POS System Electronic Manuals

Rev.1.00.140320.E

This manual consists of system introduction, system installation, system use, system expansion and appendix A/B

Contents

Part 1. System Introduction

01. Safety Notices Before Installation or Use

Read these cautions to avoid damage or injury.

Cautions

Keep rated voltage.
The product can be damaged or burned by overvoltage.

Do not use damaged components.
The product may be damaged unless it is repaired at service center.

Install the product in a clean and dry place.
The product may not work properly in moist or dusty environments.

Always copy important files.
Always copy important files because data loss cannot be guaranteed by manufacturer.

Turn off the system and Remove the power cable before the product is removed.
You may get an electric shock.

Do not use loose or damaged power cables.
There may be electric shock or fire.

Always connect power cable to a grounded 3-wire outlet.
It prevents electric shock from electrical short.

Install the product at a place with good ventilation.
The product may be transformed or burned by overheating if air vent is blocked.

Use power strips designed for computers.
There may be fire caused by overvoltage.

Use the cleaner which is only for computer.
Do not use benzene, thinner and alcohol or the product may be damaged.

Keep the product away from heaters.
The product may be damaged, overheated or burned.

Turn on the system after turning on peripheral device. Turn off peripheral device after turn off the system.
The product may be damaged.

Install the product in a safe, stable place.
The product may be damaged or you may get injured if the product is dropped.

Keep the product away from magnetic materials.
The contents of HDD may be erased or the electronic components may be damaged.

Carefully store or dispose of plastic packing material.
It is dangerous if children put their head on it.

Do not touch the power plug with a wet hand.
You may get an electric shock.

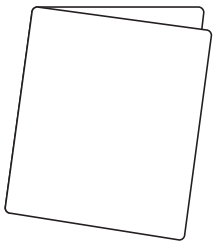
Do not touch modem, telephone line or exposed terminal during electrical storms.
There may be electric shock or fire.

Upgrade the system after shutting off the power of system and its peripheral device.
The product may be damaged.

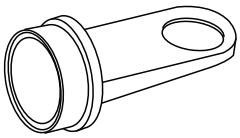
Part 1. System Introduction

02. System Introduction

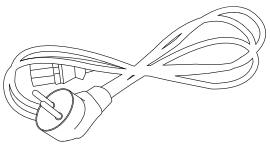
- The exterior design and specifications of product can be changed without prior notice in order to improve quality.



<Quick Manuals>



<Magnetic DALLAS (option)>



<Power Cable>

Part 1. System Introduction

03. General Specifications

Processor	* LGA 1155 Socket Type Intel Celeron G1620 : 2.7GHz / 2M Cache Intel Pentium G2120 : 3.1GHz / 3M Cache Intel i3 3220 : 3.3GHz / 3M Cache Intel i5 3550S : 3.0GHz / 6M Cache(Turbo:3.7GHz) Intel i7 3770S : 3.1GHz / 8M Cache(Turbo:3.9GHz)
Chip sets	Intel H61
Graphic	Intel Embedded Graphics
Data storage device	SATA-II 2.5" HDD / SSD / mSATA SSD / Cfast
Memory Touch Panel	DDR lll SODIMM 2 Slot (Up to 16GB)
BIOS	AMI (America Megatrends Inc.) UEFI BIOS (Touch available in the BIOS)
Display	Size : 15”(38.1cm) 1024 X 768 resolution TFT LCD Support Colors : 16.2M Colors Contrast Ratio : 700:1 Viewing Angle : Left-Right 170 / Up-Down 160 Backlight : 30,000 hours of product life(LED Type) Brightness : 350cd/m²
Touch Panel	Normal or True flat 15" 5wire Resistive Type Interface : Serial Interface Transparency : 80% Surface Hardness : 3H Hitting Life : 35 million times
OS	Windows XP / POSReady 2009 / POSReady 7 / Industry 8 .etc
I/O Interface	COM (Serial) port : D-SUB 9P x 3 Ports / RJ - 45 x 1Port 5V / 12V or RI outputs through COM 1. 2. 3. 4 (BIOS setup) PARALLEL port : D-SUB 25P x 1Port USB port : USB 2.0 side x 2 Ports / back x 4 Ports Ethernet port : 10M / 100M / 1GB LAN RJ-45 x 1Port VGA Port : D-SUB 15P x 1 Audio port : Line-out x 1 DC-OUTPUT port : 12V DC-OUT 2.5 Φ x 1Port
Booting device	HDD, SSD, mSATA, Cfast memory, external CD / DVD-ROM, USB memory etc.
Power supply	AC INPUT : AC 100~240V / 50~60Hz, 2A DC OUTPUT : 19V / 7.98A(150W)

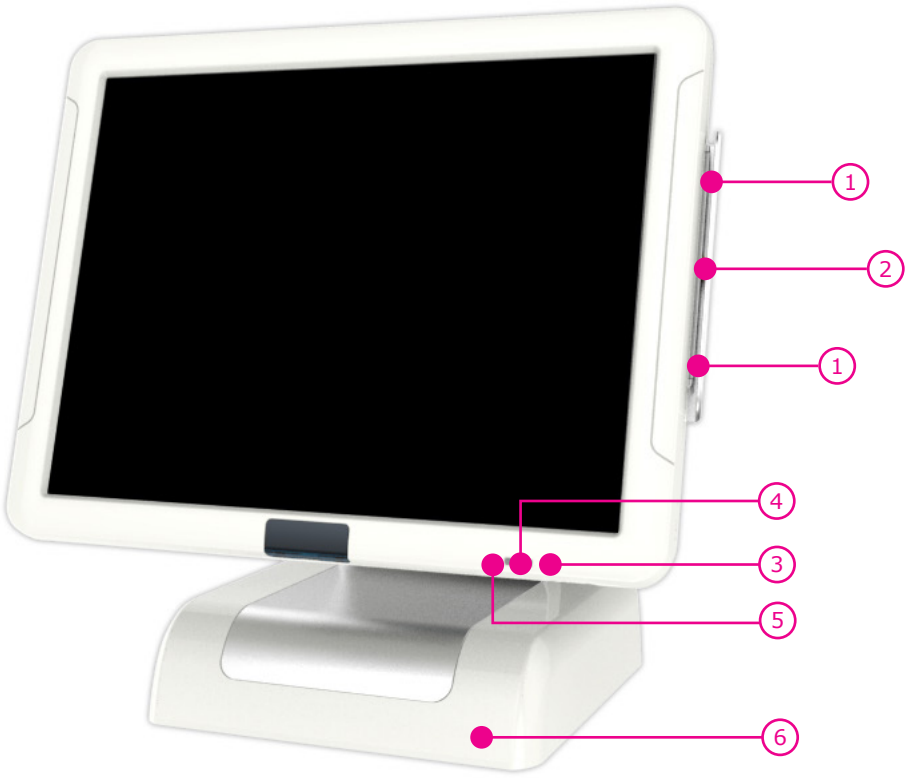
Part 1. System Introduction

04. Optional Specifications

Magnetic Swipe Reader (MSR)	Read Track : ISO track 1, 2, 3 Interface : Internal USB Performance : 10~150 cm/sec Head Reliability : 500,000 times Error rate : Less than 0.5%
DALLAS KEY	Magnet type , USB Communication
Finger Printer Reader	Finger print function is possible, USB Communication
Cfast Socket	Cfast memory card can be used
Customer Display	VFD : 5 x 7 Dot 20 x 2 Character type 256 x 32 Graphic type LCD : 7”(17.78cm) 800 x 480 16:9 type 9.7"(24.6cm) 1024 X 768 4:3 type 15"(38.1cm) 1024 X 768 4:3 type
Wall Mount	The device for attaching POS system on the wall

Part 1. System Introduction

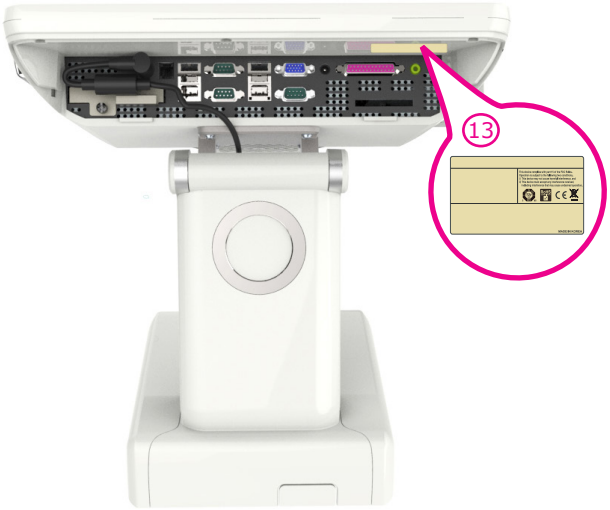
05. Name and Function of each component(Front View)

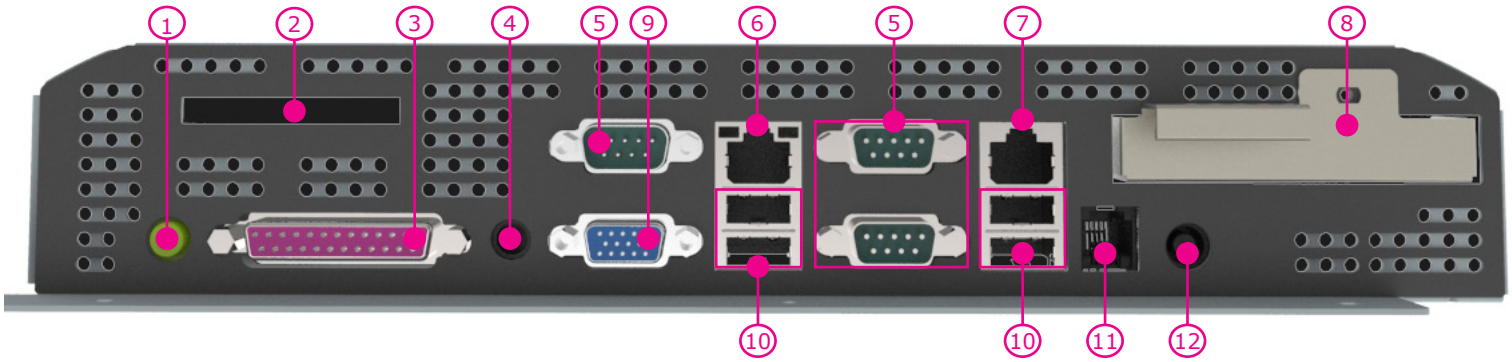


1. Credit card recognition lamp : When the card reader recognizes a credit card, the light is on.
2. Payment module (option) : MSR can be used.
3. Indicating lamp for power supply : The light is on when the system is on.
4. Indicating lamp for HDD : The light is on when data in HDD is being used or read.
5. Indicating lamp for LAN connection : The light is on when internet is connected.
6. Stand : Adaptor is built in.

Part 1. System Introduction

06. Name and Function of each component (I/O)

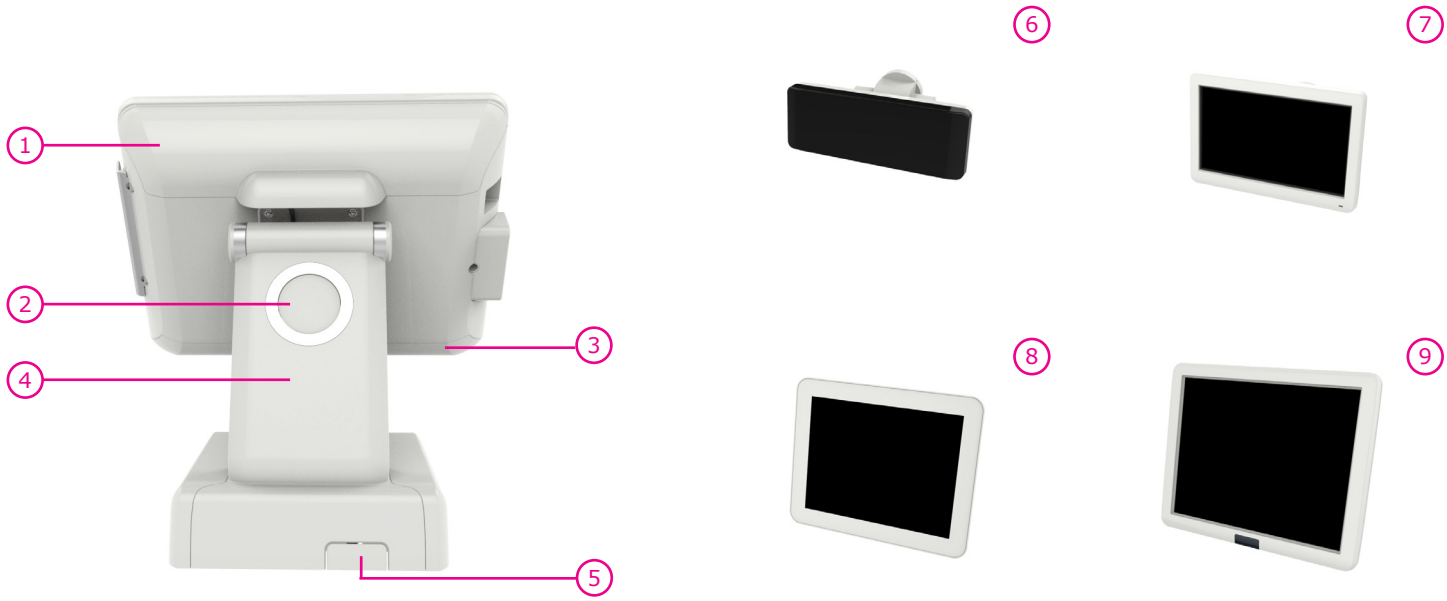




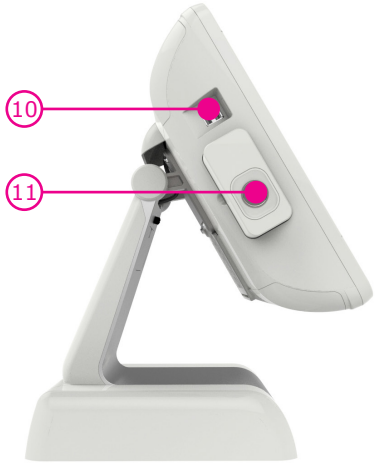
1. Audio port (Line-out) : You can connect the external speakers.
2. Cfast SLOT (Option) : Cfast memory can be used.
3. D-SUB 25pin printer (Parallel) port: You can connect parallel device such as a printer.
4. 2.5Φ 12V DC Output (for Rear display) : System connected to an external DC power cable to the power that can be an output jack.
5. D-SUB 9pin COM (Serial) port : You can connect serial devices such as barcode scanners, printers.
6. RJ-45 LAN (ETHERNET) port : You can connect RJ45 cable for 100/1000 Mbps Ethernet connection.
7. RJ-45 8pin COM(Serial) Port : You can connect serial devices such as barcode scanners, printers.
8. HDD Slot : You can connect 2.5" HDD or SSD
9. D-SUB 15pin VGA port : You can connect the external monitor.
10. USB 2.0 port : You can be used to connect devices such as the USB scanner, USB keyboard, USB printer.
11. RJ-11 6pin Cash Drawer port : You can connect the cash drawer.
12. 19V DC Input (Input power connection) : Jack is connected to the adapter to supply power to the system.
13. This is location of the label rating of the product.

Part 1. System Introduction

07. Name and Function of each component (Side & Rear view)



1. Interface cover : Remove this cover, you can install the peripheral device.
2. Integrated customer display cover: Remove this cover, you can install the all-in-one customer display.
3. Mother board protection cover : Remove this cover, you can remove the mother board.
4. Dummy for cable arrangement : Remove this cover, you can arrange cables of device.
5. Cable Outlet cover: This is outlet cover for the cables connected to the mother board(If needed, you can use it by removing Cable Outlet cover.)
6. VFD (all-in-one customer display) - option
7. 7inch Display (all-in-one customer display) - option
8. 9.7inch Display (all-in-one customer display) - option
9. 15inch Display (all-in-one customer display) - option



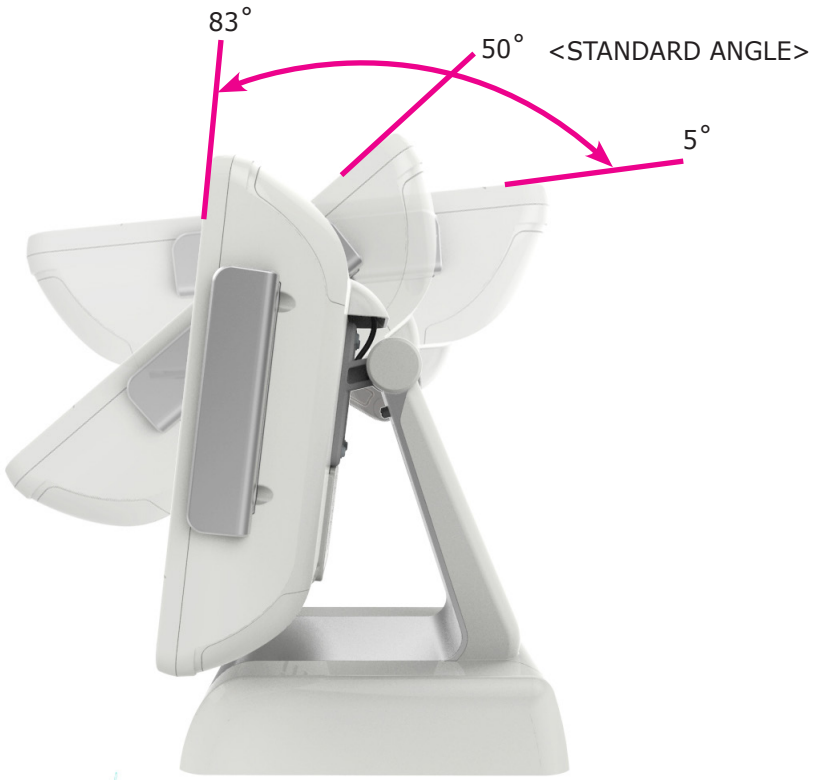
10. USB Port : USB Devices can be used through this port, i.e. USB scanner, USB Keyboard, USB Printer, etc.
11. Security module (option) : Dallas key / Finger print reader can be used

Part 2. System Installation

01. Checking the Location for Installation

It is important to choose a safe and secure place to install the terminal.

- Choose a desk or table big and strong enough to support the weight of the system and peripherals.
- Choose a flat, hard surface. Carpeted area can generate static electricity that can alter memory or damage system components.
- Make sure a system installed in a well-ventilated place and keep the space free around the system.
- Choose appropriate environmental conditions such as cool and dry places. Avoid humid and dusty places. Also avoid direct sunlight, rapidly changing temperatures, or placing the system near heat sources.
- Select the appropriate voltage. Connect all the equipment into an isolated outlet to prevent static electricity and short circuit.
- where sufficient power outlets are available for printers and other peripheral devices.
- Do not install near electromagnetic and electrical devices, such as phones and electric moters, that can cause system damage.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.



Note

Adjust the system depending on the condition and use it with the exact angle.
Adjustable angle shown in the figure.

Cautions

- Use the same battery for the product (motherboard) to prevent a risk of explosion.
- Dispose of used battery according to the separate instruction.

Part 2. System Installation

02. Before Connecting Peripherals

To connect peripherals first remove the 'Interface cover', which is in the top of the system, after that remove the 'Cable arrange cover' which is in the rear of the system.

• Interface cover remove

1. As it shown in the picture pull the cover in the direction of the arrow.

Cautions

- Turn off the power of the body and connect peripherals.
- Connecting peripherals to the corners parts of the system can cause hands injury. For your safety use the gloves.

• Cable arrange cover remove

2. Remove the screw (1pc) and then remove, `Cable cover' and `Stand dummy' in the direction of arrow shown in below picture.

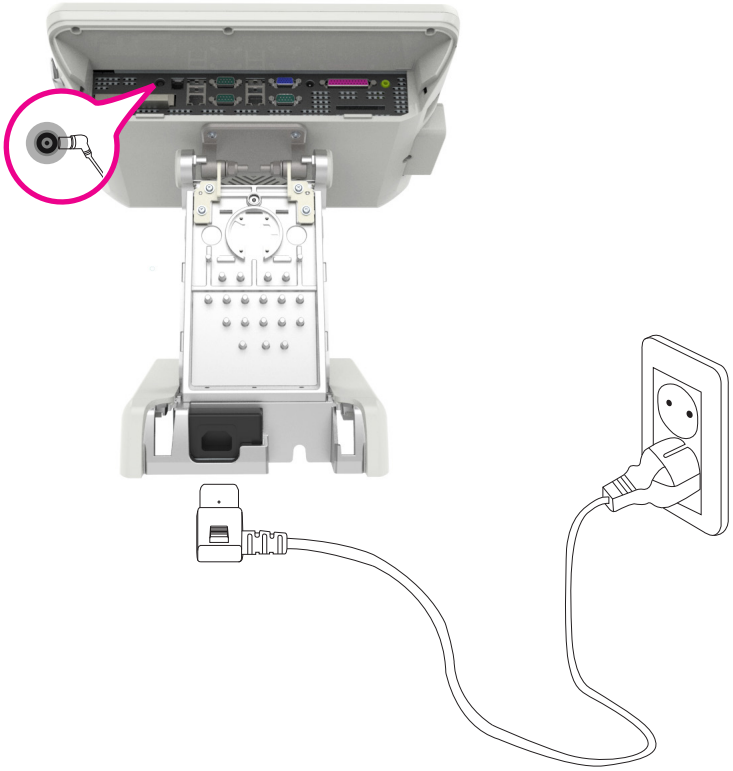
Part 2. System Installation

03. Connecting DC power supply cable

Connect the DC power cable to the DC power input connector at the bottom of the system. (Adapter 100V - 220V free voltage of the system can be used.) In order to connect power plug, please remove 'Cable arrange cover' and 'Stand dummy' (Ref.page 11)

Cautions

- Only manufacturer adapter should be used for this system.
- Manufacturer wont take responsibility for damages caused by using products which not made by manufacturer.

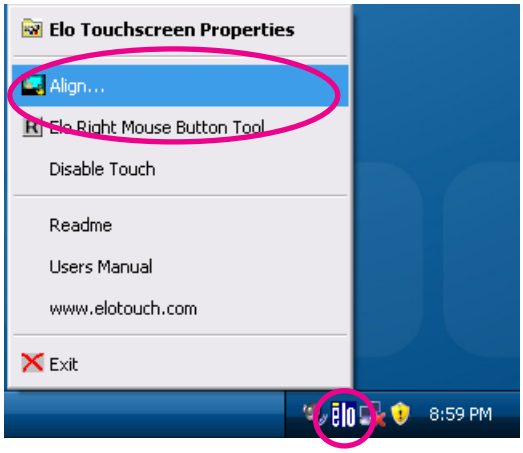


Part 3. System Utilization

01. ELO Normal touch

Please recalibrate if it is not accurate on touch points.

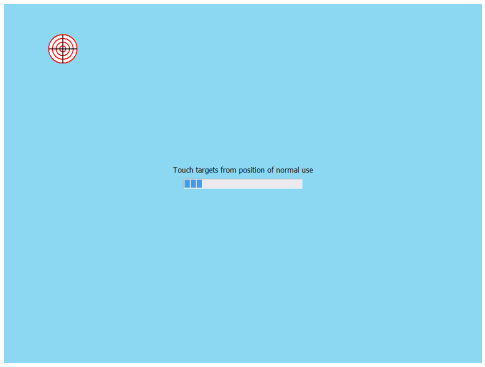
1. In the right corner bottom of the Window click on 'elo' icon (right button of mouse) and select 'Align…' item.

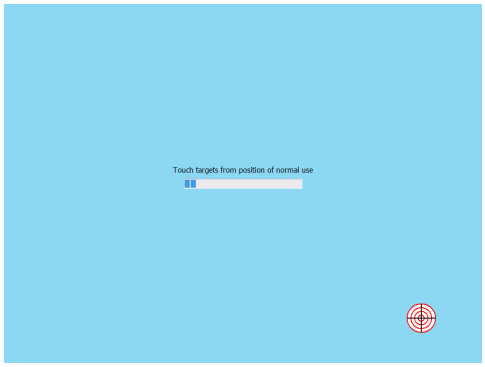


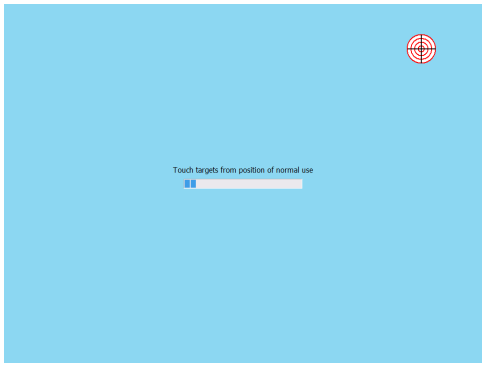
2. If the following screen appears, touch the center of the red circle for 2 seconds and then remove your finger. Repeat the procedure if the red circle appears again.

Cautions

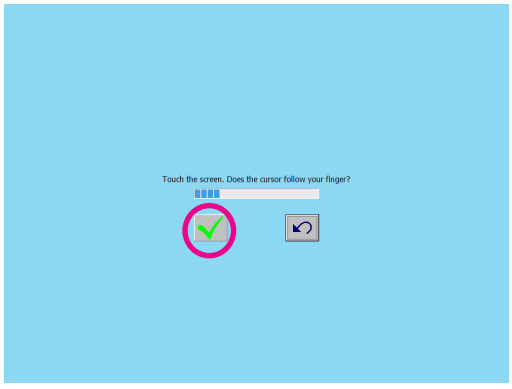
- Ball point pens or sharp tools may damage the surface of the touch screen.







3. If the recalibration is finished, click the green check button and shut down the recalibration program.



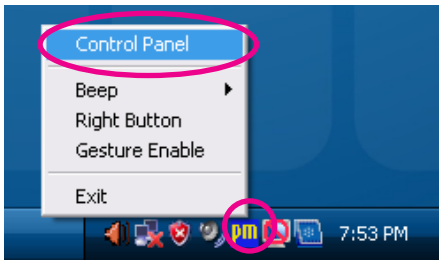
Note

Recalibration is not needed when setting up Extended Screen Mode after connecting a dual monitor.
Recalibration is also not needed when changing to Single Screen Mode (LVDS only) while using Extended Screen Mode.

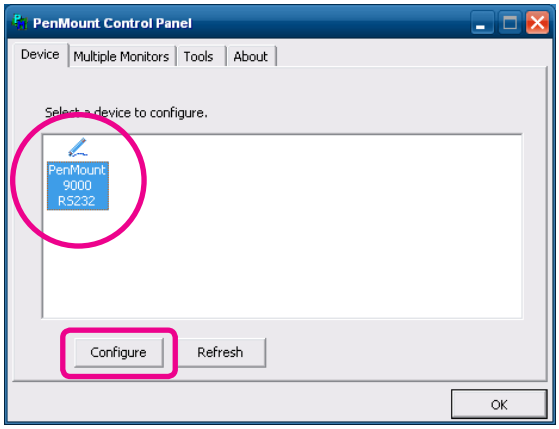
Part 3. System Utilization

02. AMT Touch Screen

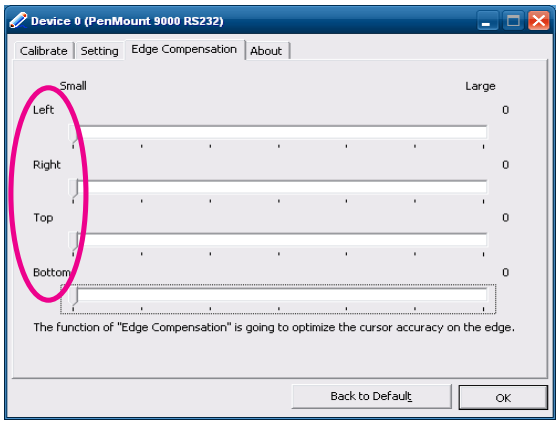
1. Click the right button of mouse on 'PM' icon of Windows tray icons. And select 'Control Panel' on popup menu.



2. If 'PenMount Control Panel' dialog appears, double-click the selected icon or 'Configure' button.



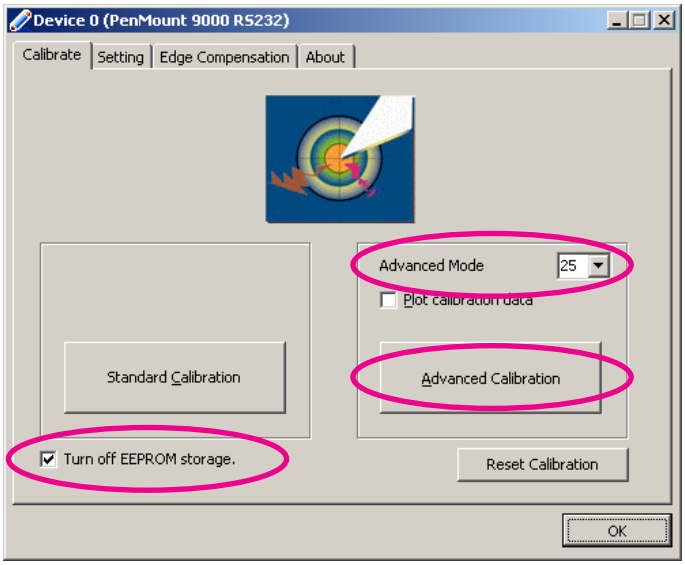
3. Click 'Edge Compensation' tab, move all of four scroll bars(Left, Right, Top, Bottom) to the Left side(Small).



Part 3. System Utilization

02. AMT Touch Screen

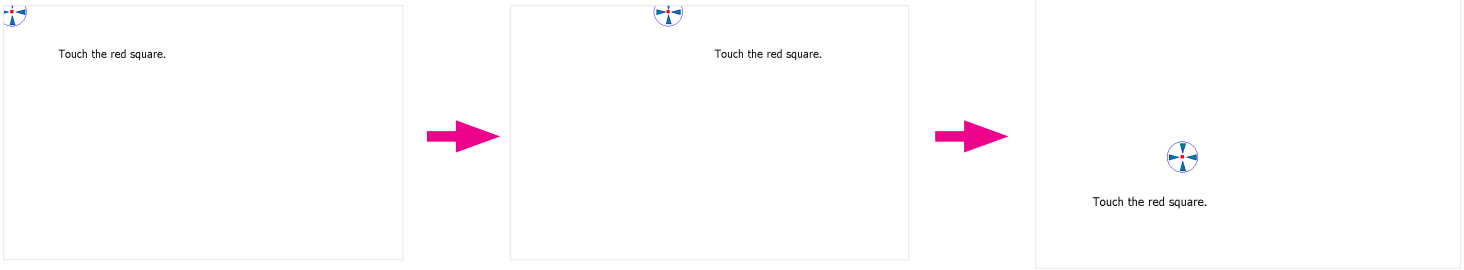
4. On the 'Calibrate' tab. Check 'Turn off EEPROM storage'.
   Select the number '25' of the Advanced Mode combo-box list. Press the <Advanced Calibration> button.



5. Click the red point about 2 seconds on a calibration procedure will be proceeded with following messages.

Cautions

• Ball point pens or sharp tools may damage to the surface of the touch screen.



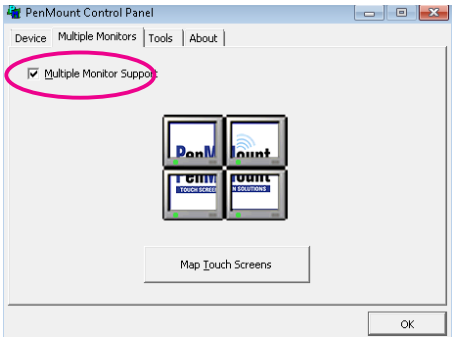
Part 3. System Utilization

02. AMT Touch Screen

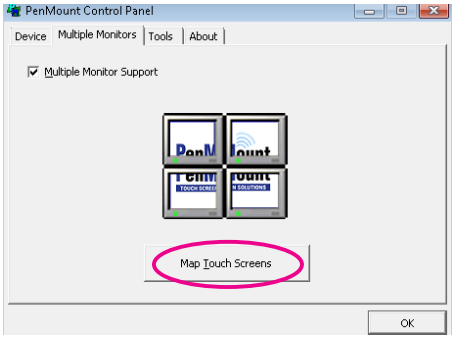
Note

- For using the Touch Screen on Multi-monitor. (You need keyboard for this setting)

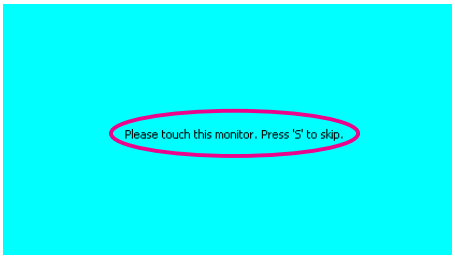
1. Check 'Multiple Monitor Support' box on 'Multiple Monitors' tab.



2. Click <Map Touch Screen> button.



3. If you want to use touchable screen of current monitors, you should touch the screen. If or not, press 'S' to skip.

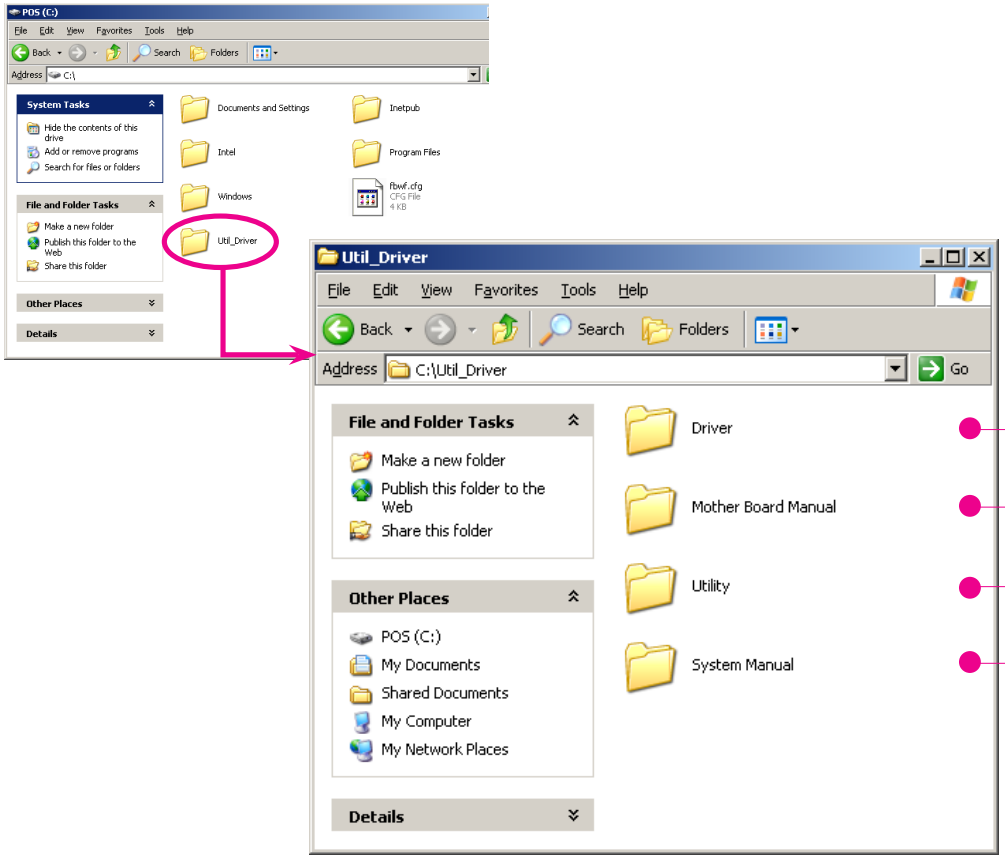


Part 3. System Utilization

03. POS Driver and Utility Introduction

• POS Driver and Utility introduction

POS Drivers & Other utilities are located in hard disk drive(C:₩Util_Driver).



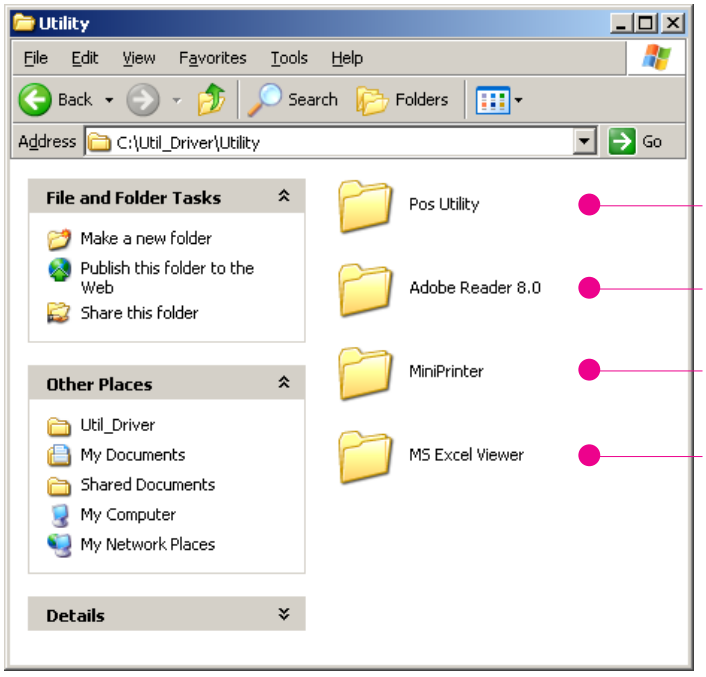
Driver
Driver files are in this folder.

Mother Board Manual
Mother board manual is in this folder.

Utility
Utility are in this folder.

System Manual
System manual is in this folder.

• C:\Util_Driver\Utility



POS Utility

Adobe Reader

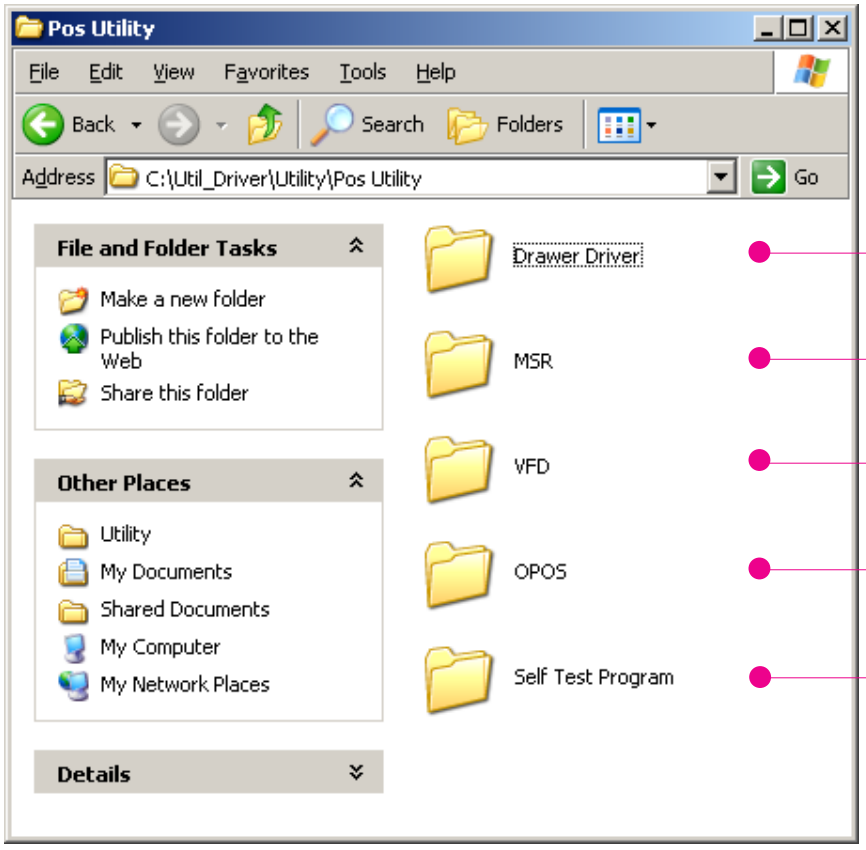
MiniPrinter

MS Excel Viewer

Part 3. System Utilization

03. POS Driver and Utility Introduction

• C:\Util_Driver\Utility\Pos Utility



Drawer Driver

MSR
MSR Setup Utility.

VFD
Customer Display Utility.

OPOS
OPOS driver file.

Self Test Program
Test utility for peripherals of POS.

- OPOS consisted of an architecture for win32-based POS device access. The current OPOS driver has been developed in accordance with OPOS Specification Version 1.10 and will be continued to support the upper version of OPOS Specification.
- Support OS : POSReady 2009, Win XP Pro, POSReady 7, Win 7 Pro

Support Peripherals (The model name written on the bottom of the product)

- LineDisplay (Customer Display) : Q202LD
- Cash Drawer (Cash Drawer) : S5000CD
- POSPrinter (Printer) : ELLIX Series

The location of installation file

- The file is located on the hard disk (C:\Util_Driver\Utility\Pos Utility\OPOS)

The installation method

- Execute 'XXXXOPOSSET_RVx.xx.exe' file in OPOS folder.
- All components will be automatically registered & set up according to the system configuration.

Part 3. System Utilization

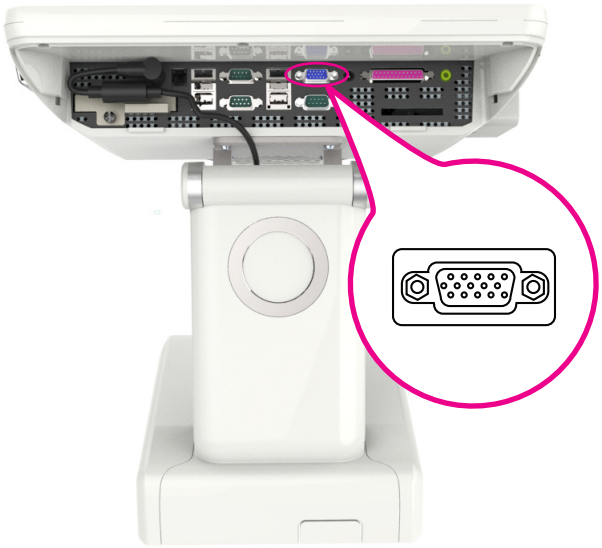
04. Dual Monitor Usage

Additional monitor can be connected to the VGA connector. This content is written based on Windows 7.

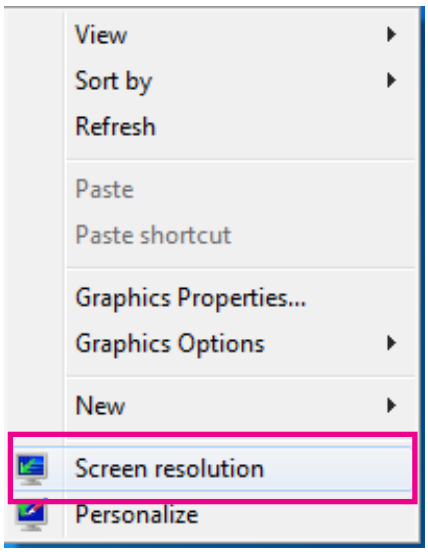
• Dual Monitor usage

The system supports dual monitor system, which is using two monitors for one system. Sub-monitor's screen can be displayed as a duplication of the main monitor or as an extended screen. (Windows desktop)

1. Connect the external monitor when the system is off. (Remove the 'Interface cover' at the top of the system and you will see a VGA connector.)
   1. Connect the external monitor when the system is off.
   2. Connect a power cable to external monitor
2. Press a power button of the system and the external monitor.



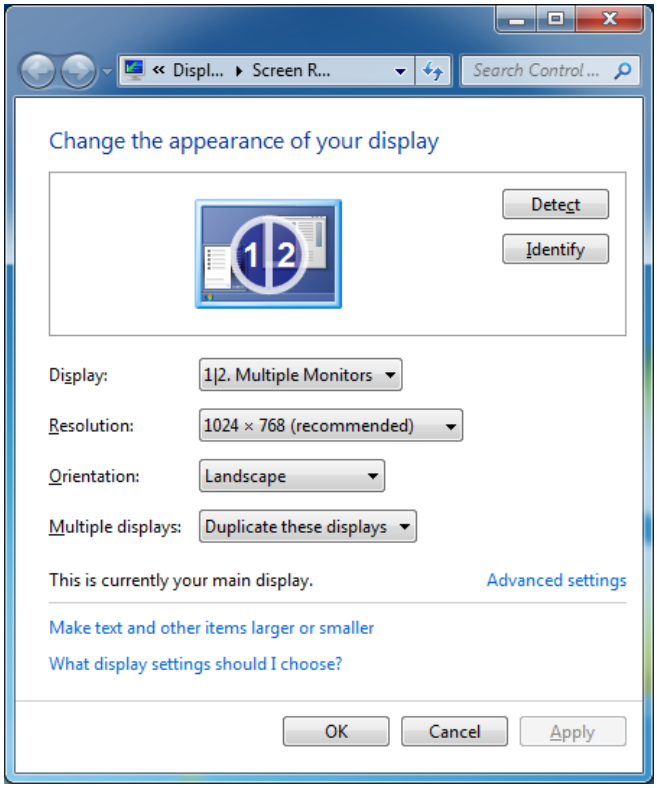
3. Click the right button of mouse on Windows desktop screen and select 'Screen resolution' from a popup menu.



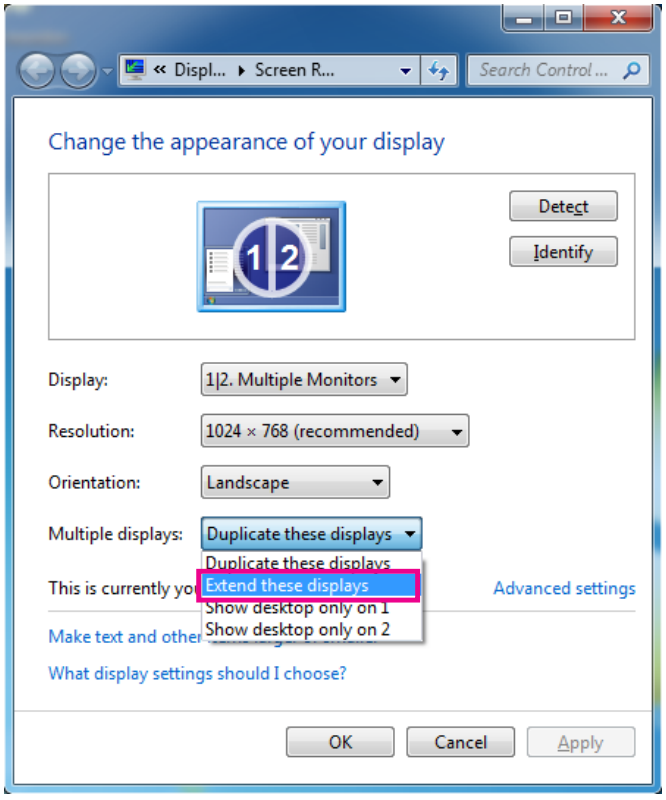
Part 3. System Utilization

04. Dual Monitor Usage

4. On The following dialog window 'Change display appearance of your display' 'Display' option is set as '1|2. Multiple Monitor'and 'Multiple display (M) option is set as duplicate these displays. (In this case, the dual monitor shows a duplicated screen.)



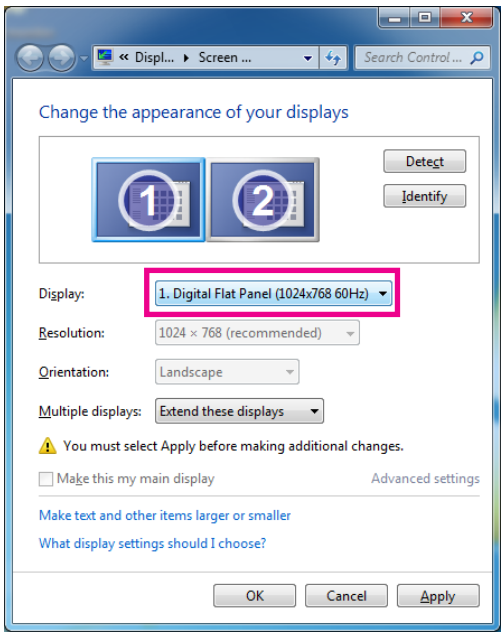
5. If you want to change to an extended screen, set 'Multiple displays' option as 'Extend these displays' on 'Change the appearance' of you display dialog window. (In this case, two different extended screen monitors are shown.)



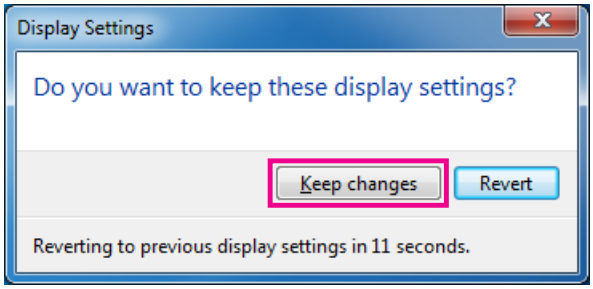
Part 3. System Utilization

04. Dual Monitor Usage

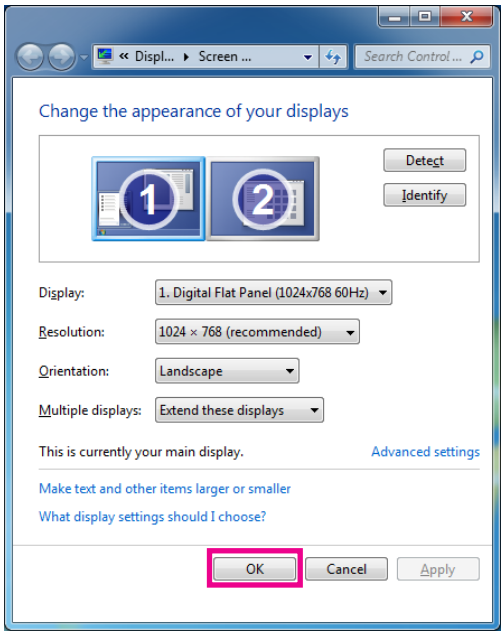
6. Set 'Display' option as '1. Digital Flat Panel (1024x768 60 Hz)' and click <Apply> button.



7. Select <Keep changes> button on 'Display Settings' dialog to keep the current settings.



8. If the configuration is finished, click <OK> button to close the 'Change the appearance of your displays' dialog window.



Part 3. System Utilization

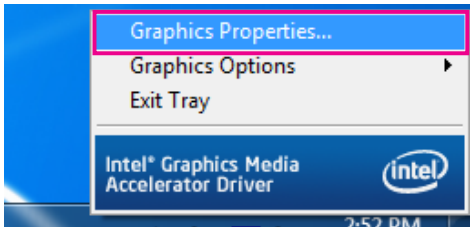
04. Dual Monitor Usage

Additional monitor can be connected to the VGA connector. This content is written based on Windows 7.

Note

How to check dual monitor's settings
If dual monitors don t work properly, refer to the following procedure.

- Method 1 - Check the BIOS setup
  Make sure that 'Chipset > Host Bridge > Intel IGD Configuration > Boot Display Device' menu is selected as 'D-SUB + LVDS'
- Method 2 - Click the right button of mouse on'Intel Graphic icon'of Windows tray area and select 'Graphic Properties' menu.
  Make sure that 'Operating Mode'of 'Multiple Displays'is set as 'Extended Desktop'



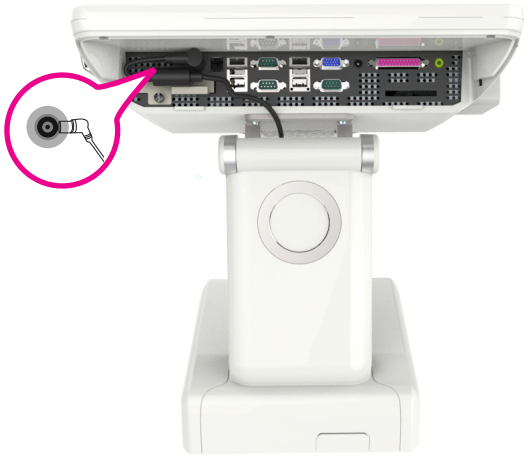
05. How to control Direct I/O in order to use drawer

1. Hardware I/O Port Number to Open/close Drawer : "0xA05"
2. Value (byte) needed to 'Open the drawer 1'. : "0x40"
3. Value (byte) needed to 'Open the drawer 2'. : "0x80"
4. Value (byte) needed to 'Close the drawer'. : "0x3F"

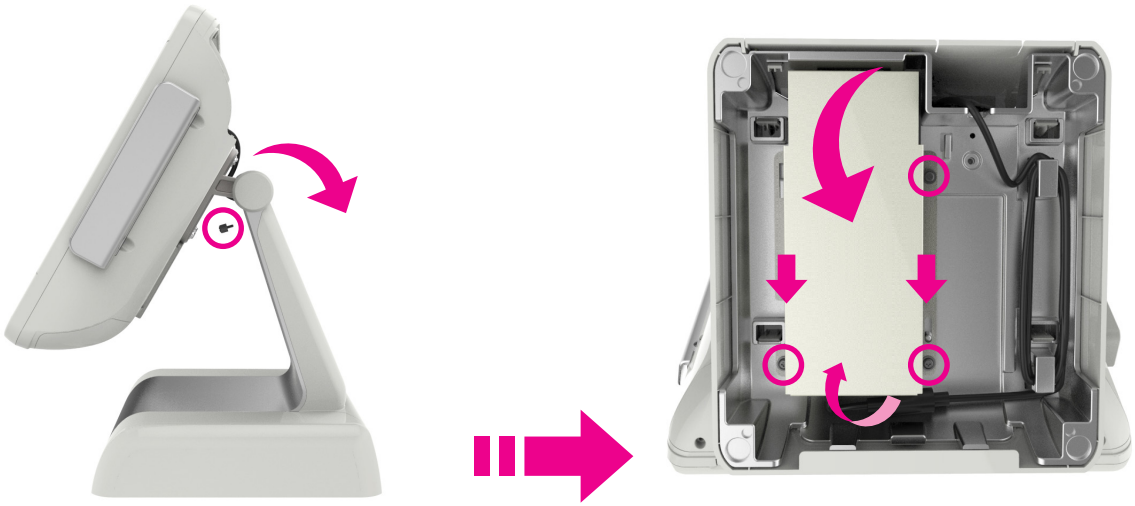
Part 4. System Assembly & Disassembly

01. Power Adaptor

1. Make sure that the system & peripheral's powers are turned off.
2. Remove the `Interface Cover' on the top of the system following the direction of arrow in the below picture.
3. Disconnect cables for peripherals & DC power supply jack from the system.



4. As shown in below left picture, remove the screw (1pcs) and the cable cover following the direction of the arrow.
5. Remove the adaptor fixing screw (3pcs) on the bottom of the stand and remove the adaptor cable.
6. Please slide the adaptor as below right picture and remove it.



Cautions

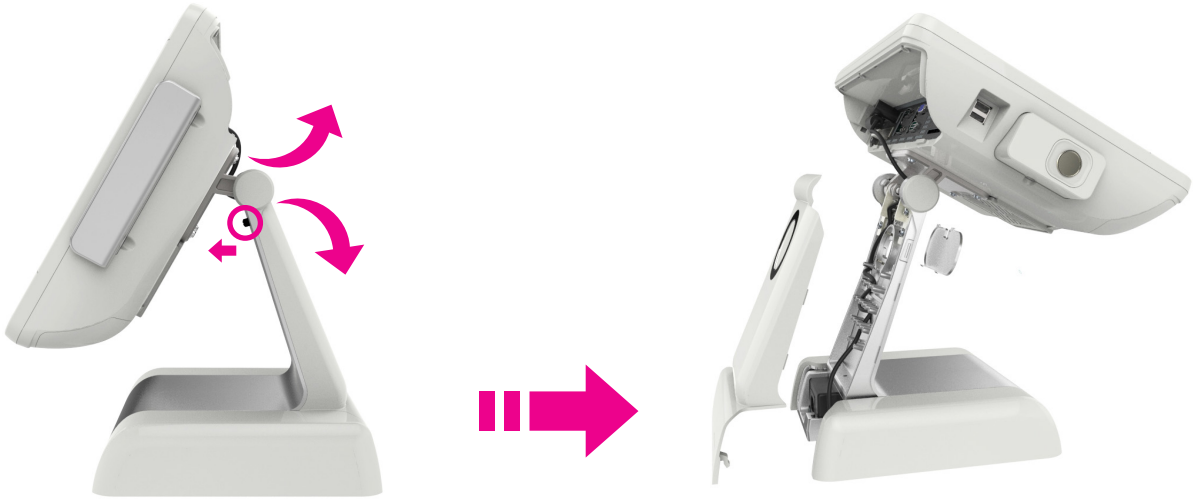
Cautions for disconnecting DC power supply jack
The neck point should be gently pulled out before full disconnection.

Part 4. System Assembly & Disassembly

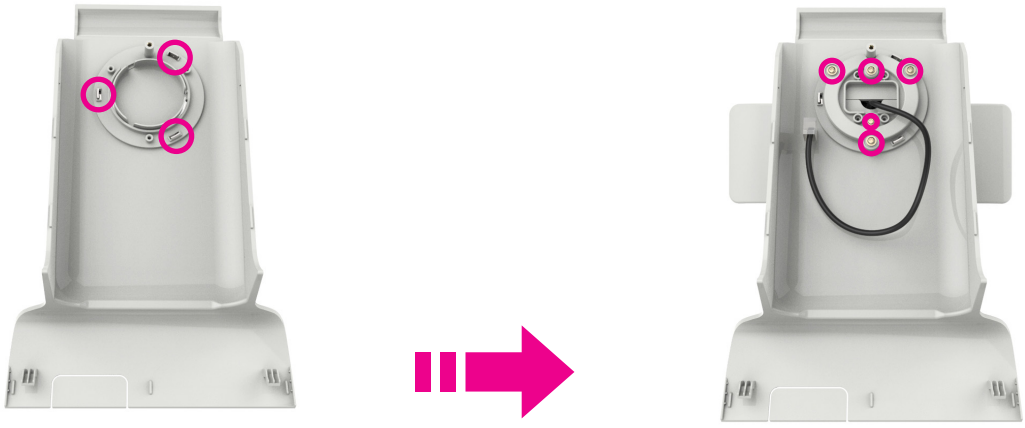
02. VFD, 7”/9.7” Dual Monitor

*** Assembly and disassembly structure for VFD, 7” and 9.7” dual monitor is same.**

1. Remove the screw (1pc) and then remove `Interface cover', `Cable cover' and `Stand dummy' in the direction of arrow shown in below picture.



2. Press on the hook in below picture and remove `Stand ring accessory.'
3. Using the screw (3pcs) from `Cable cover,' assemble `Mount dummy' and then assemble `Stand ring accessory.'
4. Using the screw (2pcs) from `Cable cover,' assemble VFD.

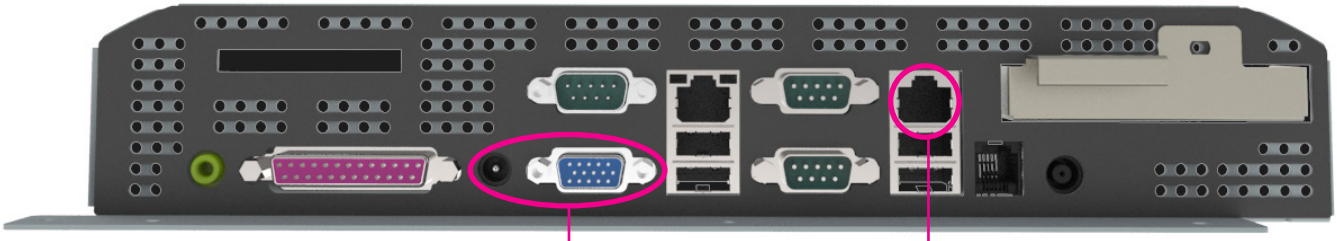


Part 4. System Assembly & Disassembly

02. VFD, 7”/9.7” Dual Monitor

5. Assemble the VFD, which is already assembled on `Cable cover' as below picture and assemble the `Stand dummy' and then apply the screw (1pc).

6. For VFD, connect the cable on COM4 and for 7” and 9.7” dual monitor, connect on the DC-Out and VGA port and then assemble the `Interface cover.'



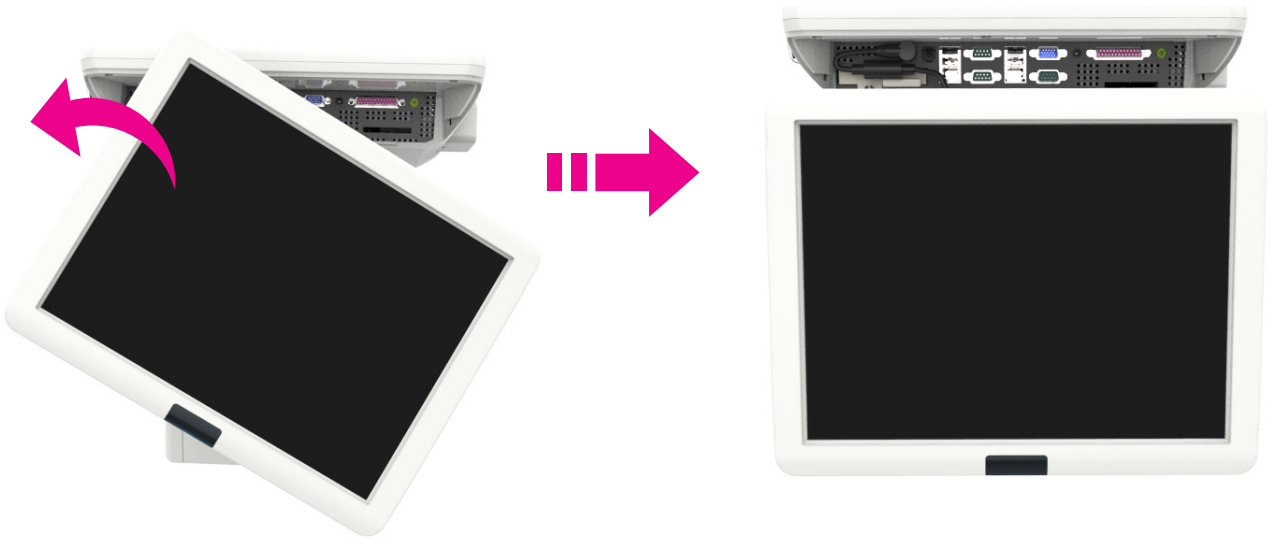
VFD | 7” Dual Monitor | 9.7” Dual Monitor

Part 4. System Assembly & Disassembly

03. 15" Dual Monitor

1. Proceed up to No. 2 on page 24 and assemble only `Stand ring accessory' on `Cable cover.'
2. Place the power and VGA cable through the hall on the stand and tilt the dual monitor approximately 45 degrees so that the hinge on the dual monitor is aligned with the hall on the stand.

3. Tilt the dual monitor left 45 degrees to arrange the dual monitor in right position.



Part 4. System Assembly & Disassembly

03. 15" Dual Monitor

4. As shown in below pictures, apply screw (4pcs), assemble `Stand dummy' and apply a screw (1pc).

5. Refer to No. 6 of page 25 and connect VGA and power cable and assemble the `Interface cover.'

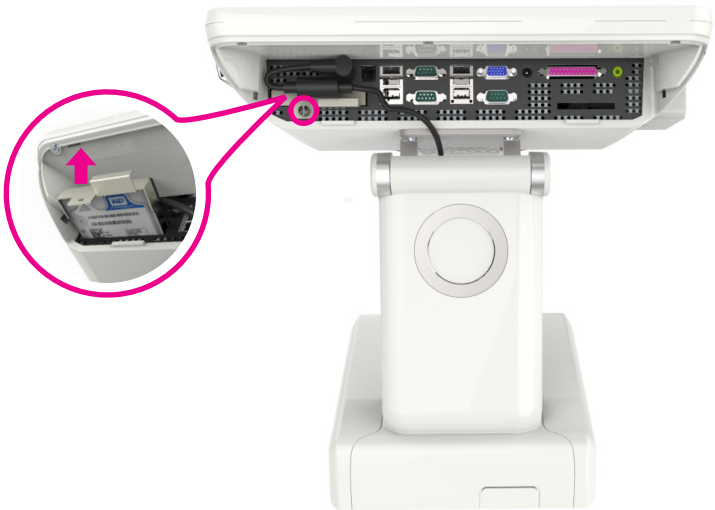
Part 4. System Assembly & Disassembly

04. MSR / Dallas Module

1. Remove screws on the back of MSR (2pcs) and Dallas (1pc) and disassemble the modules from the system.

05. HDD

1. Turn off the system before changing the HDD.
2. Remove the `Interface Cover' on the top of the system following the direction of arrow in the below picture.
3. Disassemble by removing the hand screw on HDD drive and pulling in the direction of arrow as below picture.



Part 4. System Assembly & Disassembly

05. HDD

• HDD Assembly and Operation Confirmation

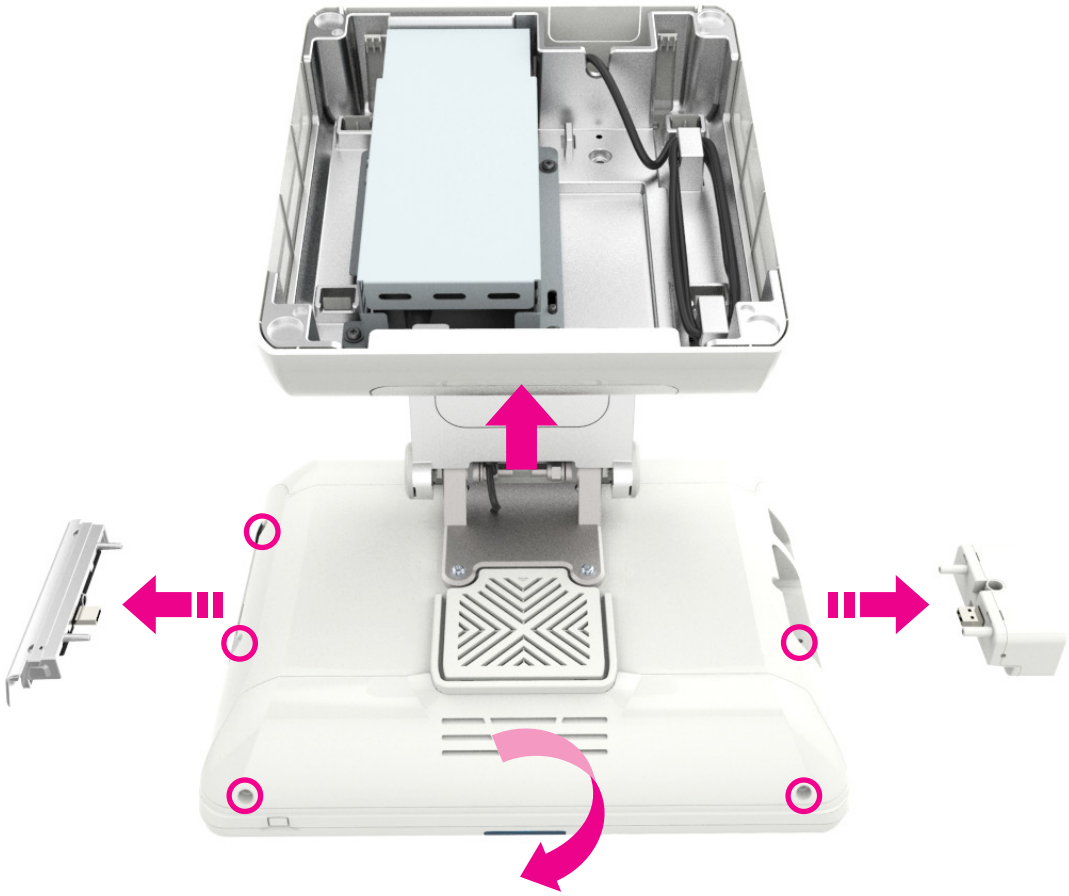
1. Assemble in reverse order and connect peripheral cables and DC power supply jack.
2. Turn system on by pressing on the power button and confirm on proper activation of HDD.

06. Motherboard & Memory

This system supports socket type of CPU and memory slot in order to expand performance.
When you expand the main memory, you must understand the specification of currently installed main memory and the one that will be installed. For this product, it can be equipped up to 16GB. When the memory is installed, the BIOS will automatically recognize the type, capacity and speed of memory.

1. In order to expand the main memory, turn off the system.
   Before disassembling the system, make sure that the power is turned off and peripheral cables are disconnected.
2. Place the system upside down with the stand facing up. Unscrew the screws on the back of MSR (2pcs) and Dallas (1pc) and separate the module. Also remove the screw (2pcs) `Mother board cover' and disassemble it by pulling the cover as in the picture.

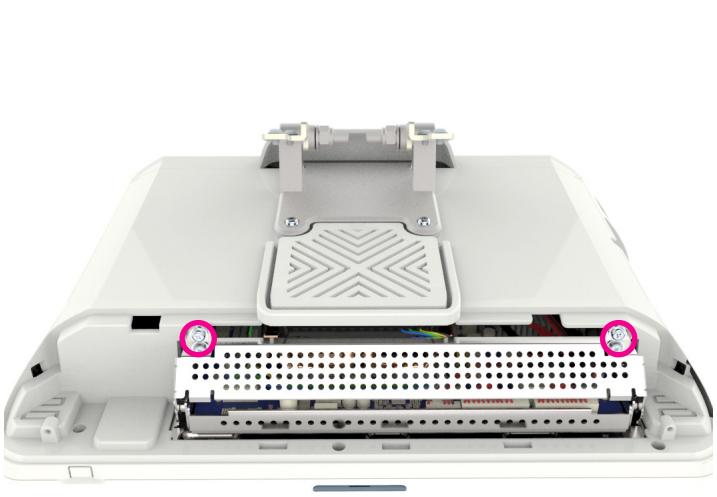
∗ When disassemble Mother board only, you can skip #2 procedure.

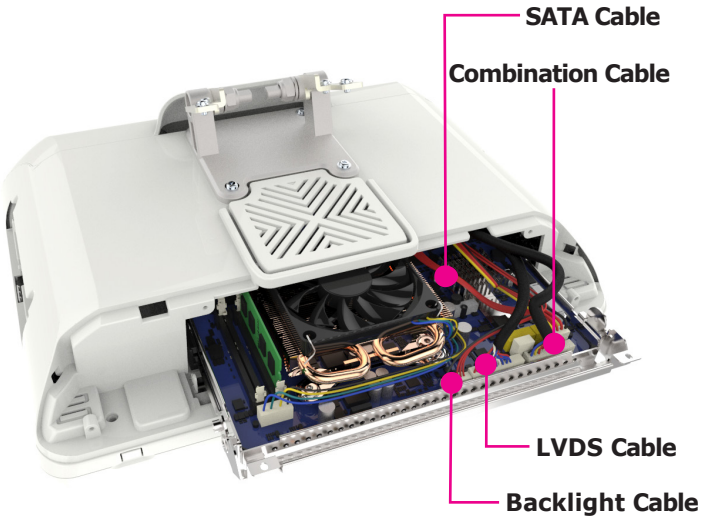


Part 4. System Assembly & Disassembly

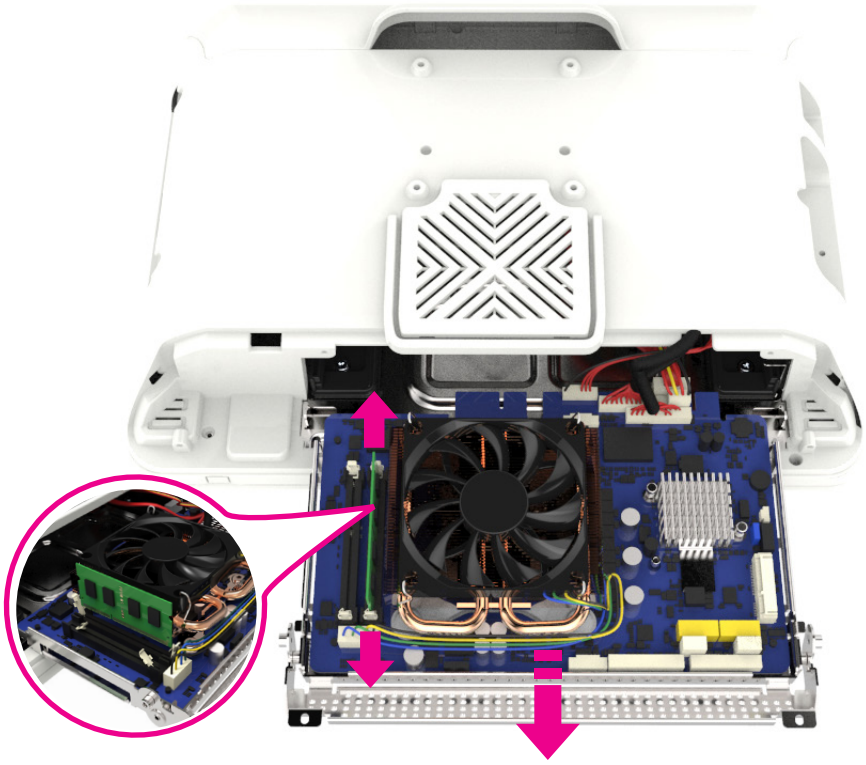
06. Motherboard & Memory

3. First, disconnect the DC power supply jack and then remove the screw (2pcs) of `Motherboard open bracket.'
4. Disconnect the Backlight, LVDS, Combination and SATA cable.





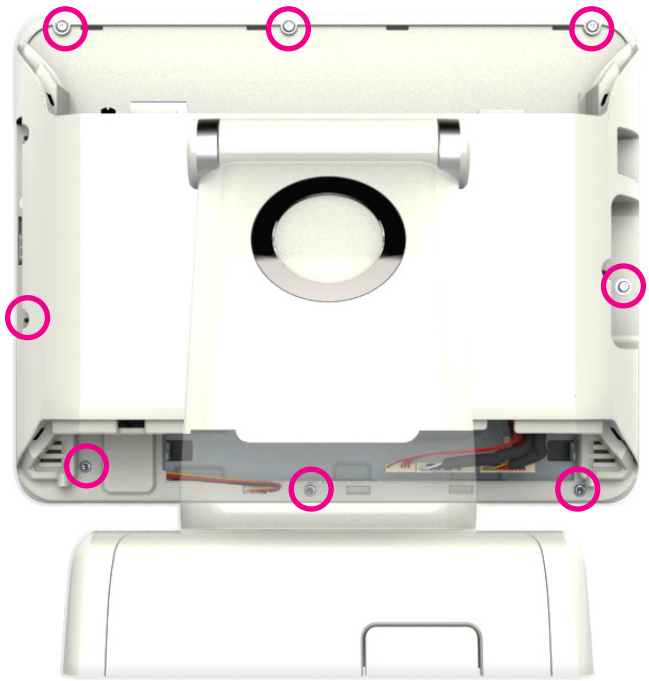
5. Grab on the handle of `Motherboard open bracket' and pull in the direction of below picture and disassemble the motherboard.
6. Pull the lever in the direction of arrow shown in below picture and remove the memory by pulling it up.

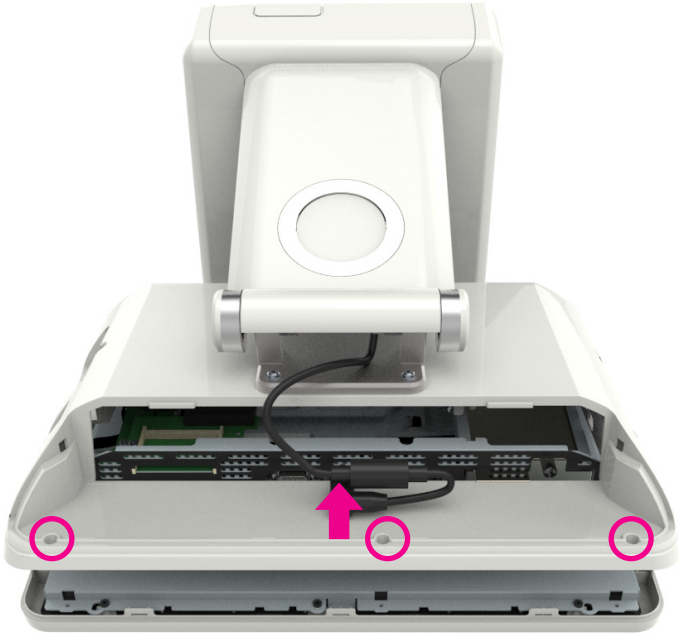


Part 4. System Assembly & Disassembly

07. I/O Board

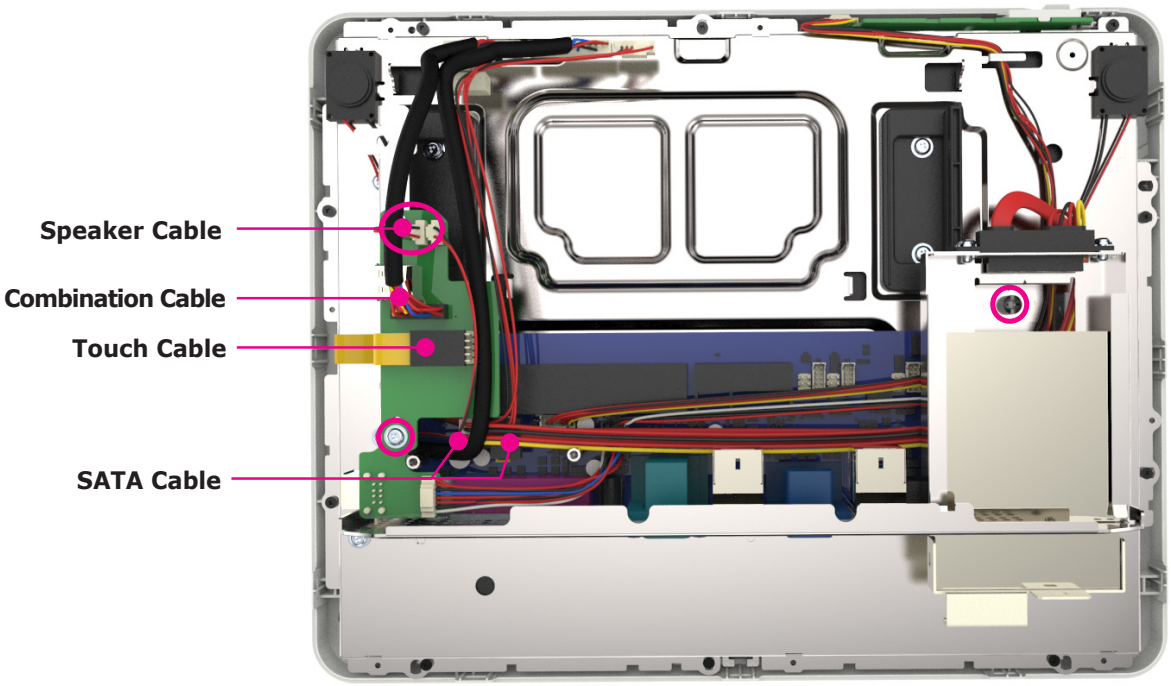
1. Proceed up to No. 5 of page 30 and remove the screws (8pcs) on the back cover of the system and push up the back cover to disassemble.





2. Remove the hand screw on the HDD and separate the HDD. (Refer to page 36)
3. Remove the screw (1pc) on the HDD bracket and disconnect the SATA cable from the HDD bracket.
4. Disconnect the Touch, Speaker, Combination and USB cable from the Touch Board, remove the screw (2pcs) and then remove the Touch board.

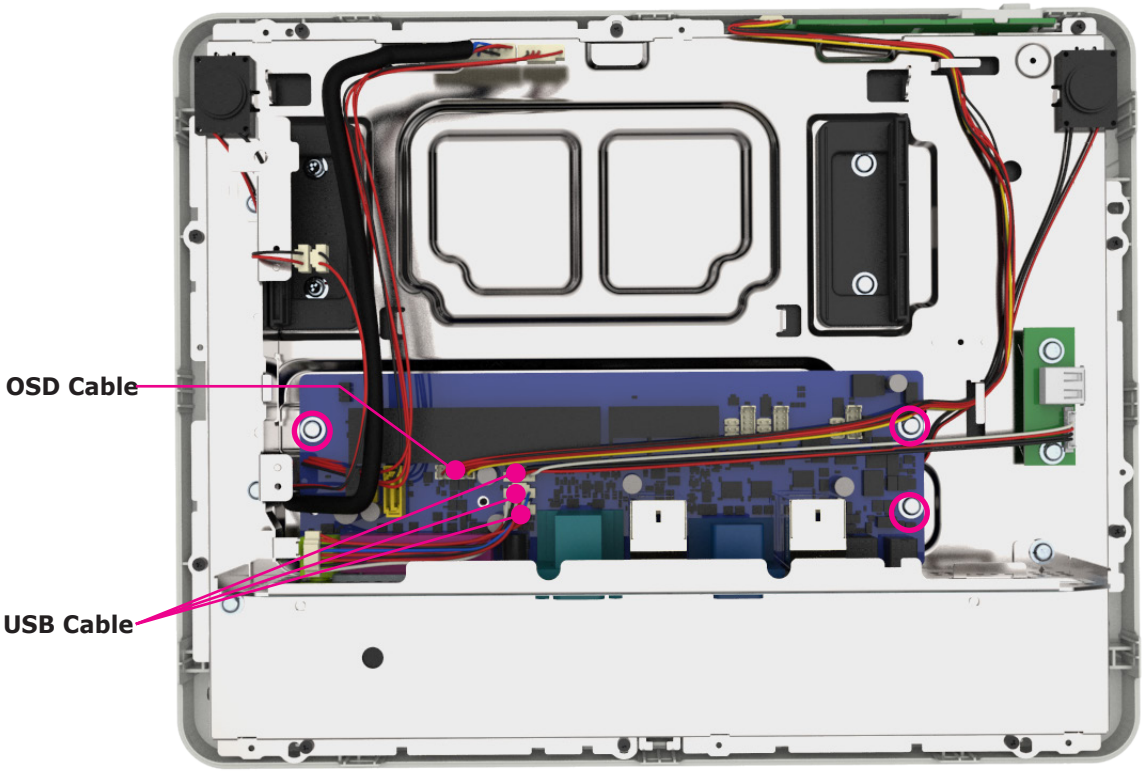
∗ When disconnecting the touch cable, be cautious and protect the touch cable from any damages.



Part 4. System Assembly & Disassembly

07. I/O Board

5. Disconnect the USB and OSD cable on I/O board and remove screws (3pcs) to separate the I/O board.



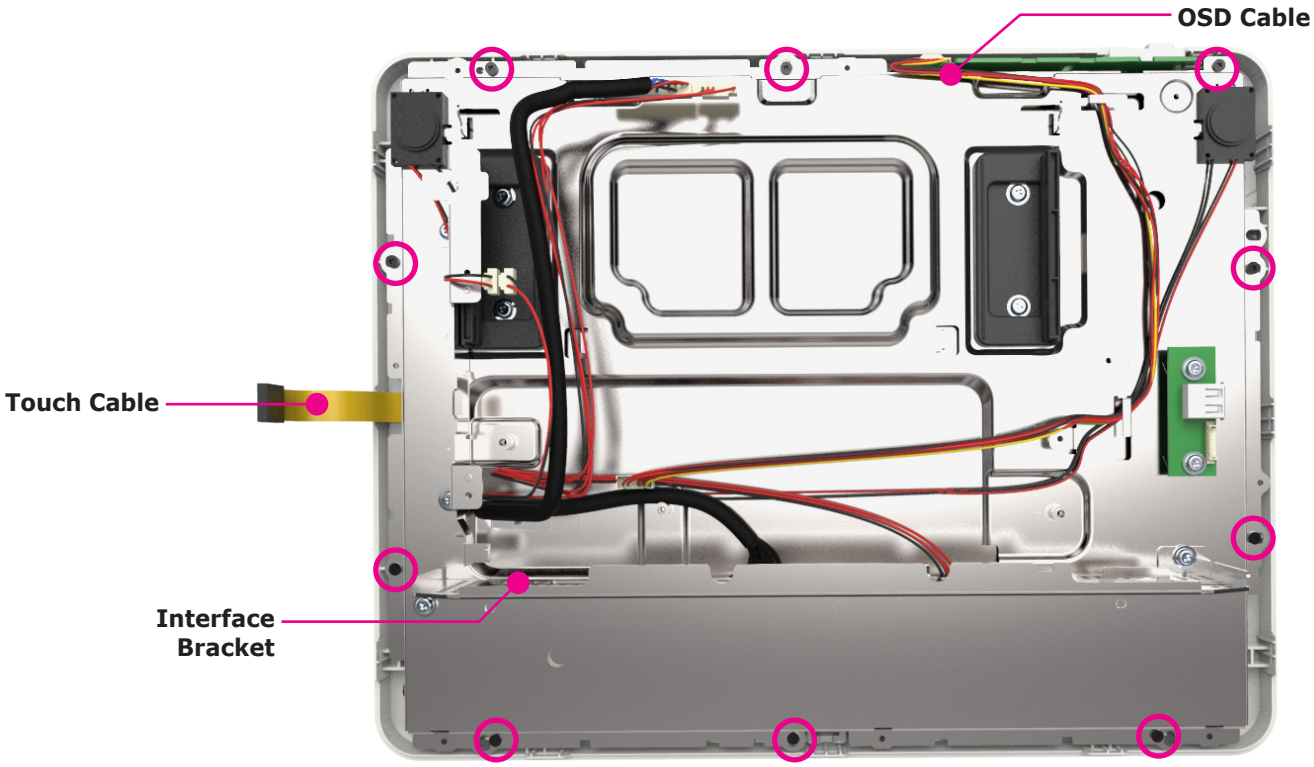
Part 4. System Assembly & Disassembly

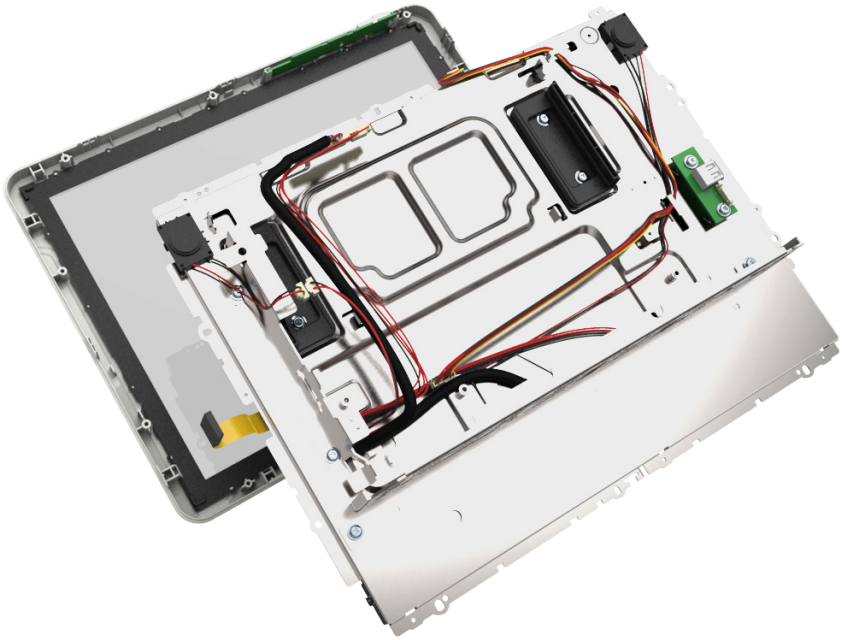
08. Touch Panel and LCD

Cautions

- When disassembling LCD or touch panel, damage may occur due to alien substances or mishandling. Please receive technical service from the branches certified by us.

1. Proceed up to No. 5 of page 32, separate the OSD cable and remove screws (10pcs) as below picture.
2. Hold onto bracket of the interface and separate the display assembly.





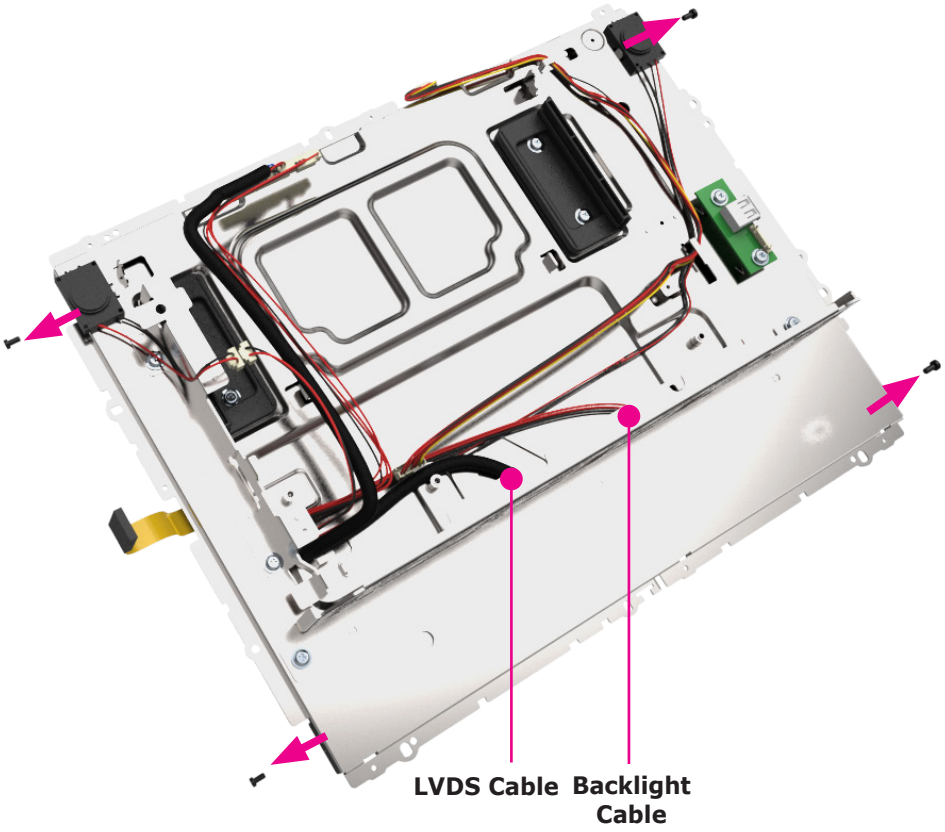
Part 4. System Assembly & Disassembly

08. Touch Panel and LCD

Cautions

- Be careful not to damage the cable while operating.
- The touch panel may separate suddenly from the LCD panel due to a vacuum condition between the touch panel and LCD.
- Be careful not to damage components.
- Work in a clean environment. Dust can adhere to the surface of LCD or touch panel and cause scratches.

3. Disconnect the LVDS and backlight cable.
4. Remove the screws (4pcs) on the side of display bracket.
5. Push up the display bracket and separate it from LCD.



Part 4. System Assembly & Disassembly

09. CFast Module

1. Apply HEXA-Screw as below 2 places.
2. Place Cfast module as below picture and apply screws (2pcs).
3. Connect the SATA cable of CFast module on mother board as the below picture.

Appendix A. BIOS Set Up

01. Understanding BIOS

• Understanding BIOS Set up

BIOS provides configuration and set-up information for driving the main board. BIOS values are saved in CMOS ROM on the main board.

BIOS (Basic Input and Output System) Set-Up is a menu-oriented software utility which enables a user to configure the system's environmental set-up, system hardware, power saving functions, etc. BIOS Set-Up values can seriously affect how the system works. Therefore, users should determine all options regarding BIOS Set-Up and configure the system accordingly.

Entering the Setup

- Turn on the system and the system will show Press <DEL> to enter SETUP message.
- When this message show up, press <DEL> or <Delete> key to enter SETUP screen.

Cases of BIOS Setup

- When checking HDD type and capacity after HDD replacement
- When changing booting sequence
- When reflecting user s need on the setup
- When setting or changing a password

∗ If you would like to check the details about BIOS, please refer HDD or Miainboard manual o CD provided.

Appendix A. BIOS Set Up

02. Serial voltage change & Using Keyboard shortcut

1. Advanced Menu

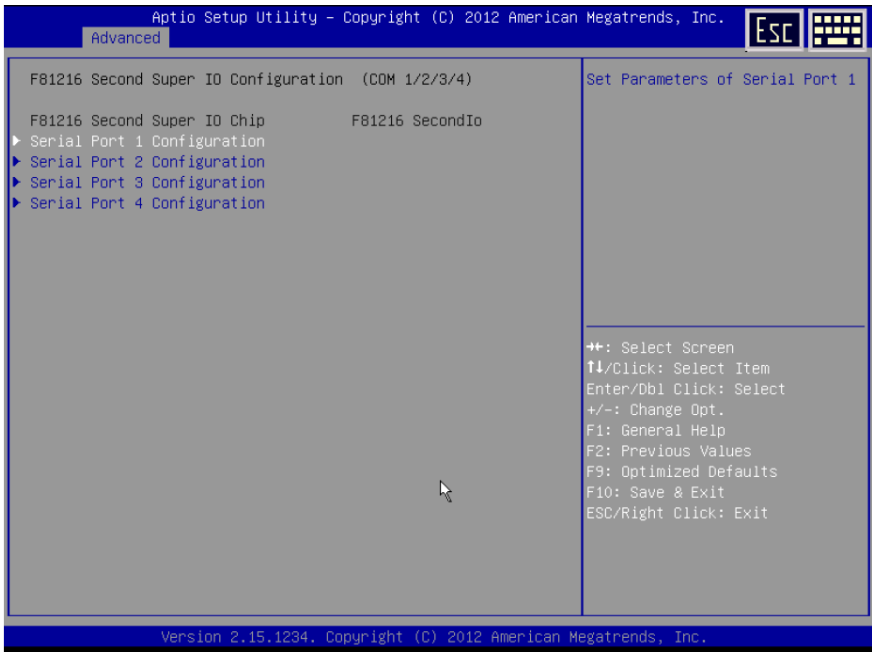
   Use this menu to set up for system performance.

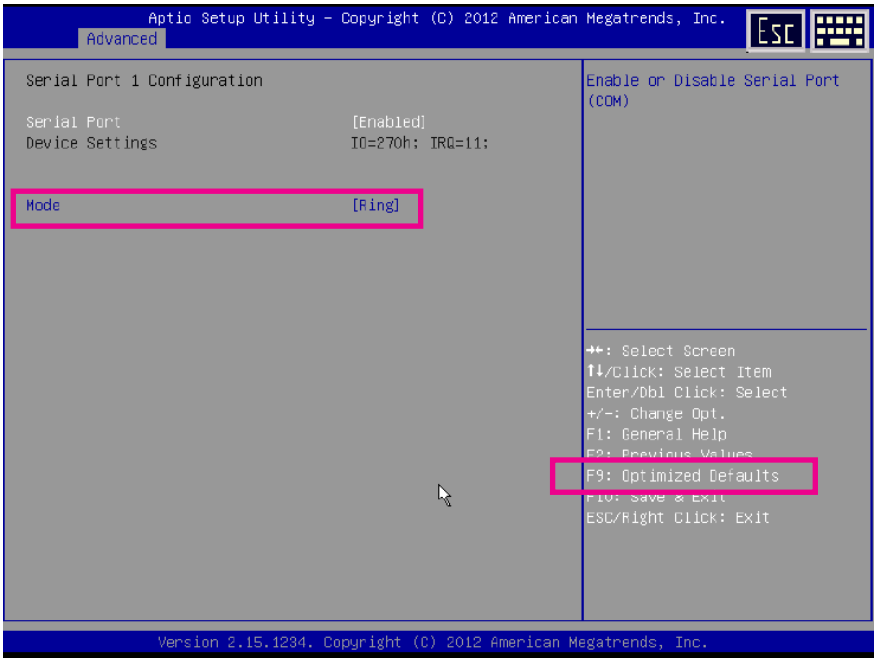
   - Advancede> F81216 Second Super IO Configuration(COM 1/2/3/4) > Serial Port 1/2/3/4 Configuration > Mode

     : This item allows you to set the output voltage value of Serial port 1/2/4 PIN9 type This item allows you to set the output voltage value of Serial port 3 PIN1 type.

2. Using keyboard shortcut

   - Press key`F9'on the keyboard, it is initialized.

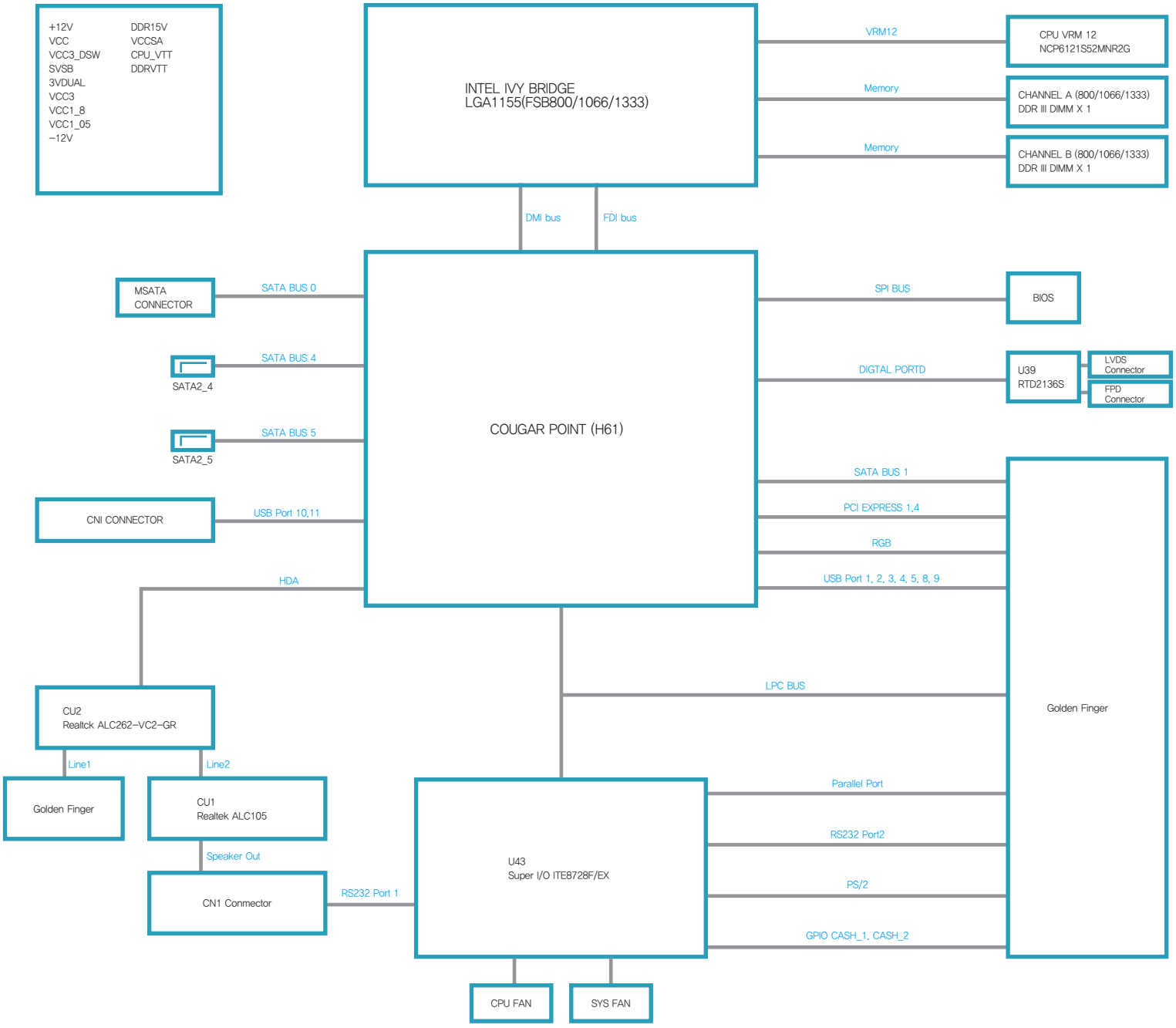




Appendix B. System Configuration

01. System Block Diagram

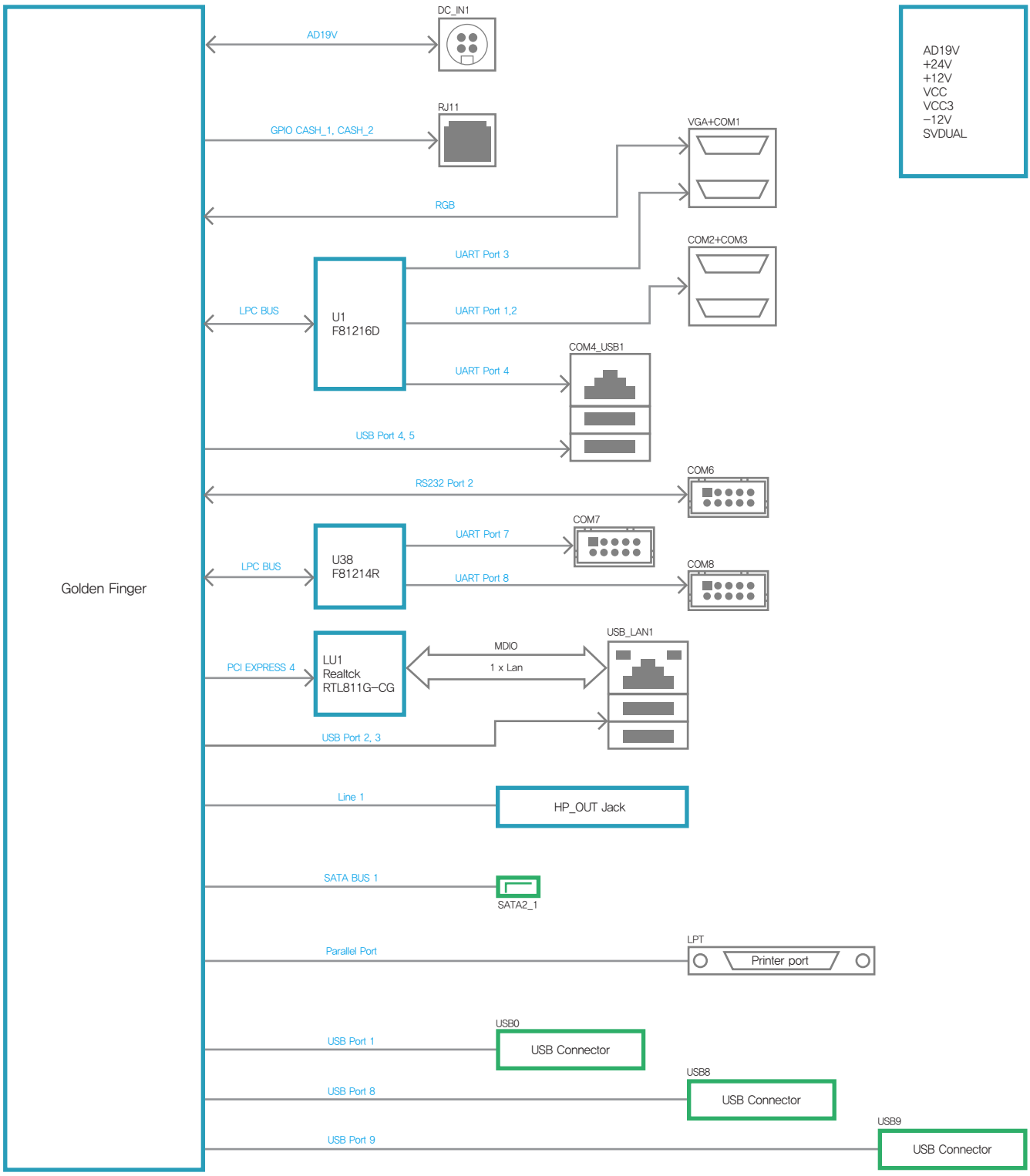
• MotherBoard System Block Diagram



Appendix B. System Configuration

01. System Block Diagram

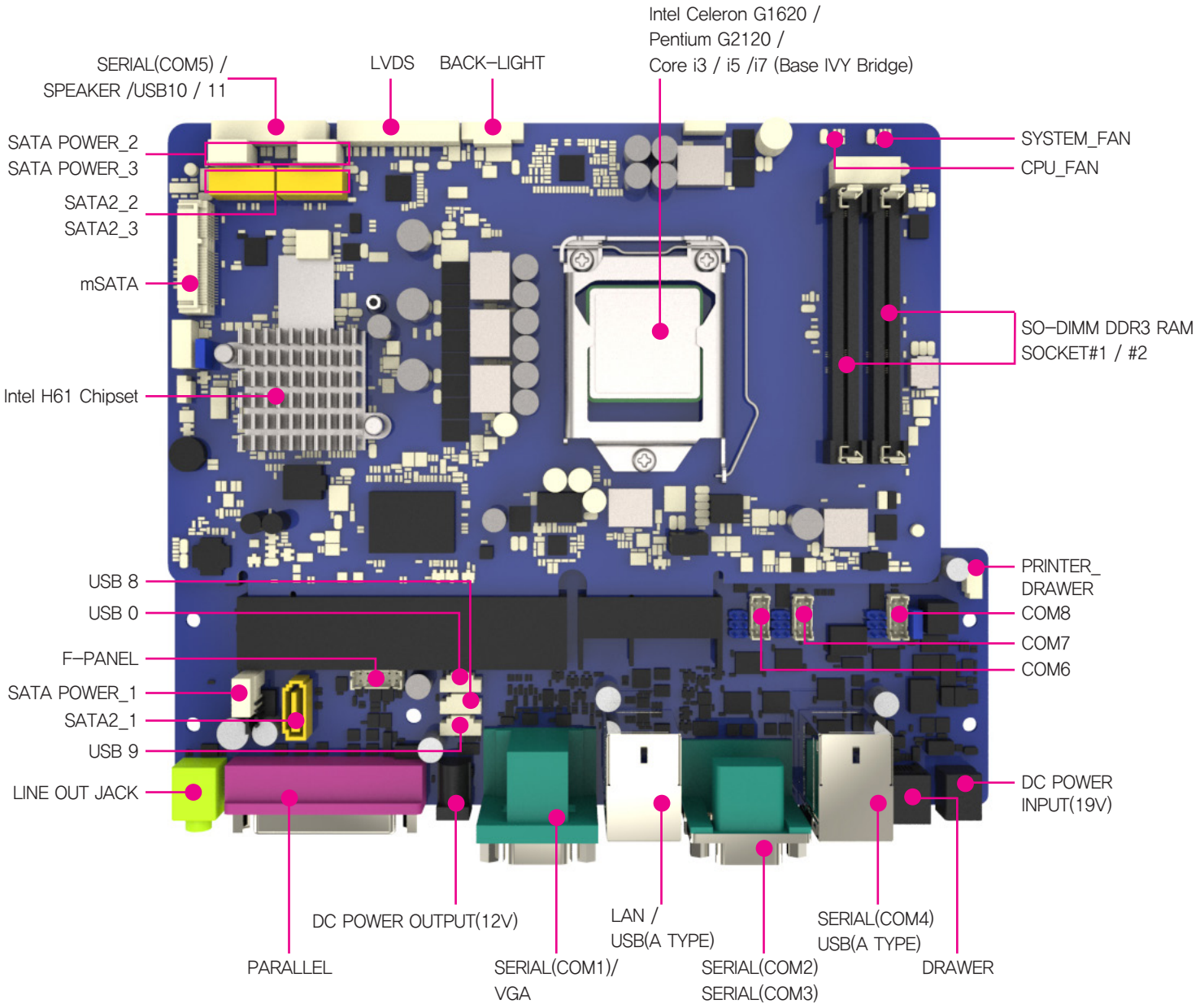
• I/O Board System Block Diagram



Appendix B. System Configuration

02. Main Chipset & Connector

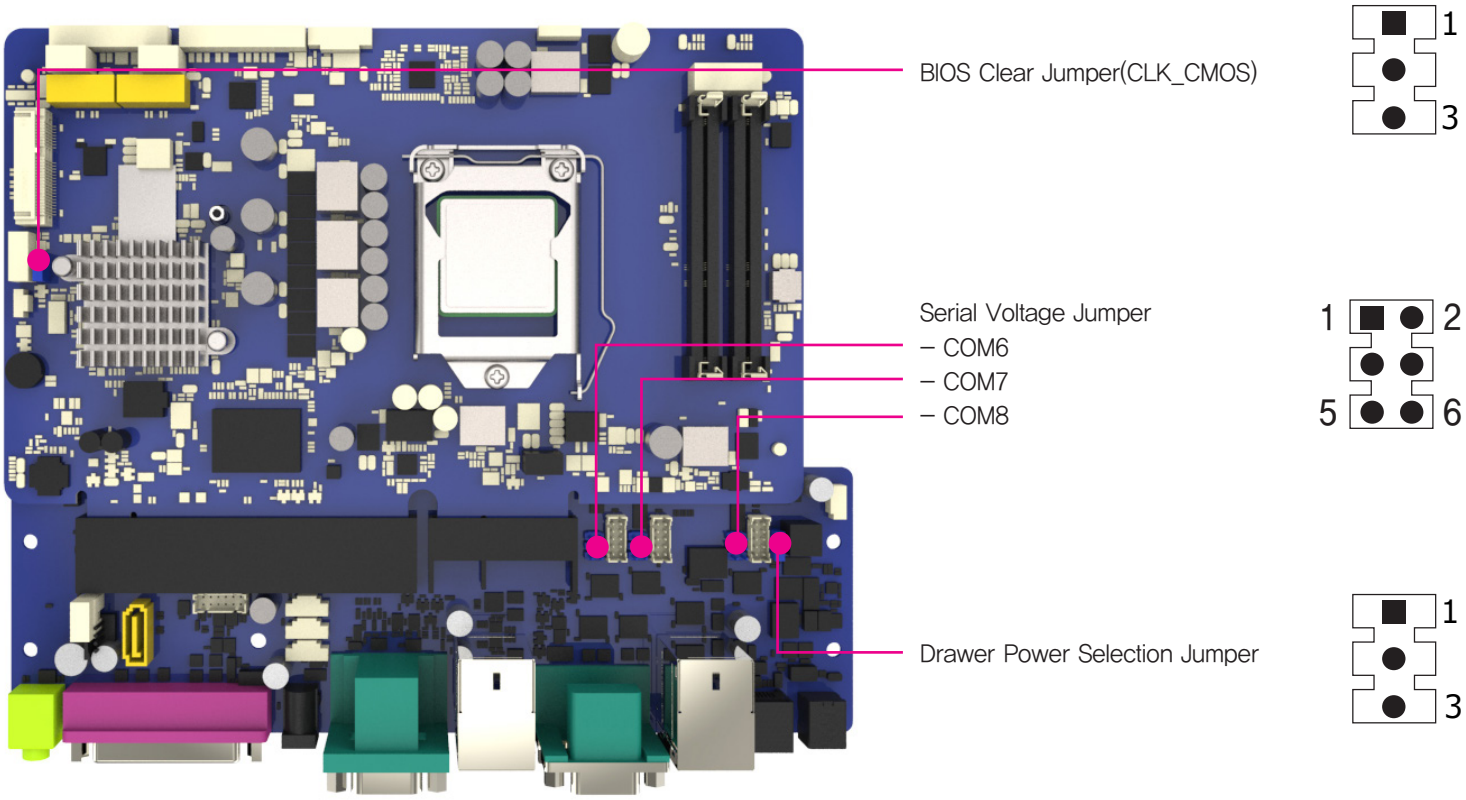
• Main Chipset & Connector



Appendix B. System Configuration

03. Main Jumper Setting

• Main Jumper Setting



• BIOS Clear Jumper(CLK_CMOS)

Jumper Setting	Voltage
1 – 2 Short	Nomal Operation
2 – 3 Short	CMOS Clear

• Drawer Power Selection Jumper

Jumper Setting	Voltage
1 – 2 Short	12V (Default)
2 – 3 Short	24V

• Serial Voltage Jumper

– COM6

Jumper Setting	Voltage
1 – 2 Short	RI
3 – 4 Short	5V (Default)
5 – 6 Short	12V

– COM7

Jumper Setting	Voltage
1 – 2 Short	RI
3 – 4 Short	5V (Default)
5 – 6 Short	12V

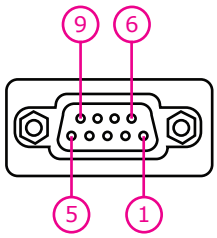
– COM8

Jumper Setting	Voltage
1 – 2 Short	RI
3 – 4 Short	5V (Default)
5 – 6 Short	12V

Appendix B. System Configuration

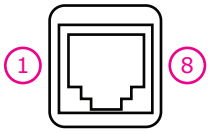
04. IO Pin map

• COM1/2/3(DSUB9 MALE)



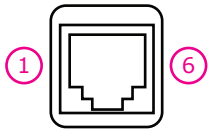
Pin Num	Description
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	Ring / +5V / +12V

• COM4 Serial Port(RJ45)



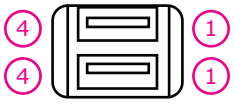
Pin Num	Description
1	Ring / +5V / +12V
2	DSR
3	TXD
4	RXD
5	RTS
6	CTS
7	GND
8	DTR

• Cash Drawer Port(RJ11)



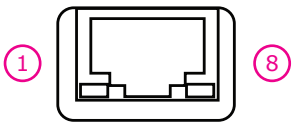
Pin Num	Description
1	GND
2	DRAWER#1
3	DRW_COMP
4	VDRW(+12V / +24V)
5	DRAWER#2
6	GND

• USB Port(TYPE A)



Pin Num	Description
1	VSUB(+5V)
2	D–
3	D+
4	GND

• LAN Port(RJ45)

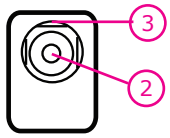


Pin Num	Description
1	MDI [0] +
2	MDI [0] –
3	MDI [1] +
4	MDI [1] –
5	MDI [2] +
6	MDI [2] –
7	MDI [3] +
8	MDI [3] –

Appendix B. System Configuration

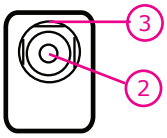
04. IO Pin map

• Adapter Input + 19V



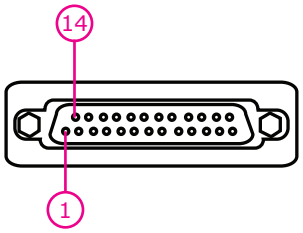
Pin Num	Description
1	NC
2	+19V
3	GND

• DC +12V Output(For Dual Monitor)



Pin Num	Description
1	NC
2	+12V
3	GND

• Printer Port (D-SUB25 FEMALE)

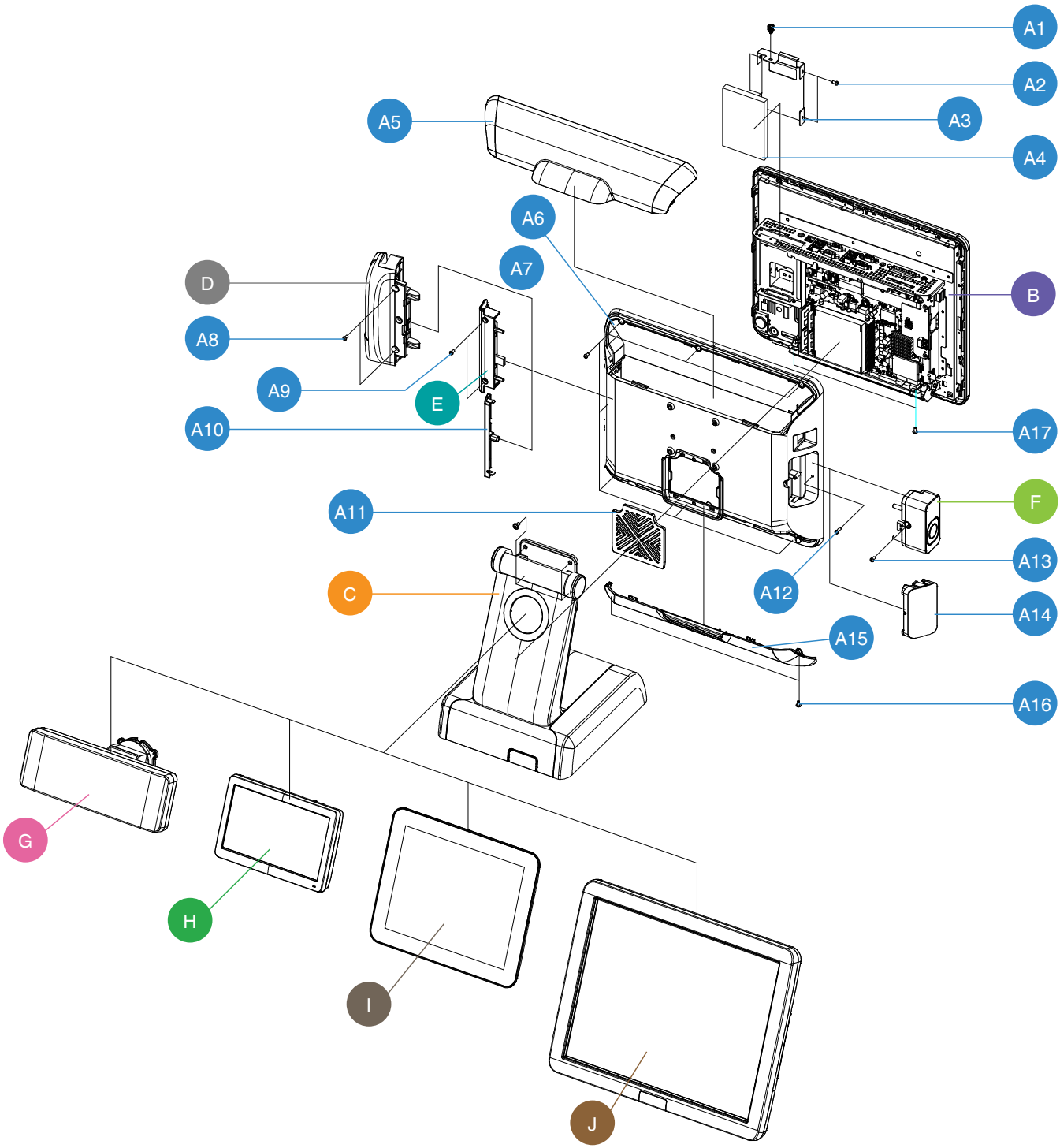


Pin Num	SPP	ECP	EPP	In/Out
1	/STROBE	/STROBE	/WRITE	I/O
2	PD0	PD0	PD0	I/O
3	PD1	PD1	PD1	I/O
4	PD2	PD2	PD2	I/O
5	PD3	PD3	PD3	I/O
6	PD4	PD4	PD4	I/O
7	PD5	PD5	PD5	I/O
8	PD6	PD6	PD6	I/O
9	PD7	PD7	PD7	I/O
10	/ACK	/ACK	NTR	I
11	BUSY	BUSY,PERIPHACK	/WAIT	I
12	PERROR	PE,/ACKREVERSE	PE	I
13	SELECT	SELECT	SELECT	I
14	/AUTOFD	/AUTOFD,HOSTACK	/DATASTB	O
15	/FAULT	/FAULT,/PERIPHREQST	/FAULT	I
16	/INIT	/FAULT,/REVERSEQST	/RESET	O
17	/SLCTIN	/SLCTIN	/ADDRSTB	O
18–25	GND	GND	GND	–

Appendix B. System Configuration

05. A Deal Drawin

- Main



Appendix B. System Configuration

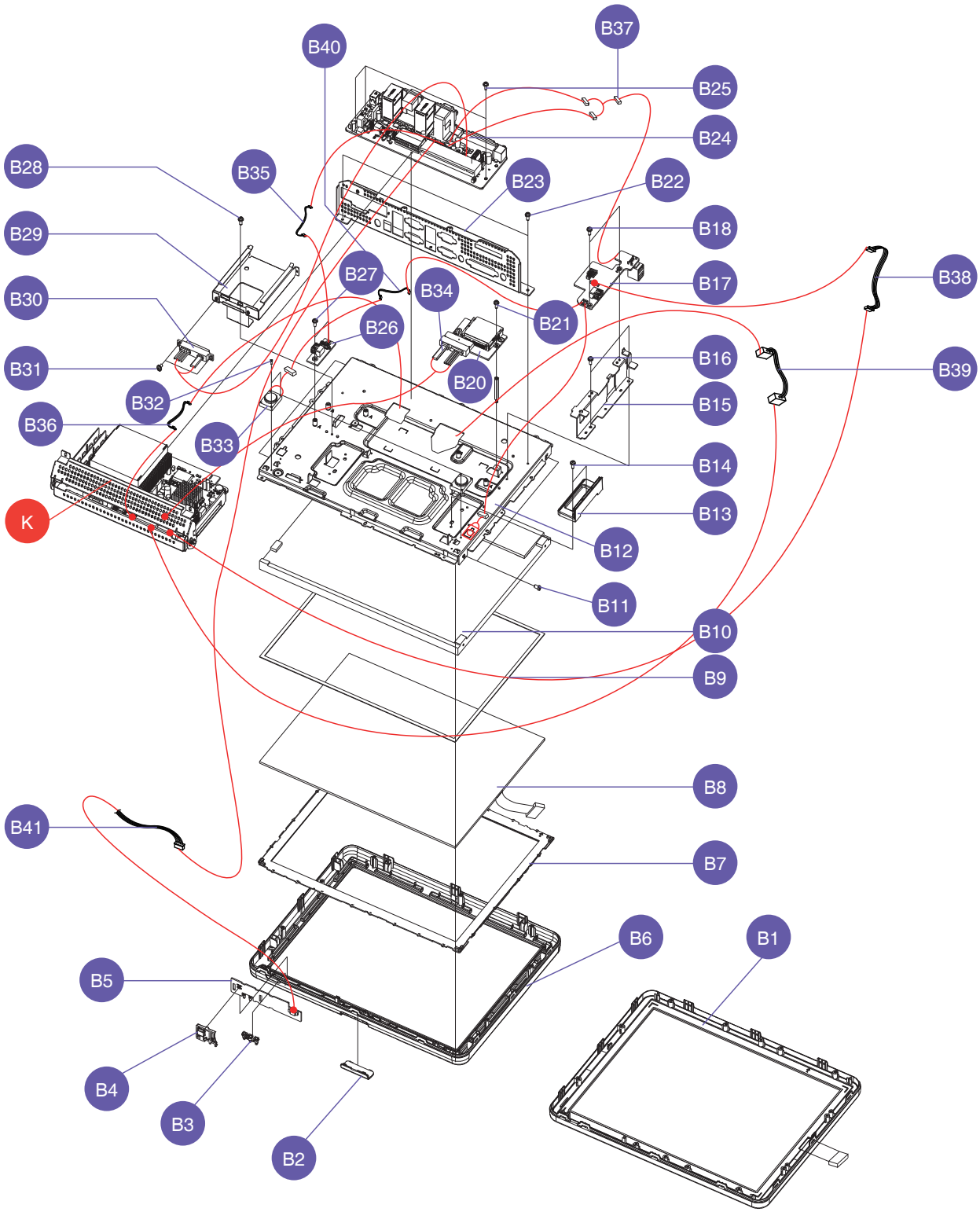
05. A Deal Drawin

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
A1	S600100037A	SCREW-MACHINE COIN: M3,L6	1	Y	
A2	S600100031A	SCREW-MACHINE:M3,L4	4	Y	
A3	JK70-20337A	IPR-HOLDER_HDD	1	Y	
A4	JK95-70615A	UNIT-HDD,2.5",320GB,SATA-2,WD&SEGATE	1	Y	
A5	JK72-20898A	PMO-COVER WIRE	1	Y	
A6	JK70-20344A	IPR-REAR DISPLAY	1	Y	
A7	S600100127A	SCREW-MACHINE:M3,L6	7	Y	
A8	S600100077A	SCREW-MACHINE:M3,L12	2	Y	
A9	S600100077A	SCREW-MACHINE:M3,L12	2	Y	
A10	JK72-20903A	PMO-DUMMY MSR	1	Y	
A11	JK95-70667A	ASSY-COVER FAN	1	Y	
A12	S600100077A	SCREW-MACHINE:M3,L12	1	Y	
A13	S600100077A	SCREW-MACHINE:M3,L12	1	Y	
A14	JK72-20902A	PMO-DUMMY DALLAS	1	Y	
A15	JK72-20897A	PMO-COVER BOTTOM	1	Y	
A16	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
A17	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
A18	S600100039A	SCREW-MACHINE:M4,L8	4	Y	
B	JK95-70628A	ASSY-MAIN FRONT	1	N	
C	JK95-70619A	ASSY-STAND	1	N	
D	QMR-T480DW	ASSY-MSR, With DALLAS(ONLY PROBE)	1	Y	OPTION
	QMR-T481DW	ASSY-MSR, With DALLAS(1KEY)			
	QMR-T485DW	ASSY-MSR, With DALLAS(5KEY)			
	QMR-T480NW	ASSY-MSR, None DALLAS			
E	QMR-T500NW	ASSY-MSR (SLIM TYPE)	1	Y	OPTION
F	QDK-T500NW	ASSY-DALLAS(ONLY PROBE)	1	Y	OPTION
	QDK-T501NW	ASSY-DALLAS(1KEY)			
	QDK-T505NW	ASSY-DALLAS(5KEY)			
G	QCD-S50V202W	ASSY-VFD DISPLAY(CHARACTER)	1	Y	OPTION
	QCD-S50G256W	ASSY-VFD DISPLAY(GRAPHIC)			
H	QCD-S50L7NWB	ASSY-7"DUAL DISPLAY	1	Y	OPTION
I	SCD-100/D50NNWN	ASSY-9.7"DUAL DISPLAY	1	Y	OPTION
J	QCD-S50L15NWB	ASSY-15"DUAL DISPLAY	1	Y	OPTION

Appendix B. System Configuration

05. A Deal Drawin

- Display



Appendix B. System Configuration

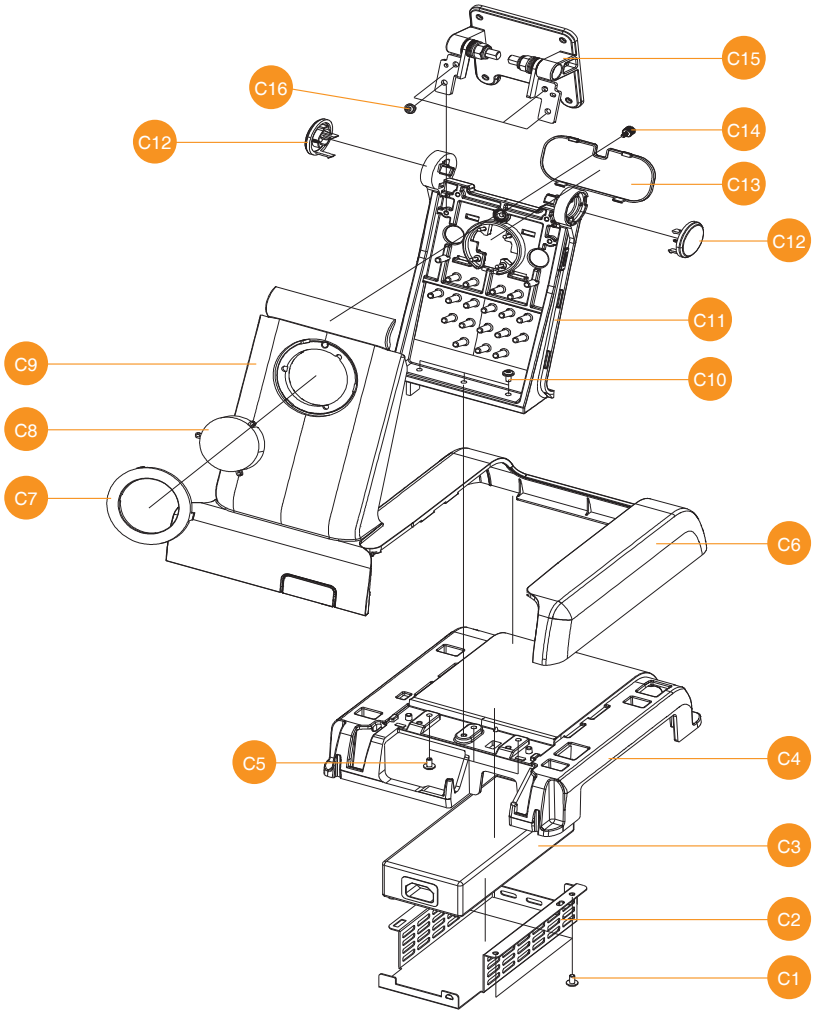
05. A Deal Drawin

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
B1	JK95-70559B	ASSY-FRONT DISPLAY(TRUE)	1	Y	TRUE FLAT
B2	JK72-20551D	PMO-BRAND FRONT	1	Y	
B3	JK72-20410A	PMO-COVER LED	1.5	Y	
B4	JK72-20375E	PMO-BUTTON(D)	1	Y	NORMAL
	JK72-20620A	PMO-BUTTON(F)	1	Y	TRUE FLAT
B5	JK92-10141A	PCB-SUB:OSD B'D	1	Y	NORMAL
	JK92-10141B	PCB-SUB:OSD B'D	1	Y	TRUE FLAT
B6	JK72-20608A	PMO-FRONT DISPLAY	1	Y	
B7	JK73-20003G	RMO-WATER PROOF(D)	1	Y	ELO,D/GRAY
	JK73-20003H	RMO-WATER PROOF(D)	1	Y	ELO,GREEN
	JK73-20003M	RMO-WATER PROOF(D)	1	Y	ELO,ORANGE
B8	JK95-70378E	TOUCH PANEL 5W:ELO	1	Y	
B9	JK73-11019A	RMO-RUBBER TAPE(15S)	2	Y	
	JK73-11019B	RMO-RUBBER TAPE(15L)	2	Y	
B10	JK95-70567A	LCD-LED:XTN,15"	1	Y	
B11	S600100044A	SCREW-MACHINE:M3,L5	4	Y	
B12	JK95-70629A	MEA-BRKT DISPLAY	1	Y	
B13	JK72-20904A	PMO-GUIDE MAIN	2	Y	
B14	S600100016A	SCREW-MACHINE:M3,L4	4	Y	
B15	JK70-20340A	IPR-BRKT TOUCH	1	Y	
B16	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
B17	JK92-10141C	PCB-SUB:ELO TOUCH B'D	1	Y	NORMAL
	JK92-10141D	PCB-SUB:AMT TOUCH B;D	1	Y	TRUE FLAT
B18	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
B19	JK70-70066A	ICT-SCREW MACHINE HEXA	2	Y	
B20	JK92-10141E	PCB-SUB:CFAST BOARD	1	Y	
B21	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
B22	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
B23	JK95-70625A	IPR-BRKT INTERFACE	1	Y	
B24	JK95-70706A	IO BOARD,H61	1	Y	
B25	S600100016A	SCREW-MACHINE:M3,L4	3	Y	
B26	JK92-10141F	PCB-SUB:USB JOINT B'D	1	Y	
B27	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
B28	S600100016A	SCREW-MACHINE:M3,L4	1	Y	
B29	JK70-20336A	IPR-BRKT HDD	1	Y	
B30	JK39-90010A	CABLE-SATA:HDD	1	Y	
B31	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
B32	S3004000002	UNIT-SPEAKER	2	Y	
B33	S600100024A	SCREW-MACHINE:M2,L6	4	Y	
B34	S39090001A	CABLE-SATA:CFAST	1	Y	
B35	JK39-40852A	HARNESS-USB	1	Y	
B36	JK39-80017A	HARNESS-INVERTER	1	Y	
B37	JK39-80037A	HARNESS-EXT USB	1	Y	
B38	JK39-80038A	HARNESS-TOUCH&DALLAS	1	Y	
B39	JK39-80039A	HARNESS-LVDS	1	Y	
B40	JK39-80040A	HARNESS-SPK JOINT	1	Y	
B41	JK39-80041A	HARNESS-OSD	1	Y	
K	-	ASSY-MAIN BOARD	1	N	

Appendix B. System Configuration

05. A Deal Drawin

• Stand

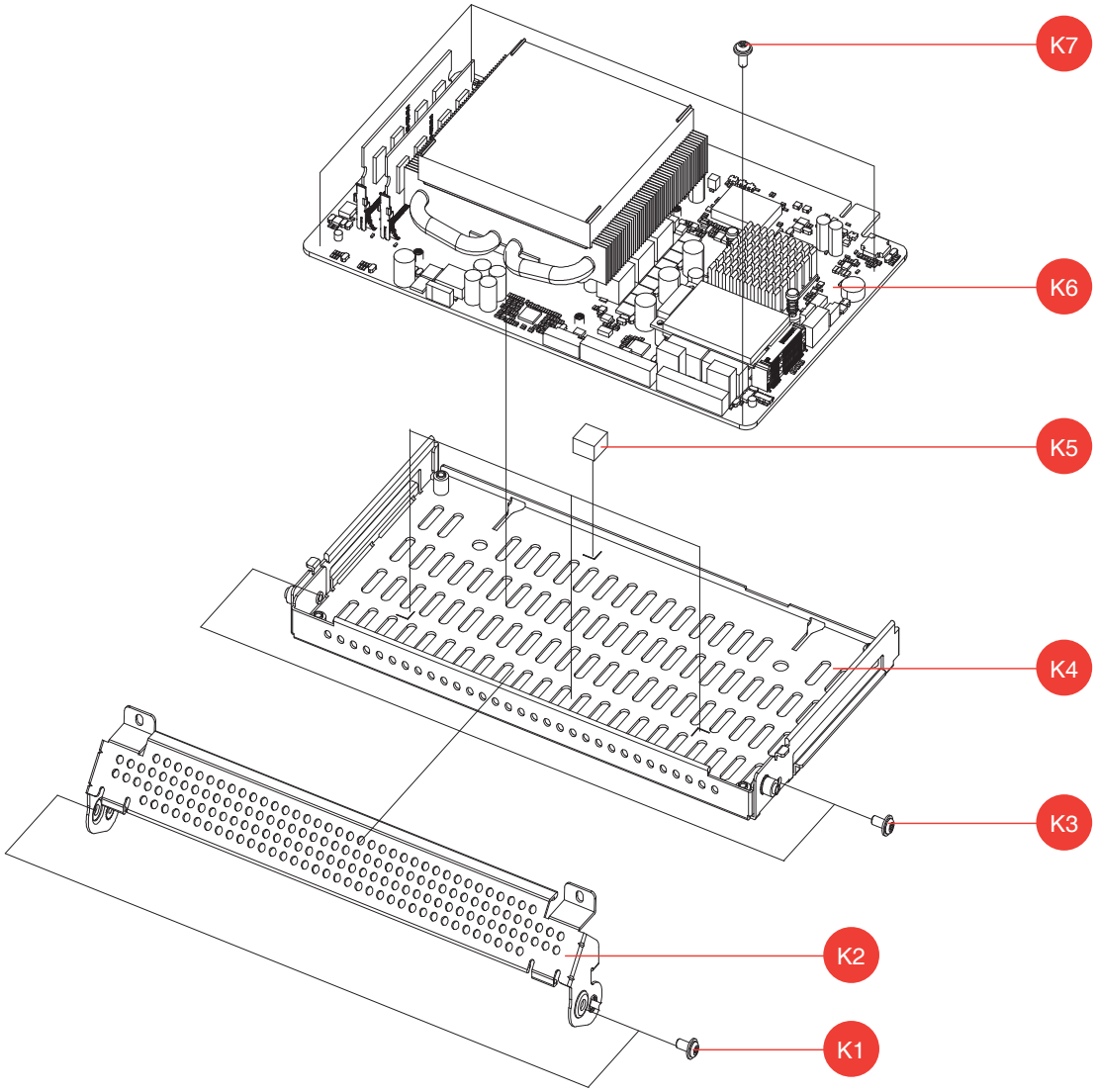


NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
C	JK95-70619A	ASSY STAND	1	N	
C1	S600100046A	SCREW-MACHINE:PWH,M4,L6,	3	Y	
C2	JK95-70627A	ASSY-BRKT SMPS	1	Y	
C3	JK95-70617A	ASS'Y-SMPS 150W	1	Y	
C4	JK95-70666A	ASSY FOOT STAND	1	Y	
C5	S600600015A	SCREW-ASS'Y TAPT:WT,BH,+,M4,L12	3	Y	
C6	JK72-20908A	PMO-COVER_STAND	1	Y	
C7	JK72-20910A	PMO-STAND_DECO	1	Y	
C8	JK72-20911A	PMO-DUMMY_MOUNT	1	Y	
C9	JK95-70632A	MEA-COVER CABLE	1	Y	
C10	S600600015A	SCREW-ASS'Y TAPT:WT,BH,+,M4,L12	3	Y	
C11	JK70-20346A	IPR-FRAME_STAND	1	Y	
C12	JK72-20912A	PMO-DUMMY_HINGE	2	Y	
C13	JK72-20906A	PMO-DUMMY_STAND	1	Y	
C14	S600100037A	SCREW-MACHINE COIN:M3,L6	1	Y	
C15	JK75-40015A	MAIN-HINGE_ASSY:SPT-5000	1	Y	
C16	S600600007A	SCREW-ASS'Y MACH:BH,+,M4,L8	4	Y	

Appendix B. System Configuration

05. A Deal Drawin

• Main Board

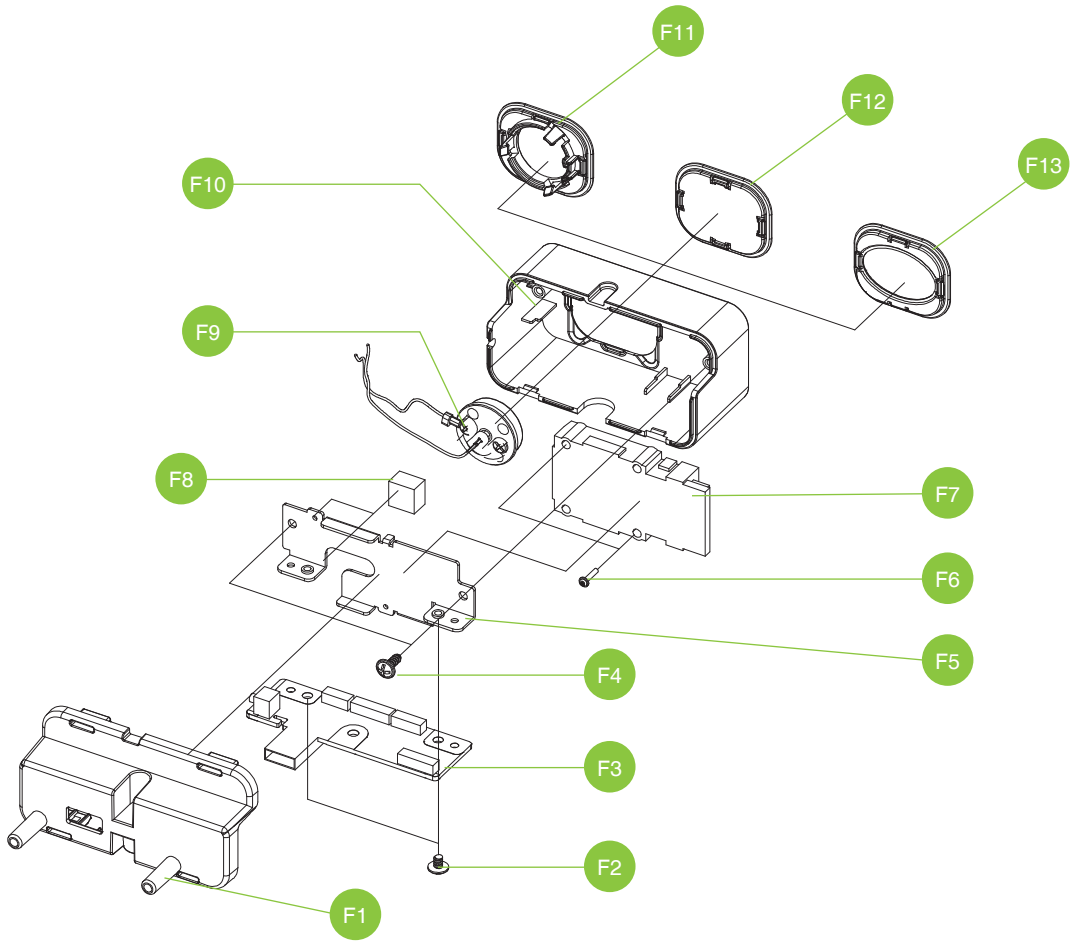


NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
K1	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
K2	JK95-70631A	IPR-BRKT OPEN	1	Y	
K3	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
K4	JK95-70630A	IPR-BRKT MAIN	1	Y	
K5	JK73-11026A	RMO-PAD BOARD	4	Y	
K6	JK95-70622B	MOTHER BOARD	1	Y	
K7	S600100016A	SCREW-MACHINE:M3,L4	4	Y	

Appendix B. System Configuration

05. A Deal Drawin

• Dallas

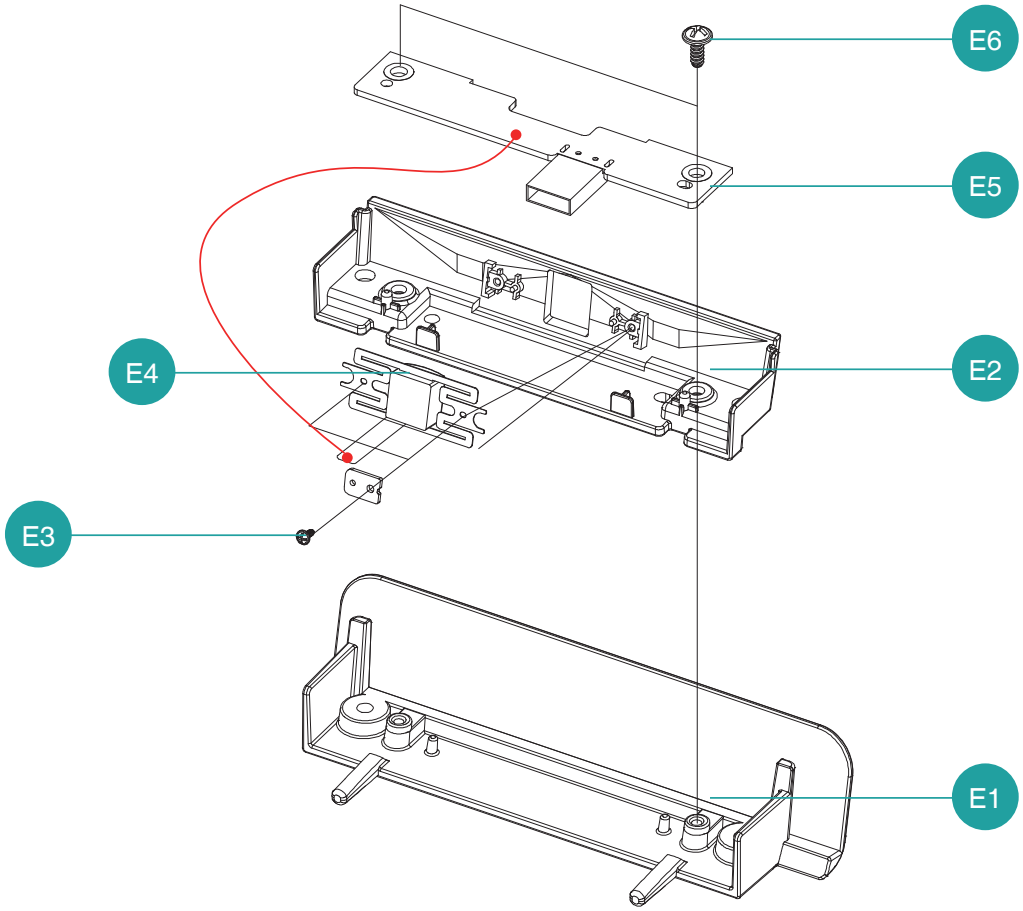


NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
F	QDK-T500NW	ASSY-DALLAS(ONLY PROBE)	1	Y	OPTION
	QDK-T501NW	ASSY-DALLAS(1KEY)			
	QDK-T505NW	ASSY-DALLAS(5KEY)			
F1	JK72-20901A	PMO-REAR DALLAS	1	Y	
F2	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
F3	JK92-10099A	DALLAS&FPR BOARD	1	Y	
F4	S600200006A	SCREW-TAPPING:M3,L8	2	Y	
F5	JK70-20339A	IPR-BRKT DALLAS	1	Y	
F6	S600100048A	SCREW-MACHINE:M2X14	2	Y	
F7	JK41-10765A	UNIT-FINGER PRINT	1	Y	
F8	JK73-11026A	RMO-PAD BOARD	2	Y	
F9	JK95-70134C	UNIT-DALLAS MODULE	1	Y	
F10	JK72-20900A	PMO-FRONT DALLAS	1	Y	
F11	JK72-20403C	PMO-CAP DALLAS	1	Y	
F12	JK72-20404C	PMO-CAP MSR	1	Y	
F13	JK72-20402C	PMO-CAP FPR	1	Y	

Appendix B. System Configuration

05. A Deal Drawin

- MSR

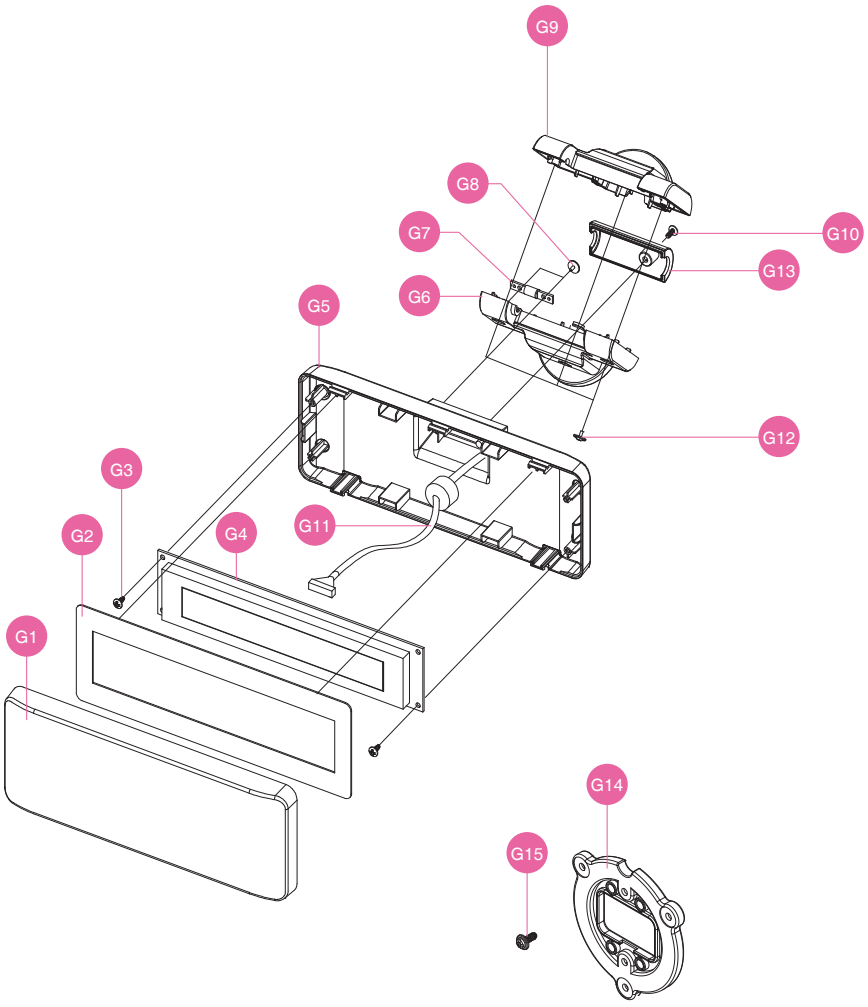


NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
E	QMR-T500NW	ASSY-MSR	1	Y	OPTION
E1	JK70-20345A	IPR-COVER MSR	1	Y	
E2	JK72-20899A	PMO-LED GUIDE	1	Y	
E3	S600300026A	SCREW-DELTA PT:Ø1.8,L3.5	2	Y	
E4	JK48-10012A	MSR MODULE	1	Y	MODULE
E5	JK92-10098A	MSR BOARD	1	Y	
E6	S600100017A	SCREW-MACHINE:M3,L6	2	Y	

Appendix B. System Configuration

05. A Deal Drawin

• VFD Display

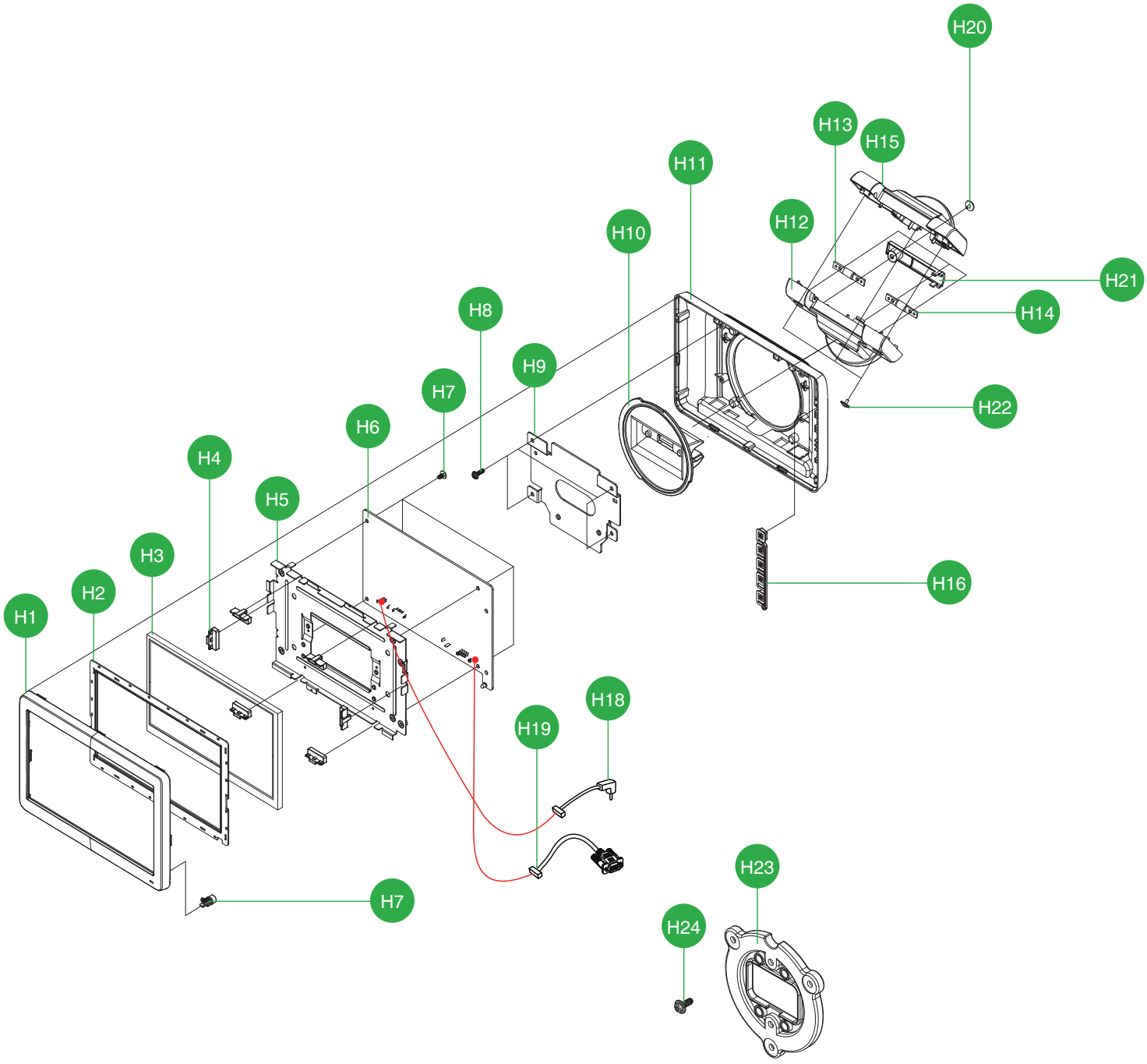


NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
G	QCD-S50V202W	OPTION-VFD(CHARACTER)	1	Y	OPTION
	QCD-S50G256W	OPTION-VFD(GRAPHIC)			
G1	JK72-20299C	PMO-WINDOW VFD	1	Y	
G2	JK68-40120A	LABEL(R)-VFD SHEET	1	Y	
G3	S600300020A	SCREW-TAPTITE:M3,L10	2	Y	
G4	JK46-00006A	UNIT-VFD MODULE(CHARACTER)	1	Y	MODULE
	JK46-00007A	UNIT-VFD MODULE(GRAPHIC)			
G5	JK72-20298B	PMO-REAR VFD(M)	1	Y	
G6	JK72-20914A	PMO-HOLDER DUAL LOWER	1	Y	
G7	JK75-40004A	MEC-HINGE ASSY	1	Y	
G8	S600300020A	SCREW-TAPTITE:M3,L10	2	Y	
G9	JK72-20913A	PMO-HOLDER DUAL UPPER	1	Y	
G10	S600300020A	SCREW-TAPTITE:M3,L10	1	Y	
G11	JK39-60075B	CABLE-POLE:RJ45,550	1	Y	
G12	S600200006A	SCREW-TAPPING:M3,L8	3	Y	
G13	JK72-20300B	PMO-REAR VFD DUMMY	1	Y	
G14	JK72-20907A	PMO-HOLDER DUAL	1	Y	UNPACKING
G15	S600200028A	SCREW-TAPPING:M3,L6	5	Y	UNPACKING

Appendix B. System Configuration

05. A Deal Drawin

- 7'' Dual Display



Appendix B. System Configuration

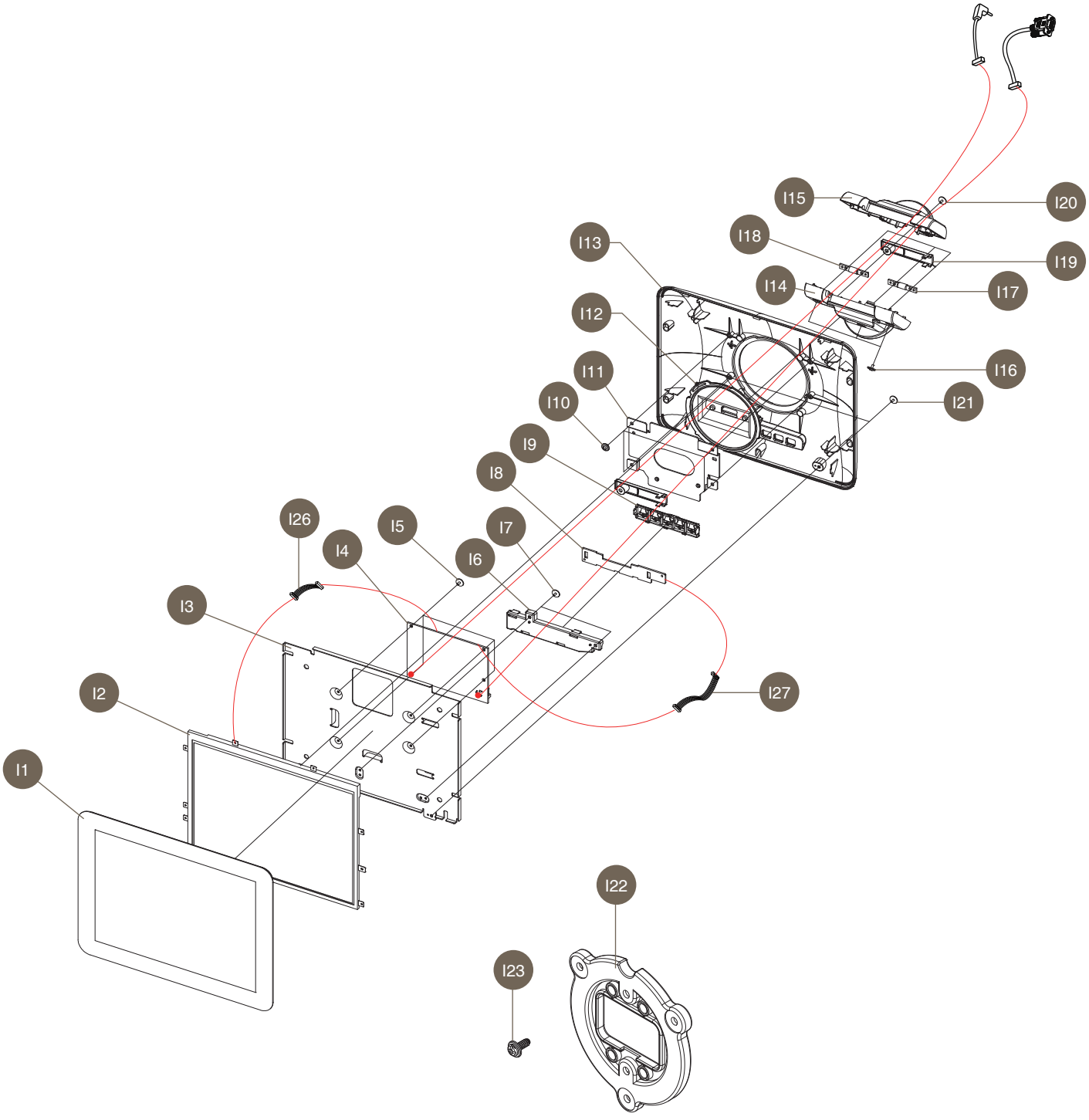
05. A Deal Drawin

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
H	QCD-S50L7NWB	OPTION 7"Dual Monitor	1	Y	OPTION
H1	JK72-20592C	PMO-LCD FRONT	1	Y	
H2	JK73-20016A	RMO-WATER PROOF(P)	1	Y	
H3	JK07-00023A	HW-DISPLAY LCD	1	Y	
H4	JK73-11043A	RMO-RUBBER LCD	6	Y	
H5	JK70-20238A	IPR-BRKT LCD	1	Y	
H6	JK49-00003C	HW-7INCH AD BOARD	1	Y	
H7	S600100016A	SCREW-MACHINE:M3,L4	4	Y	
H8	S600200006A	SCREW-TAPPING:M3,L8	4	Y	
H9	JK70-20240A	IPR-PLATE REAR(P)	1	Y	
H10	JK72-20596B	PMO-HOLDER HINGE(D)	1	Y	
H11	JK72-20593E	PMO-LCD REAR	1	Y	
H12	JK72-20914A	PMO-HOLDER DUAL LOWER	1	Y	
H13	JK75-40006A	MEC-HINGE ASS'Y	1	Y	
H14	JK75-40004B	MEC-HINGE ASS'Y	1	Y	
H15	JK72-20913A	PMO-HOLDER DUAL UPPER	1	Y	
H16	JK72-20594B	PMO-BUTTON(P)	1	Y	
H17	JK72-20600A	PMO-COVER LED(P)	1	Y	
H18	JK39-60085A	HW-HARNESS POWER	1	Y	
H19	JK39-90014A	HW-HARNESS VGA CABLE	1	Y	
H20	S600300020A	SCREW-TAPTITE:M3,L10	4	Y	
H21	JK72-20604B	PMO-HOLDER DUMMY	1	Y	
H22	S600200006A	SCREW-TAPPING:M3,L8	3	Y	
H23	JK72-20907A	PMO-HOLDER DUAL	1	Y	UNPACKING
H24	S600200028A	SCREW-TAPPING:M3,L6	5	Y	UNPACKING

Appendix B. System Configuration

05. A Deal Drawin

- 9.7" Dual Display



Appendix B. System Configuration

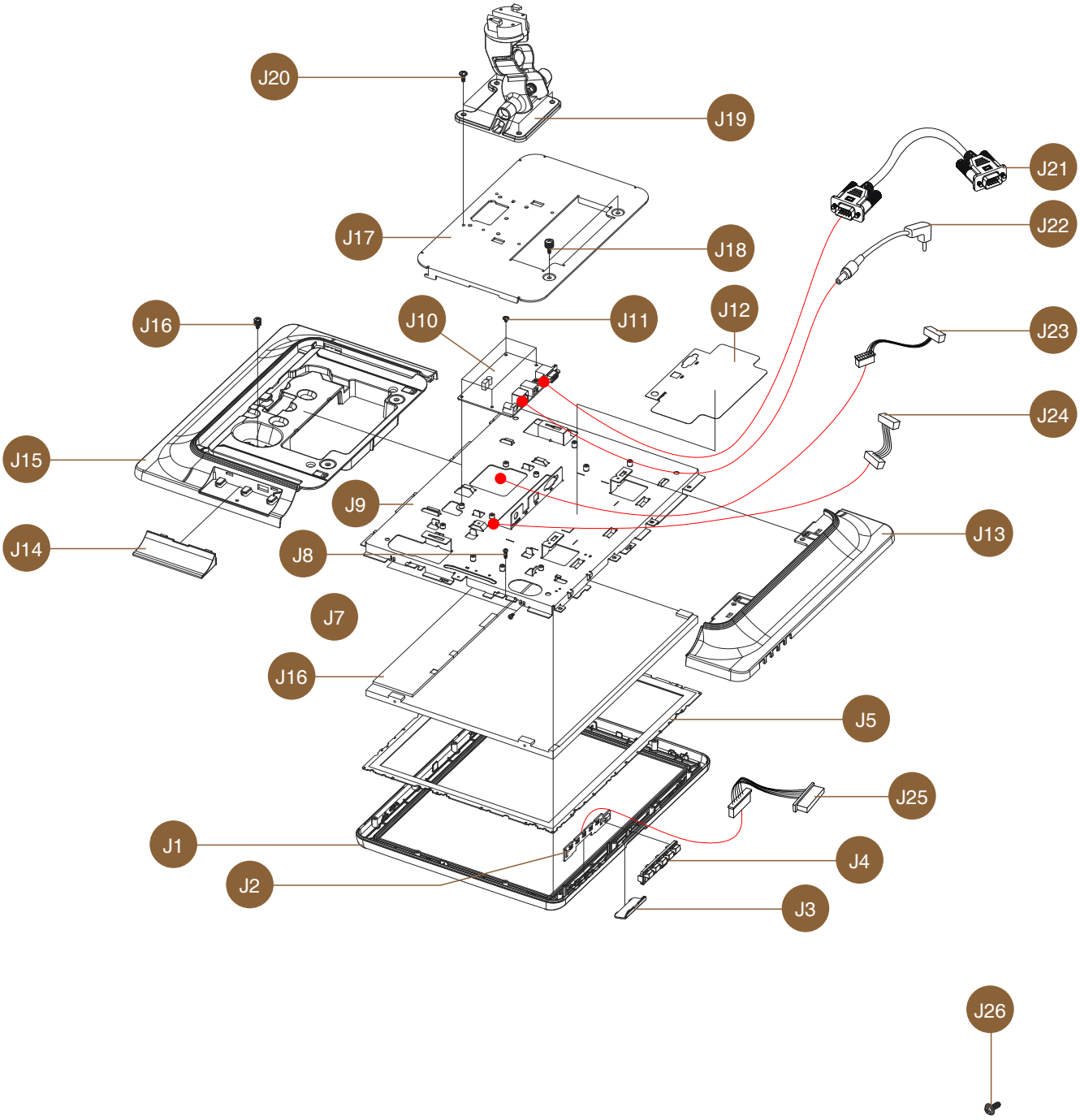
05. A Deal Drawin

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
I	SCD-100/D50NNWN	9.7" Dual Monitor	1	Y	
I1	JK95-40006A	ASSY-WINDOW FRONT	1	Y	
I2	JK07-70009A	DISPLAY-LCD	1	Y	
I3	JK70-20368A	IPR-BRKT DISPLAY	1	Y	
I4	JK49-10008A	UNIT-AD BOARD	1	Y	
I5	S600100016A	SCREW-MACHINE:M3,L4	4	Y	
I6	JK72-20457A	PMO-HOLDER BUTTON	1	Y	
I7	S600100016A	SCREW-MACHINE:M3,L4	2	Y	
I8	JK92-10116A	UNIT-OSD BOARD	1	Y	
I9	JK72-20547B	PMO-BUTTON	1	Y	
I10	S600200006A	SCREW-TAPPING:M3,L8	4	Y	
I11	JK70-20240A	IPR-PLATE REAR(P)	1	Y	
I12	JK72-20596C	PMO-HOLDER HINGE(D)	1	Y	
I13	JK72-20950A	PMO-COVER REAR(A)	1	Y	
I14	JK72-20914A	PMO-HOLDER DUAL LOWER	1	Y	
I15	JK72-20913A	PMO-HOLDER DUAL UPPER	1	Y	
I16	S600200006A	SCREW-TAPPING:M3,L8	3	Y	
I17	JK75-40004B	MEC-HINGE ASS'Y	2	Y	
I18	JK75-40006A	MEC-HINGE ASS'Y	2	Y	
I19	JK72-20604B	PMO-HOLDER DUMMY	1	Y	
I20	S600300020A	SCREW-TAPTITE:M3,L10	4	Y	
I21	S600200006A	SCREW-TAPPING:M3,L8	2	Y	
I22	JK72-20907A	PMO-HOLDER DUAL	1	Y	UNPACKING
I23	S600200006A	SCREW-TAPPING:M3,L6	5	Y	UNPACKING
I24	JK39-60085A	HW-HARNESS POWER	1	Y	
I25	JK39-90014A	HW-HARNESS VGA CABLE	1	Y	
I26	JK39-40799A	HW-HARNESS OSD	1	Y	
I27	JK39-90009A	HW-HARNESS IPEX	1	Y	

Appendix B. System Configuration

05. A Deal Drawin

- 15" Dual Display



Appendix B. System Configuration

05. A Deal Drawin

NO	PART CODE	PARTS NAME	Q'TY	Serviceable	REMARK
J	QCD-S50L15NWB	OPTION 15"Dual Monitor	1	Y	OPTION
J1	JK72-20544A	PMO-FRONT DISPLAY	1	Y	
J2	JK92-01736A	HW-DUAL OSD BOARD	1	Y	
J3	JK72-20551A	PMO-BRAND FRONT	1	Y	OPTION
J4	JK72-20547A	PMO-BUTTON	1	Y	
J5	JK73-20015A	RMO-WATER PROOF	1	Y	
J6	JK95-70567A	LCD-LED:XTN,15"	1	Y	
J7	S600100044A	SCREW-MACHINE:M3,L5	4	Y	
J8	S600300020A	SCREW-TAPTITE:M3,L10	12	Y	
J9	JK95-70431A	ASSY-BRKT DISPLAY DUAL	1	Y	
J10	JK95-70221B	HW-UNIT AD BOARD	1	Y	
J11	S600100016A	SCREW-MACHINE:M3,L4	4	Y	
J12	JK68-40223A	LABEL(R)-DUAL DISPLAY	1	Y	
J13	JK72-20546B	PMO-REAR BOTTOM	1	Y	
J14	JK72-20552A	PMO-DUMMY MSR	1	Y	OPTION
J15	JK72-20545A	PMO-REAR TOP	1	Y	
J16	S600100036A	SCREW-MACHINE HAND M3,L6	1	Y	
J17	JK70-20215B	IPR-PLATE REAR	1	Y	
J18	S600100056A	SCREW-MACHINE HAND M3,L10	2	Y	
J19	JK75-40014A	MEC-DUAL HINGE ASS'Y	1	Y	
J20	S600100039A	SCREW-MACHINE:M4,L8	4	Y	
J21	JK39-40792B	HW-HARNESS-VGA CABLE	1	Y	
J22	JK39-40797A	HW-HARNESS-LCD POWER	1	Y	
J23	JK39-40798A	HW-HARNESS-LVDS	1	Y	
J24	JK39-80018A	HW-HARNESS-INVERTER	1	Y	
J25	JK39-40876A	HW-HARNESS-DUAL OSD	1	Y	
J26	-	SCREW-MACHINE:M3,L8	4	Y	UNPACKING