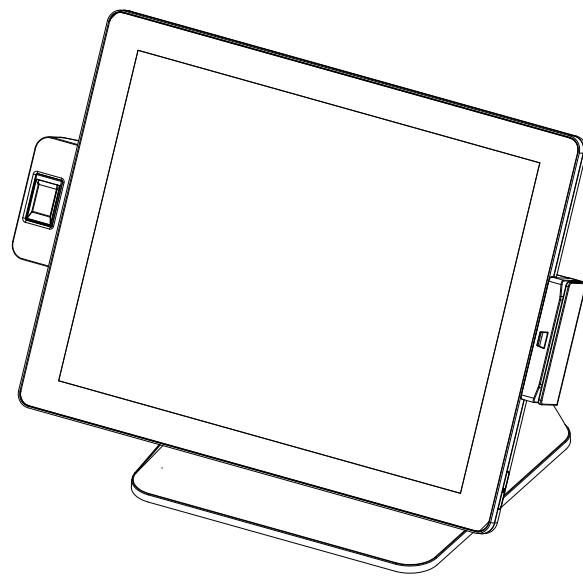


USER MANUAL

VERSION 1.0 January 2018

Breeze Ultra



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Safety

IMPORTANT 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. The wall socket must be easily accessible and in close proximity to the machine.
2. Read these instructions carefully. Save these instructions for future reference.
3. Follow all warnings and instructions marked on the product.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. 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. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. 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.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. 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.



This device complies with the requirements of the EEC directive 2014/30/EU with regard to “Electromagnetic compatibility” and 2014/35/EU “Low Voltage Directive”.



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.

CAUTION ON LITHIUM BATTERIES

There is a danger of explosion if the battery is replaced incorrectly. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer’s instructions.



Battery Caution

Risk of explosion if battery is replaced by an incorrectly type. Dispose of used battery according to the local disposal instructions.



Safety Caution

Note: To comply with IEC60950-1 Clause 2.5 (limited power sources, L.P.S) related legislation, peripherals shall be 4.7.3.2 “Materials for fire enclosure” compliant.

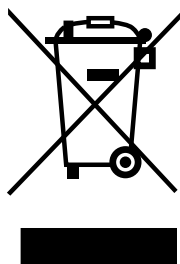
4.7.3.2 Materials for fire enclosures

For MOVABLE EQUIPMENT having a total mass not exceeding 18kg, the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of V-1 CLASS MATERIAL or shall pass the test of Clause A.2.

For MOVABLE EQUIPMENT having a total mass exceeding 18kg and for all STATIONARY EQUIPMENT, the material of a FIRE ENCLOSURE, in the thinnest significant wall thickness used, shall be of 5VB CLASS MATERIAL or shall pass the test of Clause A.1

LEGISLATION AND WEEE SYMBOL

2012/19/EU Waste Electrical and Electronic Equipment Directive on the treatment, collection, recycling and disposal of electric and electronic devices and their components.



The crossed dust bin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

Revision History

Changes to the original user manual are listed below:

Revision	Description	Date
1.0	• Initial release	January 2018

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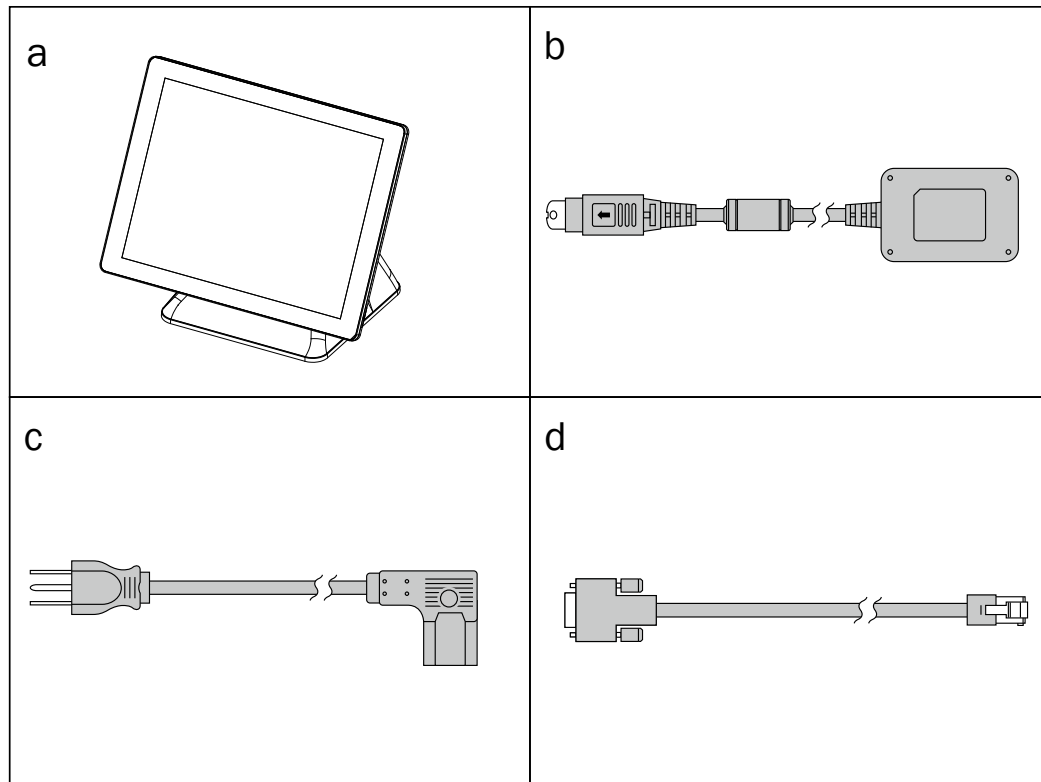
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1. Packing List

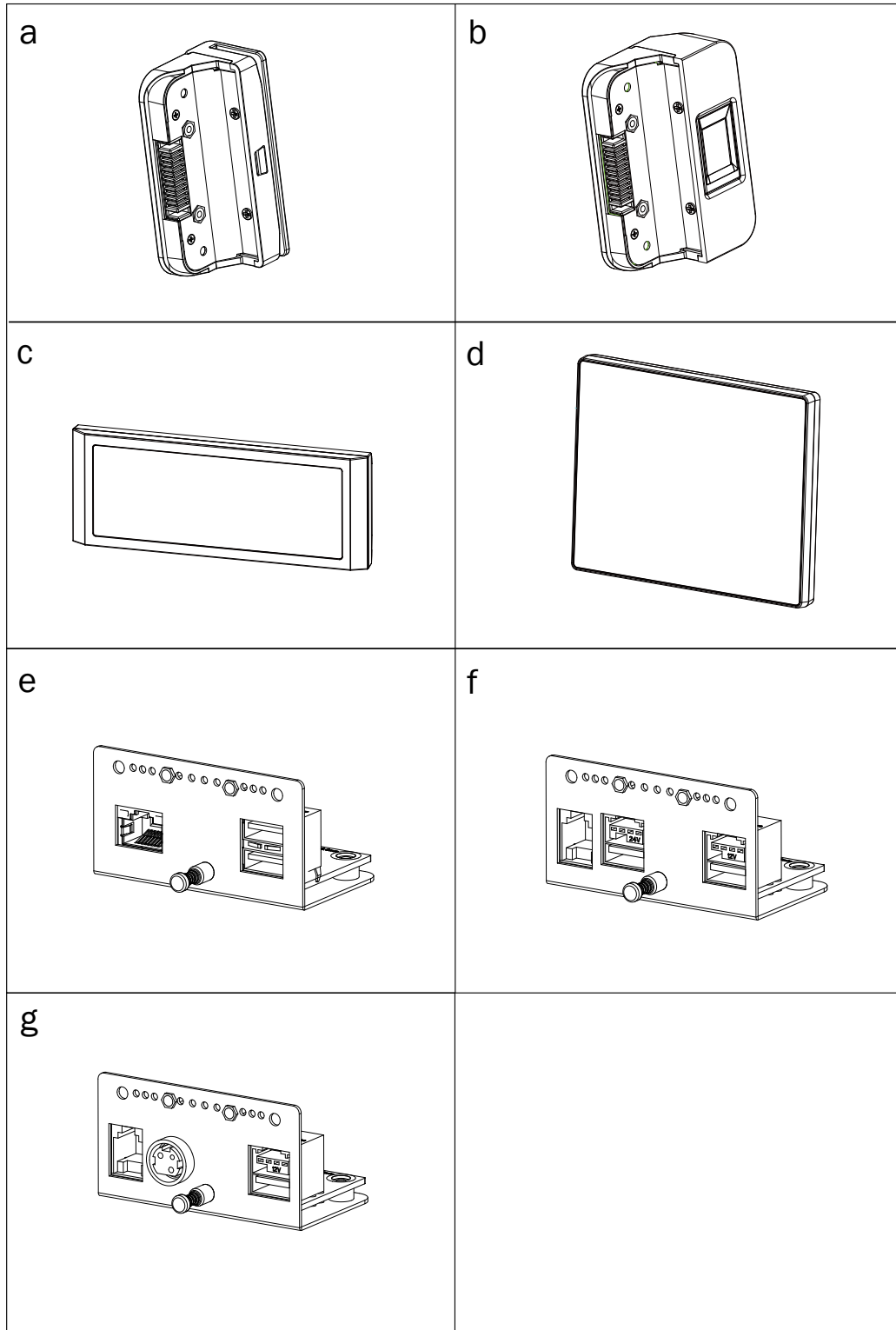
1-1. Standard Accessories



- a. System
- b. Power adapter
- c. Power cord
- d. RJ45-DB9 cable (x2)

Note: Power cord will be supplied differently according to various region or country.

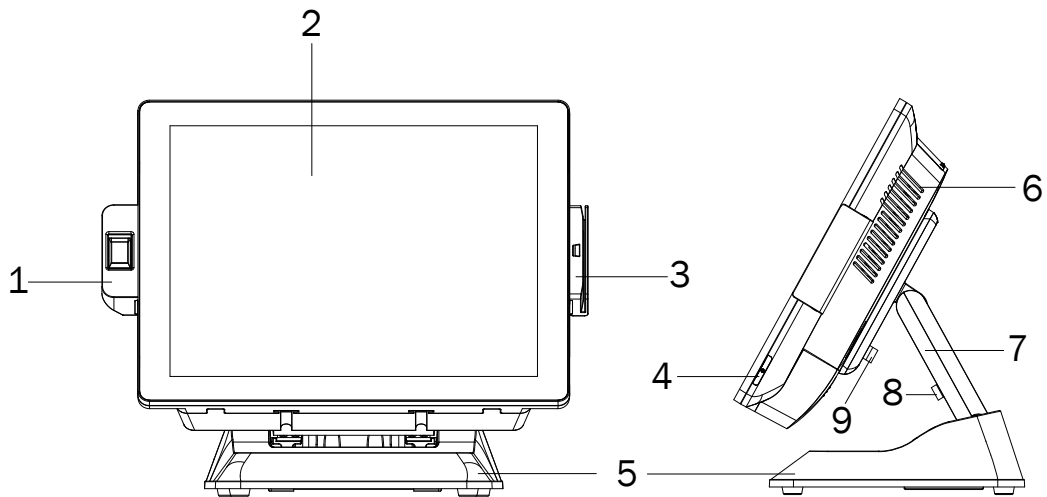
1-2. Optional Accessories



- a. MSR module
- b. TCET Fingerprint module
- c. Customer display
- d. 8 or 15 2nd display
- e. IO port module (LAN / USB2.0 x 2)
- f. IO port module (cash drawer / powered USB 24V / powered USB 12V)
- g. IO port module (cash drawer / 24V DC out / powered USB 12V)

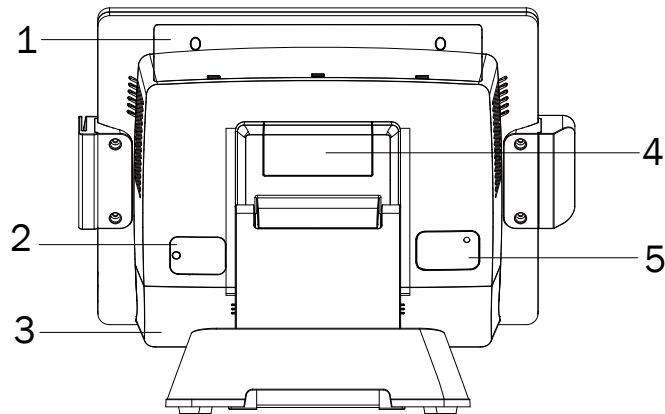
2. System View

2-1. Front & Side View



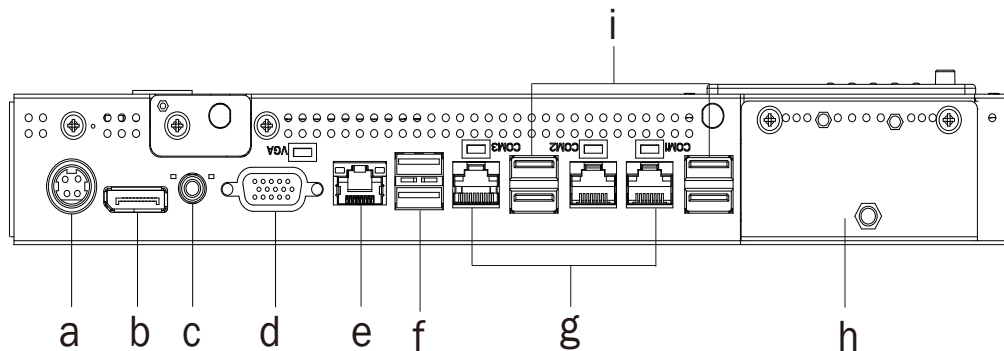
No.	Description
1	Fingerprint (option)
2	Touch screen
3	MSR (option)
4	Power button
5	Stand
6	Ventilation holes
7	Stand front cover
8	Thumb screw for the stand front cover
9	Thumb screw for the VESA mount

2-2. Rear View



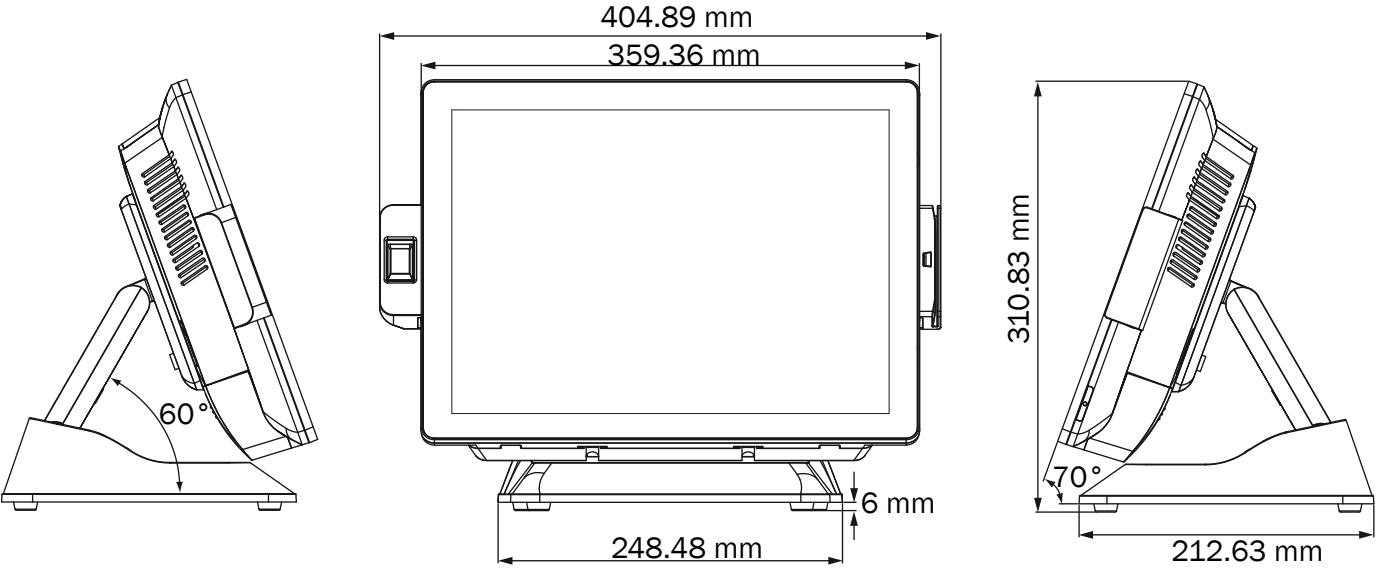
No.	Description
1	Cover for the HDD and the motherboard chassis
2	Dummy door of the Mini-PCIE slot
3	Cable cover
4	VESA top cover
5	Dummy cover for the SDR

2-3. I/O Port View



No.	Description
a	DC jack
b	Display port
c	Line out
d	VGA
e	LAN
f	USB 2.0 x 2
g	COM 1, 2, 3 (from right to left)
h	I/O module bracket
i	USB 3.0 x 4

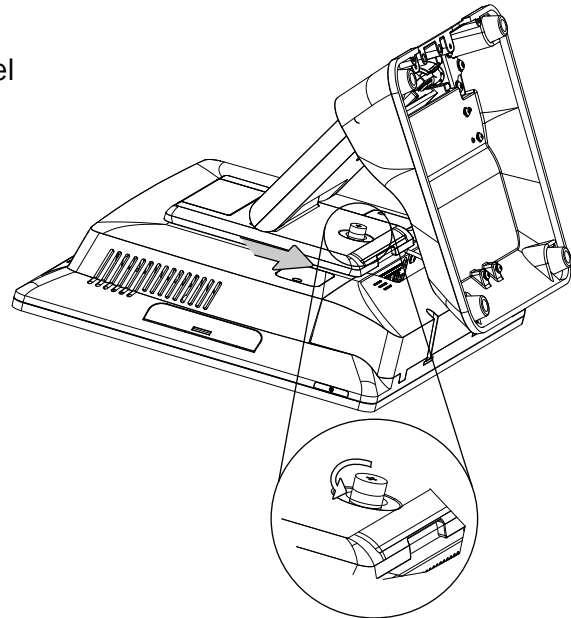
2-4. System Dimensions



3. System Assembly & Disassembly

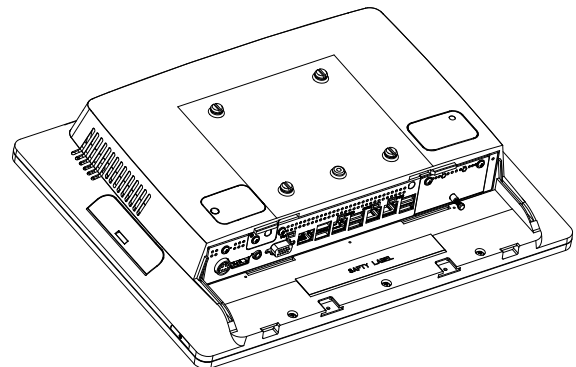
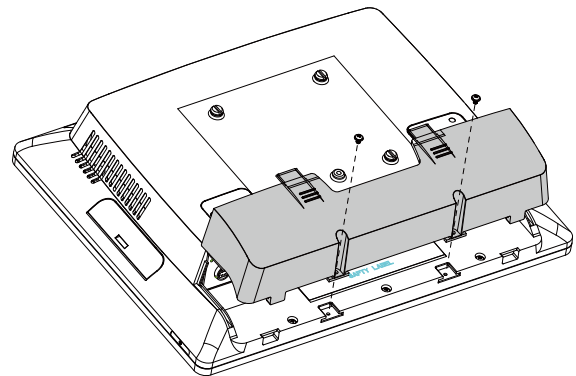
3-1. Disassemble the Stand

1. Loosen the thumb screw (x1) and slide the stand towards the IO panel to remove it from the system.
2. Reverse the steps above to attach the stand to the system.



3-2. Remove the Cable Cover

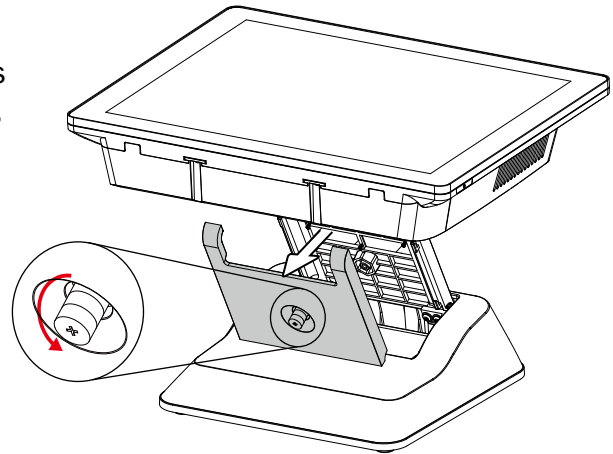
1. Follow the steps in Chapter 3-1 to remove the stand first.
2. Remove the screws (x2) and lift the cable cover.



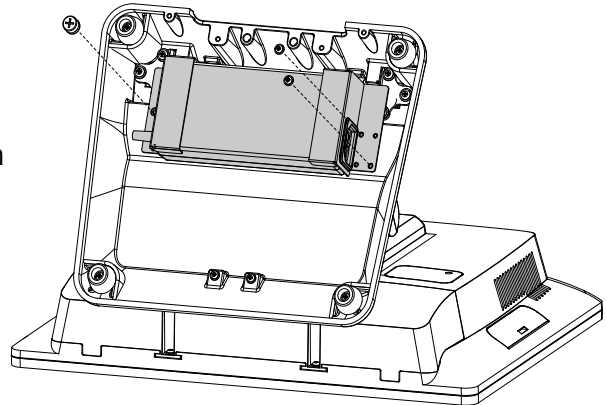
3-3. Install the Power Adapter

The system is equipped with a 120W power adapter. Please follow the steps to install the power adapter.

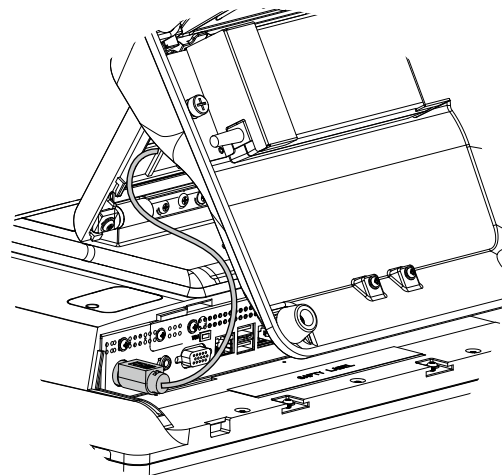
1. The stand is designed to allow for clean cable management. There is a cable channel through the stand, which has a quick access cover. Please loosen the the front cover thumb screw (x1) first.



2. Lay down system to access the bottom of the stand.
3. Attach the power adapter and then fasten the screws (x3) to secure the holder bracket.

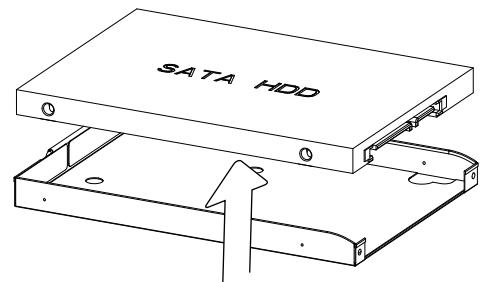
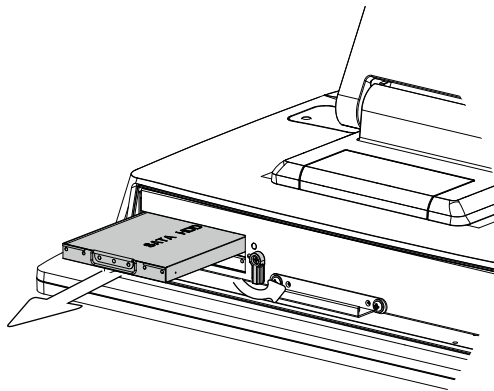
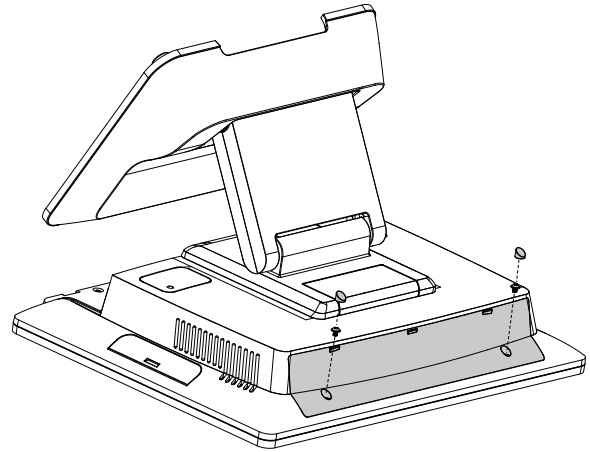


4. Connect the power adapter to the 19V DC in port and then route the cable as shown in the picture.
5. Replace the front cover.



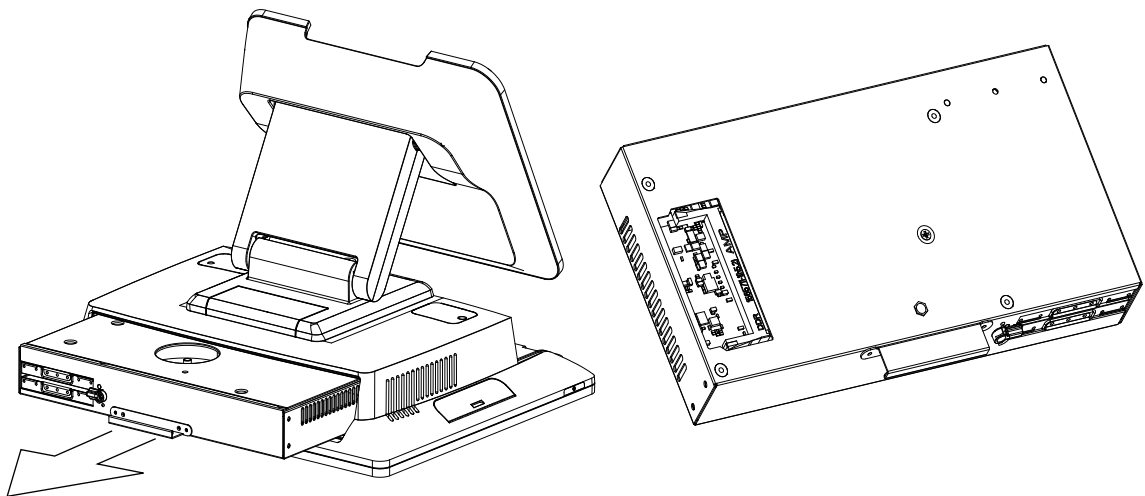
3-4. Replace HDD

1. Power off the system.
2. Remove the rubber pads (x2) and screws (x2) from the HDD dummy door.



3. The HDD is secured by a clip, slide the clip aside.
 4. Pull the HDD tray from the system.
- * To install a new HDD, attach the HDD to the HDD tray and slide it into the slot until it snaps in place.
 - * Please note the top of the HDD should be on the upper side.

3-5. Release the Motherboard Chassis

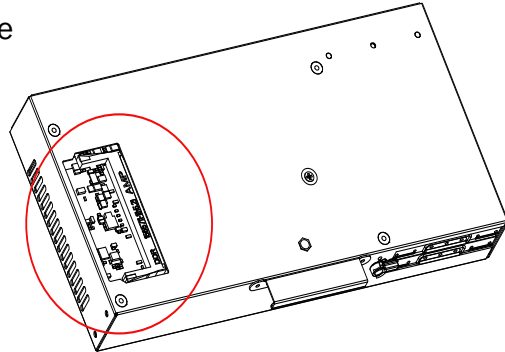


1. Follow the steps in Chapter 3-4 to remove the HDD dummy door first.
2. Pull the Motherboard chassis.

3-6. Replace RAM

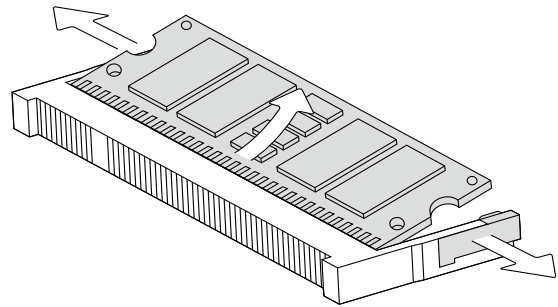
To remove and replace the RAM module, please release the motherboard chassis firstly as steps dscribed in chapter 3-5.

1. Find the memory slot at the left side as the picture shown.



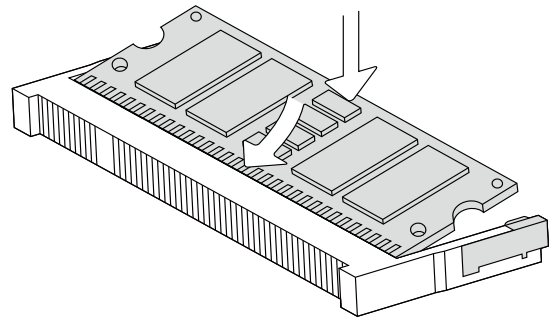
Removing a RAM module

2. Flip the ejector clips outwards to remove the memory module from the memory slot.



Installing a RAM module

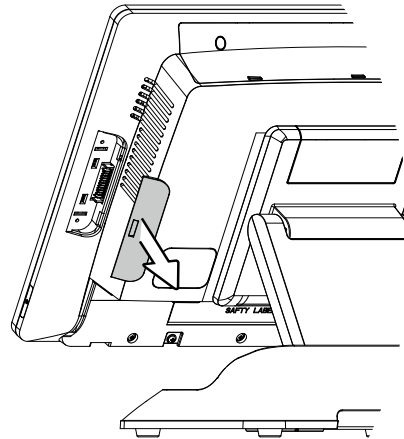
3. Slide the memory module into the memory slot and press down until the ejector clips snaps in place.



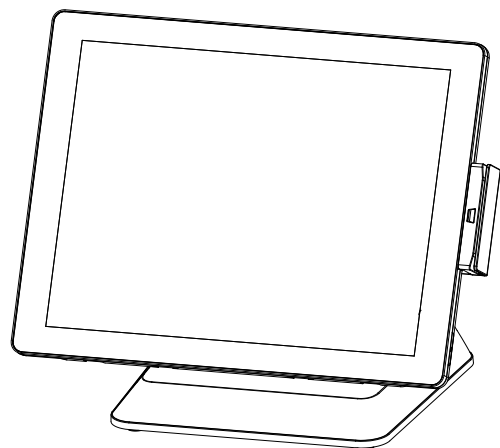
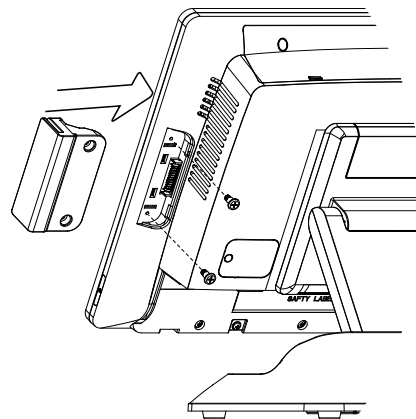
4. Peripheral Installation

4-1. Install the MSR Module

1. Remove the dummy cover first.

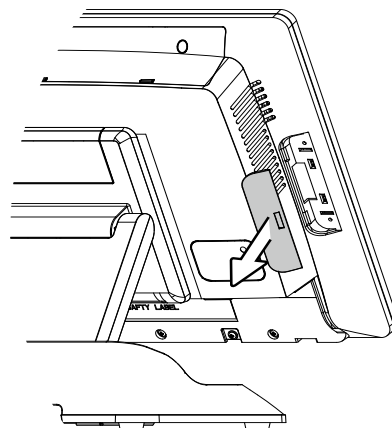


2. Insert the MSR module in place and fasten the screws (x2) on the back to secure the module.

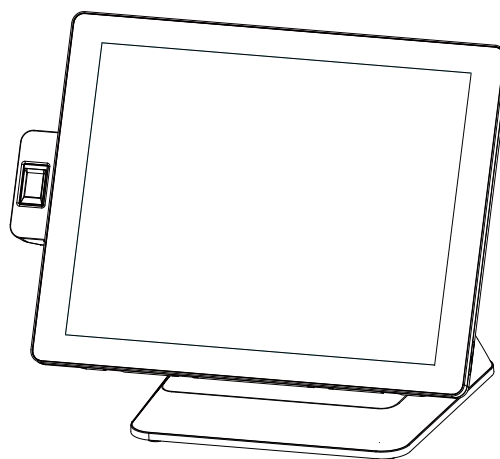
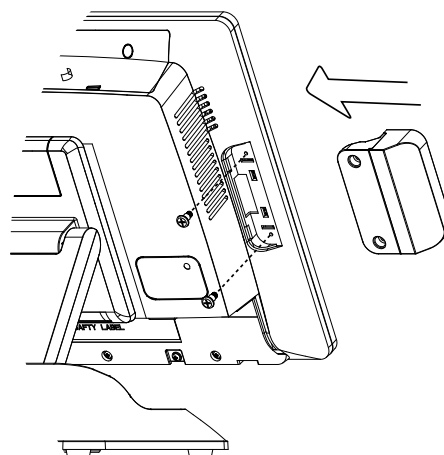


4-2. Install the Fingerprint Module

1. Remove the dummy cover first.

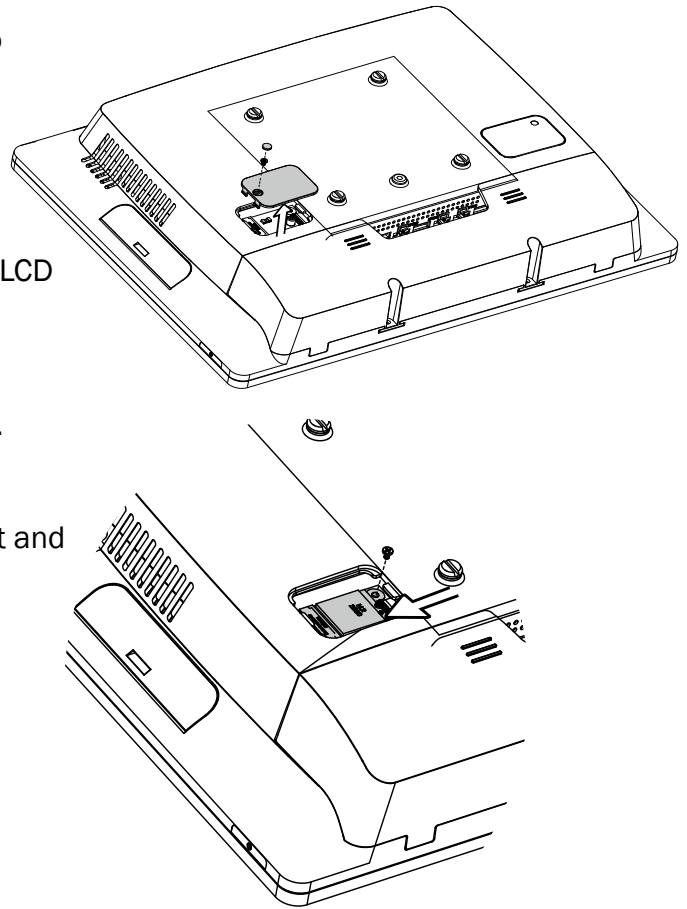


2. Insert the Fingerprint module in place and fasten the screws (x2) on the back to secure the module.



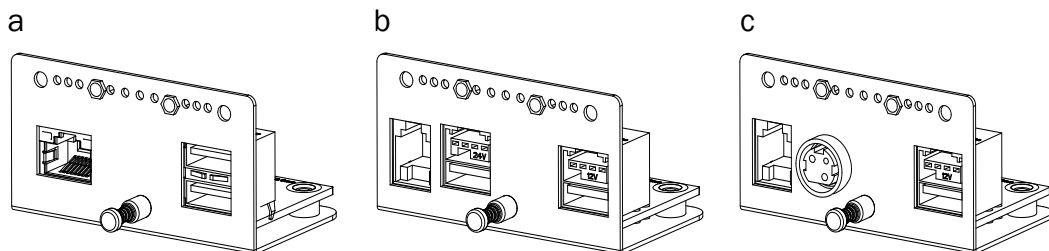
4-3. Install the WLAN Card

1. Follow the steps in Chapter 3-1 to release the stand first.
2. Place the system face down. Making sure not to scratch the screen. Find the mini PCIE slot at the left side of the back of the LCD panel.
3. Remove the rubber pad (x1) and screw (x1) from the dummy cover.
4. Insert the WLAN card into the slot and fasten the screw (x1) onto the main side to fix the WLAN card.



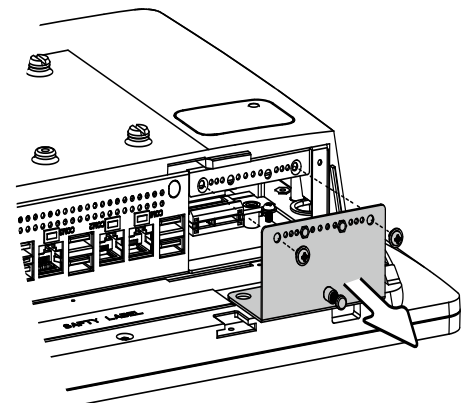
4-4. Install the IO Port Module

The system offers three optional expansion IO port modules and all follow the same installation procedure listed below:

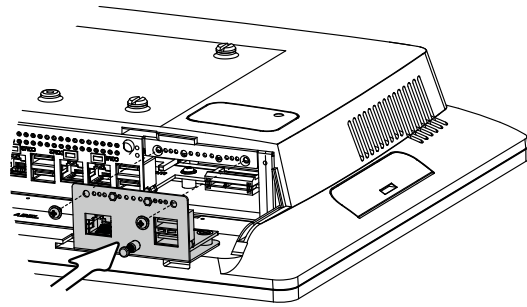


- a. IO port module (LAN / USB2.0 x 2)
- b. IO port module (cash drawer / powered USB 24V / powered USB 12V)
- c. IO port module (cash drawer / 24V DC out / powered USB 12V)

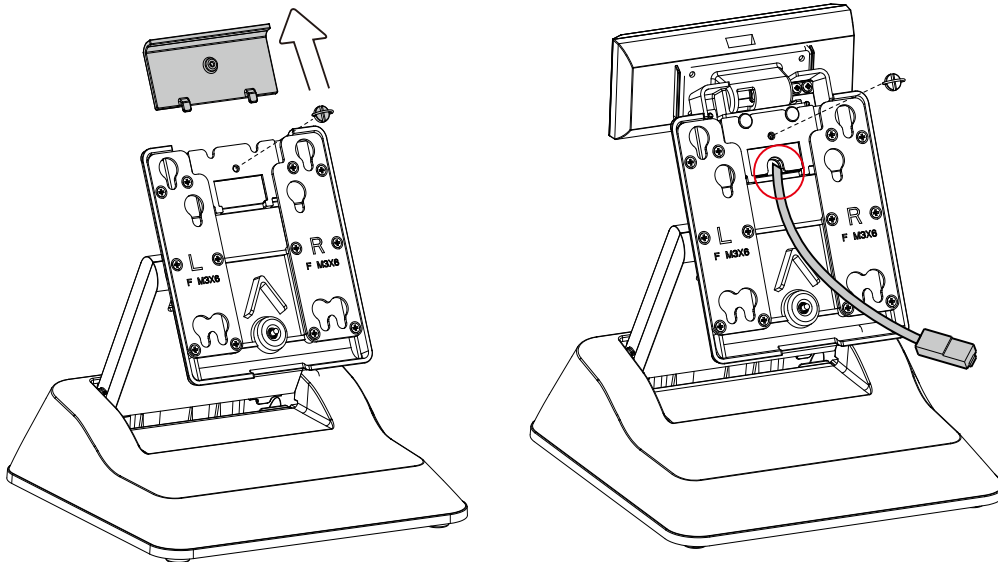
1. Follow the steps in Chapter 3-1 and Chapter 3-2 to release the stand and cable cover.
2. Remove the screws (x2) from the dummy IO port bracket and pull the bracket outwards.



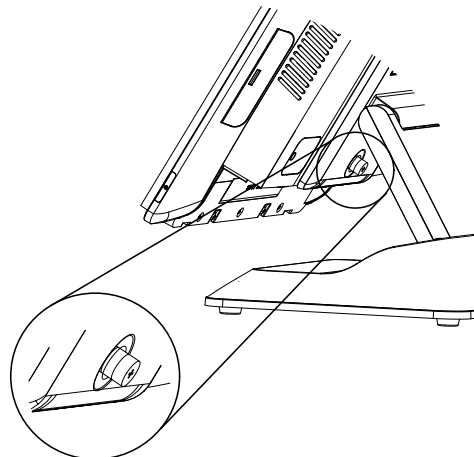
3. Attach the IO port module and fasten the screws (x2) to fix it to the system.



4-5. Install the Customer Display

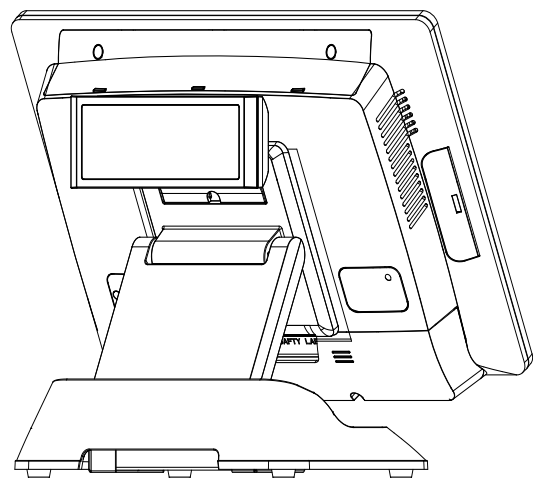
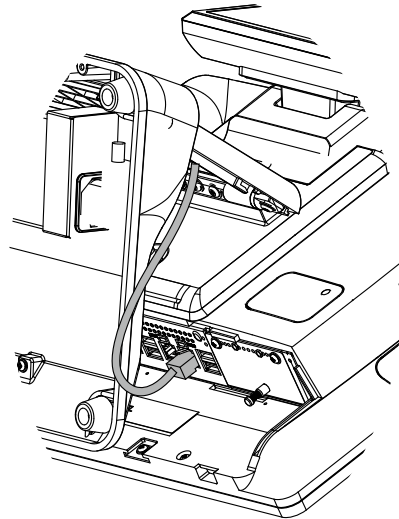


1. Follow the steps in Chapter 3-1 to disassemble the stand from the LCD panel.
2. Remove the thumb screw (x1) from the VESA top cover and then pull the cover up.
3. Attach the LCM module to system by fastening the thumb screw (x1).
4. Route the RJ-45 cable through the hole of the stand as picture shown.
5. Attach the stand to the LCD panel and fasten the thumb screw (x1).

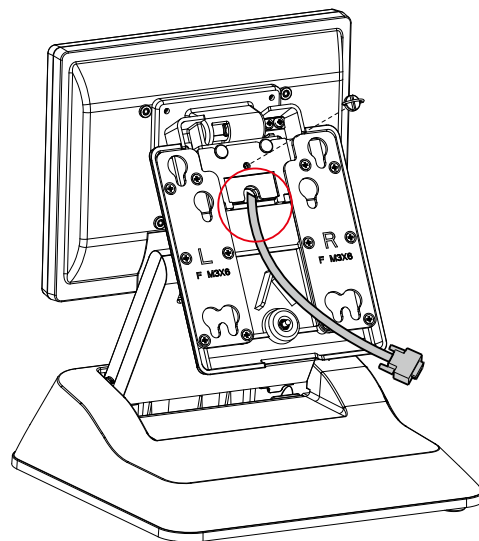
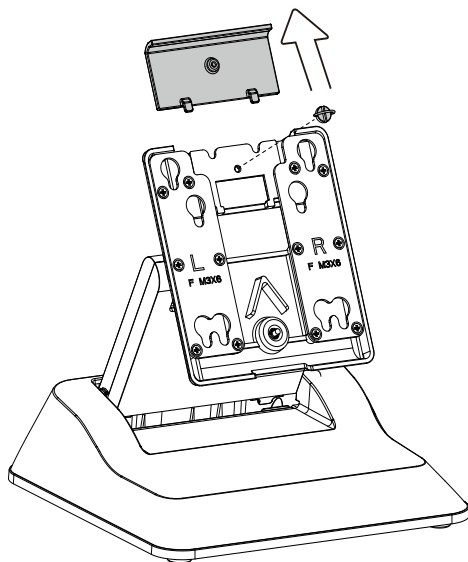


6. Connect the RJ-45 cable to COM port on the systems IO panel. Make sure the system is powered off.

* Please note the cable cover and the stand front cover (refer to Chapter 2-1 and 2-2) have to be removed before routing the cable.

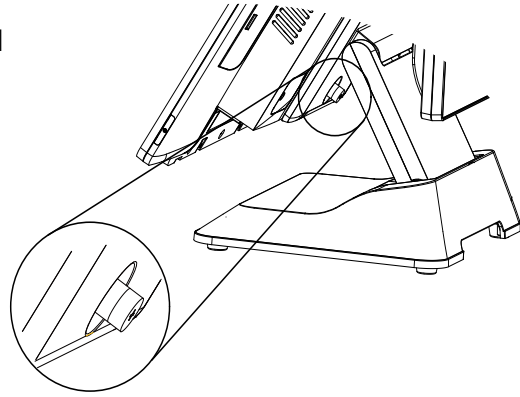


4-6. Install the Second Display



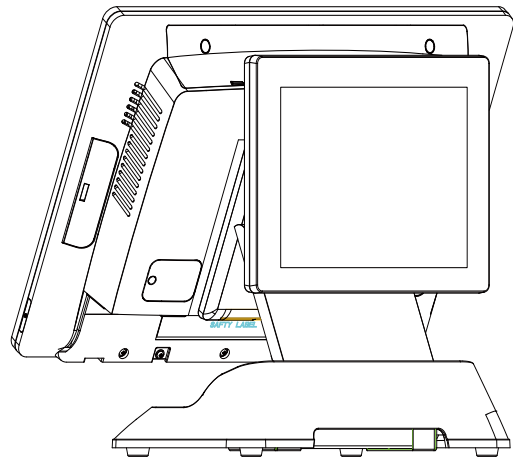
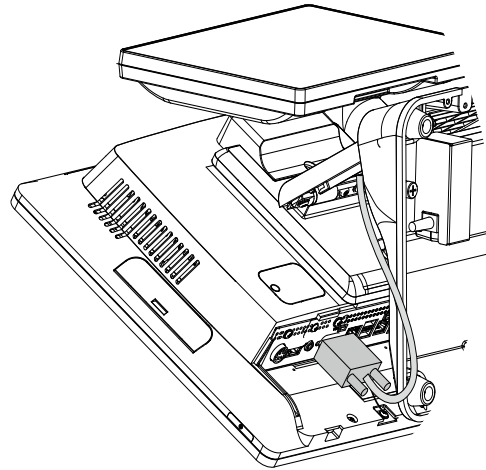
1. Follow the steps in Chapter 3-1 to disassemble the stand from the LCD panel.
2. Remove the thumb screw (x1) from the VESA top cover and then pull the cover up.
3. Attach the 8" 2nd display module to system by fastening the thumb screw (x1).
4. Route the 2nd display cable through the hole of the stand as picture shown.

5. Attach the stand to the LCD panel and fasten the thumb screw (x1).



6. Connect the 2nd display cable to VGA port on the systems IO panel. Make sure the system is powered off.

* Please note the cable cover and the stand front cover (refer to Chapter 2-1 and 2-2) have to be removed before routing the cable.



5. Specification

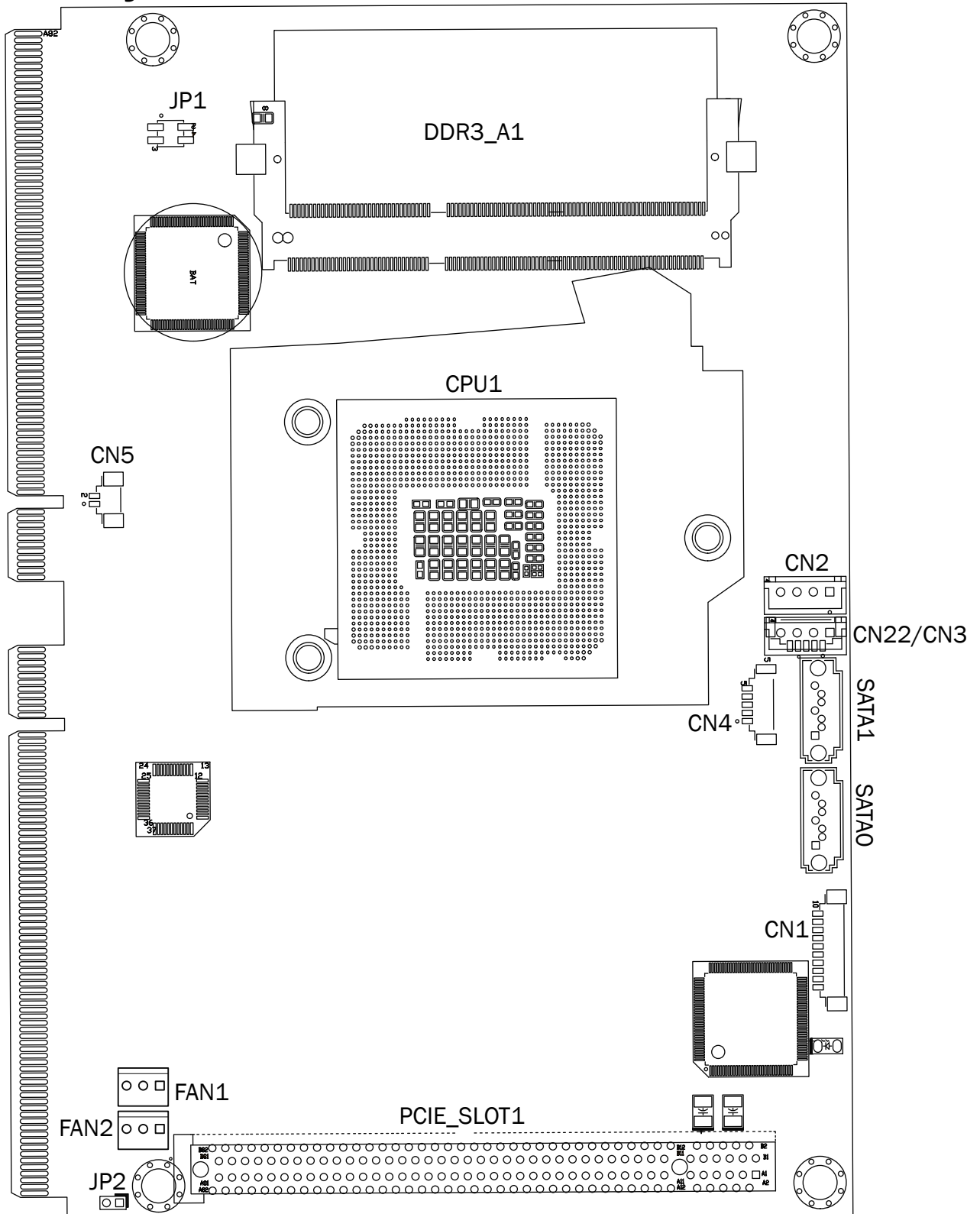
Model Name	Breeze Ultra
Mainboard	Kabylake
CPU support	Intel® Celeron G3930TE Processor (2M Cache, 2.70 Ghz) Intel® Core™ i7-7700T Processor (8M Cache, 2.90 GHz) Intel® Core™ i5-7500T Processor (6M Cache, 2.70 GHz) Intel® Core™ i3-7101TE Processor (3M Cache, 3.40 GHz)
System memory	S.O.DIMM 2 x DDR3L 1600MHz (16GB Max)
Graphic memory	Intel Graphic (Gen 9) DX12, define on CPU
LAN controller (Giga LAN)	Intel WG I219 LM
LCD Touch Panel	
LCD size	15"
Brightness (cd/m ²)	350nits
Maximal resolution	1024x768
Touch screen type	PCAP
Tilt angle	70 degree (20 degree to 90 degree)
Storage	
Storage type	2.5" Bay x 2, 7mm
Supported storage	2.5" SSD or HDD with RAID 0,1 support
Expansion	
M.2 slot	1 (for WIFI)
I/O Port Expansion	
	LAN/USB2.0x2 or USB+24/USB+12/Cash Drawer or USB+12V/+24V DC/Cash Drawer
Rear I/O	
USB port	6 (4 x USB3.0/2.0, 2 x USB2.0)
Serial / COM	3 x RJ48 (COM1/COM2/COM3/ without power by default or with power enable /disable 5V/12V by BIOS selecting)
LAN (10/100/1000)	1 x RJ45
VGA	1 (DB-15-Female), support 12V power by BIOS setting
Display port	
DC jack	1
Line out	1
Power	
Power adapter	120W /19V or 180W /19V for the powered USB options
Peripherals (optional)	
MSR	3 Tracks MSR (USB)
Fingerprint	1 (USB)
Second display	8 or 15" LED Second display
Customer display	Flush mount LCM display 2 x 20 characters (COM)
Certificate	
EMC & Safety	FCC, Class A, CE, LVD
ESD	contact 6KV ; air 10KV

Model Name	Breeze Ultra
Mainboard	Kabylake
Communication	
Wireless LAN	802.11 b/g/n/ac wireless LAN card & antenna (Option)
Environment	
Operating temperature	5 °C ~ 35 °C (41 °F ~ 95 °F)
Storage temperature	-20 °C ~ 55 °C (-4 °F ~ 131 °F)
Humidity	20% ~ 80% RH non-condensing
Dimension (W x D x H)	359.36 x 212.63 x 310.83mm
Weight	8kg / 9kg
OS supported	POSReady 7 (64bit) Windows Embedded industry 8.1 (64bit), Windows 10 Professional (64bit), Windows 10 IOT (64bit), Linux: Ubuntu, Fedora, Suse

*** This specification is subject to change without prior notice.**

6. Configuration

6-1. Kabylake Motherboard Layout



6-2. Connectors & Functions

Connector	Function
CN1	Front I/O connector
CN2	SATA power
CN3	SATA power
CN4	EC debug port
CN5	+3.3V battery
CN22	Smart device connector
FAN1	CPU FAN connector
FAN2	System FAN connector
SATA0	SATA connector
SATA1	SATA connector
JP1	Cash drawer power setting
JP2	Reserved
PCIE_SLOT1	Reserved

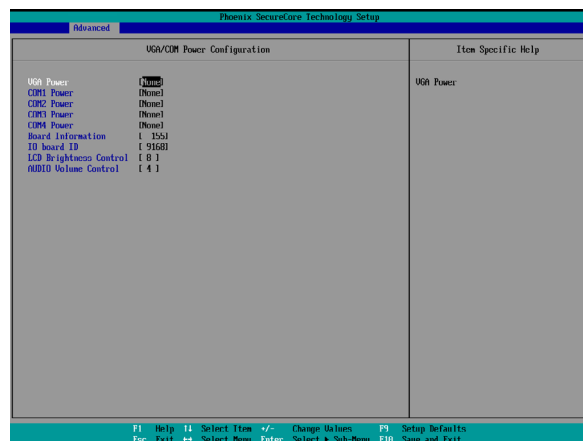
6-3. Jumper Setting

COM1/COM2/COM3 Power Setting

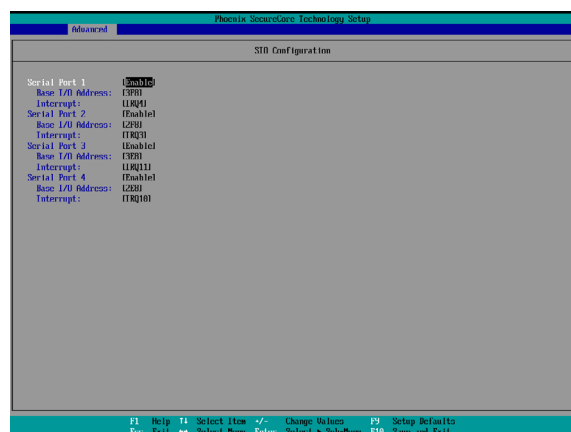
COM1, COM2 and COM3 can be set to provide power to your serial device.

The voltage can be set to +5V or +12V by BIOS setting. When enabled, the power is available on pin 10 of the RJ45 serial connector. If you use the serial RJ45 to DB9 adapter cable, the power is on pin 9 of the DB9 connector. By default, the power option is disabled in the BIOS.

1. Power on the system, and press the <DEL> key when the system is booting up to enter the BIOS Setup utility.
2. Select the Advanced tab.
3. Select **VGA/COM Power Configuration** Ports and press <Enter> to go to display the available options.



4. To enable the power, select COM1, COM2 or COM3 Power setting and press <Enter>. Select Power and press <Enter>. Save the change by pressing F10.



▲ = Manufacturer Default Setting