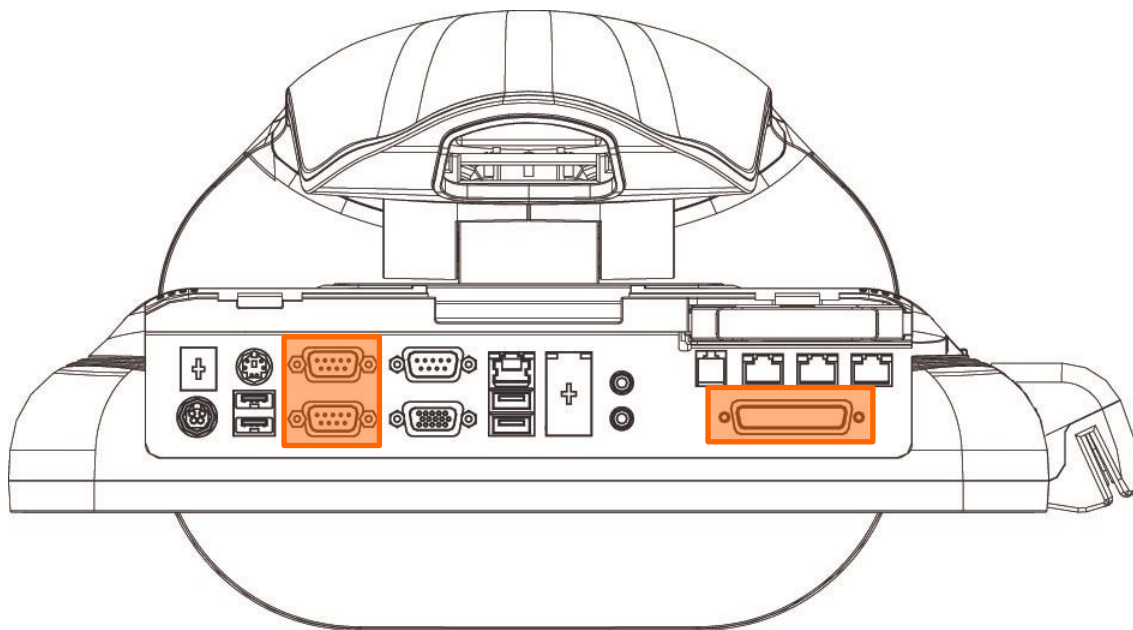
(11) Setting up: Power Cable Connection

The 'POS 21000 D25' POS system is equipped with a 12V/ 5A power adaptor.
Connect the cable to the DC-IN port on system IO panel.
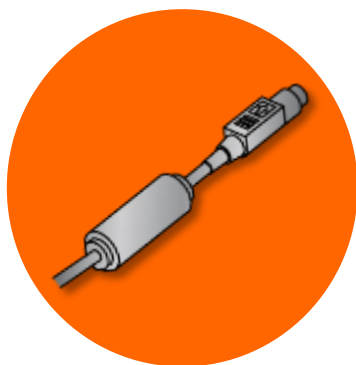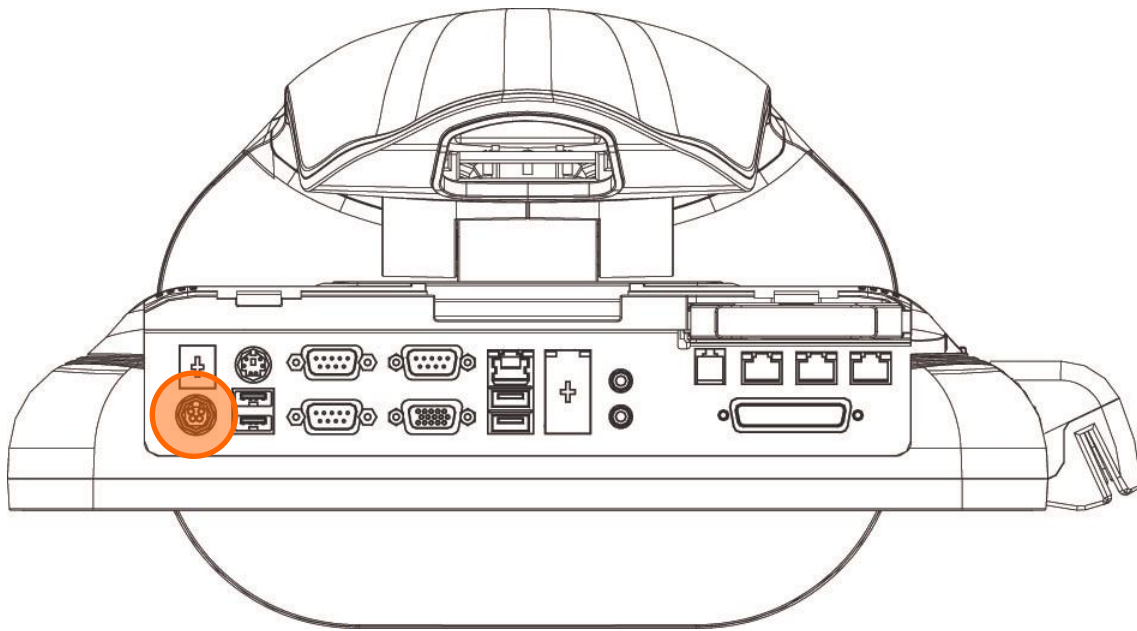
CAUTION : Do not pull on the adaptor cable! Disconnect cable with pulling the plug cap.

(12) Switching On POS

1. Press POWER button on the POS unit. (POWER LED will light up.)
   The power switch is located right hand side of the main body under the display unit.
2. Confirm that Windows loads correctly.
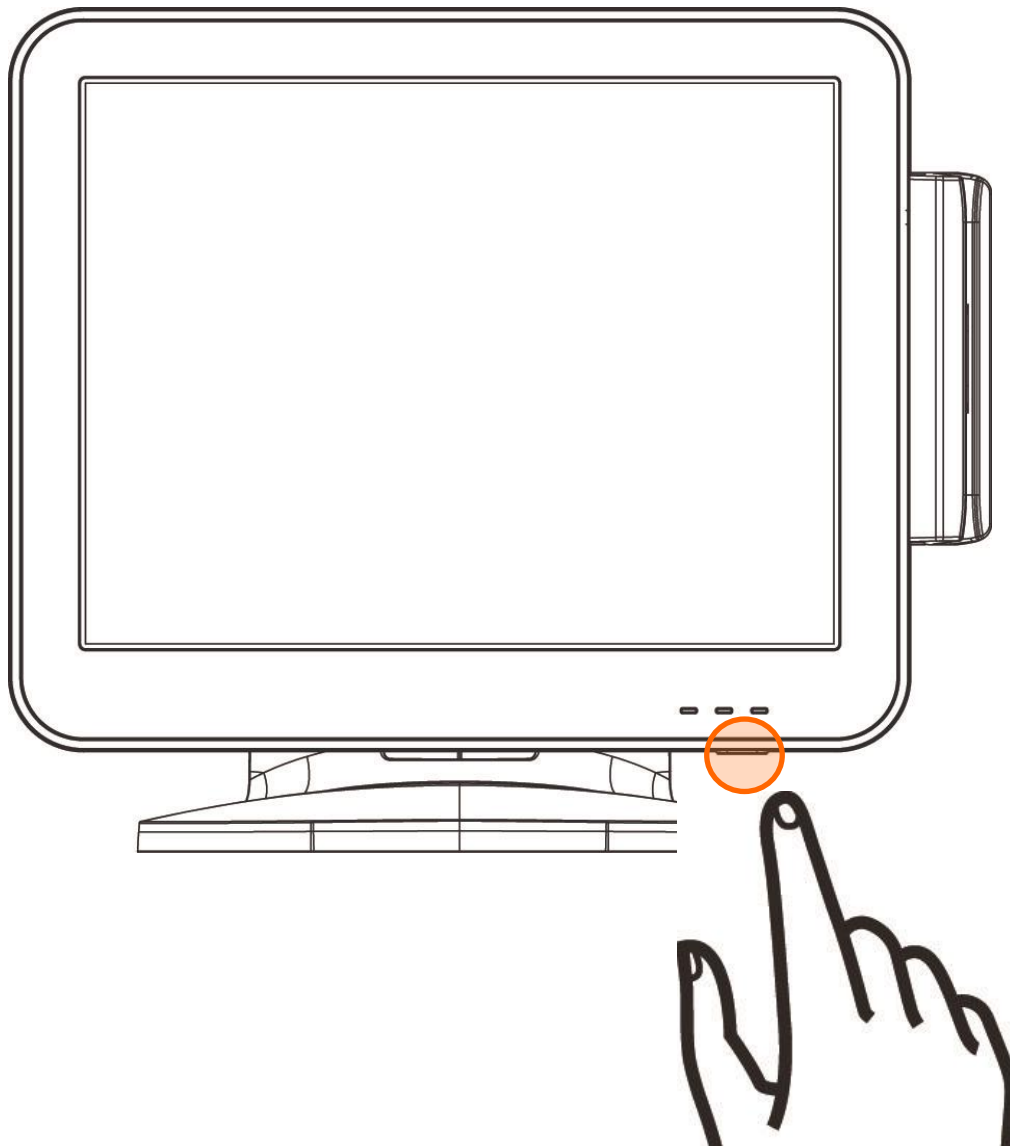
(13) Shutting Down POS

* For product stability, we recommend closing Windows from the O/S. Please make sure that you have closed all applications before closing Windows.

1. Click 'Start' and select 'Turn off Computer'
2. Click 'Shut Down' to close Windows.

(ex: POSReady2009 or Windows XP)

(14) System Drivers

Please visit our website: www.posbank.com for the latest driver updates.
Supported devices: Cash drawer, CDP (Customer Display Panel), MSR (Magnetic Swipe Reader) and printer.

Driver installation

● **Installation method :**

Driver will automatically install by clicking SETUP.EXE in your driver CD.
If you require any help with installing or using our OPOS system, please contact our customer service center.

● **Folder of contents of POS terminal installation driver:**

1. CHIP SET DRV installation
2. VIDEO (VGA) DRV installation
3. TOUCH DRV installation
4. AUDIO DRV installation method
5. LAN DRV installations
6. AMT & ME Driver installation
7. User's Manual, Installation guide

2. BLUO D25 Module Replacement

(1) Separating LCD module
Warning: Completely remove power cable when opening main unit or installing optional devices.

LCD Monitor module
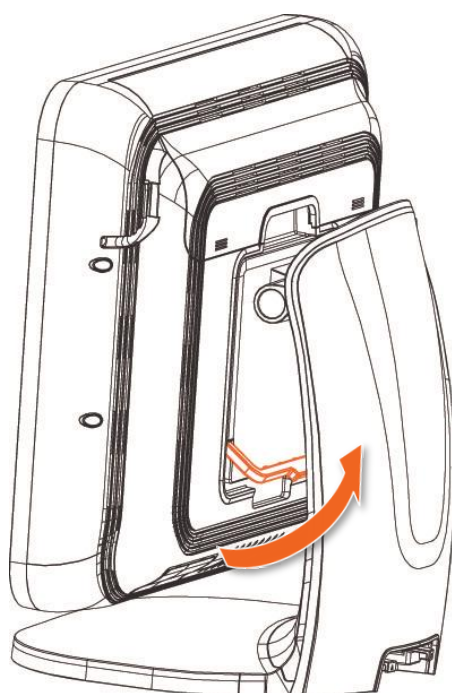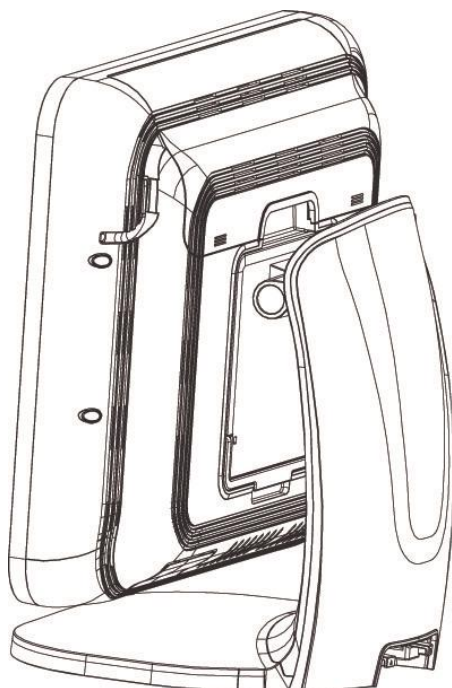
Step 1. Lift up the Hinge Holder.
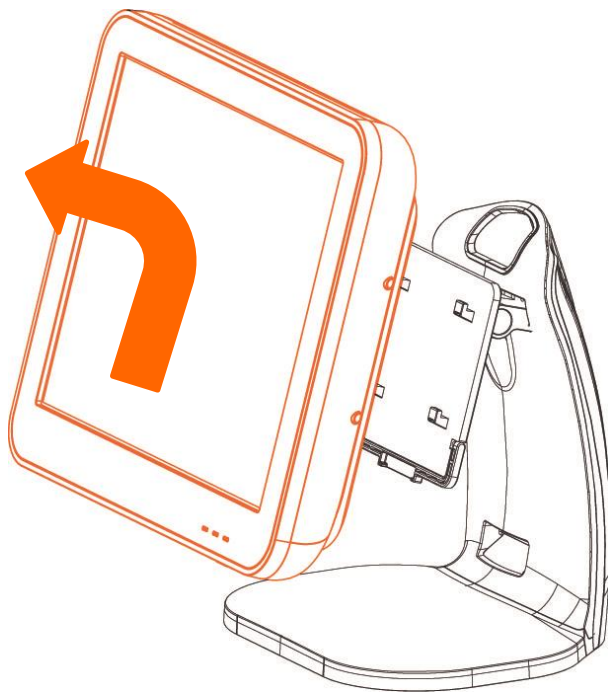
Step 2. Remove the AD Cable.
Step 3. Lift up the LCD module and detach from the Stand.

Caution
Power must be disconnected before replacing SSD.
Before replace the device, remove static electricity of technician.

(2) Separating SSD module

Warning: Completely remove power cable when opening main unit or installing optional devices.

SSD Module
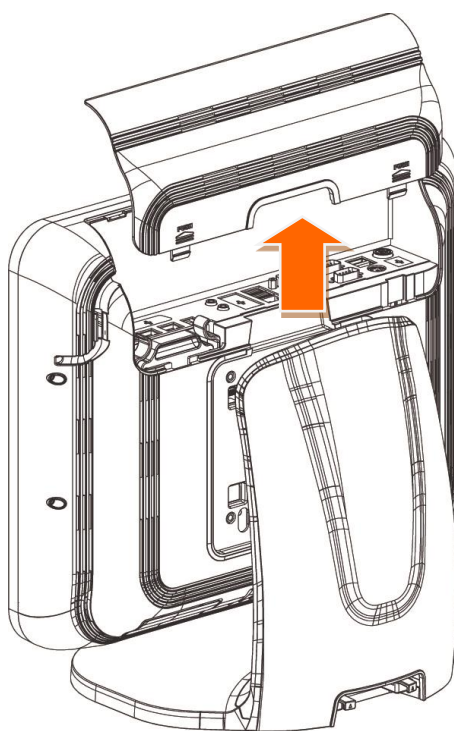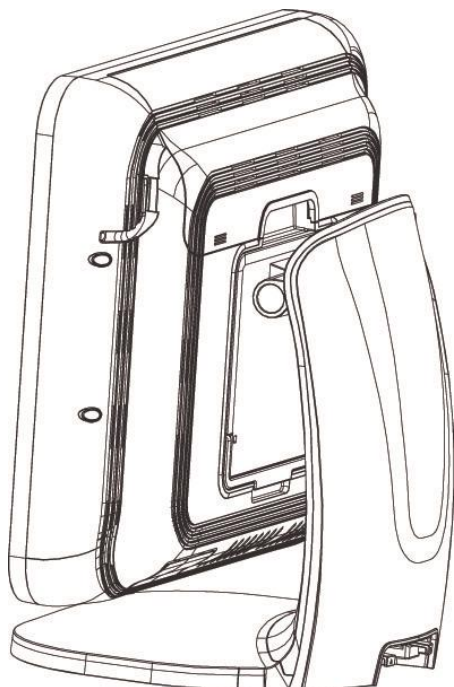
Step 1. Lift up the I/O Cover.
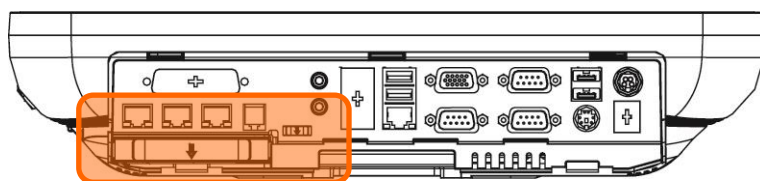
[ZOOM IN]
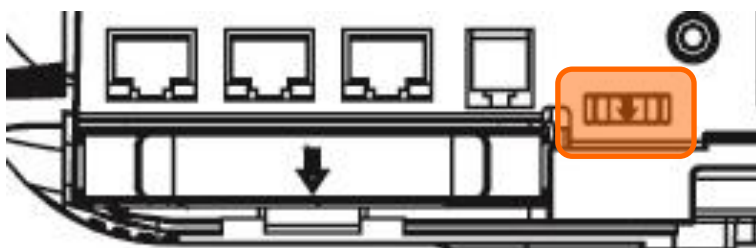
Step2. See printed image for details.

SSD Module
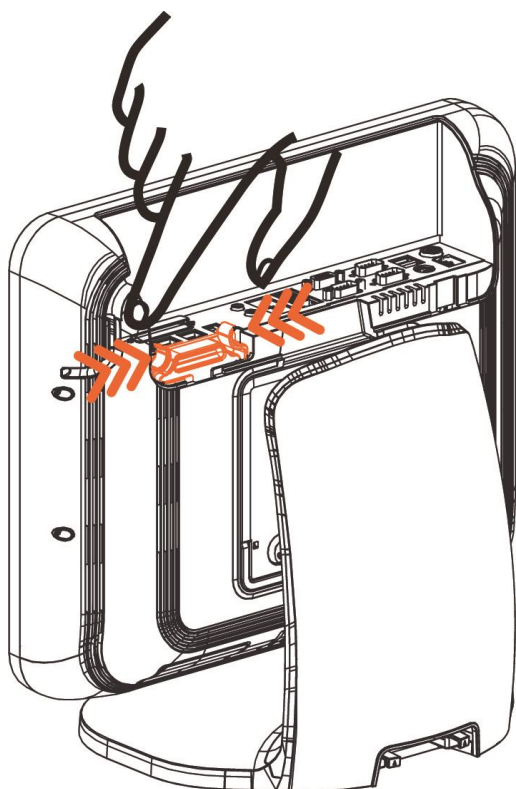
Step3. Pull out SSD Tray by pressing the Grip.
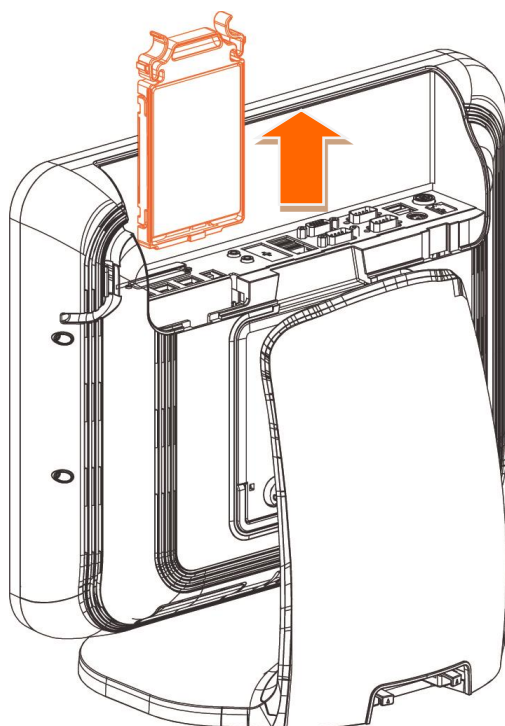
Step4. Lift up the SSD Tray.

Push
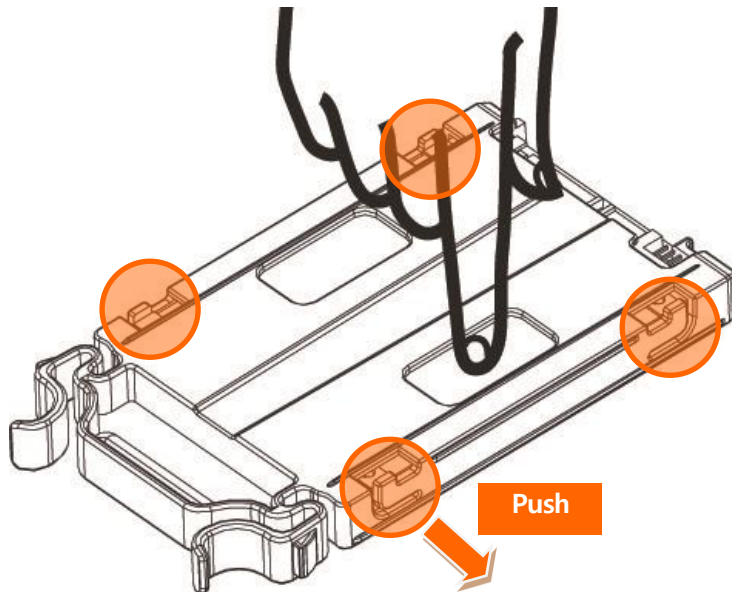
Step5. Open four Tray hinges carefully in opposite directions as in image.

Step6. SSD will be separated smoothly.
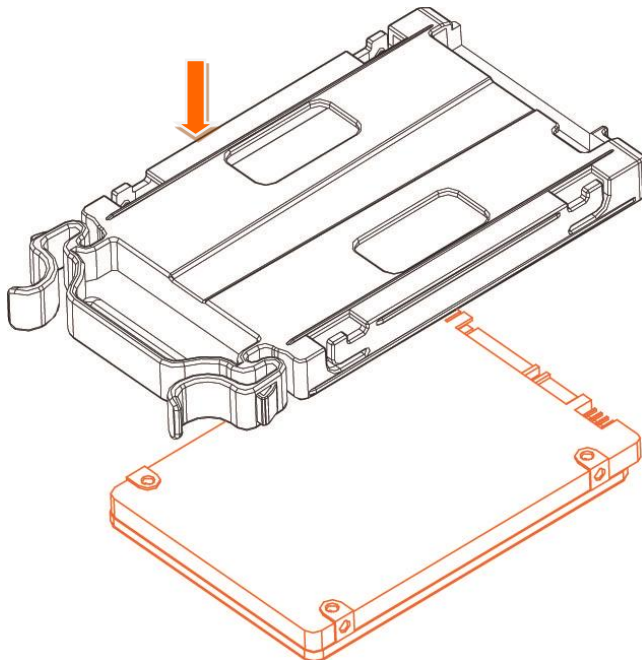
Step7. Assemble SSD bottom to join Tray bottom.

Caution
Power must be disconnected before replacing SSD.
Before replace the device, remove static electricity of technician.

(3) Separating Mother board & SUB PCB module
Warning: Completely remove power cable when opening main unit or installing optional devices.

Mother board Module & SUB PCB
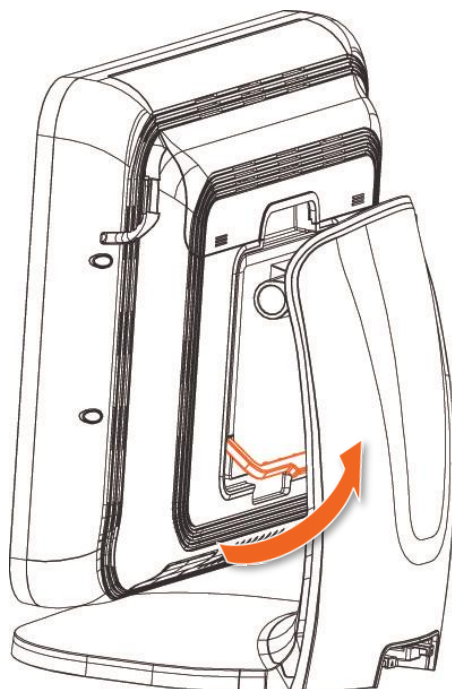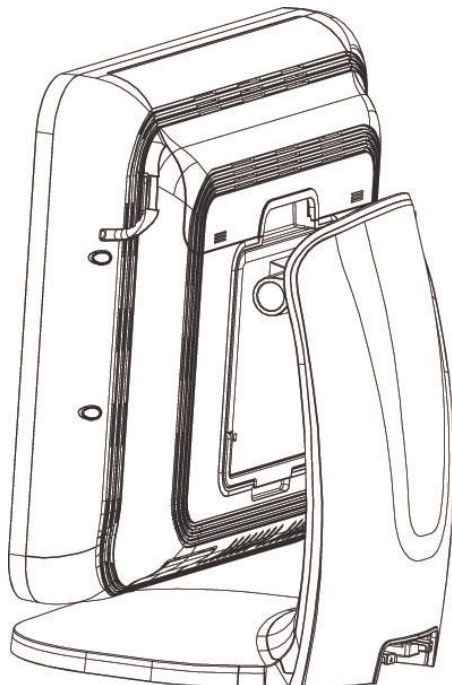
Step 1. Remove the AD Cable.
Step 2. Lift up the Hinge Holder.
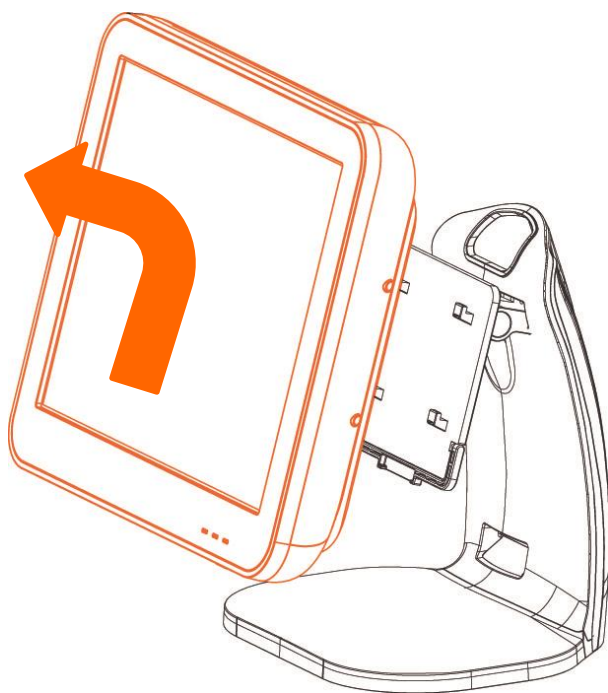
Step 3. Lift up the LCD module and detach from the Stand.

Step4. Remove the Rear cover.
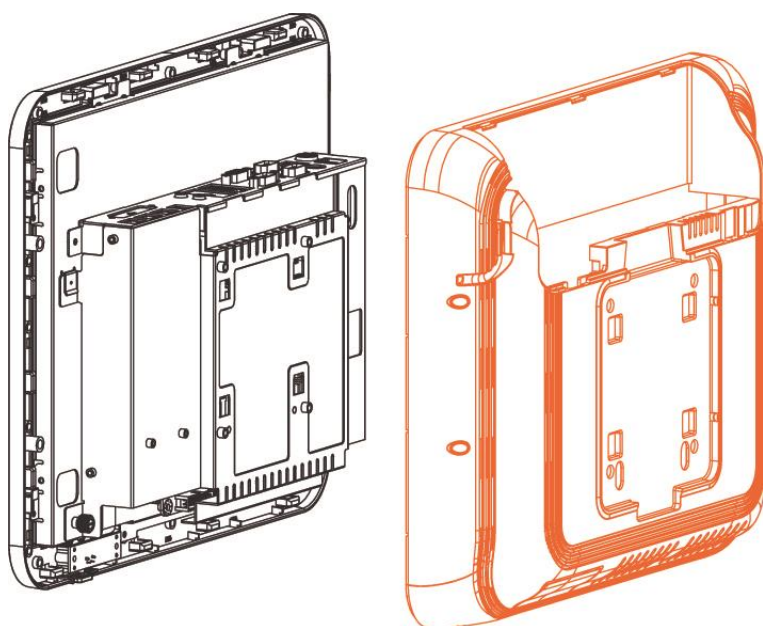
Mother board Module & SUB PCB
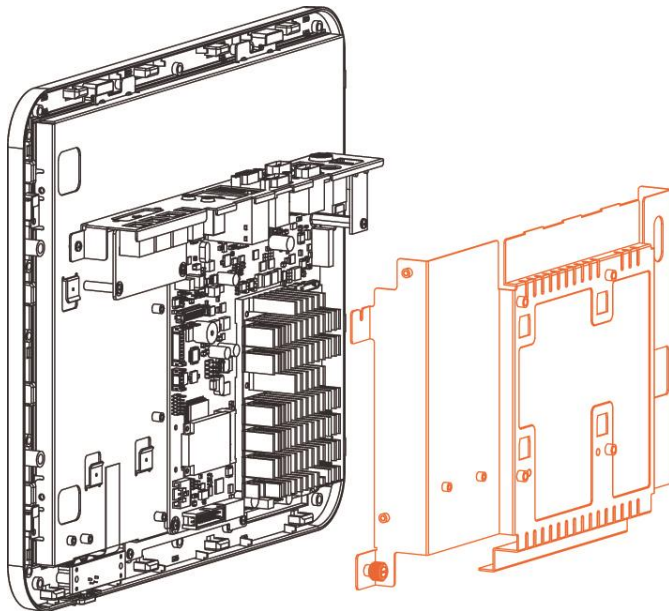
Step 5. Turn two hand screws and remove Main bracket.
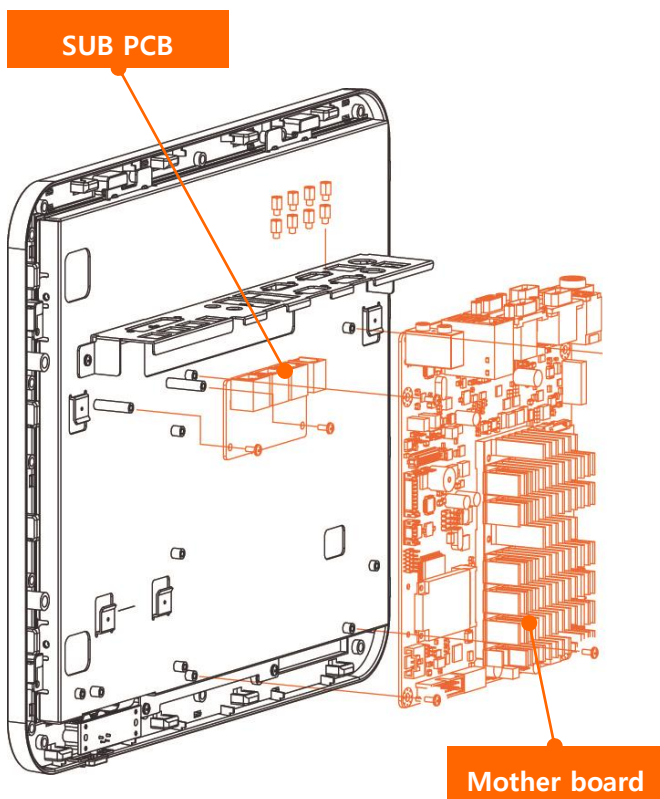
SUB PCB

Step6. Turn screws and replace Mother board.

Step7. Turn screws and replace SUB PCB.

Mother board
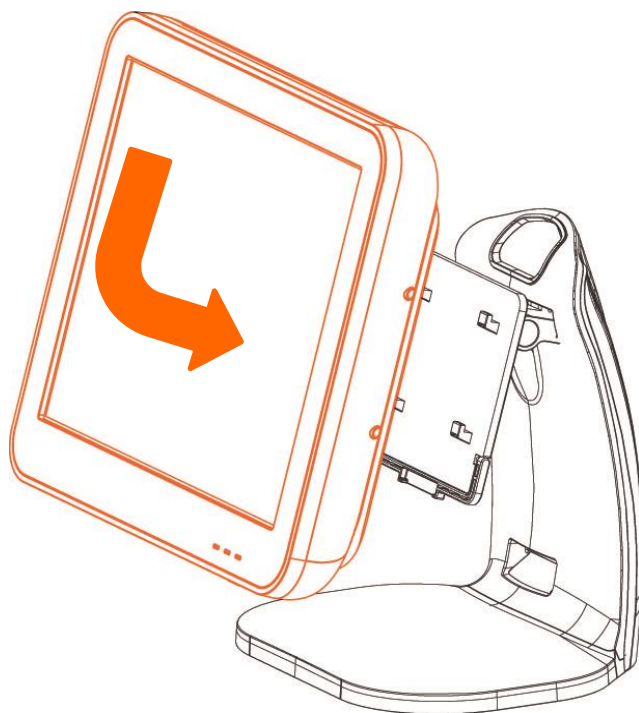
Step8. Reassemble a unit using the Reverse procedure of step 1-5 above.

(4) Separating Adapter module

Warning: Completely remove power cable when opening main unit or installing optional devices.

Adapter module
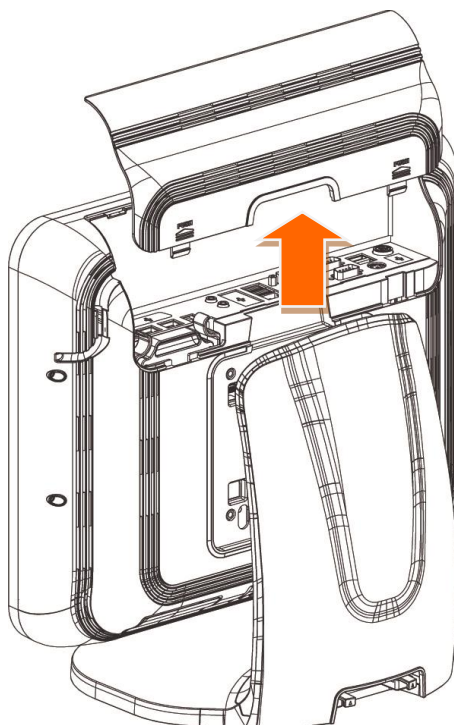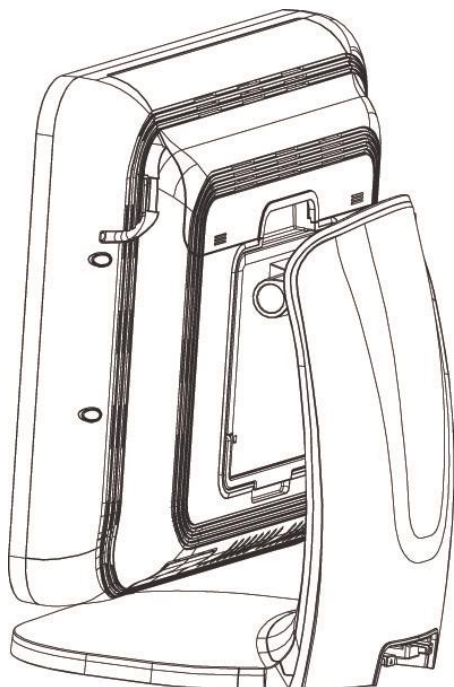
Step 1. Lift up the I/O Cover.

Adapter module
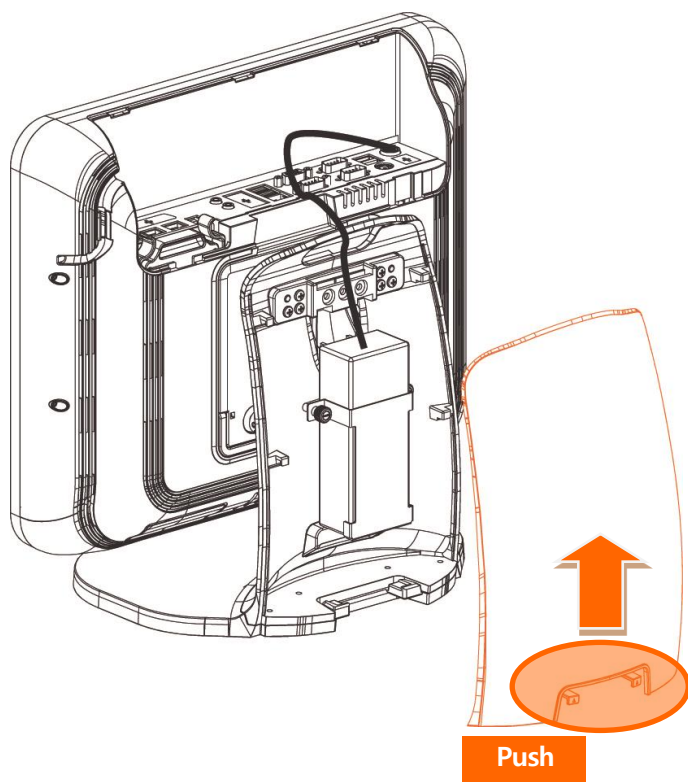
Step 2. Pull out the Stand back from the Stand module and remove.

Push
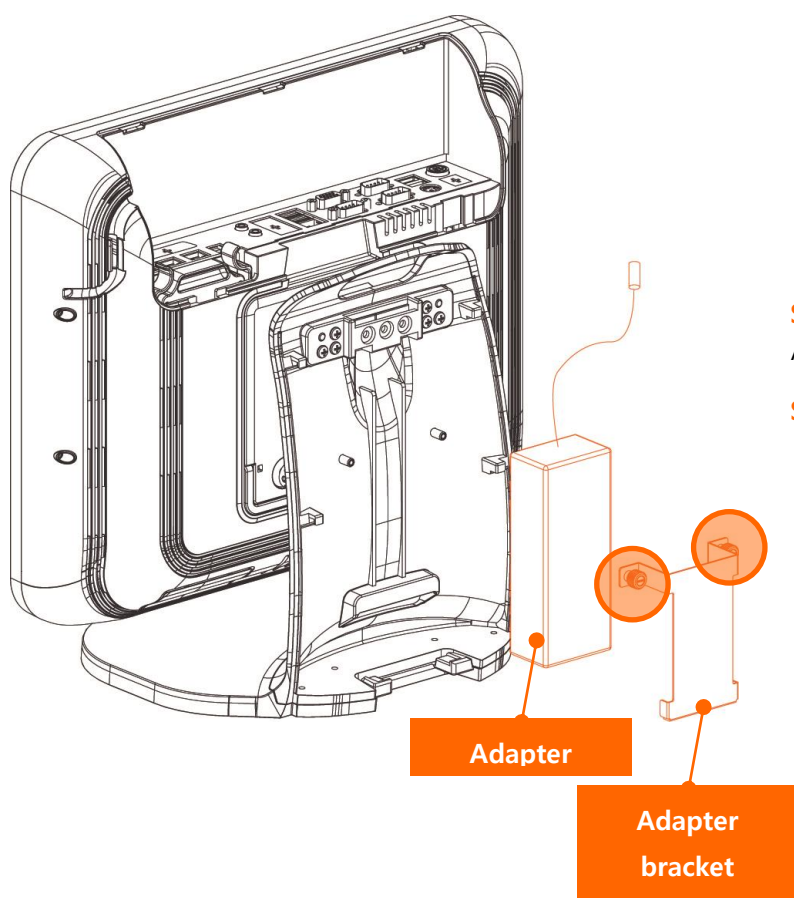
Step 3. Turn hand screws and remove Adapter bracket.

Step 4. Replace the Adapter.

Adapter

Adapter bracket

(5) Separating Stand back

* Warning: Completely remove power cable when opening main unit or installing optional devices.

Stand back
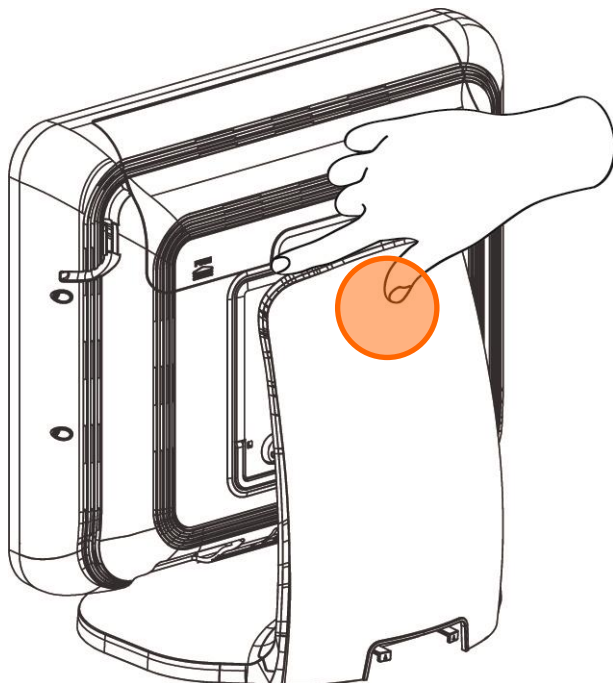
Step1. Press upper side of Stand as in image
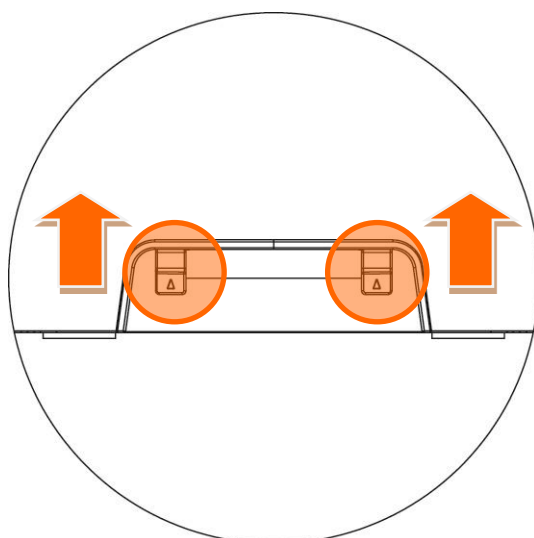
Step2. Pull up the hook on bottom of the back side of stand
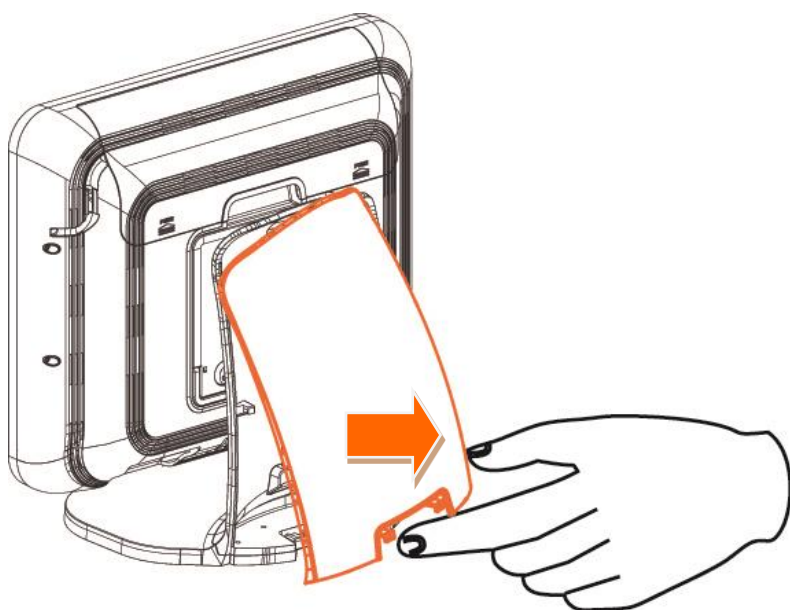
Stand back

Step 3. Disassemble Stand back by pulling down to outward.

CAUTION : Remove AC cable before disassembling Stand back.

3. Installation of option device

(1) Installation CDP module
* Warning: Completely remove power cable when opening main unit or installing optional devices.

CDP - Option

Step 1. Stand Back is now removed.

Push

Step 2. Assemble the 2nd display with the Hinge of the body.

Step 3. Fasten 3 screws to fix the 2nd display.
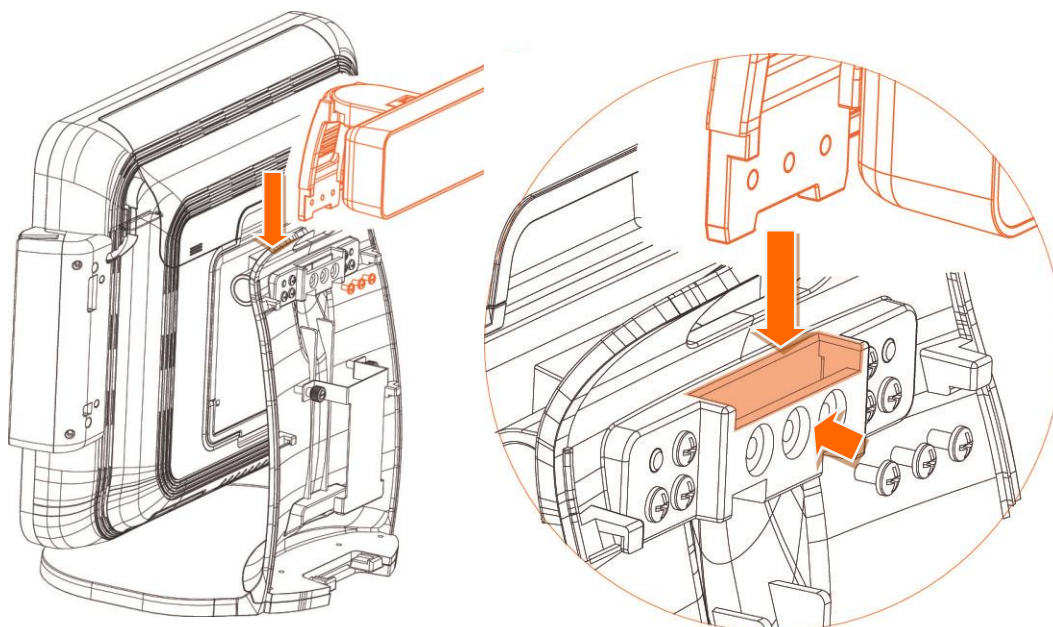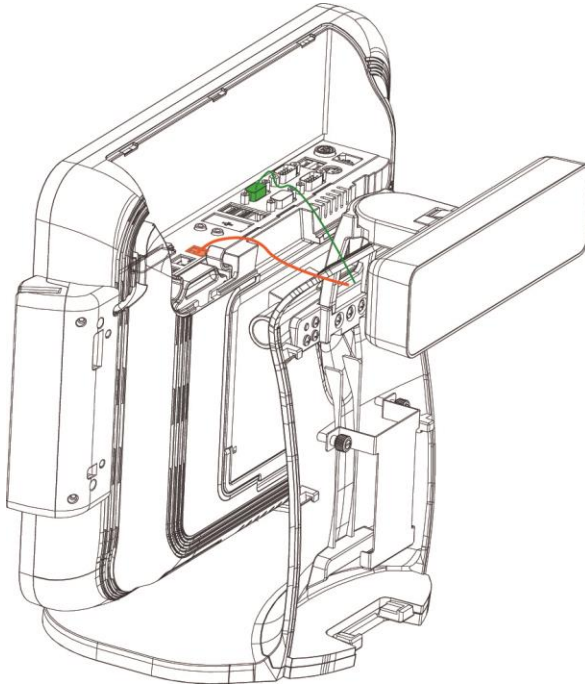
Step 4 . Remove the Io Cover and Put holes in the sample place.
(RJ11, VGA Port)
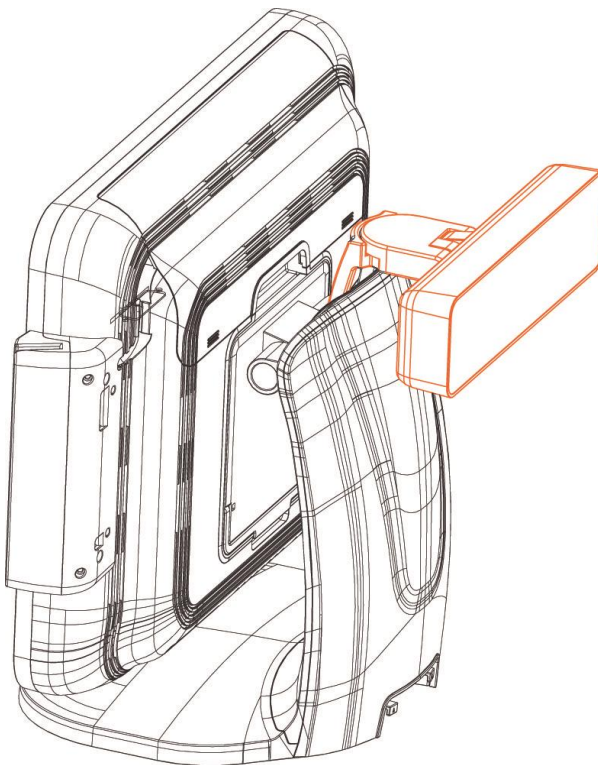
Step 5. Assemble the Stand back and I/O cover.

(2) Installation 2nd Display module

* Warning: Completely remove power cable when opening main unit or installing optional devices.

2nd display : 10.1inch, 10.4inch, 12.1inch Display   - Option

Push
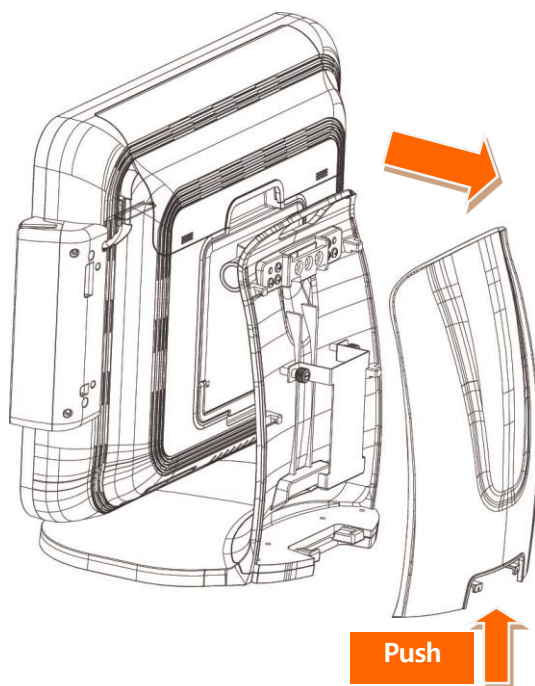
Step 1. Stand Back is now removed.
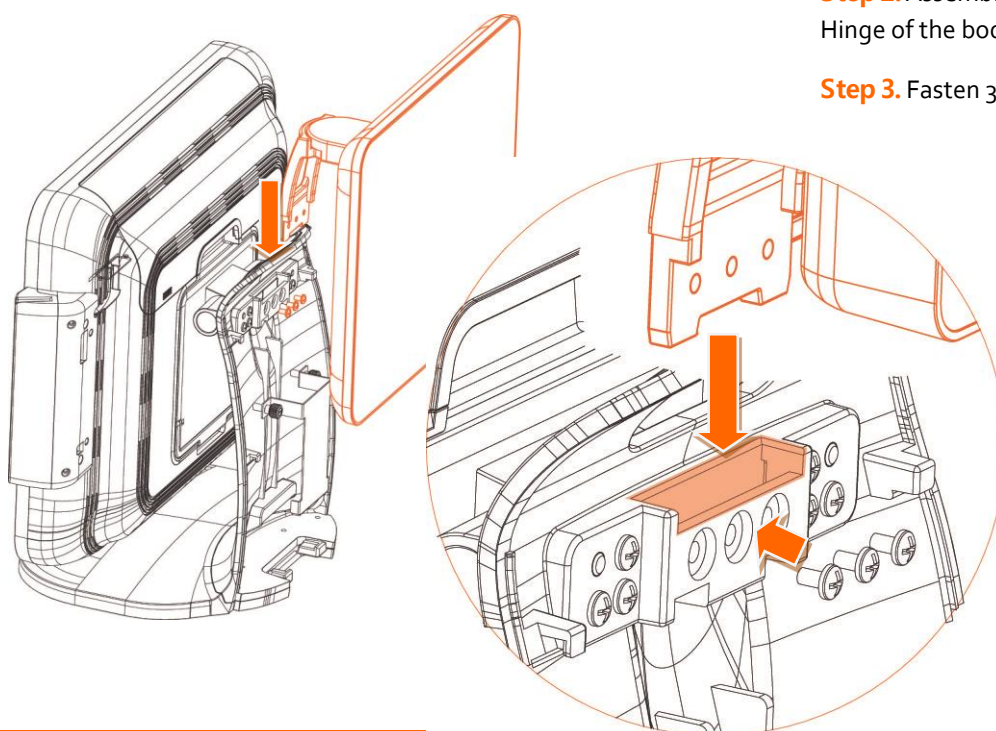
Step 2. Assemble the 2nd display with the Hinge of the body.

Step 3. Fasten 3 screw to fix the 2nd display.
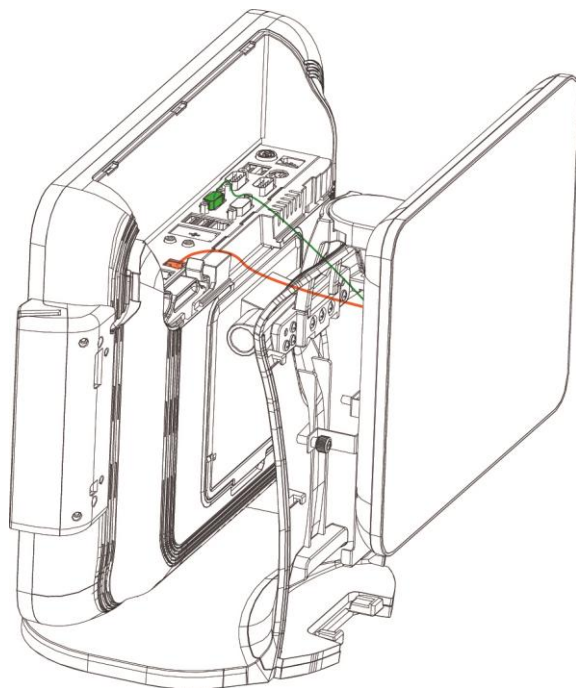
Step 4 . Remove the Io Cover and Put holes in the sample place.
(RJ11, VGA Port)
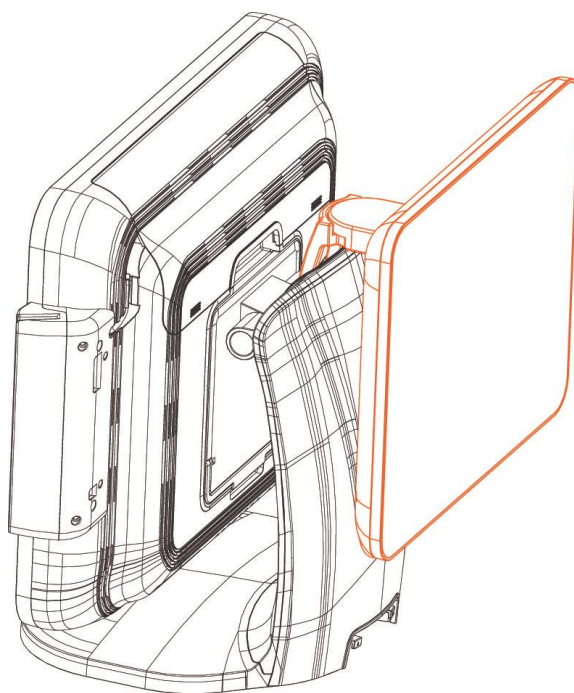
Step 5. Assemble the Stand back and I/O cover.

(3) Installation MSR module

Warning: Completely remove power cable when opening main unit or installing optional devices.

MSR - Option
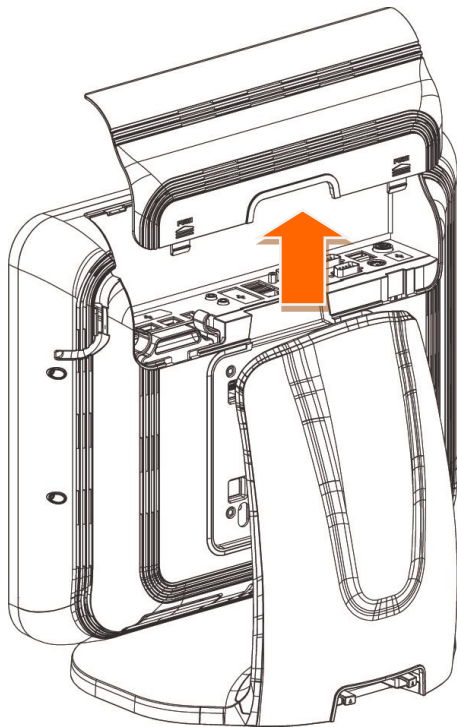
Step 1. Lift up the I/O Cover.
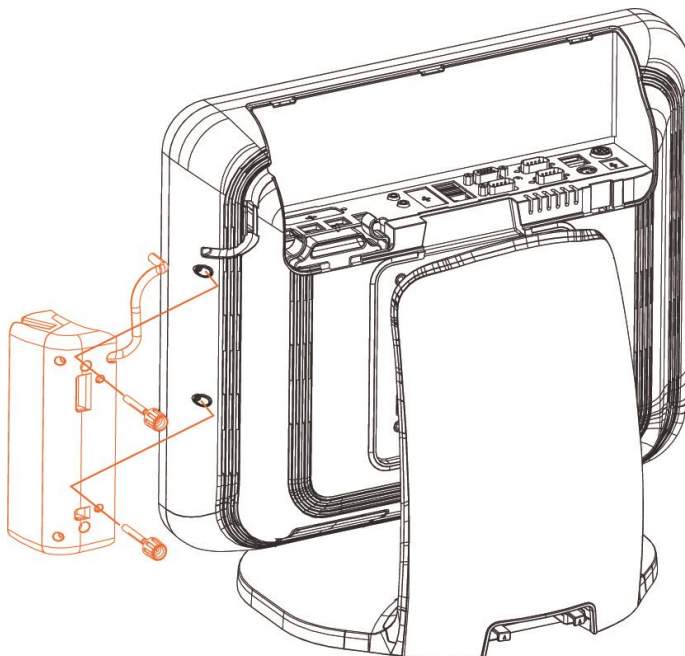
Step2. Assemble 2 hand screw from Side using hand. (as show above)
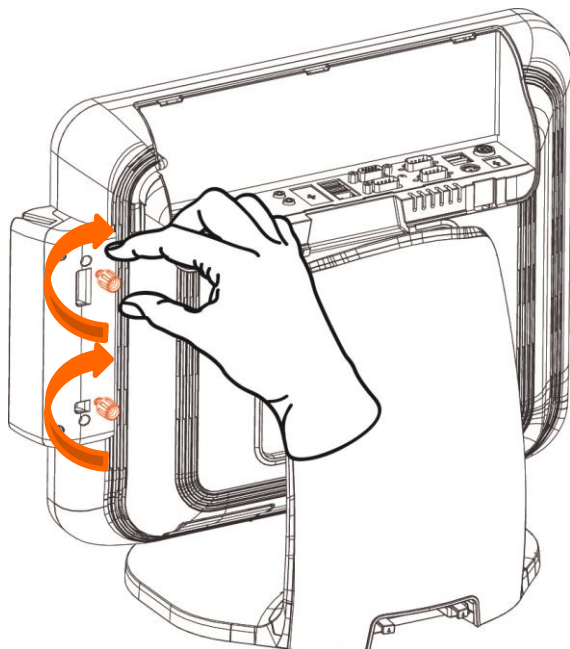
Step4. Assemble the MSR.
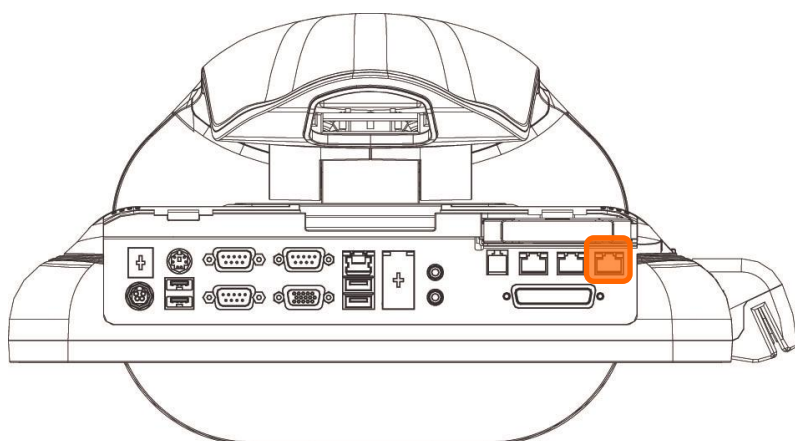
Step5. I/O part put holes in the sample place. (RJ11 PORT)

Step 6. Access to POSBANK homepage
Step 7. Click on the monitor button on the toolbar
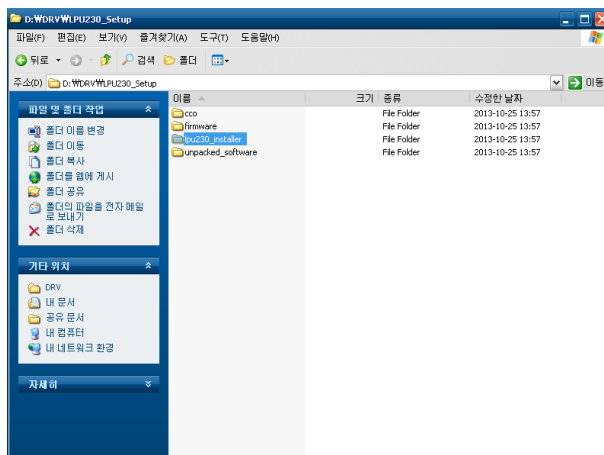
Step 8. Download the MSR mapper file.
Step 9. Double click lpu230.exe file.

Step 10. Click NEXT..

Step 11.. After the installation is complete
 'Select Device' to Make sure that the choice is normally a FW update.

(4) Installation Speakers module

* Warning: Completely remove power cable when opening main unit or installing optional devices.

Speaker - Option
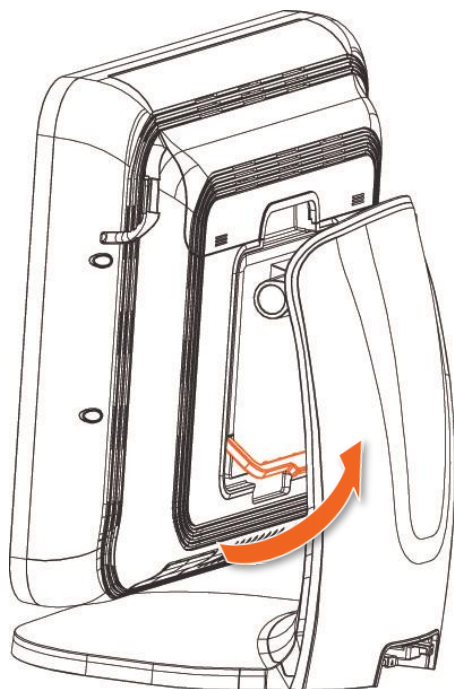
Step 1. Remove the AD Cable
Step 2. Lift up the Hinge Holder
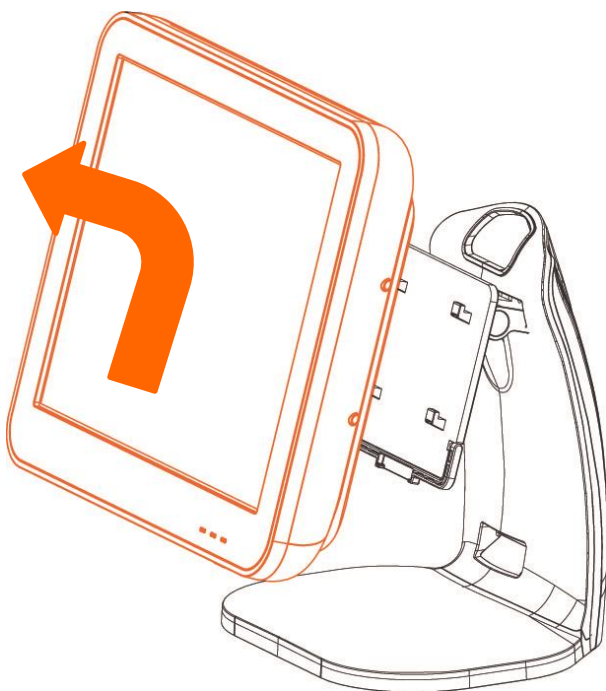
Step 3. Lift up the LCD module and detach from the Stand.
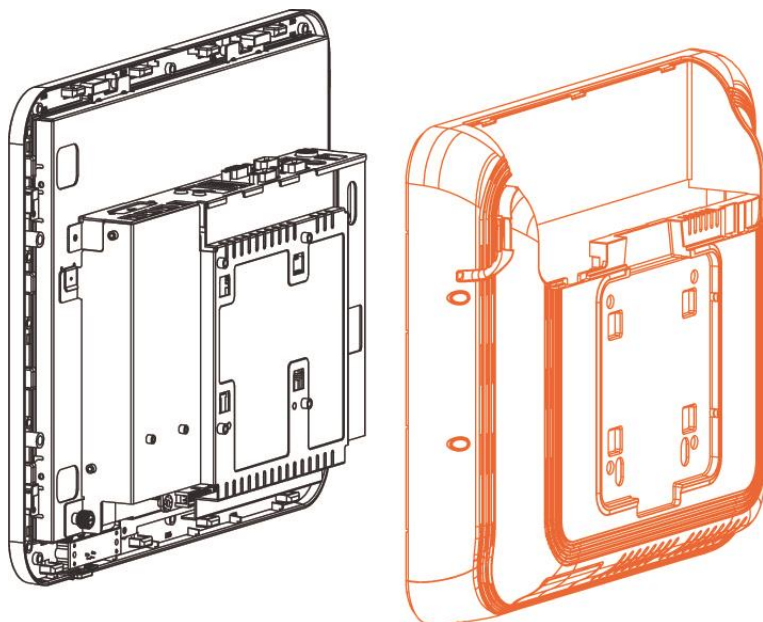
Step 4. Remove the Rear cover.
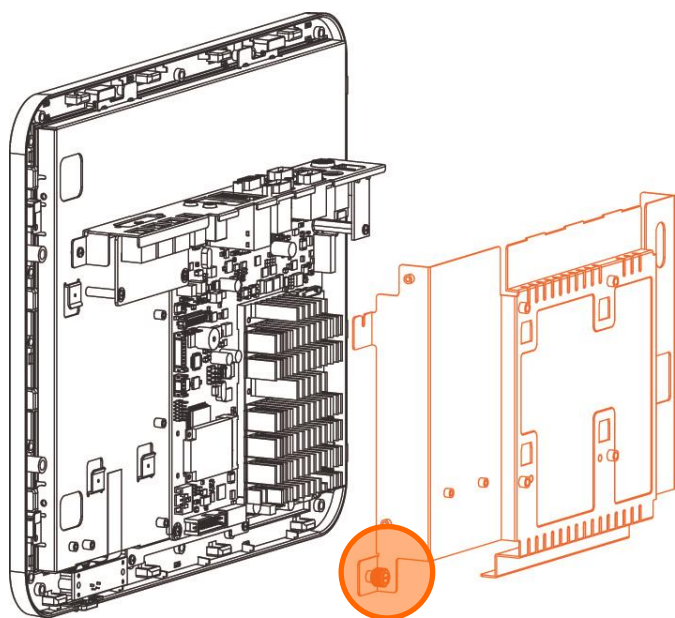
Step 5. Turn two hand screws and remove Main bracket.

Speaker - Option
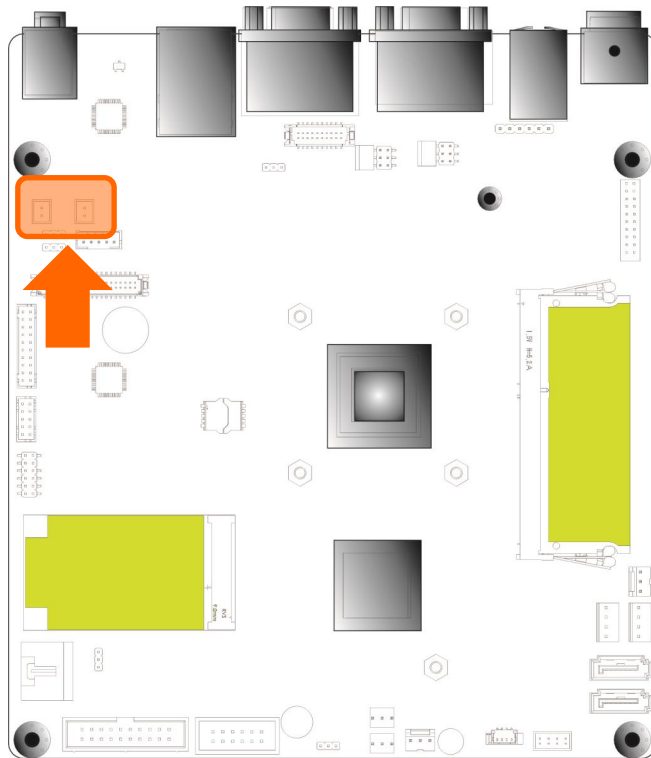
Step 6. Connect each Speaker to extend Speaker cable.

Step7. Assemble the Main bracket.
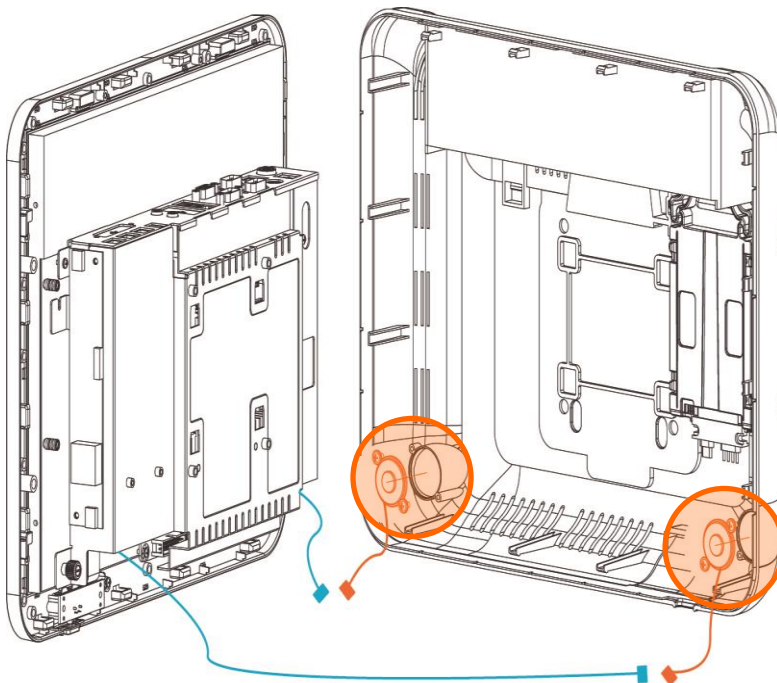
Step8. Assemble 2 Speakers to inner Side of body by screw.

Step9. Connect each Speaker to Speaker cable.
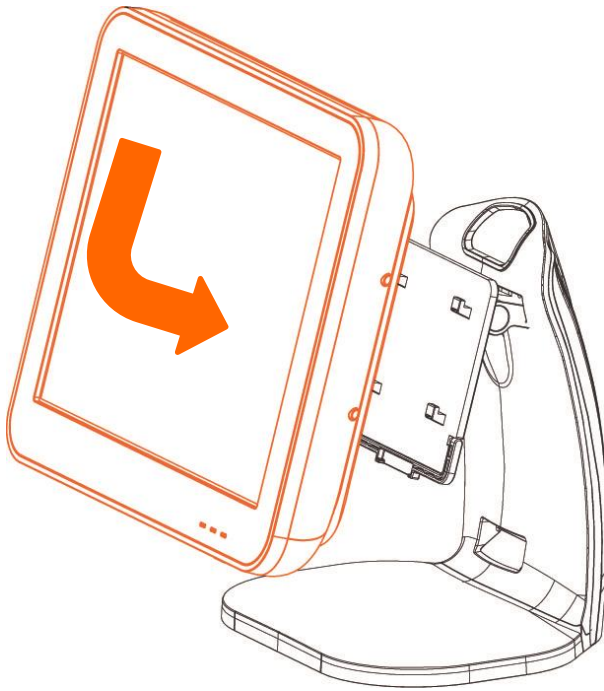
Step10. Reassemble a unit using the Reverse procedure of stpe1-5 above.

(5) Installation LPT module

Warning: Completely remove power cable when opening main unit or installing optional devices.

LPT - Option
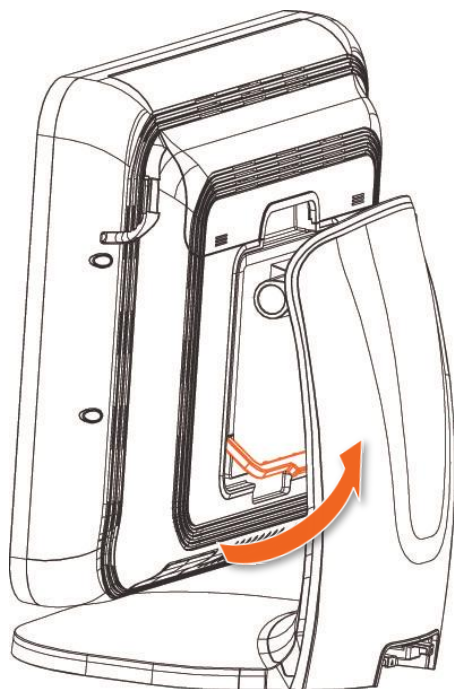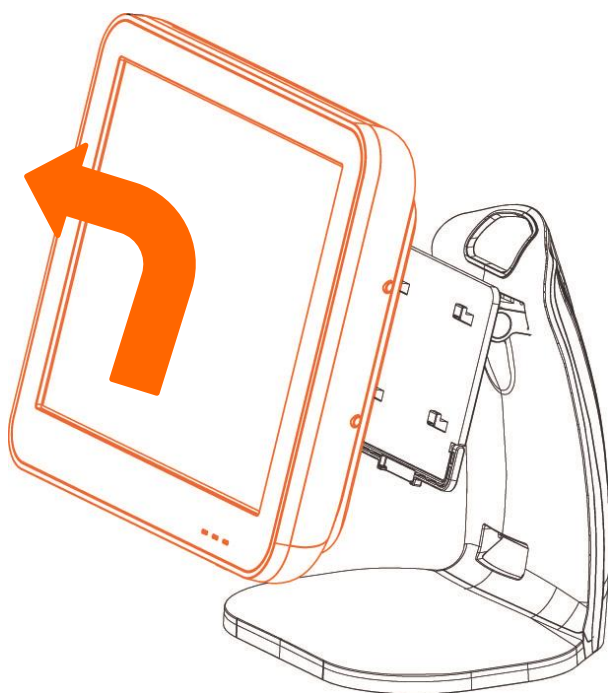
Step 1. Remove the AD Cable
Step 2. Lift up the Hinge Holder

Step 3. Lift up the LCD module and detach from the Stand.
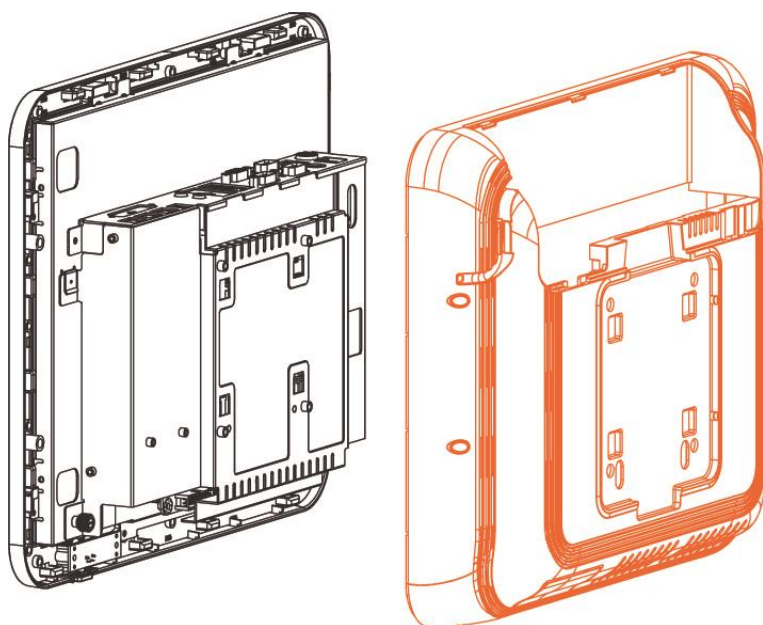
Step 4. Remove the Rear cover.
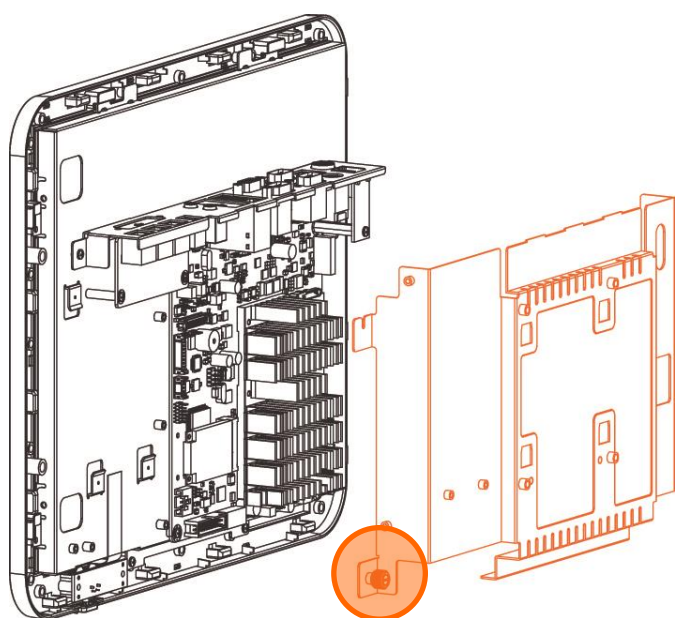
Step 5. Turn two hand screws and remove Main bracket.

Step6. Remove the LPT dummy from I/O bracket.

Step7. Assemble the LPT with the I/O bracket.
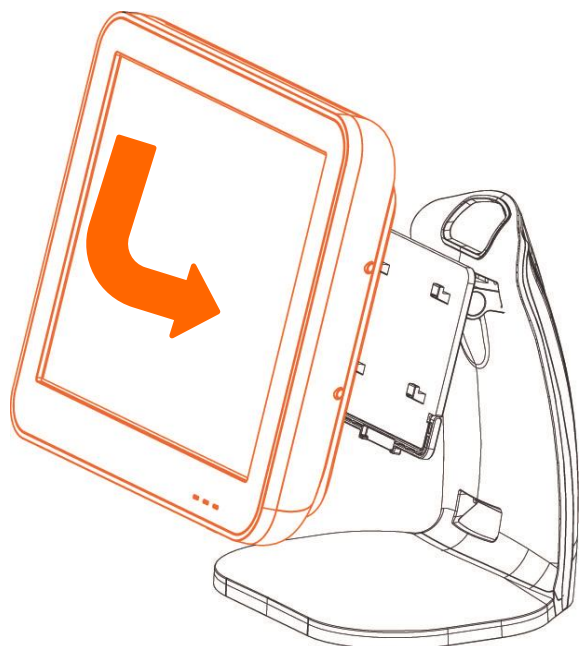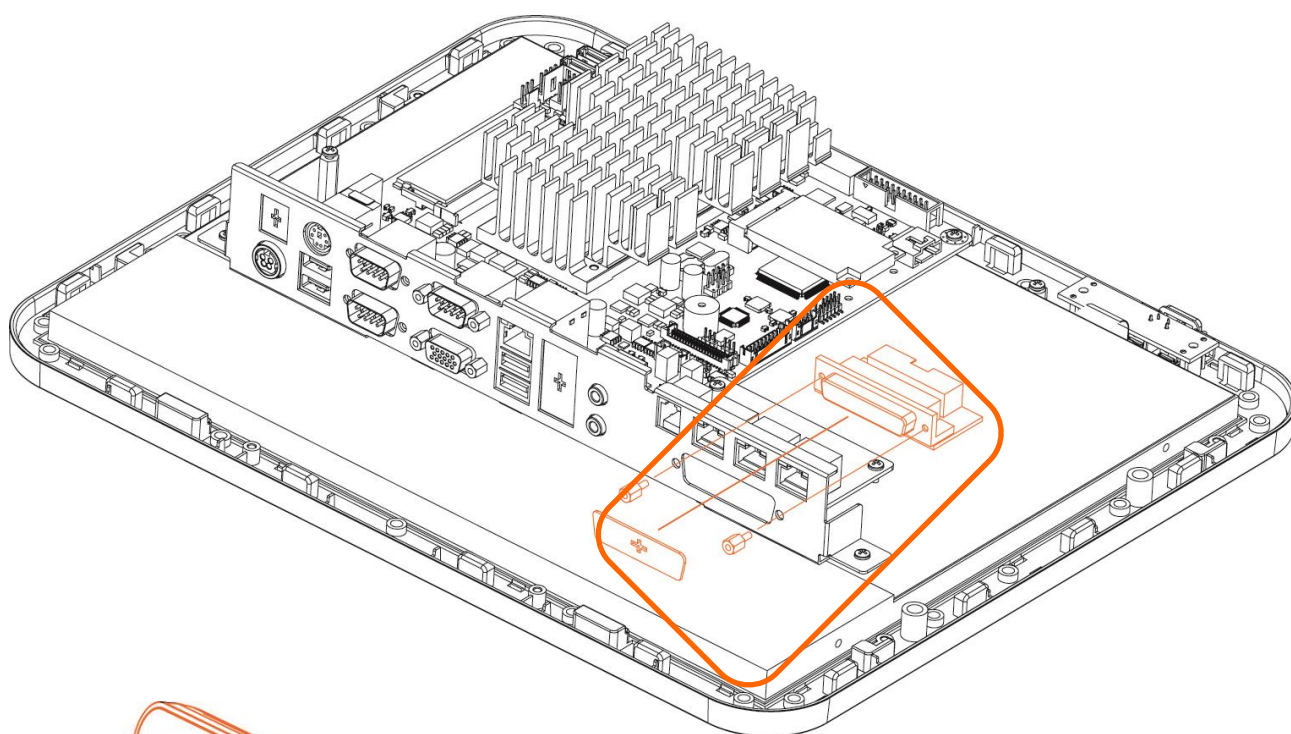
Step8. Reassemble a unit using the Reverse procedure of stpe1-5 above.

(6) Installation USB PCB module

Warning: Completely remove power cable when opening main unit or installing optional devices.

USB PCB - Option
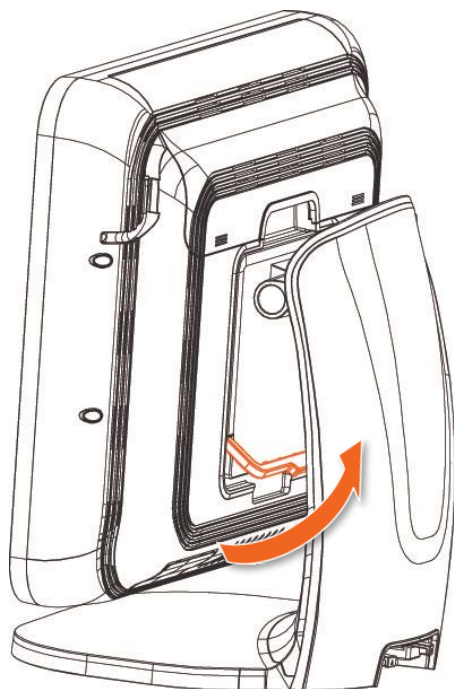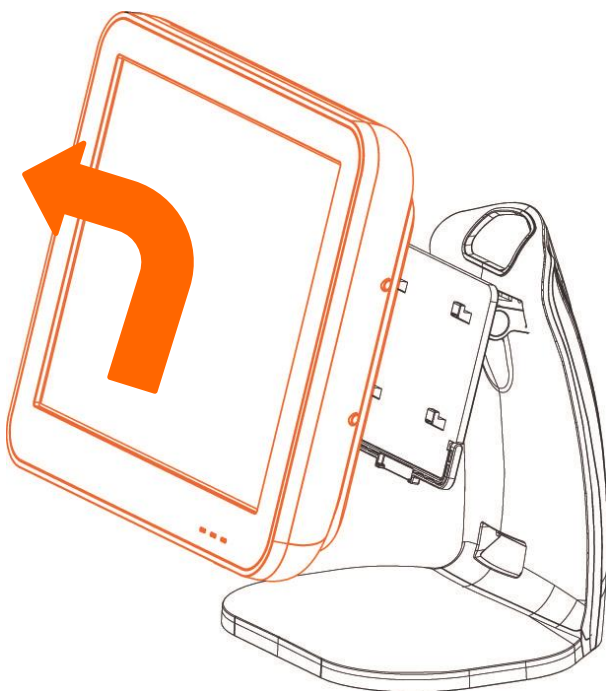
Step 1. Remove the AD Cable
Step 2. Lift up the Hinge Holder

Step 3. Lift up the LCD module and detach from the Stand.
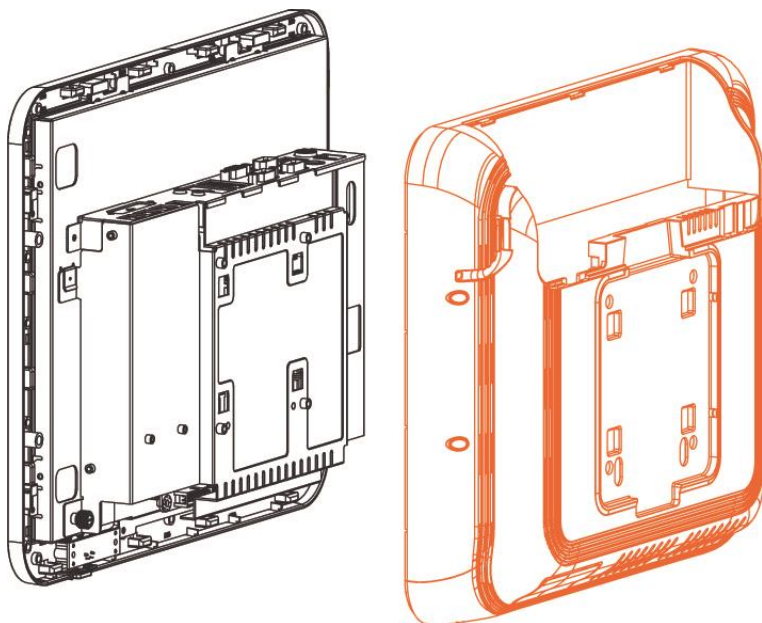
Step 4. Remove the Rear cover.
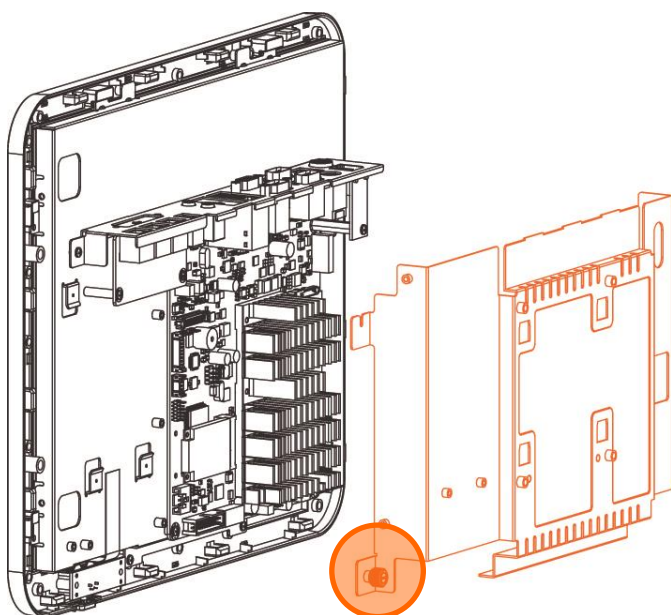
Step 5. Turn two hand screws and remove Main bracket.
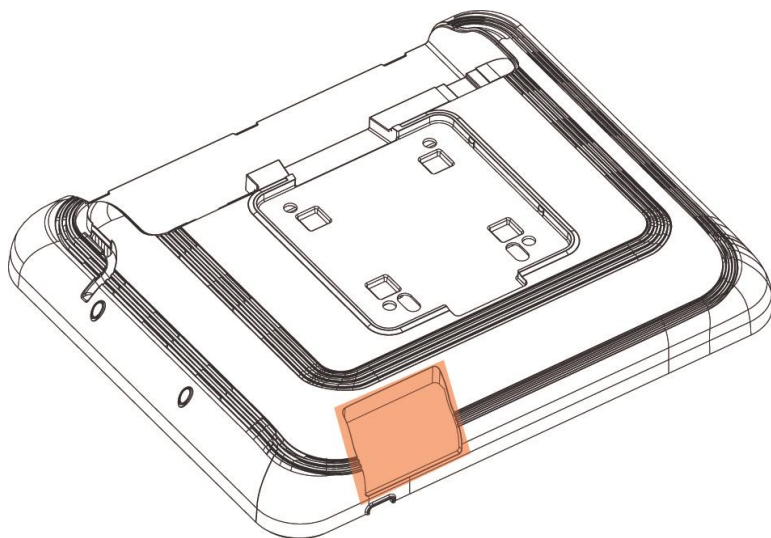
Step 6. Use cutter and ripper to remove USB dummy.
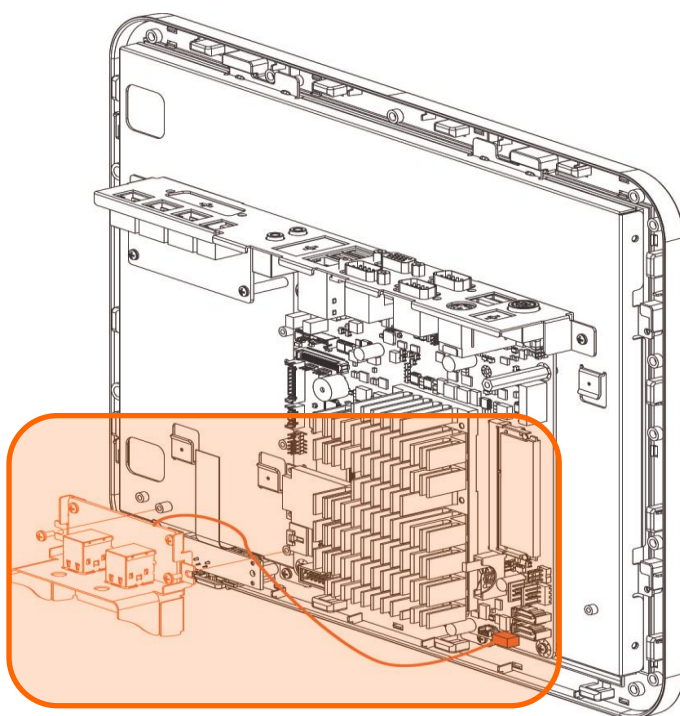
[ZOOM IN]

Step 7. Mother board put holes in the Sample place (as show above)
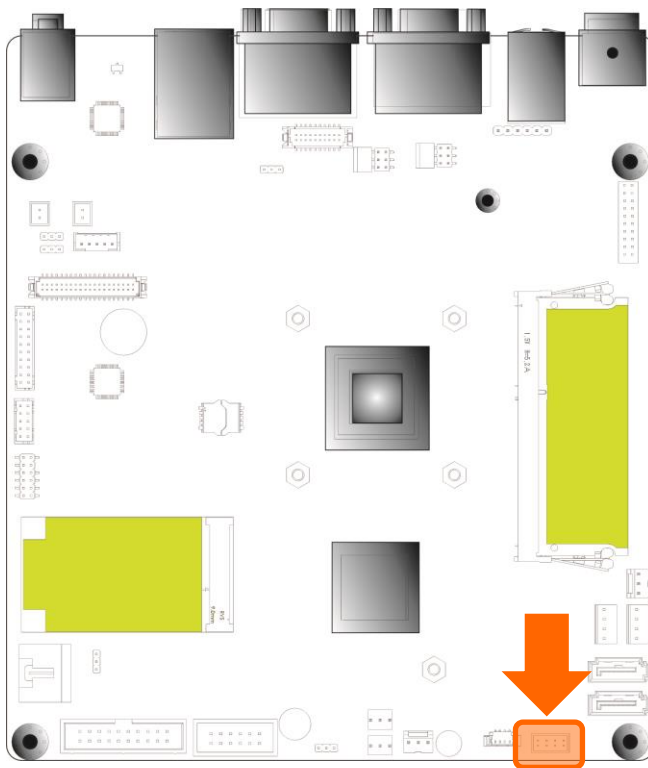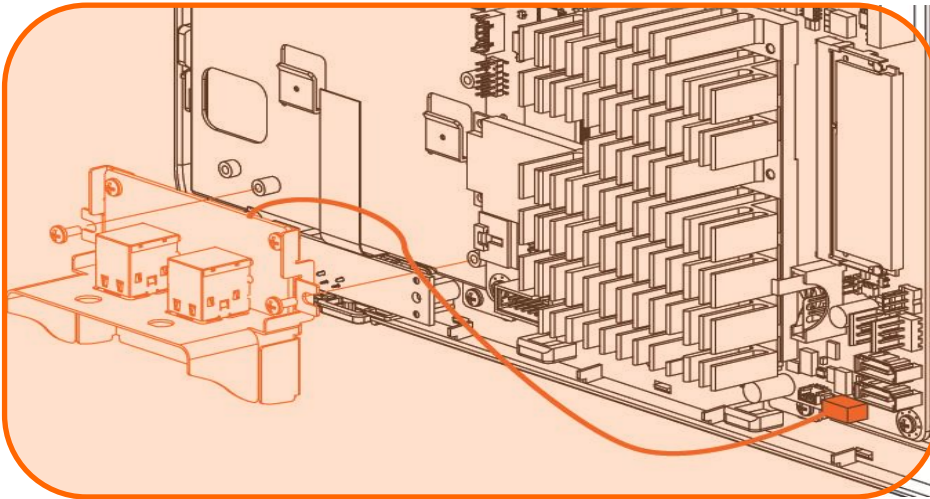
Step 8. Connect cable to mother board USB5/6.

Step9. Assemble the Main bracket.
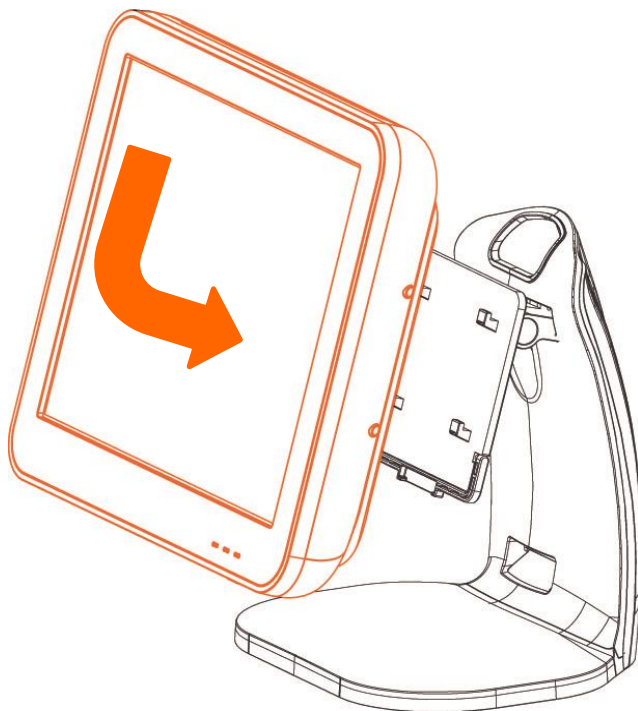
Step10. Reassemble a unit using the Reverse procedure of step 1-5 above.

(7) Installation RAM module
Warning: Completely remove power cable when opening main unit or installing optional devices.

RAM - option
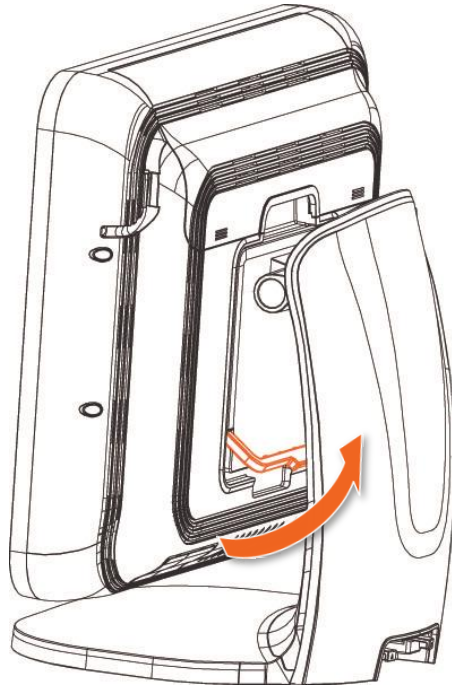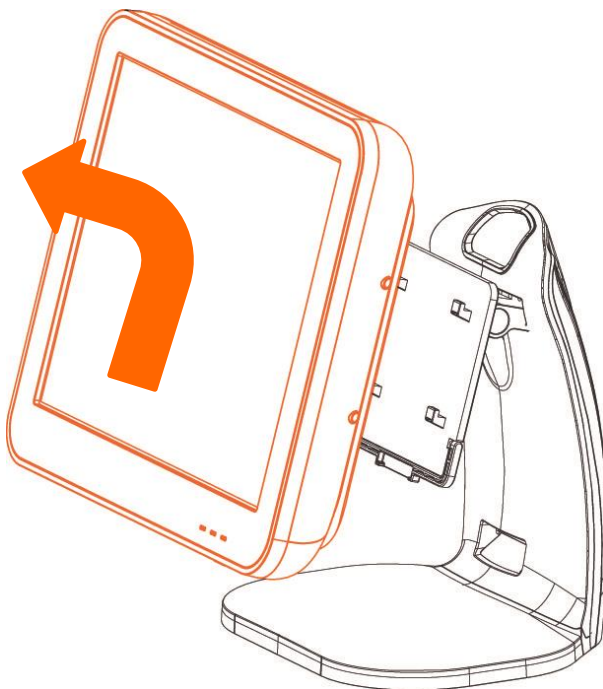
Step 1. Remove the AD Cable
Step 2. Lift up the Hinge Holder

Step 3. Lift up the LCD module and detach from the Stand.
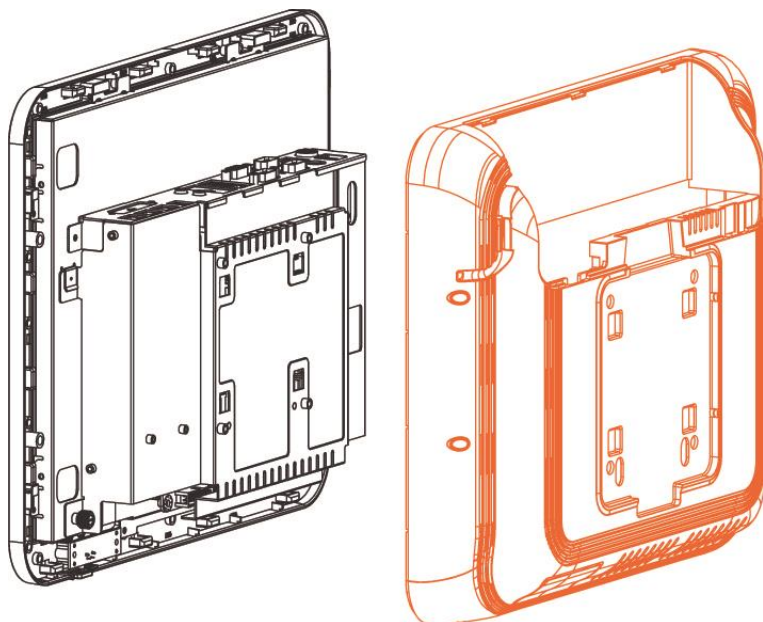
Step 4. Remove the Rear cover.
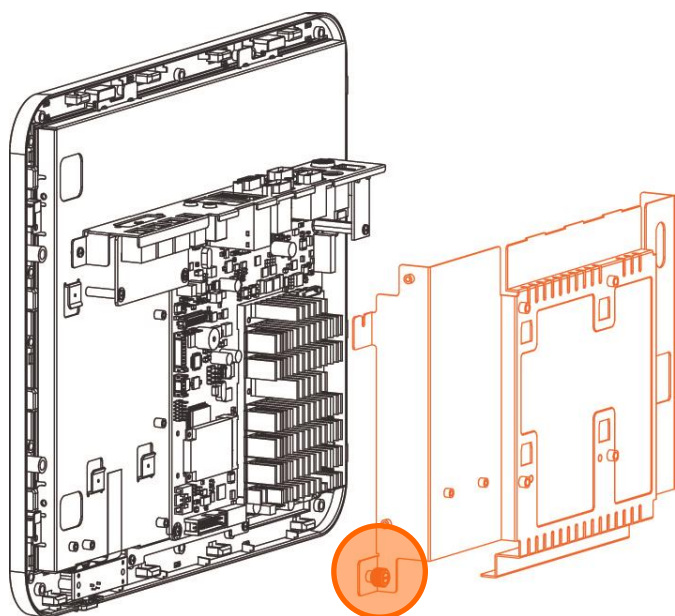
Step 5. Turn two hand screws and remove Main bracket.
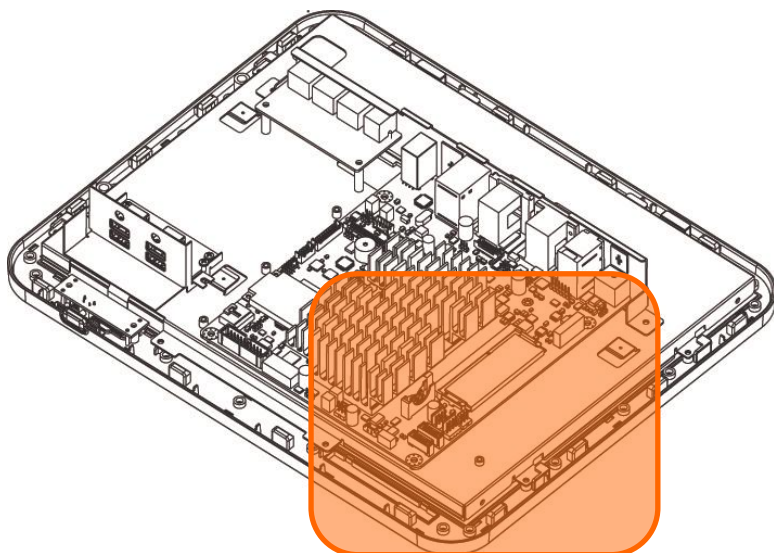
Step 6. Place Mother board as in image.
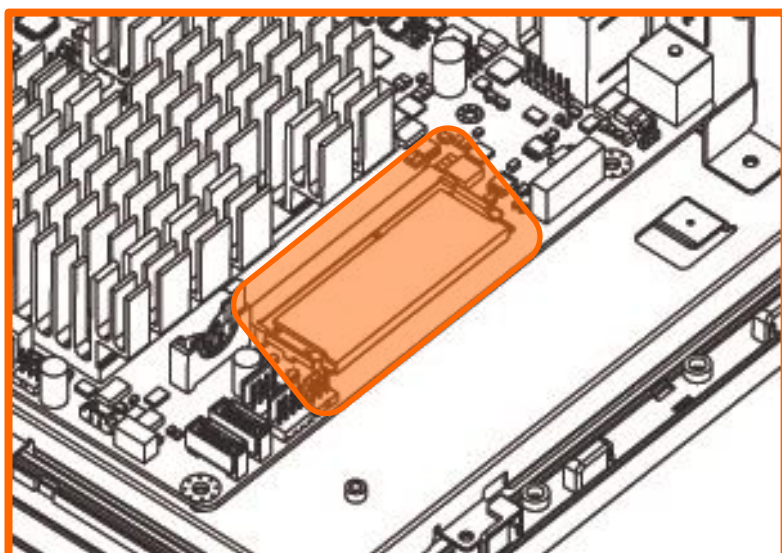
Stet 7. Install the Memory.

Step 8. Assemble the SODIMM from the socket.

Retaining clip
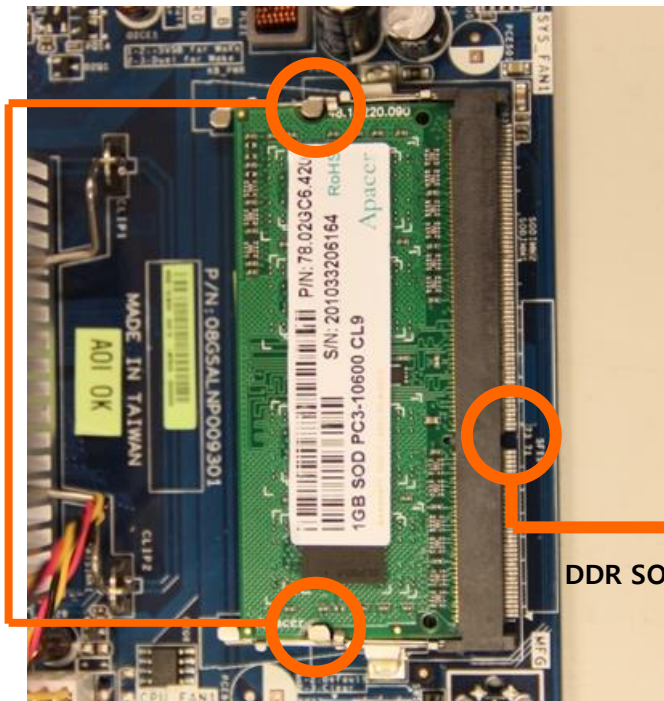
DDR SODIMM notch

(8) Installation 2nd storage (SSD) module

* Warning: Completely remove power cable when opening main unit or installing optional devices.

2nd storage (SSD)
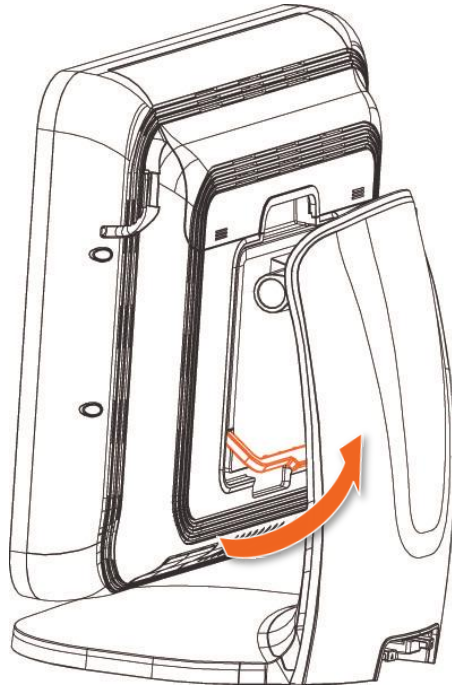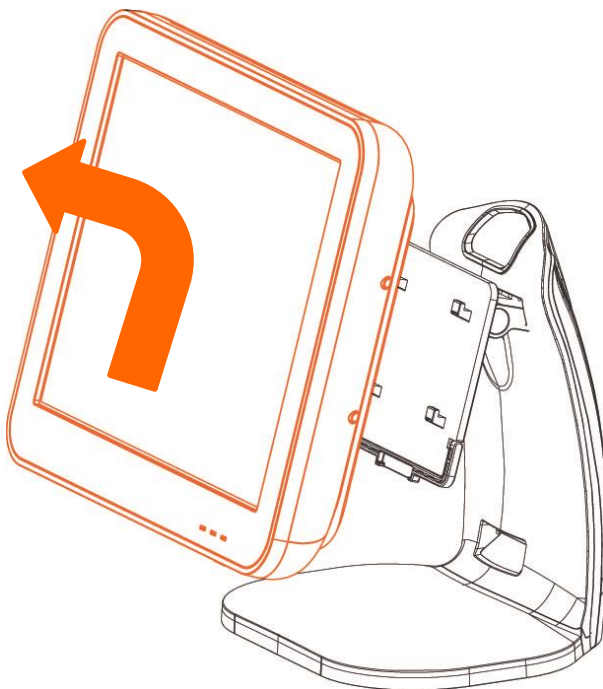
Step 1. Remove the AD Cable
Step 2. Lift up the Hinge Holder

Step 3. Lift up the LCD module and detach from the Stand.
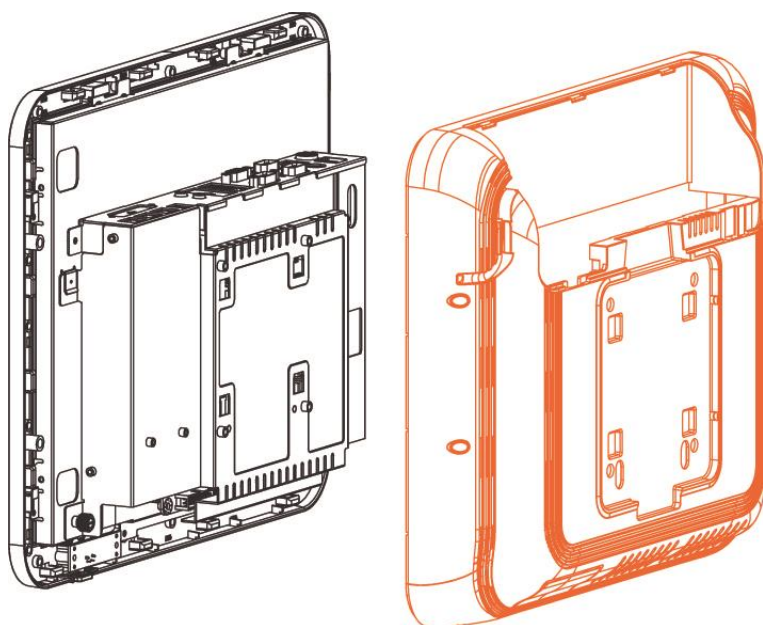
2nd storage (SSD)

Step 4. Remove the Rear cover.
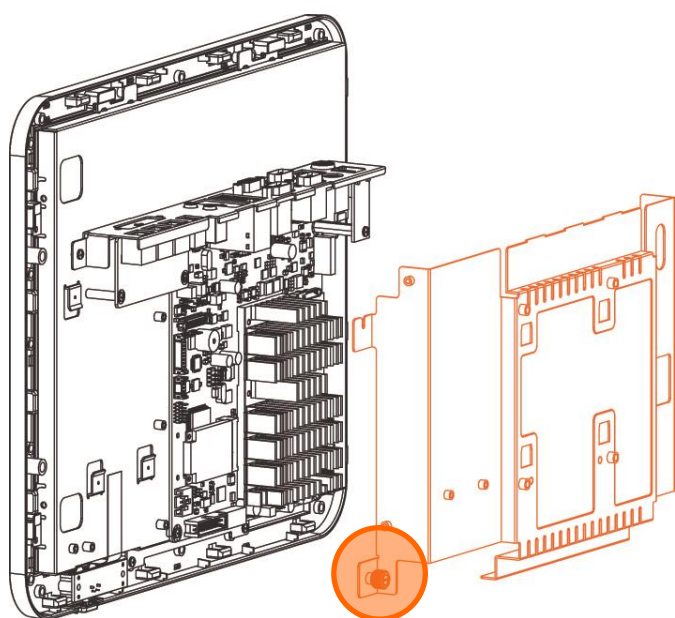
Step 5. Turn two hand screws and remove Main bracket.
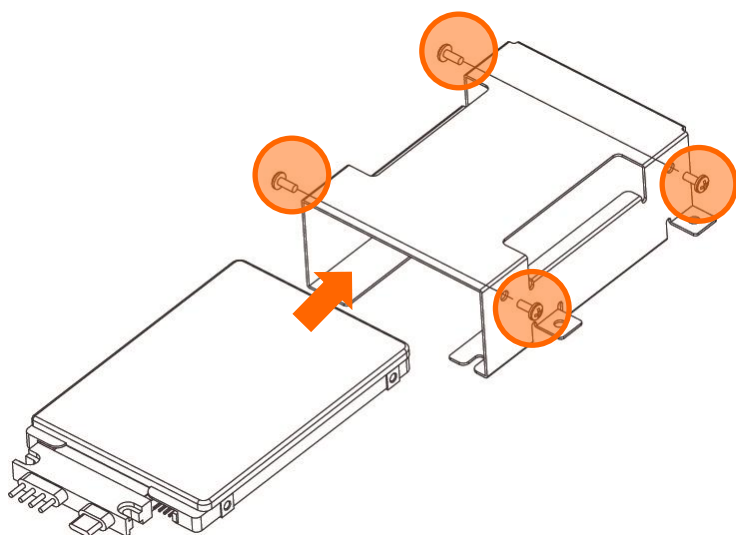
Step6. Assemble 4 screw from HDD bracket. (as show above)
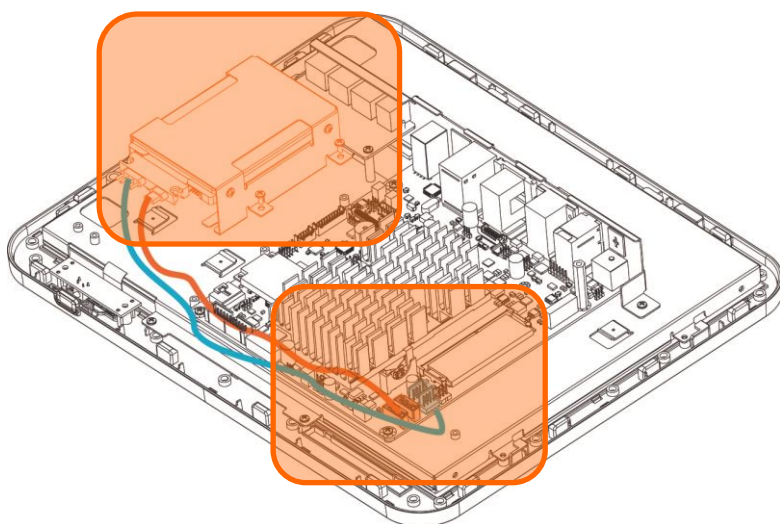
[ZOOM IN 1-2]

2nd storage (SSD)

ZOOM-1
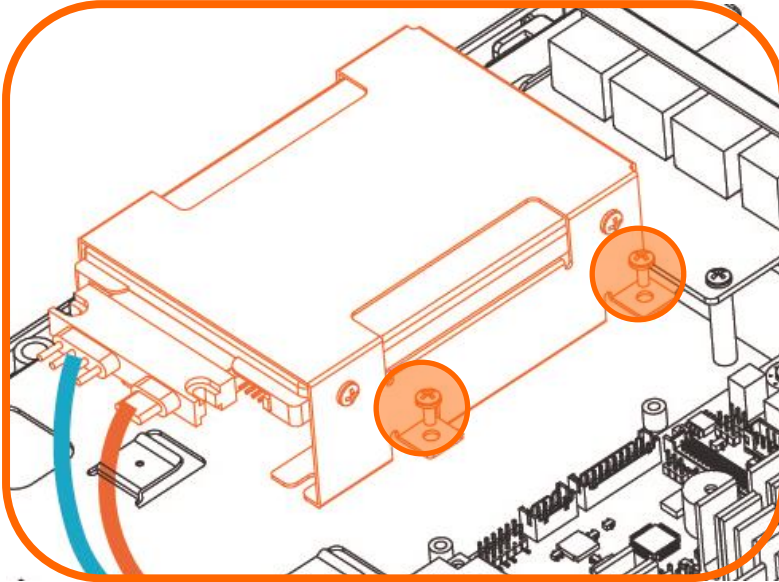
Step7. Turn two screws and Assemble SSD bracket.

ZOOM-2
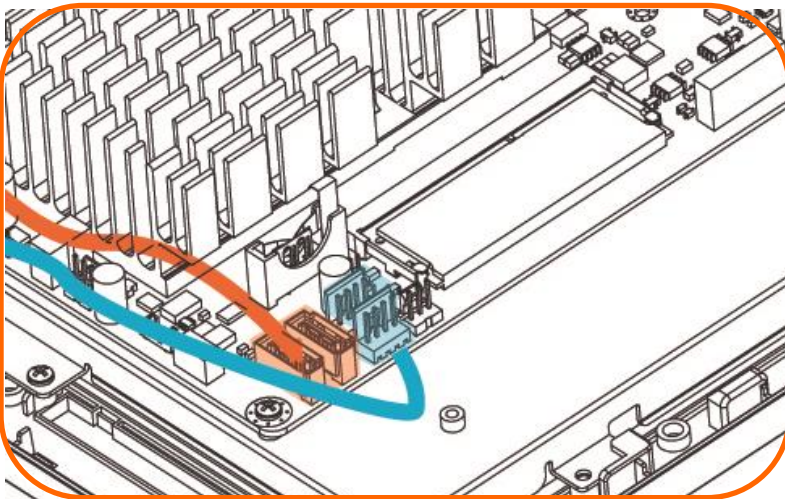
Step9. Connect each Data cable and Power cable
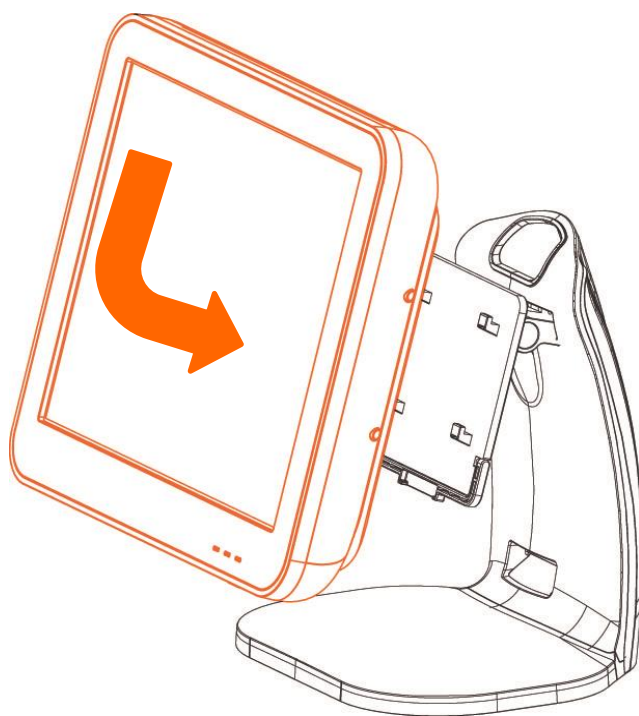
Step10. Reassemble a unit using the Reverse procedure of step 1-5 above.

4. Motherboard

(1) Motherboard Overview

This includes description of the jumpers and connectors on the motherboard.

Warring

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

1. Unplug the power cord from the wall socket before touching any component.
2. Before handling components, use a grounded wrist strap or touch a safely grounded object or a metal object, such as the power supply case, to avoid damaging them due to static electricity.
3. Hold components by the edges to avoid touching the ICs on them.
4. Whenever you uninstall any component, place it on a grounded antistatic pad or in the bag that came with the component.
5. Before you install or remove any component, ensure that the ATX power
6. Supply is switched off or the power cord is detached from the power supply. Failure to do so may cause

(2) Motherboard Layout

This includes description of the jumpers and connectors on the motherboard.

Motherboard view
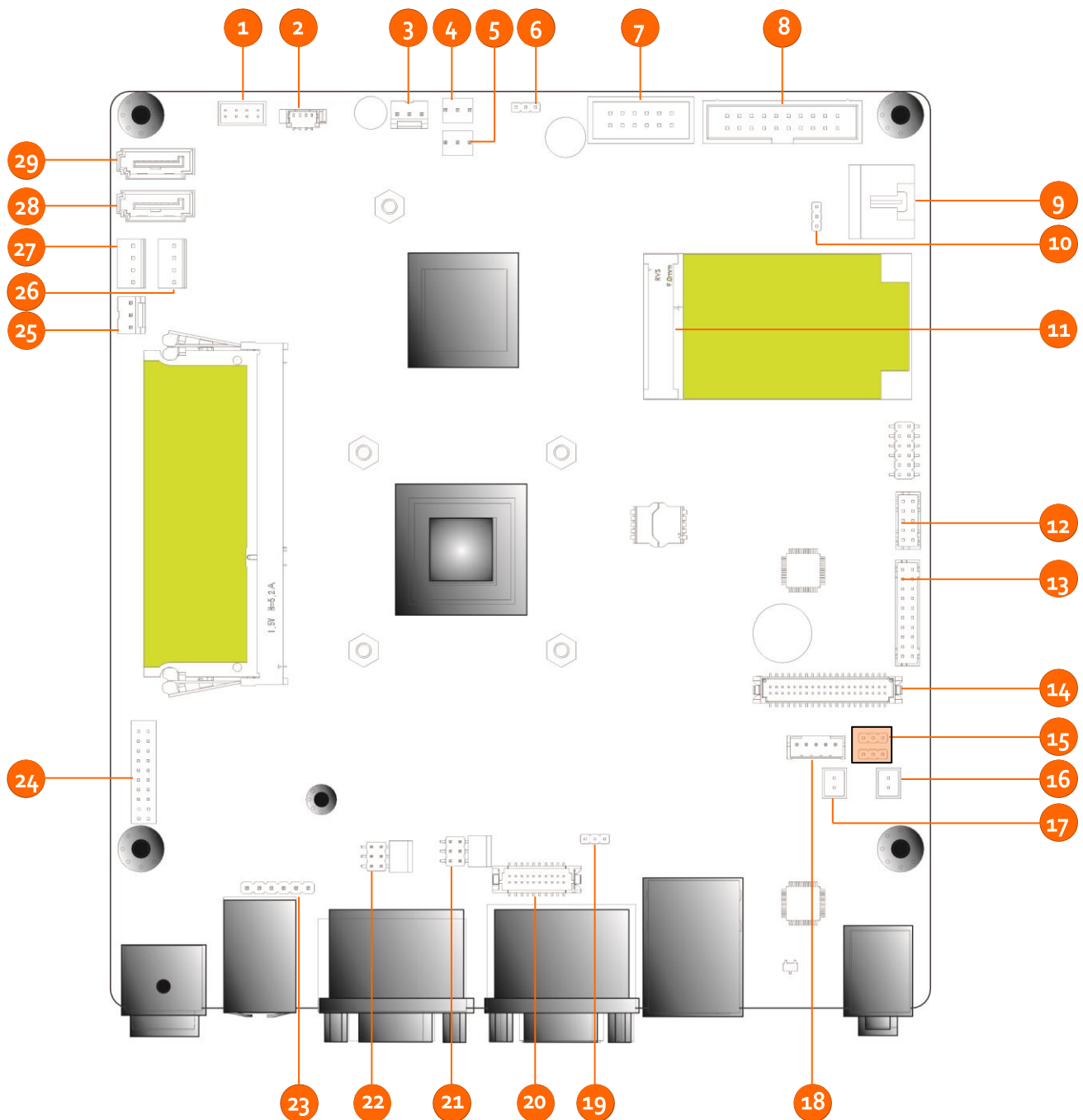
NO	Description
1.	External USB
2.	USB9
3.	SYS FAN
4.	Power switch
5.	Reset switch
6.	12V/5V Select for 2nd LVDS
7.	2nd LVDS + COM4
8.	Monitor Main Cable
9.	Resistive 5-wire touch
10.	USB/Touch Select
11.	Mini PCI-E
12.	COM5
13.	Parallel
14.	LVDS + Inverter
15.	Inverter / DDC Select
16.	Speaker L
17.	Speaker R

NO	Description
18.	Inverter
19.	12V/5V Select for 2nd Display
20.	2nd Display (VGA + COM4)
21.	COM2 12V/R1/5V
22.	COM1 12V/R1/5V
23.	PS/2
24.	Battery
25.	CPU FAN
26.	SATA Power CN1
27.	SATA Power CN2
28.	SATA 2
29.	SATA 1

(2-1) Motherboard Pin Assignment

Power (Input) port / Adapter Input – 12V
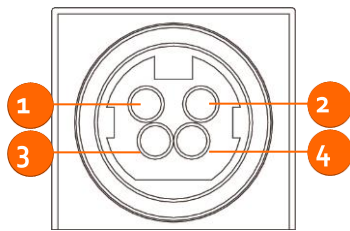
Pin Num	Description
1	+12V
2	GND
3	+12V
4	GND

LAN port (RJ45)
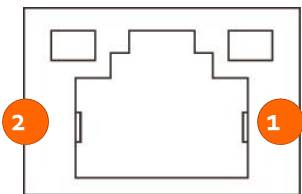
Pin Num	Description	Pin Num	Description
1	Transmit +	5	(Reserved)
2	Transmit -	6	Receive -
3	Receive +	7	(Reserved)
4	(Reserved)	8	(Reserved)

USB port
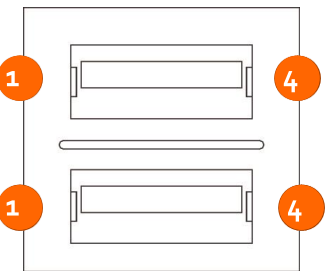
Pin Num	Description
1	VSUB(+5V) +
2	D-
3	D+
4	GND

VGA
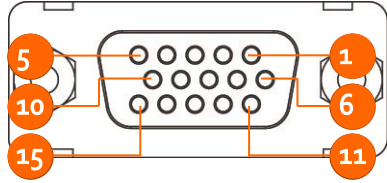
Pin Num	Description	Pin Num	Description
1	RED	9	KEY_PWR
2	GREEN	10	GND
3	BLUE	11	ID0/RES
4	ID2/RES	12	ID1/SDA
5	GND	13	Hsync
6	RED_RTN	14	Vsync
7	GREEN_RTN	15	ID3/SCL
8	BLUE_RTN		

Serial port (COM1, COM2, COM3)
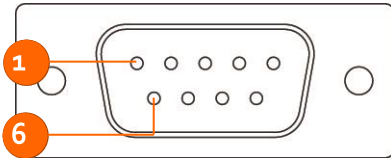
Pin Num	Description	Pin Num	Description
1	DCD	6	DSR
2	RXD	7	RTS
3	TXD	8	CTS
4	DTR	9	0V/5V/12V
5	GND		

Keyboard port
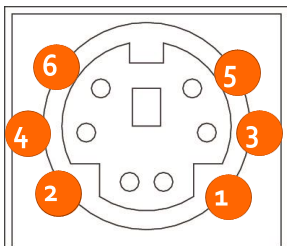
Pin Num	Description	Pin Num	Description
1	KBDAT	4	KB5V
2	NC	5	KBCLK
3	GND	6	NC

(3) EXT Term Board

| COM4 | COM5 | COM6 | USB |
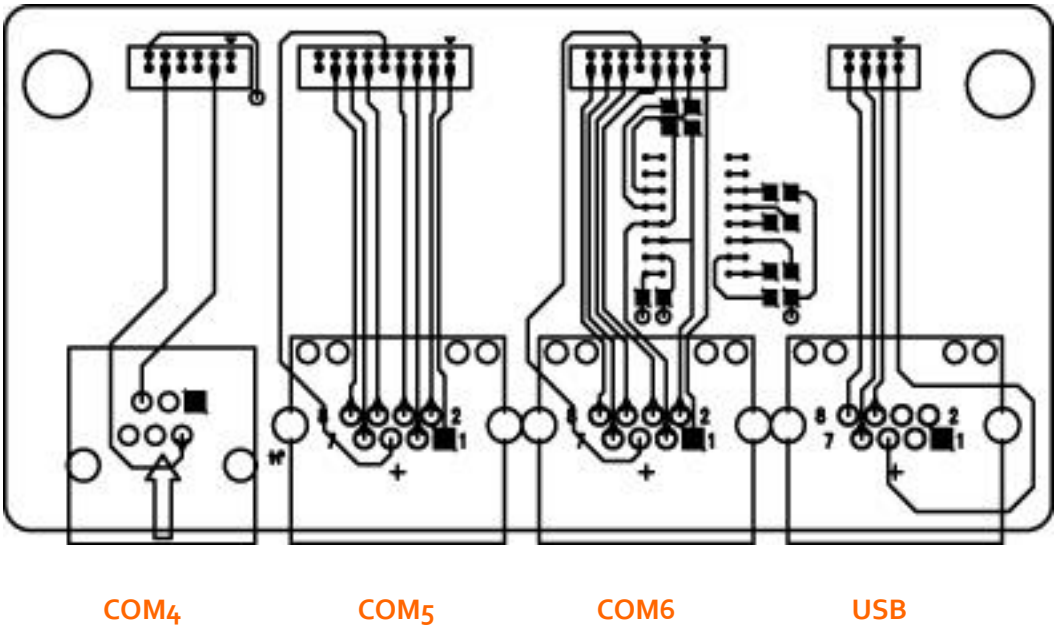
(3-1) EXT Term Board Pin Assignment

COM4 (RJ11)
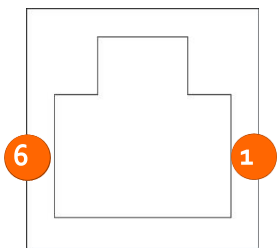
Pin Num	Description	Pin Num	Description
1	GND	4	VCC12V
2	RXD	5	TXD
3	NC	6	VCC5V

COM5 (RJ45)
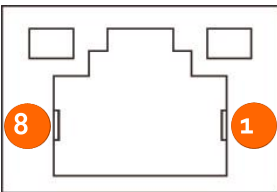
Pin Num	Description	Pin Num	Description
1	DCD	5	GND
2	TXD	6	DTR
3	RXD	7	CTS
4	DSR	8	RTS

COM6 (RJ45)
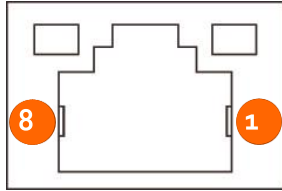
Pin Num	Description	Pin Num	Description
1	DCD	5	GND
2	TXD	6	DTR
3	RXD	7	CTS
4	DSR	8	RTS

USB (RJ45)
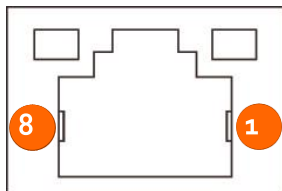
Pin Num	Description	Pin Num	Description
1	NC	5	USB-VCC
2	NC	6	USB-D-
3	NC	7	USB-D+
4	NC	8	USB-GND

(4) Power Switch Board

Power Switch Board Connector Description

PB-56 ANYSHOP II POWER SW
v1.0 (2012-04-03)

J2

A
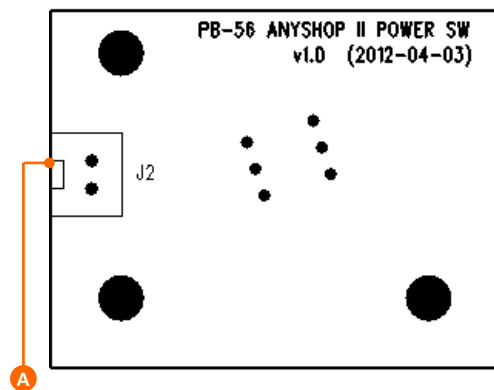
A. Power switch

(5) Drawer Kicker Board

Drawer Kicker Board Connector Description
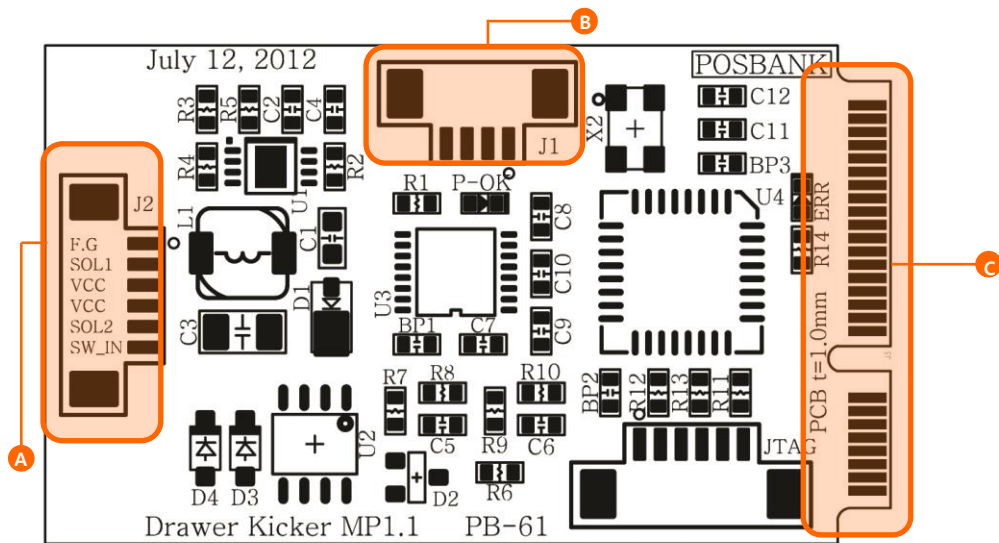
A. Drawer Port
B. Serial Port
C. Mini PCI-E Slot

(6) Jumpers

Clear CMOS (CMOS1)

This jumper allows you to clear the Real Time Clock (RTC) RAM in CMOS. You can clear the CMOS memory of date, time, and system setup parameters by erasing the CMOS RTC RAM data. The onboard button cell battery powers the RAM data in CMOS, which includes system setup information such as system passwords.

To erase the RTC RAM:

1. Turn OFF the computer and unplug the power cord.
2. Remove the onboard battery.
3. Move the jumper cap from pins 1-2 (default) to pins 2-3. Keep the cap on pins 2-3 for about 5~10 second, them move the cap back to pins 1-2.
4. Re-install the battery.
5. Plug the power cord and turn ON the computer.
6. Hold down the <Del> key during the boot process and enter BIOS setup to re-enter data

CAUTION: Except when clearing the RTC RAM, never remove the cap on CLRTC jumper default position. Removing the cap will cause system boot failure!

1. Clear CMOS (CMOS1)

Clear CMOS   **Normal (Default)**
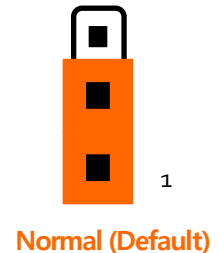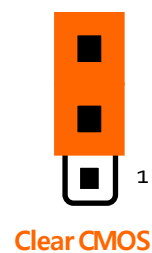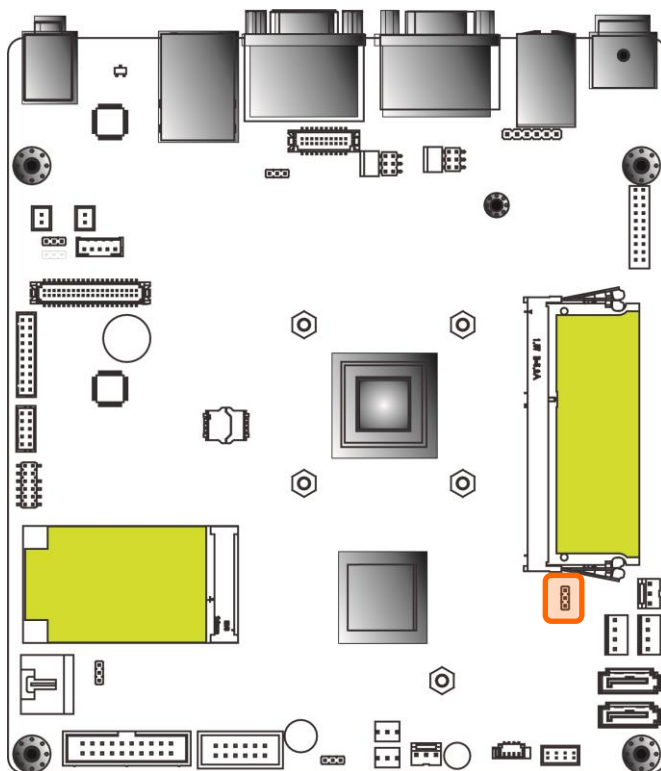
2.COM1, COM2, RI/+5V/+12V Select (JCOMPWR1 / JCOMPWR2)
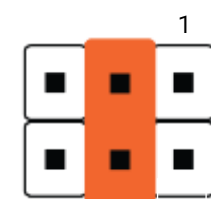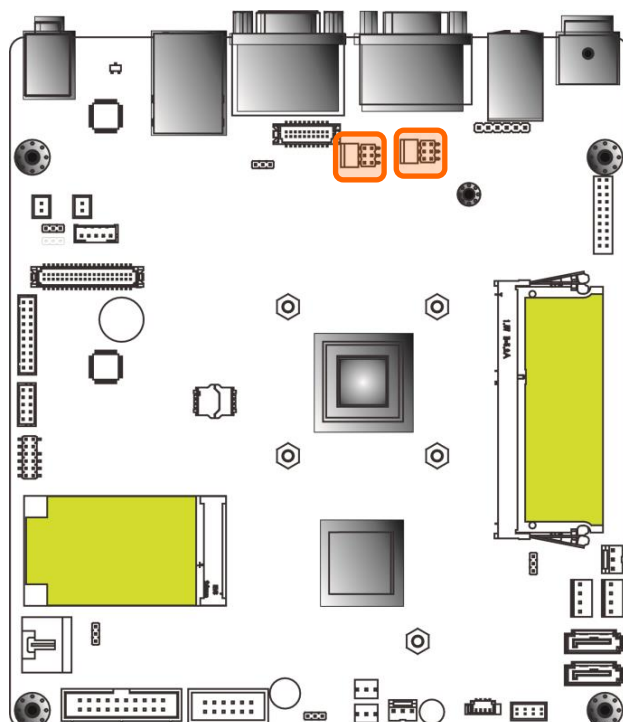
R1 (Default)
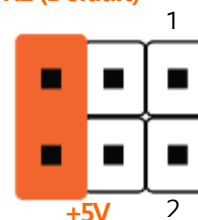
+5V
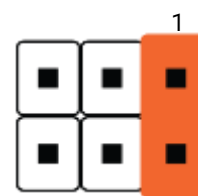
+12V

3. LVDS Backlight control mode (JLVDS_P1)
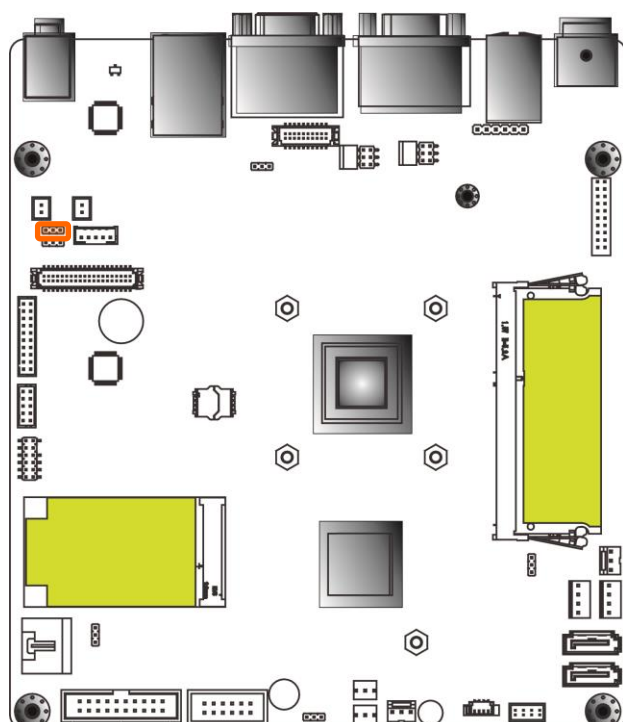
None PWM
Mode

PWM Mode
(Default)

4. LVDS Backlight power selection(JLVDS_P3)
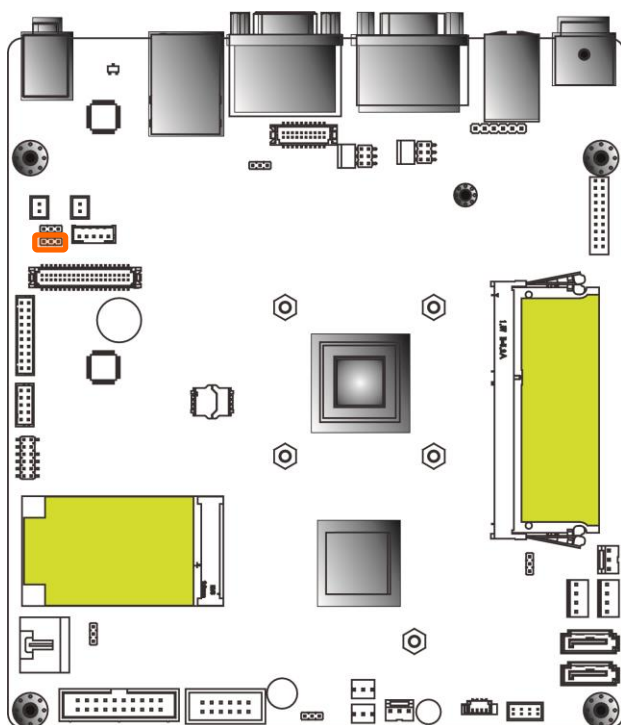
3.3V

5V
(Default)

5. VGA2 power selection(CRT_SEL)
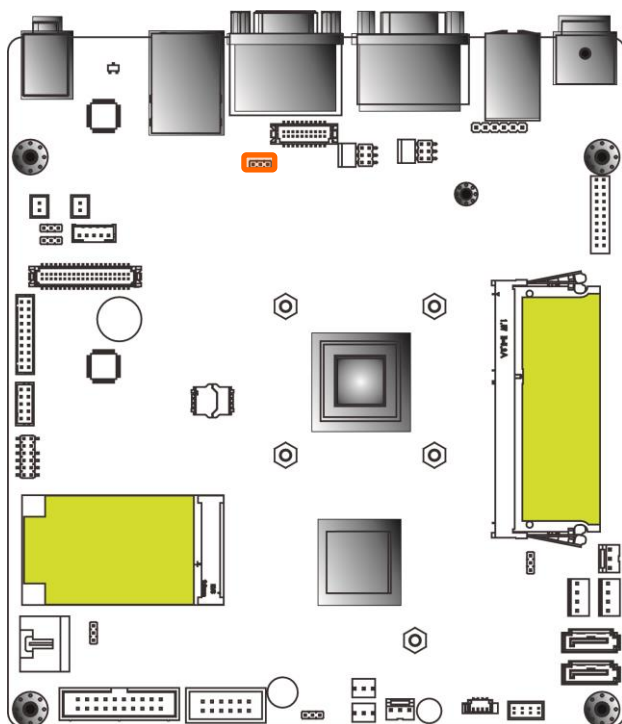
5V

12V
(Default)

6. Onboard Touch function Enable/Disable selection(USB_SEL)
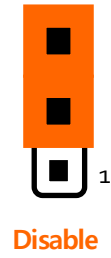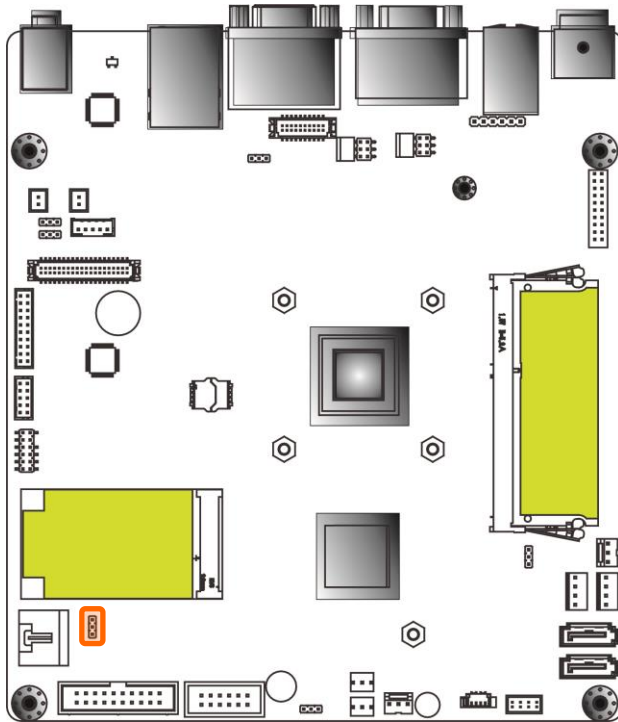
Disable
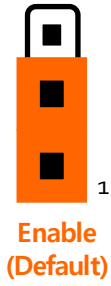
**Enable
(Default)**

5. BIOS Setup Utility

* This chapter tells how to change the system settings through the BIOS Setup menus.
Detailed descriptions of the BIOS parameters are also provided.

(1) BIOS setup program

This motherboard supports a programmable firmware chip that you can update using the provided utility described in section "2.1 Managing and updating your BIOS."

Use the BIOS Setup program when you are installing a motherboard, reconfiguring your system, or prompted to "Run Setup". This section explains how to configure your system using this utility.

Even if you are not prompted to use the Setup program, you can change the configuration of your computer in the future. For example, you can enable the security password feature or change the power management settings. This requires you to reconfigure your system using the BIOS Setup program so that the computer can recognize these changes and record them in the CMOS RAM of the firmware hub.

The firmware hub on the motherboard stores the Setup utility. When you start up the computer, the system provides you with the opportunity to run this program.
Press <Del> during the Power-On-Self-Test (POST) to enter the Setup utility; otherwise, POST continues with its test routines.

If you wish to enter Setup after POST, restart the system by pressing <Ctrl+Alt+Delete>, or by pressing the reset button on the system chassis. You can also restart by turning the system off and then back on. Do this last option only if the first two failed.

The Setup program is designed to make it as easy to use as possible. Being a menu-driven program, it lets you scroll through the various sub-menus and make your selections from the available options using the navigation keys.

- The default BIOS settings for this motherboard apply for most conditions to ensure optimum performance. If the system becomes unstable after changing any BIOS settings, load the default settings to ensure system compatibility and stability. Select the Load Default Settings item under the Exit Menu. See section "2.7 Exit Menu."
- The BIOS setup screens shown in this section are for reference purposes only, and may not exactly match what you see on your screen.

1.1 Legend Box

The keys in the legend bar allow you to navigate through the various setup menus.

Key(s)	Function Description
F1	General help, only for Status Page Setup Menu and Option Page Setup Menu
Esc	Return to the main menu from a sub-menu or prompts you to quit the setup program
←,→	Move to the item in the left or right hand
↑,↓	Move to previous or next item
Enter	Brings up a selection menu for the highlighted field
+ or PgUp	Moves the cursor to the first field
- or PgDn	Moves the cursor to the last field
F5	Loads the previous values
F6, F7	Loads the fail-safe / optimized defaults
F10	Saves changes and exits Setup

1.2 List Box

This box appears only in the opening screen. The box displays an initial list of configurable items in the menu you selected.

1.3 Sub-menu

Note that a right pointer symbol (▶) appears to the left of certain fields. This pointer indicates that you can display a sub-menu from this field. A sub-menu contains additional options for a field parameter. To display a sub-menu, move the highlight to the field and press <Enter>. The sub-menu appears. Use the legend keys to enter values and move from field to field within a sub-menu as you would within a menu. Use the <Esc> key to return to the main menu.

Take some time to familiarize yourself with the legend keys and their corresponding functions. Practice navigating through the various menus and submenus. If you accidentally make unwanted changes to any of the fields, press <F6> to load the fail-safe default values. While moving around through the Setup program, note that explanations appear in the Item Specific Help window located to the right of each menu. This window displays the help text for the currently highlighted field.

(2) BIOS Setup

2.1 BIOS Menu Screen

When you enter the BIOS, the following screen appears. The BIOS menu screen displays the items that allow you to make changes to the system configuration. To access the menu items, press the up/down/right/left arrow key on the keyboard until the desired item is highlighted, then press [Enter] to open the specific menu.

```
            Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
  Main  Advanced  Chipset  Boot  Security  Save & Exit

  BIOS Information                                      Choose the system default
  BIOS Vendor                   American Megatrends     language
  Core Version                  4.6.5.1
  Compliancy                    UEFI 2.3; PI 1.2
  Project Version               CD00X 0.16
  Build Date and Time           09/11/2013 14:36:03

  System Language               [English]

  System Date                   [Mon 11/04/2013]
  System Time                   [15:53:05]

  Access Level                  Administrator
                                                        ──────────────────────────
                                                        →←: Select Screen
                                                        ↑↓: Select Item
                                                        Enter: Select
                                                        +/-: Change Opt.
                                                        F1: General Help
                                                        F2: Previous Values
                                                        F3: Optimized Defaults
                                                        F4: Save & Exit
                                                        ESC: Exit




            Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

2.2 Main Setup

This menu gives you an overview of the general system specifications. The BIOS automatically detects the items in this menu. Use this menu for basic system configurations, such as time, date etc.

```
              Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
   Main  Advanced  Chipset  Boot  Security  Save & Exit

    BIOS Information                                        Choose the system default
    BIOS Vendor                   American Megatrends       language
    Core Version                  4.6.5.1
    Compliancy                    UEFI 2.3; PI 1.2
    Project Version               CD00X 0.16
    Build Date and Time           09/11/2013 14:36:03

    System Language               [English]

    System Date                   [Mon 11/04/2013]
    System Time                   [15:53:05]

    Access Level                  Administrator
                                                            →←: Select Screen
                                                            ↑↓: Select Item
                                                            Enter: Select
                                                            +/-: Change Opt.
                                                            F1: General Help
                                                            F2: Previous Values
                                                            F3: Optimized Defaults
                                                            F4: Save & Exit
                                                            ESC: Exit




              Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

1.   System Language

English

2. System Time

The time format is <Hour>,<Minute>,<Second>.

3. System Date

The date format is <Date>,<Month>,<Day>,<Year>.

2.3 Advanced BIOS Setup

Select the Advanced tab from the setup screen to enter the Advanced BIOS Setup screen.
You can select any of the items in the left frame of the screen, such as Chipset configuration, to go to the sub menu for that item. You can display an Advanced BIOS Setup option by highlighting it using the <Arrow> keys. All Advanced BIOS Setup options are described in this section. The Advanced BIOS Setup screen is shown below. The sub menus are described on the following pages.

```
              Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
        Main  Advanced  Chipset  Boot  Security  Save & Exit


                                                                Enable or Disable Boot Option
         Legacy OpROM Support                                   for Legacy Network Devices.
         Launch PXE OpROM                 [Disabled]

      ▶ ACPI Settings
      ▶ CPU Configuration
      ▶ IDE Configuration
      ▶ USB Configuration
      ▶ Super IO Configuration
      ▶ Hardware Monitor


                                                                →←: Select Screen
                                                                ↑↓: Select Item
                                                                Enter: Select
                                                                +/-: Change Opt.
                                                                F1: General Help
                                                                F2: Previous Values
                                                                F3: Optimized Defaults
                                                                F4: Save & Exit
                                                                ESC: Exit




              Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

2.4 Launch PXE oProm [Disable]

Configuration options: [Disabled] [Enabled]

```
               Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
   Main   Advanced   Chipset   Boot   Security   Save & Exit


    Legacy OpROM Support                                      Enable or Disable Boot Option
    Launch PXE OpROM                      [Disabled]          for Legacy Network Devices.

 ▶ ACPI Settings
 ▶ CPU Configuration
 ▶ IDE Configuration
 ▶ USB Configuration
 ▶ Super IO Configuration
 ▶ Hardware Monitor

                                                          →←: Select Screen
                                                          ↑↓: Select Item
                                                          Enter: Select
                                                          +/-: Change Opt.
                                                          F1: General Help
                                                          F2: Previous Values
                                                          F3: Optimized Defaults
                                                          F4: Save & Exit
                                                          ESC: Exit



               Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

2.5 ACPI Settings [S3 (suspend to RAM)]

```
            Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
  Advanced

 ACPI Settings                                              Select the highest ACPI sleep
                                                            state the system will enter
 ACPI Sleep State                  [S3 (Suspend to RAM)]    when the SUSPEND button is
                                                            pressed.
 Wake On LAN Control               [Disabled]
 Wake On Ring Control              [Disabled]
 PS2 KB/MS PME Control             [Disabled]
 Resume On RTC Alarm               [Disabled]


                                                            ➜←: Select Screen
                                                            ↑↓: Select Item
                                                            Enter: Select
                                                            +/-: Change Opt.
                                                            F1: General Help
                                                            F2: Previous Values
                                                            F3: Optimized Defaults
                                                            F4: Save & Exit
                                                            ESC: Exit

            Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

System ACPI parameters.

Select the highest ACPI sleep state the system will enter when the SUSPEND button is pressed .

Wake on LAN control [Disabled]

Enable/Disable WOL function

Wake on Ring control [Disabled]

Enable/Disable Wake on Ring function

PS2 KB/MS PME control[Disabled]

PS2 keyboard/Mouse PME Control any key or click as wake up event.

Resume on RTC Alarm[Disabled]

Enable or disable system wake on alarm even. When enabled, system will wake upon the hr/min/sec specified.

2.6 CPU Configuration

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
   Advanced

  CPU Configuration                                      Enabled for Windows XP and
                                                         Linux (OS optimized for
  Processor Type              Intel(R) Atom(TM) CPU      Hyper-Threading Technology)
  EMT64                       Supported                  and Disabled for other OS (OS
  Processor Speed             1865 MHz                   not optimized for
  System Bus Speed            533 MHz                    Hyper-Threading Technology).
  Ratio Status                14
  Actual Ratio                14
  Processor Stepping          30661
  Microcode Revision          269
  L1 Cache RAM                2x56 k
  L2 Cache RAM                2x512 k
  Processor Core              Dual
  Hyper-Threading             Supported              →←: Select Screen
                                                     ↑↓: Select Item
  Hyper-Threading             [Enabled]              Enter: Select
  Execute Disable Bit         [Enabled]              +/-: Change Opt.
  Limit CPUID Maximum         [Disabled]             F1: General Help
                                                     F2: Previous Values
                                                     F3: Optimized Defaults
                                                     F4: Save & Exit
                                                     ESC: Exit


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```

Hyper-Threading[Enabled]

Enabled for Windows XP and Linux (OS optimized for Hyper-Threading Technology)
And Disable for other OS(OS not optimized for Hyper-Threading Technology)

Execute Disable Bit [Enabled]

XD can prevent certain classes of malicious buffer overflow attacks when combine with a supporting OS (Windows Server 2003 SP1,Windows XP SP2,SuSE Linux9.2, RedHat   Enterprise 3 update 3.)

Limit CPUID Maximum[Disable]

Disable for Windows XP

2.7 IDE Configuration

- IDE Devices configuration

```
Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
  Advanced

SATA Port1                        Not Present           SATA Ports (1-2) Device Names
SATA Port2                        Not Present           if Present and Enabled.

  SATA Controller(s)              [Enabled]

  Configure SATA as               [AHCI]
    Port1 Speed Limit             [No Limit]
    Port2 Speed Limit             [No Limit]

    SATA Port 1                   [Enabled]
    SATA Port 2                   [Enabled]

                                                        →←: Select Screen
                                                        ↑↓: Select Item
                                                        Enter: Select
                                                        +/-: Change Opt.
                                                        F1: General Help
                                                        F2: Previous Values
                                                        F3: Optimized Defaults
                                                        F4: Save & Exit
                                                        ESC: Exit

          Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

SATA Controller[Enable]

SATA ports(1-2)Device names if Present and Enable.

Configuration SATA as [AHCI]

Select a configuration for SATA controller .

SATA Port 1/2 [Enable]

SATA port(1-2) Enable/Disable

2.8. USB Configuration

- USB configuration Parameters

```
         Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
  Advanced

 USB Configuration                                    Enables Legacy USB support.
                                                      AUTO option disables legacy
 USB Devices:                                         support if no USB devices are
       1 Keyboard, 1 Hub                              connected. DISABLE option will
                                                      keep USB devices available
 Legacy USB Support               [Enabled]           only for EFI applications.
 EHCI Hand-off                    [Enabled]

 USB hardware delays and time-outs:
 USB transfer time-out            [20 sec]
 Device reset time-out            [20 sec]
 Device power-up delay            [Auto]
                                                      ─────────────────────────
                                                      ↔: Select Screen
                                                      ↑↓: Select Item
                                                      Enter: Select
                                                      +/-: Change Opt.
                                                      F1: General Help
                                                      F2: Previous Values
                                                      F3: Optimized Defaults
                                                      F4: Save & Exit
                                                      ESC: Exit


         Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

Legacy USB support [Enable]

Enables Legacy USB support AUTO option disable legacy support if no USB device
are connected DISABLE option will keep USB device available only for EFI applications

EHCI Hand-off[Enable]

This is a workaround for OSes without EHCI hand-off support the EHCI ownership change should be claimed by EHCI
driver .

2.9 Super I/O Configruation

- System supper I/O CHIP parameters

```
Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
 Advanced

 Super IO Configuration                                    Set Parameters of Serial Port
                                                           1 (COM1)
 Super IO Chip                    W83627DHG
▶ Serial Port 1 Configuration
▶ Serial Port 2 Configuration
▶ Parallel Port Configuration

 Second Super IO Chip            F81216 SecondIO
▶ Serial Port 3 Configuration
▶ Serial Port 4 Configuration
▶ Serial Port 5 Configuration
▶ Serial Port 6 Configuration

 AC Power Loss State             [Always OFF]           ┌─────────────────────────
                                                        →←: Select Screen
 Watch Dog Count Mode            [Second(s) Mode]       ↑↓: Select Item
 Watch Dog Time-out Value        0                      Enter: Select
                                                        +/-: Change Opt.
                                                        F1: General Help
                                                        F2: Previous Values
                                                        F3: Optimized Defaults
                                                        F4: Save & Exit
                                                        ESC: Exit

            Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

Serial Port 1 configuration

Set parameters of serial port 1 (COM1)

Serial Port 2 configuration

Set parameters of serial port 2 (COM2)

Parallel Port configuration

Set parameters of parallel port

Serial Port 3 configuration

Set parameters of serial port 3 (COM3)

Serial Port 4 configuration

Set parameters of serial port 4 (COM4)

Serial Port 5 configuration

Set parameters of serial port 5 (COM5)

Serial Port 6 configuration

Set parameters of serial port 6 (COM6)

AC Power Loss state[Always OFF]

Set the state after power loss.

Watch Dog count Mode[Second(s) Mode]

Select watch Dog count mode.

Watch Dog Time-out Value

Timer will start to count from end of POST .oo- Time out Disable.

2.10 Hardware Monitor

```
            Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
  Advanced

  PC Health Status                                    Smart Fan Mode Select

▶ Smart Fan Mode Configuration
  System Temperature              : +41 C
  CPU Temperature                 : +36 C
  SYS_FAN1 Speed                  : N/A
  CPU_FAN1 Speed                  : 7031 RPM
  VCORE                           : +1.184 V
  +12V                            : +12.032 V
  + 5V                            : +4.992 V
  + 5VSB                          : +4.992 V
  VCC3V                           : +3.232 V
  +3.3VSB                         : +3.232 V
  VBAT                            : +3.040 V
                                                    →←: Select Screen
                                                    ↑↓: Select Item
                                                    Enter: Select
                                                    +/-: Change Opt.
                                                    F1: General Help
                                                    F2: Previous Values
                                                    F3: Optimized Defaults
                                                    F4: Save & Exit
                                                    ESC: Exit




            Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

Smart Fan Mode configuration

Smart Fan Mode select
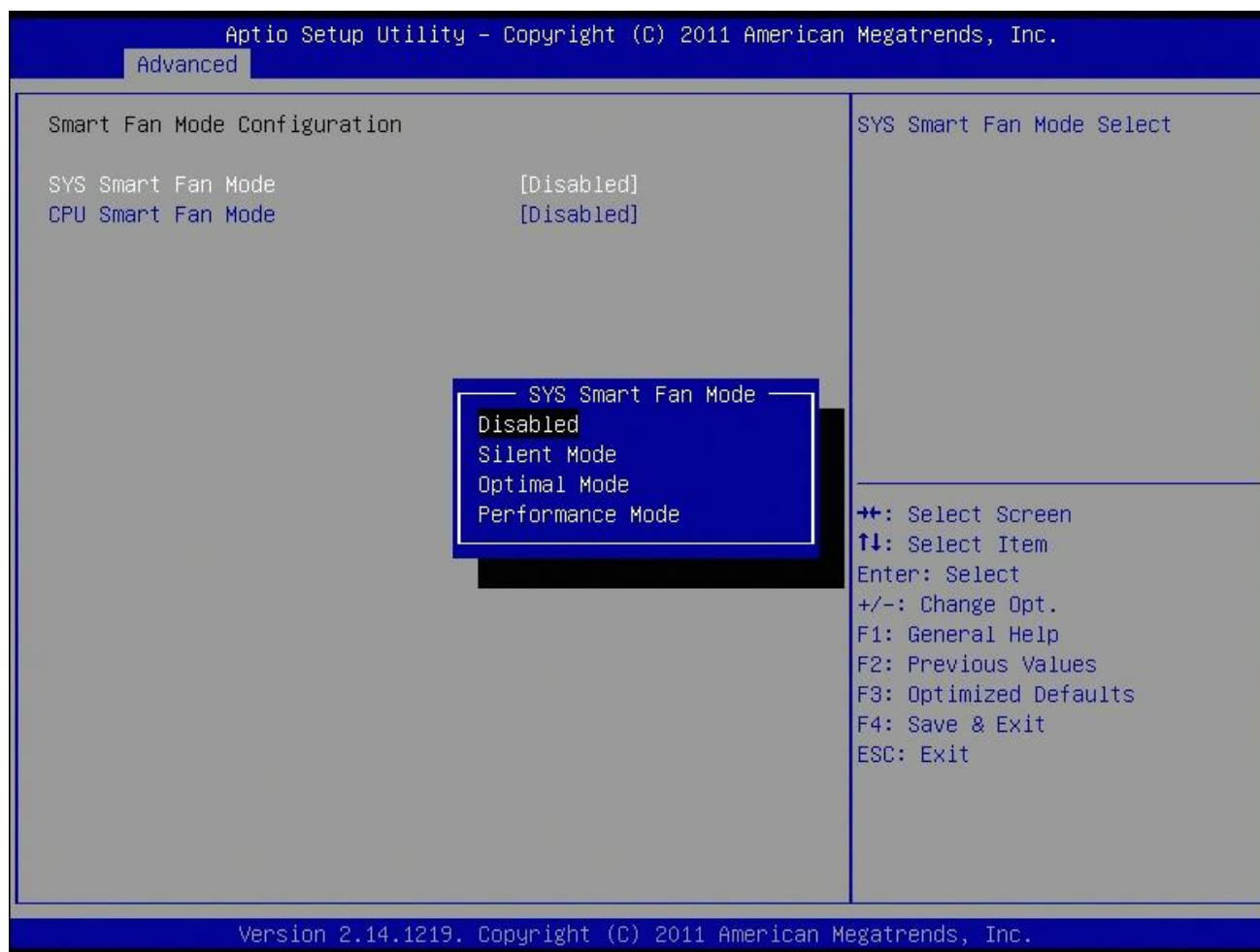
System smart fan mode [Disable]

System smart Fan mode select

CPU smart fan mode [Disable]

System smart Fan mode select

2.11 Chipset
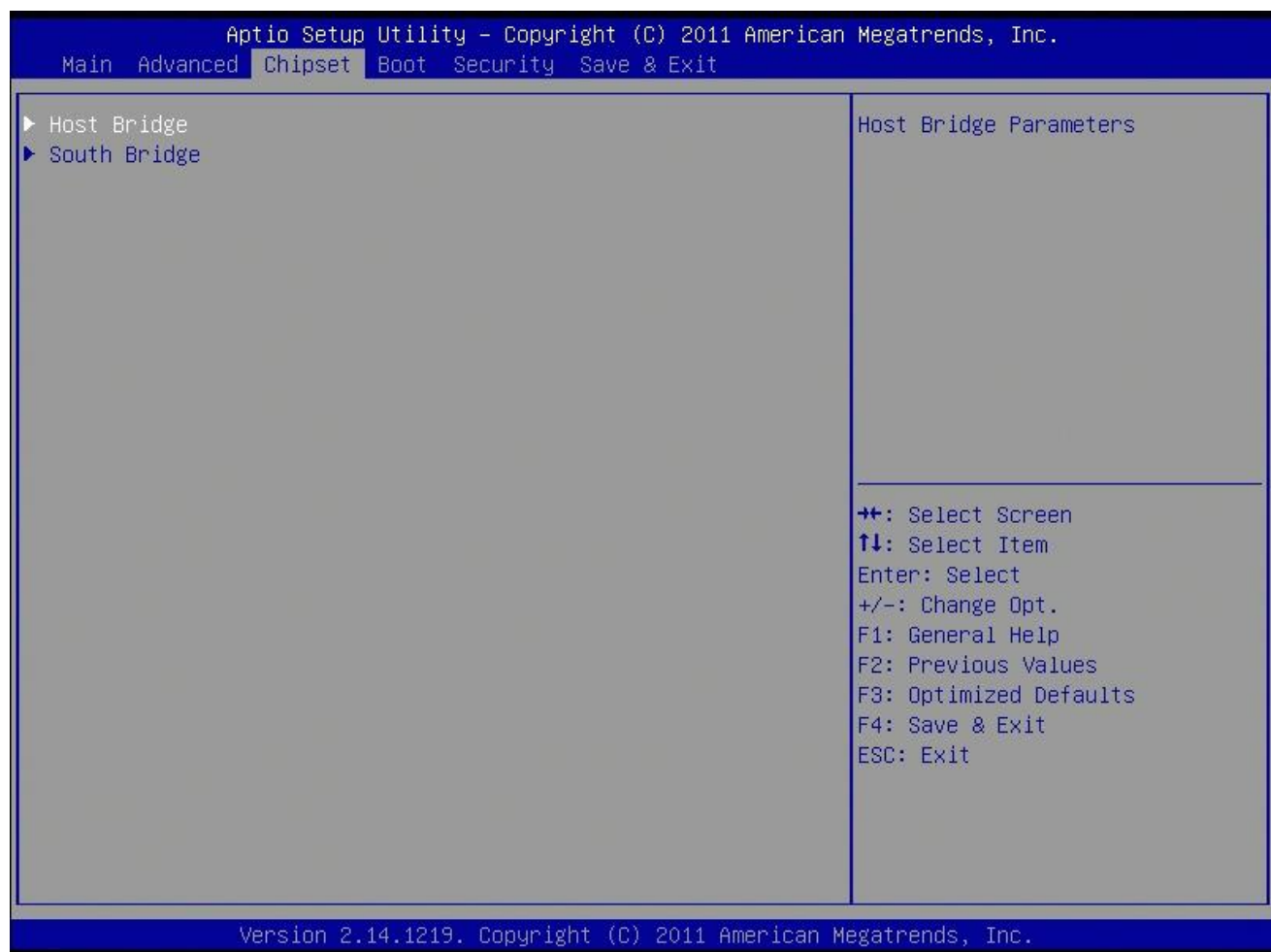
```
Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
  Main  Advanced  Chipset  Boot  Security  Save & Exit

▶ Host Bridge                                          Host Bridge Parameters
▶ South Bridge




                                                       →←: Select Screen
                                                       ↑↓: Select Item
                                                       Enter: Select
                                                       +/-: Change Opt.
                                                       F1: General Help
                                                       F2: Previous Values
                                                       F3: Optimized Defaults
                                                       F4: Save & Exit
                                                       ESC: Exit


        Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

2.12 Host Bridge

```
            Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
    Chipset

▶ Boot Display Configuration                                  Config Boot Display Settings.

  ****** Memory Information ******
  Memory Frequency                   1067 MHz(DDR3)
  Total Memory                       2048 MB
  DIMM#1                             2048 MB




                                                            →←: Select Screen
                                                            ↑↓: Select Item
                                                            Enter: Select
                                                            +/-: Change Opt.
                                                            F1: General Help
                                                            F2: Previous Values
                                                            F3: Optimized Defaults
                                                            F4: Save & Exit
                                                            ESC: Exit



            Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

Host bridge parameters

Memory Frequency and Timing

Display memory Frequency and Timing settings.

2.13 Boot Display Configuration

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
     Chipset

 Boot Display Configuration                                 Select LCD panel used by
                                                            Internal Graphics Device by
 LCD Panel Type                      [VBIOS Default]        selecting the appropriate
 Color Depth                         [24 Bits]              setup item.
                                                            D2000 series upto 1440x900.
                                                            N2000 series upto 1366x768.



                                                            _____

                                                            ↔: Select Screen
                                                            ↑↓: Select Item
                                                            Enter: Select
                                                            +/-: Change Opt.
                                                            F1: General Help
                                                            F2: Previous Values
                                                            F3: Optimized Defaults
                                                            F4: Save & Exit
                                                            ESC: Exit



          Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

2.14 LCD Panel type [VBIOS Default]

Select LCD Panel used by internal Graphics Device by Select the appropriate setup item.

```
           Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
            Chipset

  Boot Display Configuration                              Select LCD panel used by
                                                          Internal Graphics Device by
  LCD Panel Type                    [VBIOS Default]       selecting the appropriate
  Color Depth                       [24 Bits]             setup item.
                                                          D2000 series upto 1440x900.
                                                          N2000 series upto 1366x768.

                       ┌───── LCD Panel Type ─────┐
                       │ VBIOS Default            │
                       │ 640x480    LVDS          │
                       │ 800x600    LVDS          │       →←: Select Screen
                       │ 1024x768   LVDS          │       ↑↓: Select Item
                       │ 1280x1024 LVDS           │       Enter: Select
                       │ 1366x768   LVDS          │       +/-: Change Opt.
                       │ 1440x900   LVDS          │       F1: General Help
                       │ 1280x800   LVDS          │       F2: Previous Values
                       │ 1024x600   LVDS          │       F3: Optimized Defaults
                       └──────────────────────────┘       F4: Save & Exit
                                                          ESC: Exit




           Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

Color depth [24Bits]

Select color Depth for LVDS

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
            Chipset

  Boot Display Configuration                              Select Color Depth for LVDS1.
                                                          24 Bits is only for D2000
  LCD Panel Type                   [VBIOS Default]        series processors.
  Color Depth                      [24 Bits]




                              ┌──── Color Depth ────┐
                              │  18 Bits            │
                              │  24 Bits            │
                              └─────────────────────┘
                                                          ←→: Select Screen
                                                          ↑↓: Select Item
                                                          Enter: Select
                                                          +/-: Change Opt.
                                                          F1: General Help
                                                          F2: Previous Values
                                                          F3: Optimized Defaults
                                                          F4: Save & Exit
                                                          ESC: Exit



          Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

2.15 South Bridge parameters

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
    Main  Advanced  Chipset  Boot  Security  Save & Exit

  ▶ Host Bridge                                    │ South Bridge Parameters
  ▶ South Bridge                                   │
                                                   │
                                                   │
                                                   │
                                                   │
                                                   │
                                                   │
                                                   │
                                                   │
                                                   │
                                                   │
                                                   │_____
                                                   │
                                                   │ ➔←: Select Screen
                                                   │ ↑↓: Select Item
                                                   │ Enter: Select
                                                   │ +/-: Change Opt.
                                                   │ F1: General Help
                                                   │ F2: Previous Values
                                                   │ F3: Optimized Defaults
                                                   │ F4: Save & Exit
                                                   │ ESC: Exit

          Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

Into South Bridge Subdiredtory

```
              Aptio Setup Utility – Copyright (C) 2011 American Megatrends, Inc.
        Chipset

▶ TPT Devices                                          Enable/Disable Intel(R) IO
▶ PCI Express Root Port 4                              Controller Hub (TPT) devices

  Onboard LAN Controller           [Enabled]




                                                       ↔: Select Screen
                                                       ↑↓: Select Item
                                                       Enter: Select
                                                       +/-: Change Opt.
                                                       F1: General Help
                                                       F2: Previous Values
                                                       F3: Optimized Defaults
                                                       F4: Save & Exit
                                                       ESC: Exit



              Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```

TPT Devices

Set parameters of INTEL IO controller Hub(TPT) devices

PCI Express Root port 4

Set parameters of PCI Express Root port 4 settings

Onboard LAN controller [Enabled]

Enable or Disable onboard LAN controller

2.16 Boot

```
          Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
    Main  Advanced  Chipset  Boot  Security  Save & Exit

    Boot Configuration                                    Number of seconds to wait for
    Setup Prompt Timeout             1                     setup activation key.
    Bootup NumLock State            [On]                   65535(0xFFFF) means indefinite
                                                           waiting.
    Quiet Boot                      [Disabled]

    CSM16 Module Version             07.68


    Boot Option Priorities
    Boot Option #1                  [UEFI: Built-in EFI...]


                                                          ↔: Select Screen
                                                          ↑↓: Select Item
                                                          Enter: Select
                                                          +/-: Change Opt.
                                                          F1: General Help
                                                          F2: Previous Values
                                                          F3: Optimized Defaults
                                                          F4: Save & Exit
                                                          ESC: Exit



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```
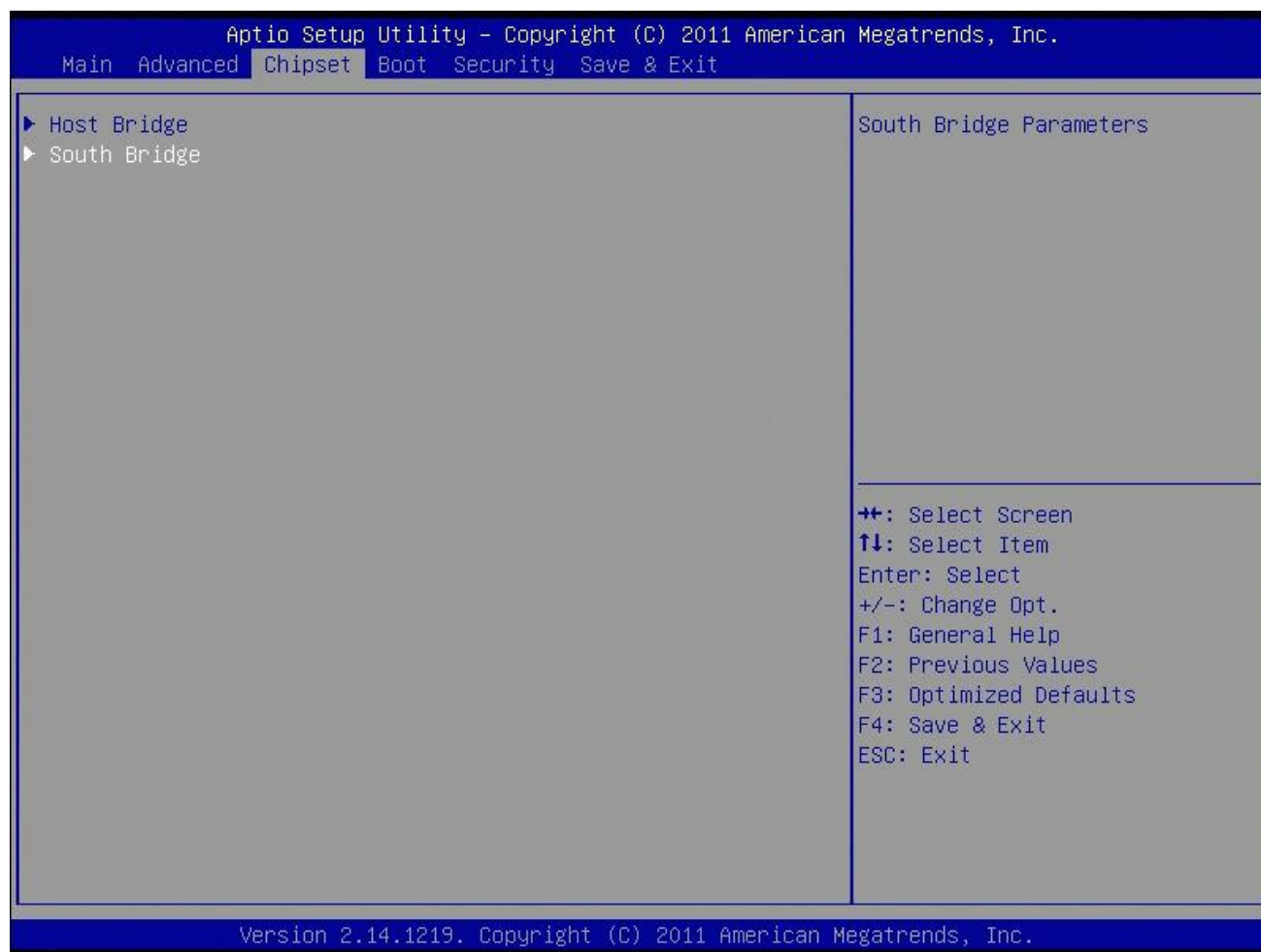
2.17 Security

```
              Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
    Main   Advanced  Chipset  Boot  Security  Save & Exit

 Password Description                                        Set Administrator Password

 If ONLY the Administrator's password is set,
 then this only limits access to Setup and is
 only asked for when entering Setup.
 If ONLY the User's password is set, then this
 is a power on password and must be entered to
 boot or enter Setup. In Setup the User will
 have Administrator rights.
 The password length must be
 in the following range:
 Minimum length                    3
 Maximum length                    20                 →←: Select Screen
                                                      ↑↓: Select Item
                                                      Enter: Select
 Administrator Password                               +/-: Change Opt.
 User Password                                        F1: General Help
                                                      F2: Previous Values
                                                      F3: Optimized Defaults
                                                      F4: Save & Exit
                                                      ESC: Exit



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```
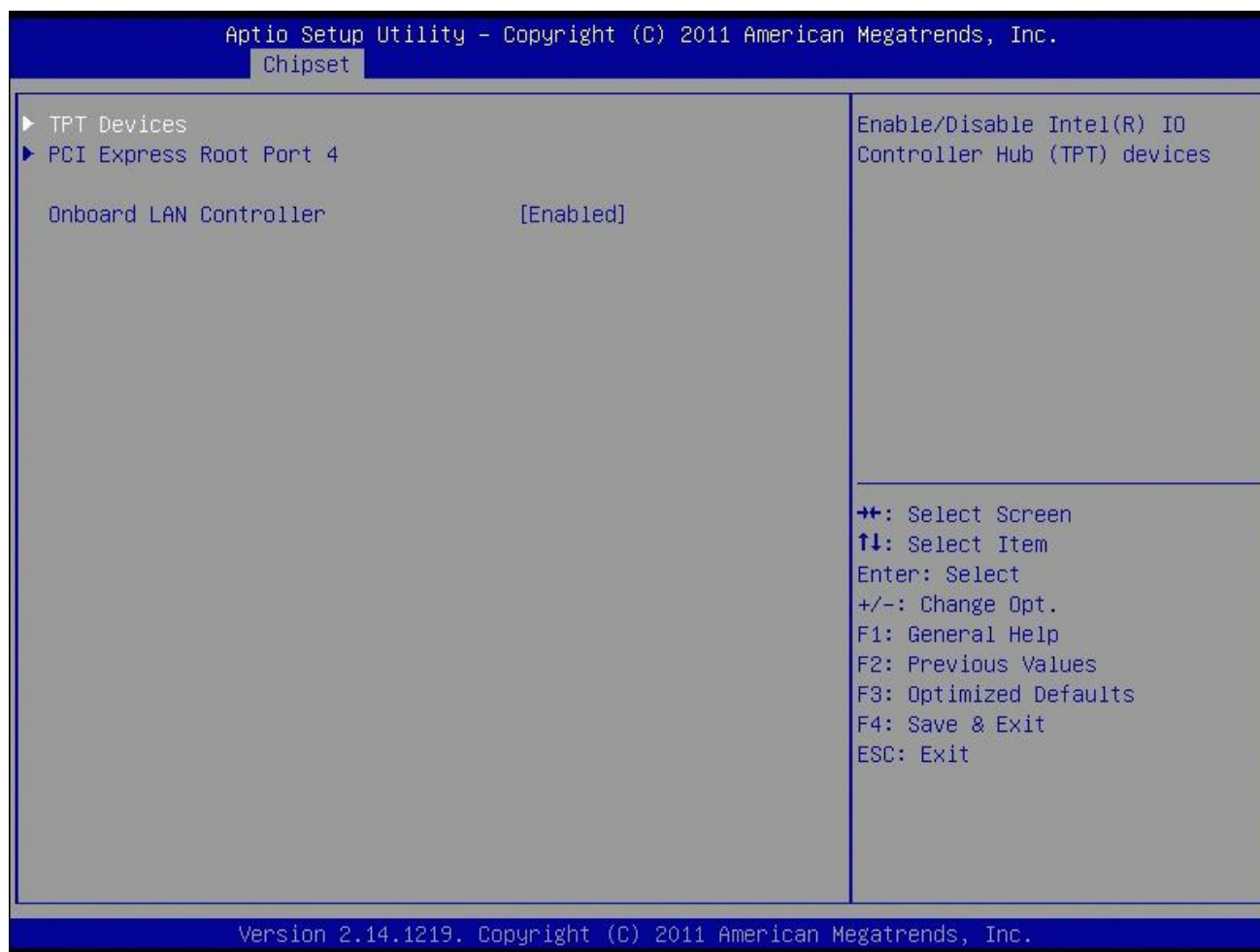
Administrator password

Set administrator password

User password

Set User password

2.18 Save & Exit

```
         Aptio Setup Utility - Copyright (C) 2011 American Megatrends, Inc.
   Main   Advanced   Chipset   Boot   Security   Save & Exit

   Save Changes and Exit                              Exit system setup after saving
   Discard Changes and Exit                           the changes.
   Save Changes and Reset
   Discard Changes and Reset

   Save Options
   Save Changes
   Discard Changes

   Restore Defaults
   Save as User Defaults
   Restore User Defaults

   Boot Override
   UEFI: Built-in EFI Shell                           →←: Select Screen
                                                      ↑↓: Select Item
                                                      Enter: Select
                                                      +/-: Change Opt.
                                                      F1: General Help
                                                      F2: Previous Values
                                                      F3: Optimized Defaults
                                                      F4: Save & Exit
                                                      ESC: Exit



         Version 2.14.1219. Copyright (C) 2011 American Megatrends, Inc.
```
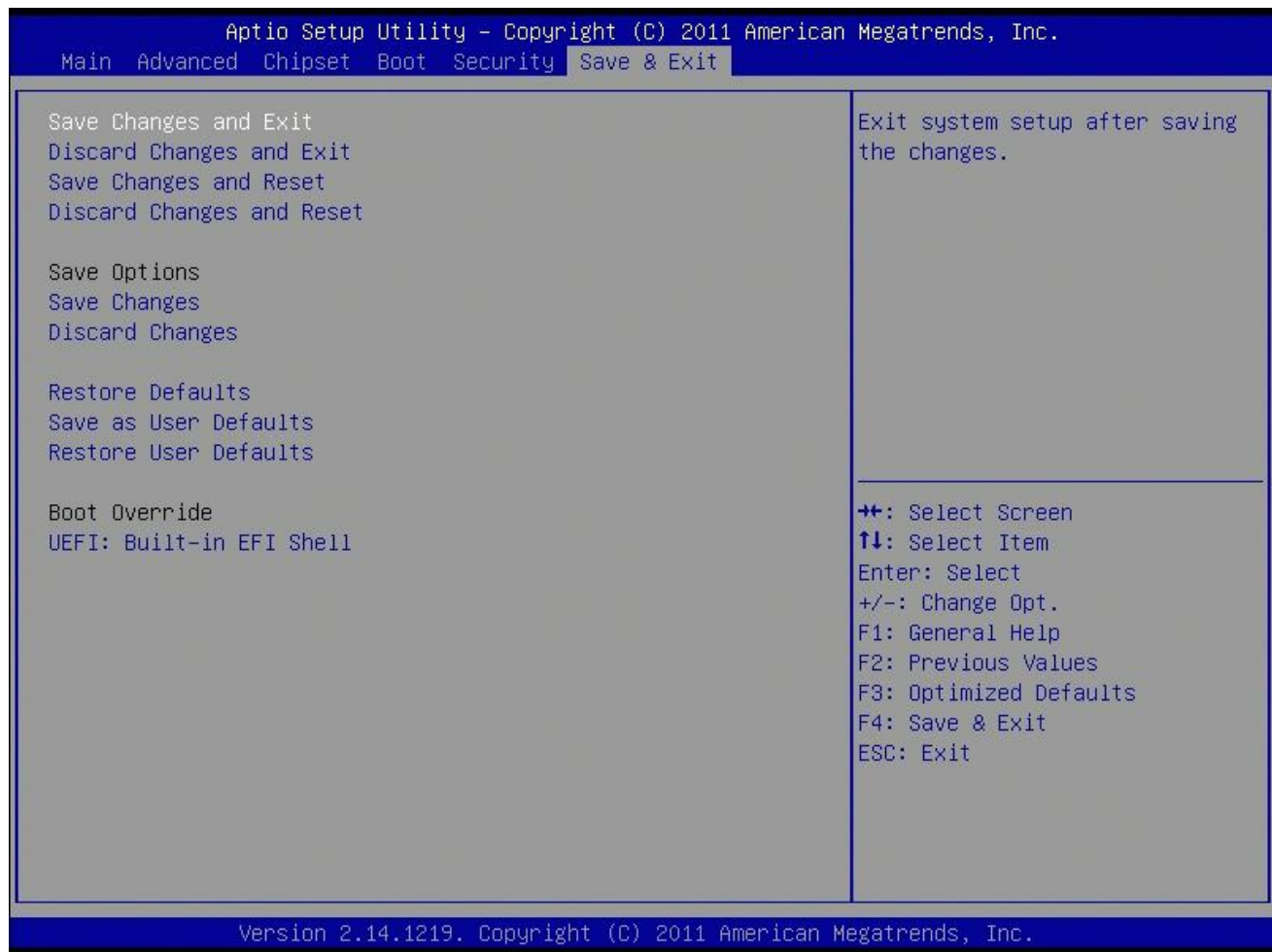
- **Save Changes and Exit**

  Exit system setup after saving the changes.

- **Discard changes and Exit**

  Exit system setup without saving any changes.

- **Save changes and Reset**

  Reset teh system after saving the changes.

- **Discard changes and Reset**

  Reset system setup without saving any changes.

- **Save changes**

  Save chnages done so far to any of the setup options.

- **Discard changes**

Discard changes done so far to any of the setup options.

- **Restore Defaults**

  Restore/Load Default values for all the setup options.

- **Save as User Defaults**

  Save the changes done so far as User Defaults

- **Restore User Defaults**

  Restore the User Default to all teh setup options.

6. Troubleshooting

(1) Network Issues

Symptom	Corrective Procedure
Cannot access LAN	▪ Check if hub or switch is working correctly ▪ Check RJ45 cable connection ▪ Check if LAN LEDs are on/off ▪ Reinstall LAN card ▪ Replace motherboard

(2) MSR Issues

Symptom	Corrective Procedure
MSR does not respond	▪ Check MSR reader cable connection ▪ Check motherboard and LCD cable connection ▪ Check MSR board cable connection

(3) USB Issues

Symptom	Corrective Procedure
USB port doesn't work	▪ Check Windows device manager for device recognition ▪ Check USB device status and connection ▪ Erase and re-install USB driver ▪ Change USB device

(4) LCD Issues

Symptom	Corrective Procedure
LCD backlight doesn't work	▪ Check LCD cable connection ▪ Check inverter cable connection ▪ Replace inverter cable ▪ Change LCD panel

(5) Touch-screen Issues

Symptom	Corrective Procedure
Touch-screen doesn't detect touch operations	• Check touch-screen cable connection • Check motherboard and LCD cable connection • Check BIOS set-up

(6) Power Issues

Symptom	Corrective Procedure
System switches off abruptly and system does not load	• Check A/C cable connection • Check motherboard power connection • Check CPU settings/status • Check DRAM settings • Check power button cable connection • Change power adaptor unit

(7) PS/2 Keyboard Issues

Symptom	Corrective Procedure
PS/2 Keyboard Issues	• Check card-reader cable • Check CN6 jumper

(8) Booting Issues

Symptom	Corrective Procedure
Re-booting during system operation	• Check SATA cable connection • Check memory status

Maintenance

Safety Warning

AXON will not be held responsible for repairs conducted via service providers other than those officially specified by the seller.

General Guidelines

1. Always disconnect the unit from the power outlet.
2. Disconnect all cables from the POS main unit before attempting reparation.
3. Keep all components in the static-proof packaging provided until ready for installation.
4. If the device still is not functioning after repair, please turn off the POS unit and contact the customer service center for a follow-up inspection.
5. We recommend that power supply unit (PSU) checks and monitor repairs only be performed at a certified service center.

Specification

BLUO D25		
CPU		Intel Atom processor D2550 (1MB Cache, 1.86 GHz, Dual Core for Cedarview-D)
Chipset		Intel NM10
Storage		SATA2(3Gb/s) 2.5 inch HDD or SSD (Max. 2 Optional)
		-
		Support AHCI
Memory		DDR3-1066MHz SODIMM 2GB (MAX. 4GB)
Graphic		Integrated Intel GMA HD 3650
AMT		-
Display	**Resolution**	15" LED Backlight LCD 250 cd/m² (1024 x 768 resolution)
	Touch screen	True Flat Capacitive or 5-wired Resistive Touch
	Viewing angle	
Internal I/O	**USB**	3 Ports (reserved for touch controller, MSR reader, mini PCIe)
	Serial port	COM 5 (reserved for cash drawer port) & COM 6 (reserved for MSR)
	Display port	VGA & COM 4 (reserved for CDP)
	Extension slot	Mini PCIe
	Primary display	24bit LVDS
External I/O	**USB**	Rear 4
	PS/2	1 Port (reserved for Keyboard & Mouse)
	Serial port	COM 1 ~ 3 with 5V/12V power output on 9pin
	LAN	Realtek RTL 8111E Ethernet Controller
	Audio	Realtek ALC 892 / Line-out, Mic-in
	Display port	VGA x 1 port
Options	**MSR**	Comply with ISO 7811, Support 1 & 2 & 3 track
	Speaker	2 x 0.8W (Stereo)
	Side USB	4 Ports (USB 2.0)
	Serial port	-
	SCR	EMV level 1
	Dallas	Dallas I-button reader
	Back up battery	Smart battery (supports up to 1 packs)
	Customer display	VFD type (20 x 2) Alphabet & numeric
	2nd LCD	10.1" LCD or 10.4" LCD or 12.1 LCD (1024 x 768 resolution)
	2nd storage	2nd SSD / HDD storage
	Cash drawer port	1 Port (RJ11 shared with COM5)
	Parallel port	1 Port
	WiFi	Mini PCIe for wireless LAN
Operating Temperature		0 ℃ ~ 40 ℃ at 10% ~ 80% humidity
Storage Temperature		-20 ℃ ~ 60 ℃ at 10% ~ 80% humidity
Qualification		CE, FCC, KC
Power		Adaptor 12V/ 5A
OS Support		Windows XP/Vista, Windows 7, POS Ready 2009
Dimension (W x H x D)		415 x 305 x 385(mm), 16.3 x 12 x 15.1(inch)

*Product specifications may differ according to region and may be changed without prior notice.

*MSR is not supported PS/2 interface