

POS System **Electronic Manuals**



Rev.1.00.230210.

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

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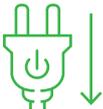
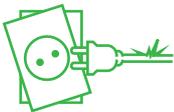
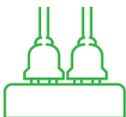
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Part 1. System Introduction

01. Safety Notices Before Installation or Use

Use the following safety guidelines to help ensure your own personal safety and to help protect your equipment and working environment from potential damage.



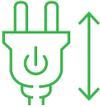
	<p>Keep rated voltage. The product can be damaged or burned by overvoltage.</p>
	<p>Do not use damaged components. The product may be damaged unless it is repaired at service center.</p>
	<p>Install the product in a clean and dry place. The product may not work properly in moist or dusty environments.</p>
	<p>Always copy important files. Always copy important files because data loss cannot be guaranteed by manufacturer.</p>
	<p>Turn off the system and Remove the power cable before the product is removed. You may get an electric shock.</p>
	<p>Do not use loose or damaged power cables. There may be electric shock or fire.</p>
	<p>Always connect power cable to a grounded 3-wire outlet. It prevents electric shock from electrical short.</p>
	<p>Install the product at a place with good ventilation. The product may be transformed or burned by overheating if air vent is blocked.</p>
	<p>Use power strips designed for computers. There may be fire caused by overvoltage.</p>

Part 1. System Introduction

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Use the following safety guidelines to help ensure your own personal safety and to help protect your equipment and working environment from potential damage.



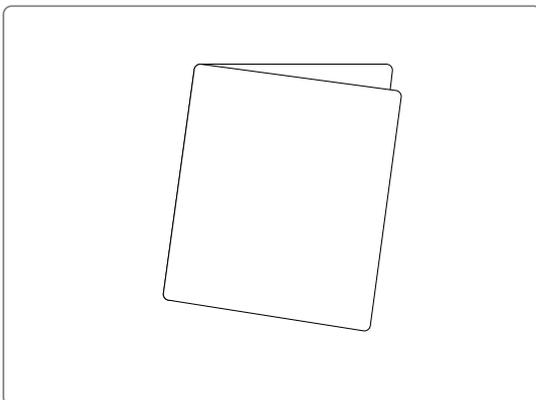
	<p>Use the cleaner which is only for computer. Do not use benzene, thinner and alcohol or the product may be damaged.</p>
	<p>Keep the product away from heaters. The product may be damaged, overheated or burned.</p>
	<p>Turn on the system after turning on peripheral device. Turn off peripheral device after turn off the system. The product may be damaged.</p>
	<p>Install the product in a safe, stable place. The product may be damaged or you may get injured if the product is dropped.</p>
	<p>Carefully store or dispose of plastic packing material. It is dangerous if children put their head on it.</p>
	<p>Do not touch the power plug with a wet hand. You may get an electric shock.</p>
	<p>Do not touch modem, telephone line or exposed terminal during electrical storms. There may be electric shock or fire.</p>
	<p>Upgrade the system after shutting off the power of system and its peripheral device. The product may be damaged.</p>
	<p>System should use compatible peripherals. Devices other than peripherals provided by us may experience compatibility issues.</p>

02. System Introduction

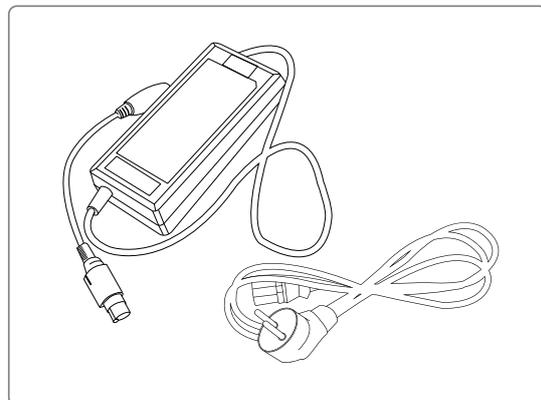
The exterior design and specifications of product can be changed without prior notice in order to improve quality.



■ Quick manual



■ Adaptor / Power cable



Part 1. System Introduction

03. General Specifications

Processor	Intel Celeron J6412 2.00GHz(up to 2.60GHz) Without FAN	
Chip sets	SOC	
Graphic	Integrated Intel HD Graphics	
Data storage device	SATA-III 2.5" HDD / SSD / M.2 SSD	
Memory	DDR4 SODIMM 2 Slots (Up to 32GB)	
BIOS	UEFI BIOS(Touch available in the BIOS)	
Display	38.1cm (15")	Resolution : 1024 x 768 (4 : 3) Color : 16.2M Colors supported Contrast Ratio : 500 : 1 Backlight : 350cd/m ² , 50,000 hours
	39.62cm (15.6")	Resolution : 1366 x 768 (16 : 9) Color : 262K Colors supported Contrast Ratio : 400 : 1 Backlight : 220cd/m ² , 15,000 hours
Touch Panel	True flat PCT(Projective Capacitive Touch) Interface : USB Transparency : 80% over Surface Hardness : 3H over Hitting Life : 100 million times	
OS	Windows 10 IoT / Windows 11 IoT	
I/O Interface	COM(Serial) Port : D-SUB 9P x 2Ports / RJ-45 x 1Port 5V / 12V or RI outputs through COM 1, 2, 3(BIOS setup) USB Port : USB 2.0 back x 2Ports USB 3.0 IO x 4Ports Ethernet Port : 10M / 100M / 1Gb LAN RJ-45 x 1Port DP Port : 1Port Audio Port : Line-out x 1Port DC-OUTPUT Port : 12V DC-OUT 2.5 x 1Port	
Power supply	AC INPUT : AC 100~240V / 50~60Hz, 2A DC OUTPUT : 12V / 5.0A(60W)	
Dimensions / Weight	38.1cm (15")	W x H x D : 352 x 225 x 363(mm) / 5.3KG
	39.62cm (15.6")	W x H x D : 394 x 225 x 343(mm) / 4.8KG

04. Optional Specifications

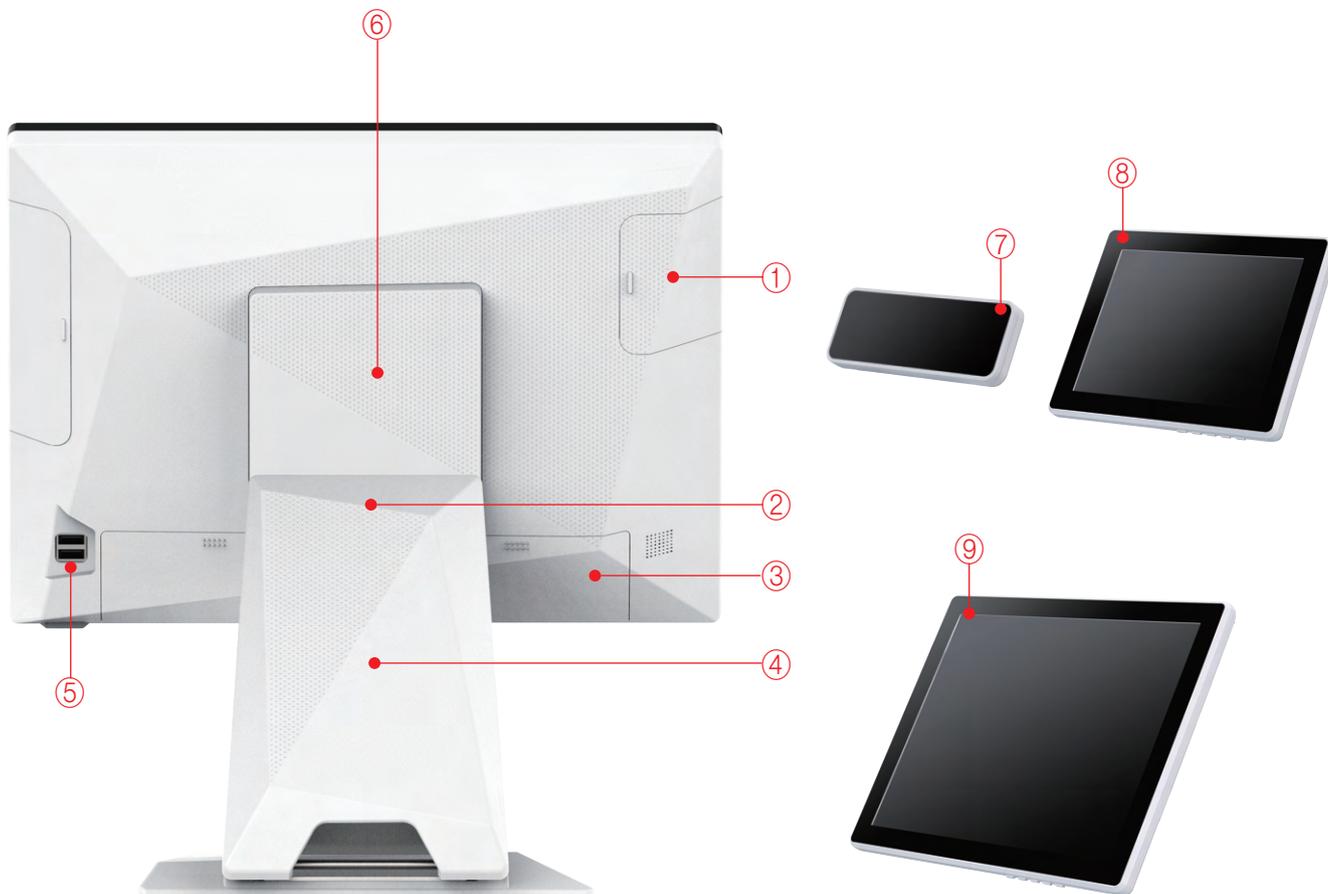
Magnetic Stripe Reader (MSR)	Read Track : ISO track 1, 2, 3 Interface : Internal USB Performance : 10~150 cm/sec Head Reliability : 500,000 times Error rate : Less than 0.5%
Customer Display	1) 2 LINE Display : 192 X 32 DOT MATRIX, Graphics type 2) Dual Display : 9.7" (24.6cm) 1024 x 768, 4:3 type 3) Dual Display : 15" (38.1cm) 1024 x 768, 4:3 type
Wall Mount	The device for attaching POS system on the wall

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



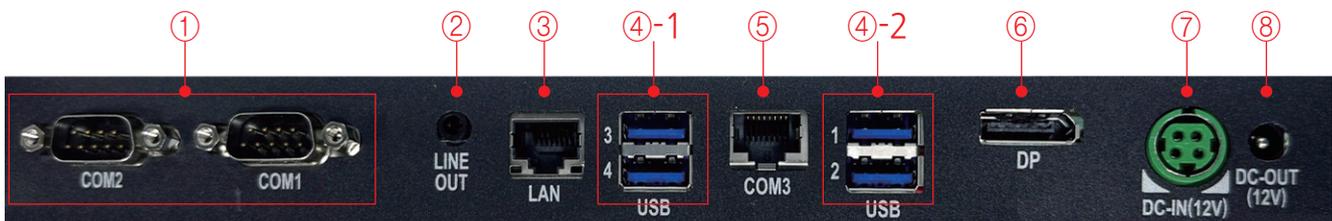
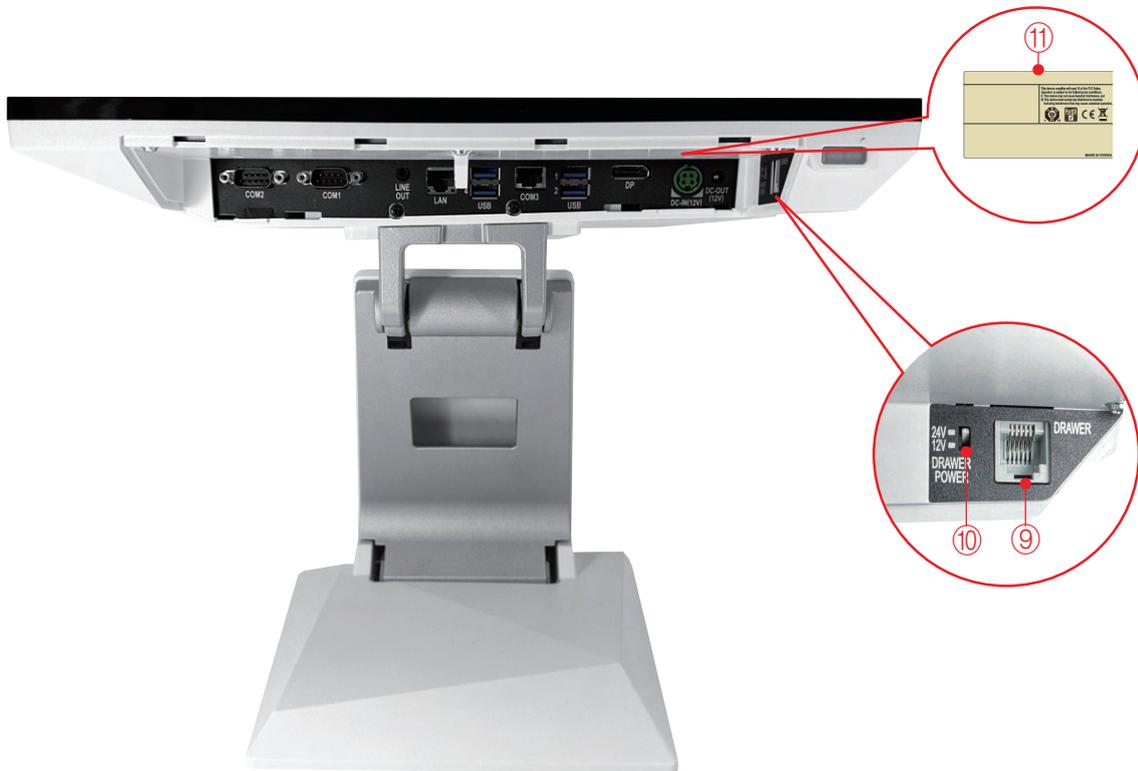
1	Display	Main Display, PCAP touch.
2	Magnetic Card Reader	Can read 3 track magnetic card.
3	Indicating lamp & Power button	The light is on when the system is on.
4	Stand	

06. Name and Function of each component (Rear view)



1	SSD cover	Remove this cover, you can connect 2.5" HDD or SSD.
2	Cable cover dummy	Remove this dummy, you can install the all-in-one customer display.
3	Interface cover	Remove this cover, you can install the peripheral device.
4	Cable cover	Remove this cover, you can arrange cables of device.
5	USB 2.0 Port	USB Devices can be used through this port, i.e. USB scanner, USB Keyboard, USB Printer, etc.
6	Hinge cover	Remove this cover, you can disassemble the hinge.
7	2 Line Display (all-in-one customer display)	Option
8	9.7inch Dual Display (all-in-one customer display)	Option
9	15inch Dual Display (all-in-one customer display)	Option

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

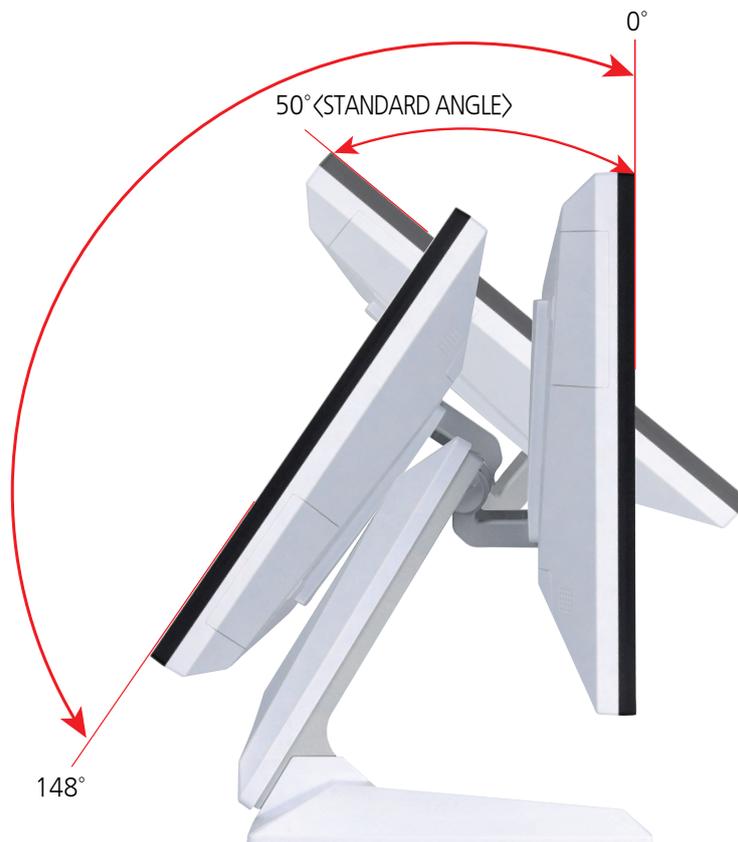


1	D-SUB 9pin COM (Serial) port	You can connect serial devices such as barcode scanners, printers.
2	Audio port (Line-out)	You can connect the external speakers.
3	RJ-45 LAN (ETHERNET) port	You can connect RJ45 cable for 100/1000 Mbps Ethernet connection.
4	USB 3.0 port	You can be used to connect devices such as the USB scanner, USB keyboard, USB printer.
5	RJ-45 8pin COM(Serial) port	You can connect serial devices such as barcode scanners, printers.
6	DP port	You can connect the external monitor.
7	12V DC Input (Input power connection)	Jack is connected to the adapter to supply power to the system.
8	2.5 Ø 12V DC Output(for Rear display)	System connected to an external DC power cable to the power that can be an output jack.
9	RJ-11 6pin Cash Drawer port	You can connect the cash drawer.
10	Setting switch of Cash drawer voltage (Option)	You can switch the power (12V/24V) for a cash drawer.
11		This is location of the label rating of the product.

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 motors, 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.

02. Before Connecting Peripherals

To connect peripheral devices, you need to stand up the 'stand', remove the 'interface cover' on the bottom of the system, and remove the 'cable management cover' on the back of the system.

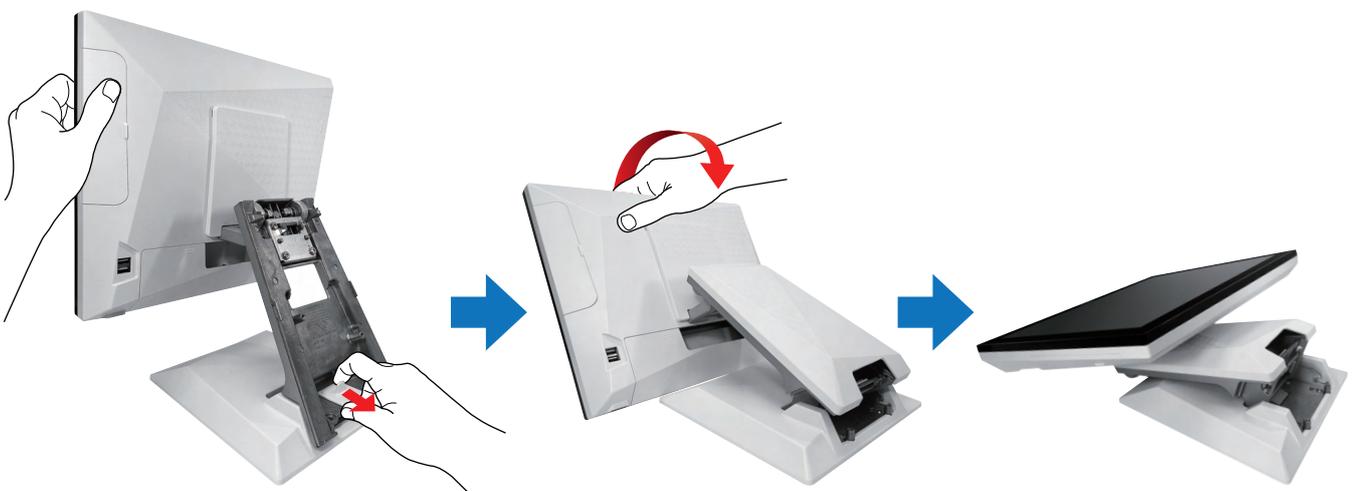
- **Raise the stand and change the angle of the monitor**

1. Set up the stand as shown in the picture and adjust the angle of the monitor.



- **How to fold the stand**

1. If you want to fold the stand again, remove the 'cable management cover' on the back of the system and pull the lever in the direction of the arrow while holding the monitor.



02. Before Connecting Peripherals

- Interface cover remove

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



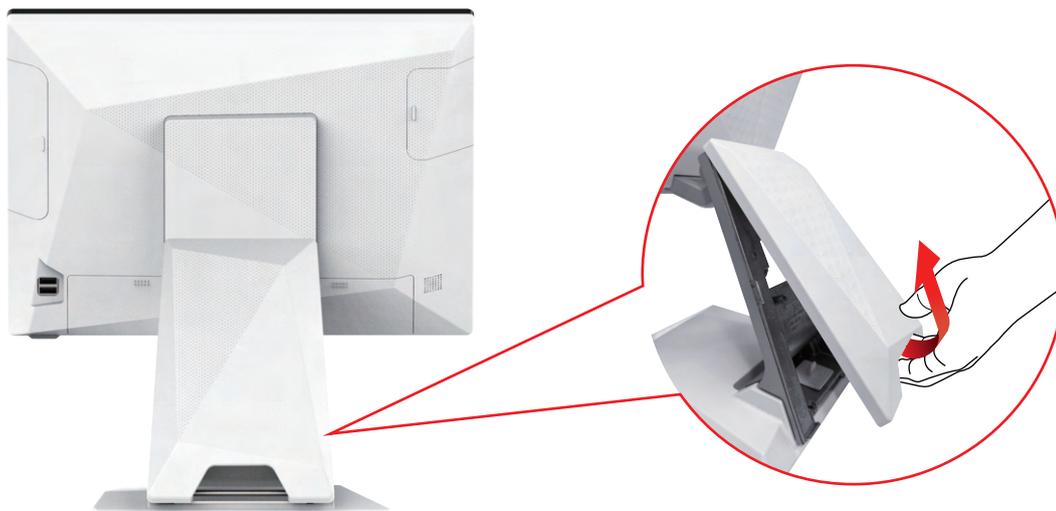
- Turn off the power of the body and connect peripherals.
- Connecting peripherals to the corners parts of the system can cause hands injury. For your safety use the gloves.



02. Before Connecting Peripherals

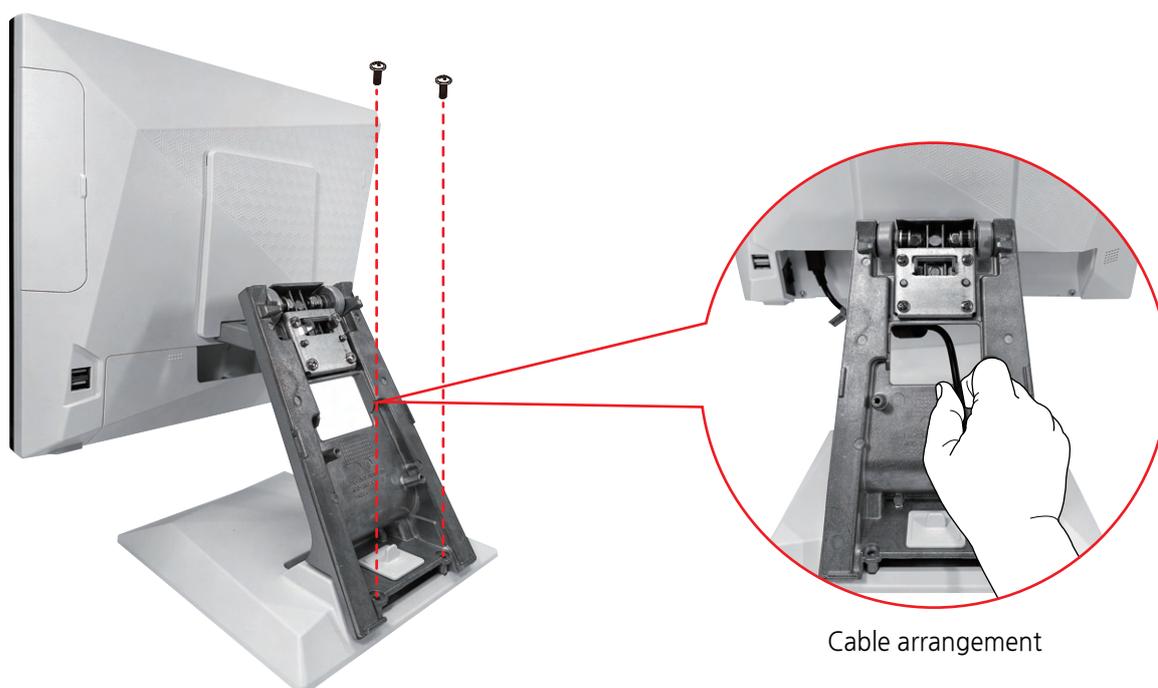
- Cable arrange cover remove

1. Remove the 'Cable arrange cover' in the direction of arrow shown in below picture.



2. Secure the stand with screws as shown. (Use the screws included with the product)

3. You can arrange the cables between the stands as shown.



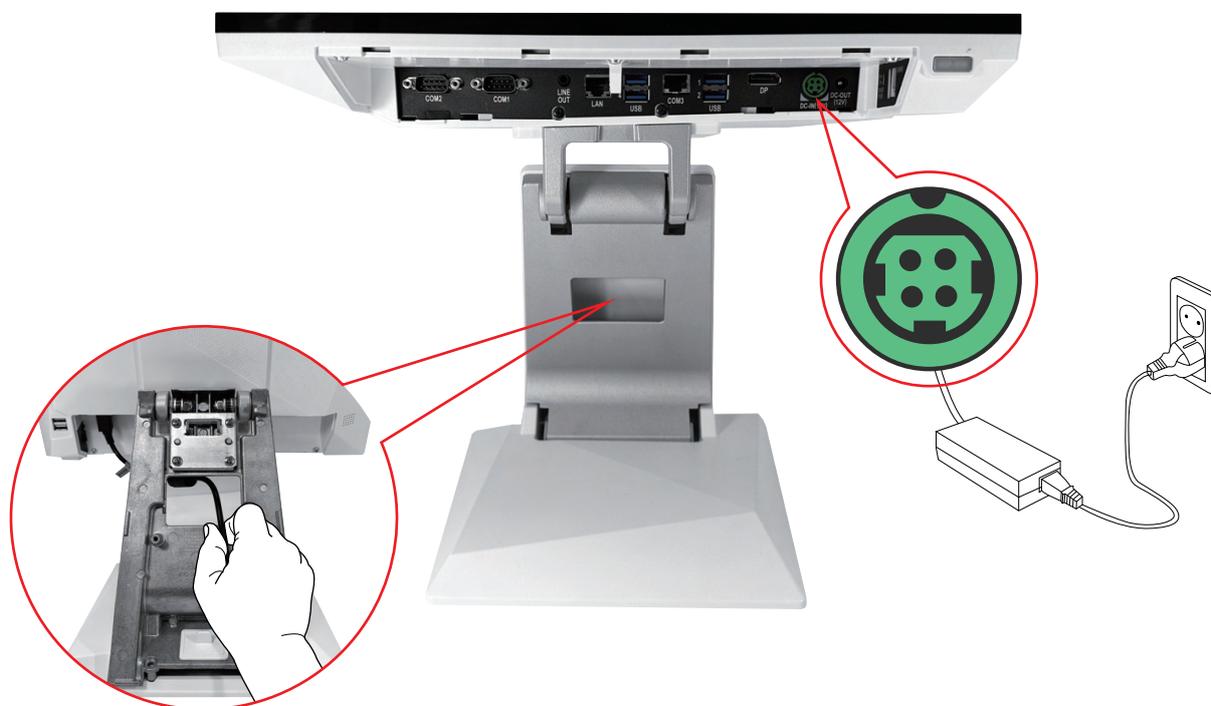
03. Connecting DC power supply cable

- **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.)



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

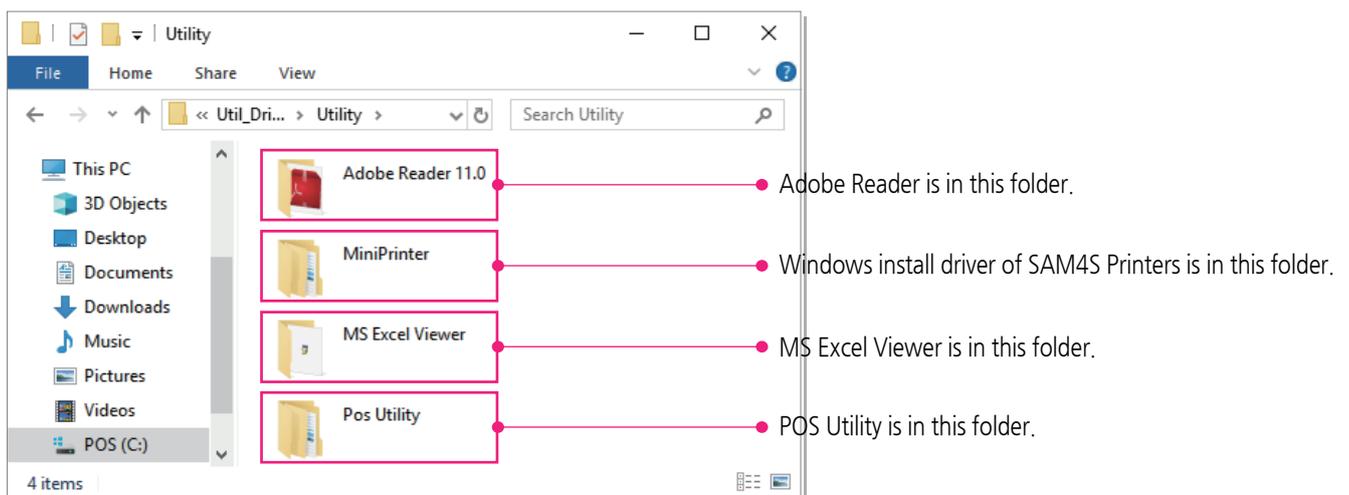
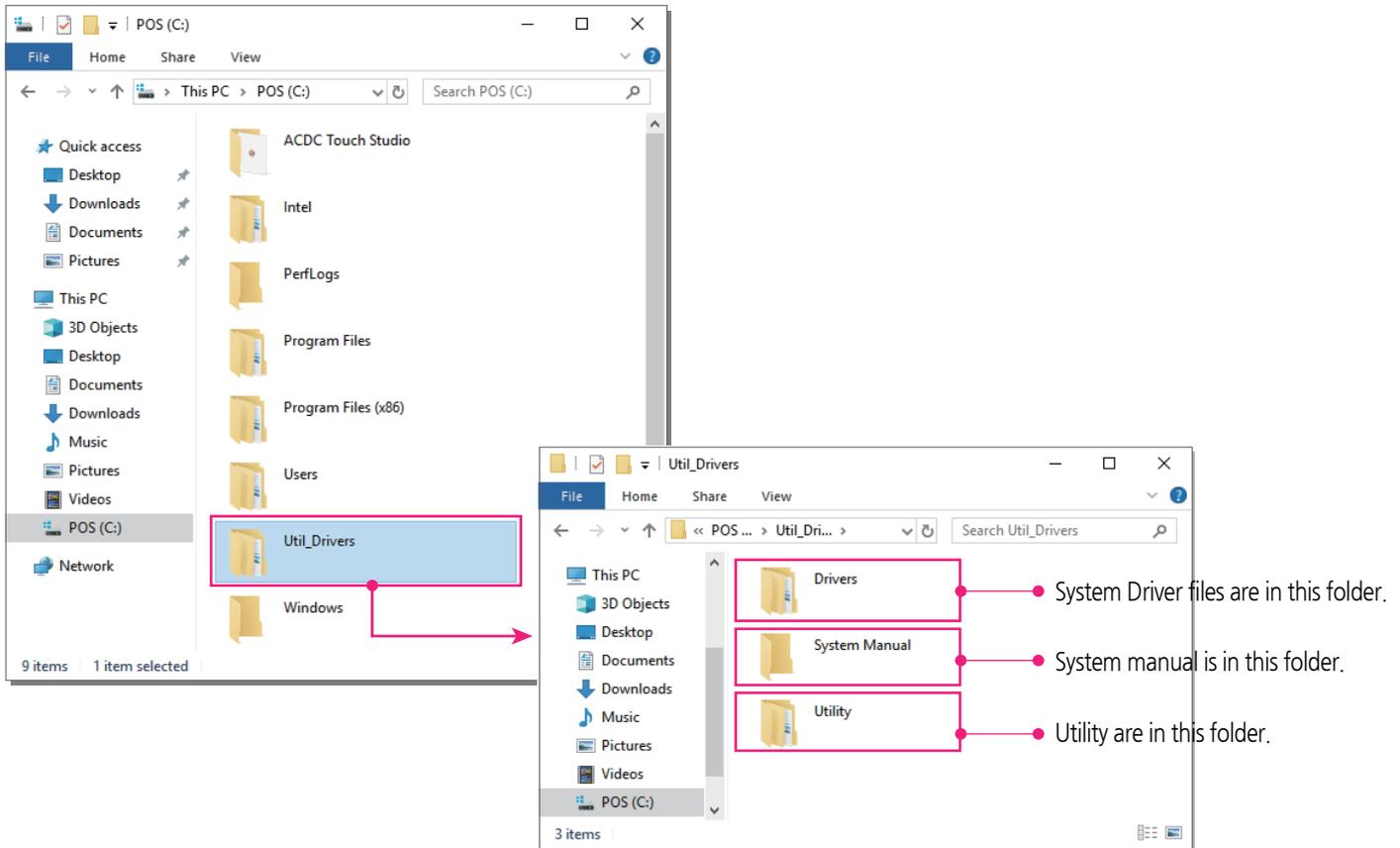


Cable arrangement

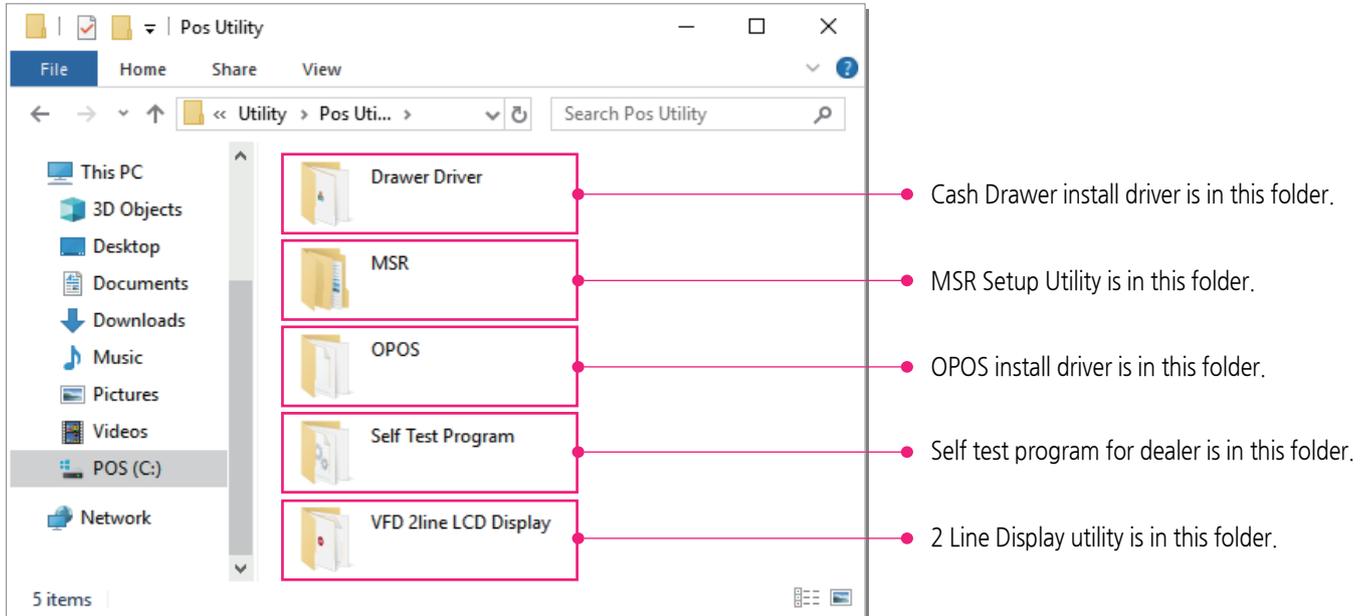
Part 3. System Utilization

01. POS Driver and Utility Introduction

1. POS Drivers & Other utilities are located in hard disk drive.(C:\Util_Drivers)



01. POS Driver and Utility Introduction



- 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, Win 8.1, Industry 8.1, Win 10

The location of installation file

- The file is located on the hard disk. (C:\Util_Drivers\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.

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

- 2 Line Display (Customer Display) : FCD-L40
- Cash Drawer (Cash Drawer) : J6EHL
- POSPrinter (Printer) : ELLIX / GCUBE / GIANT Series

Part 3. System Utilization

02. Dual Monitor Usage

Additional monitor can be connected to the DP connector. This content is written based on Windows 10.

• 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)

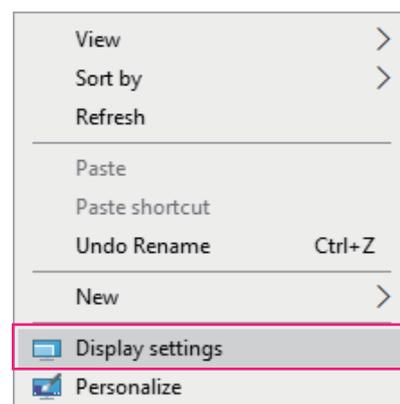
1. Connect the external monitor when the system is off.

(Remove the 'Interface cover' at the rear bottom of the system and you will see a DP connector.)

- ① Connect the external monitor when the system is off.
- ② Connect a power cable to external monitor

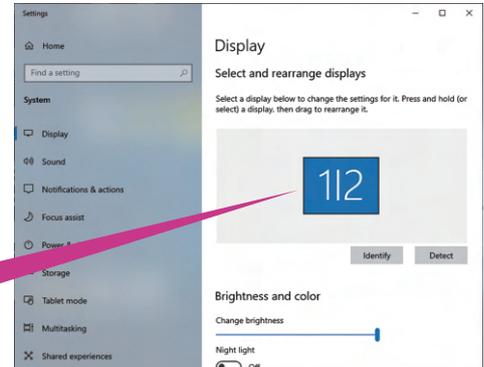


2. Press a power button of the system and the external monitor.
3. Click the right button of mouse on Windows desktop screen and select 'Display setting' from a popup menu.

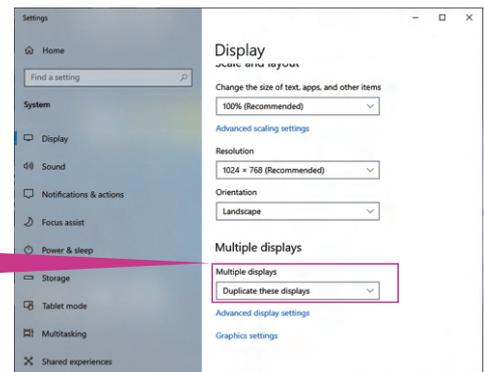


2. Dual Monitor Usage

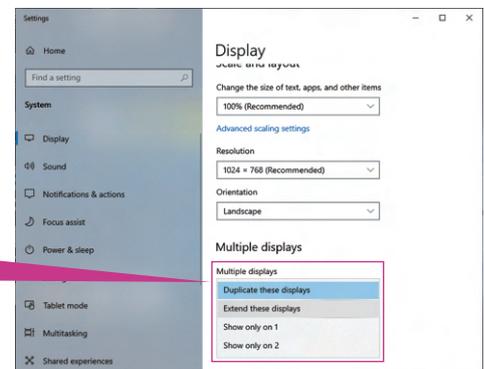
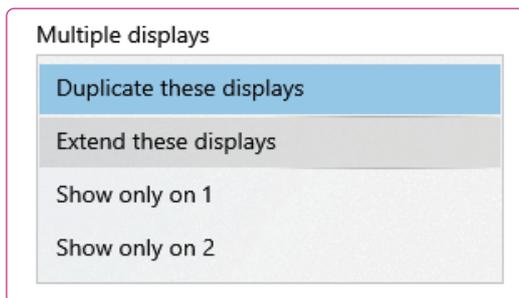
4. On The following dialog window 'Select and rearrange displays' 'Display' option is set as '1|2. Multiple Monitor' and 'Multiple displays' (M) option is set as duplicate these displays.



5. Scroll down the screen in 'Select and rearrange displays' to check the current settings.
(In this case, the dual monitor shows a duplicated screen.)

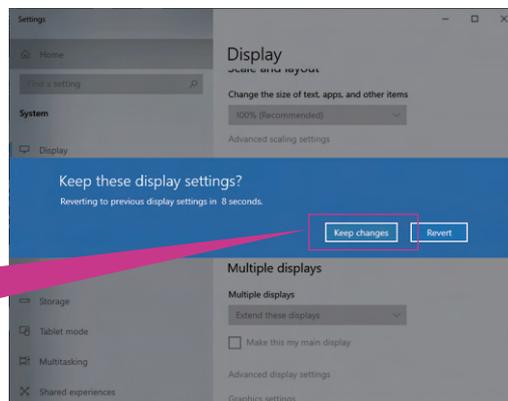


6. If you want to change to an extended screen, set 'Multiple displays' option as 'Extend these displays'.
(In this case, two different extended screen monitors are shown.)

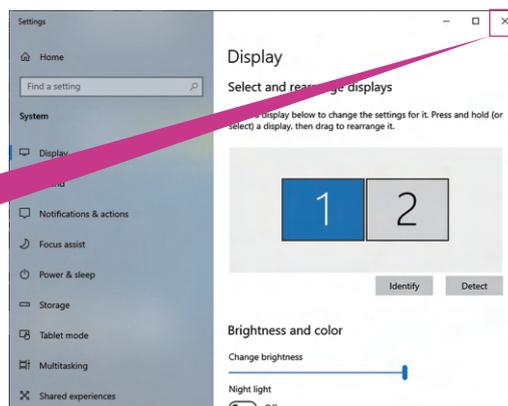


02. Dual Monitor Usage

7. Select <Keep changes> button on 'Keep these display settings?' dialog to keep the current settings.



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



Part 3. System Utilization

03. How to control Direct I/O use cash drawer

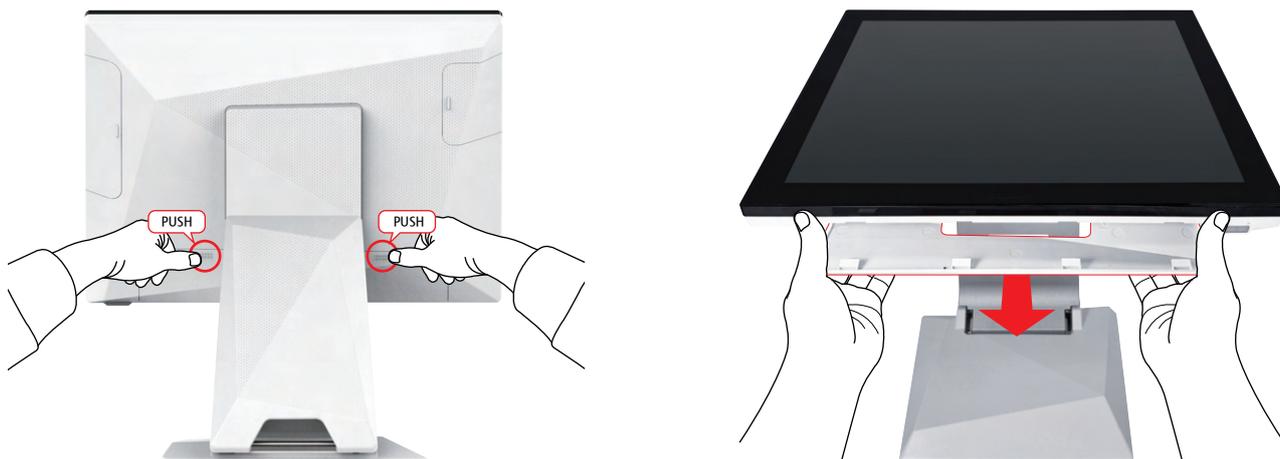
- ELKHART LAKE (J6412)

			Hexadecimal	Binary
1	I/O address to control Cash Drawer		0x2F	0010 1111
2	Status Check	Open	0xFF	xxxx x1xx
		Close	0xFB	xxxx x0xx
3	Cash Drawer 1	Kick out	0xFE	xxxx xxx0
		Release	0x01	xxxx xxx1
4	Cash Drawer 2	Kick out	0xFD	xxxx xx0x
		Release	0x02	xxxx xx1x

Part 4. System Extension & Disassemble

01. Power Adaptor

1. Confirm that the power of peripherals and systems are turned off.
2. Pull the interface cover located at the bottom of the system in the direction of the arrow to disassemble the interface cover.



3. Disconnect the DC power supply and other cable of peripherals.



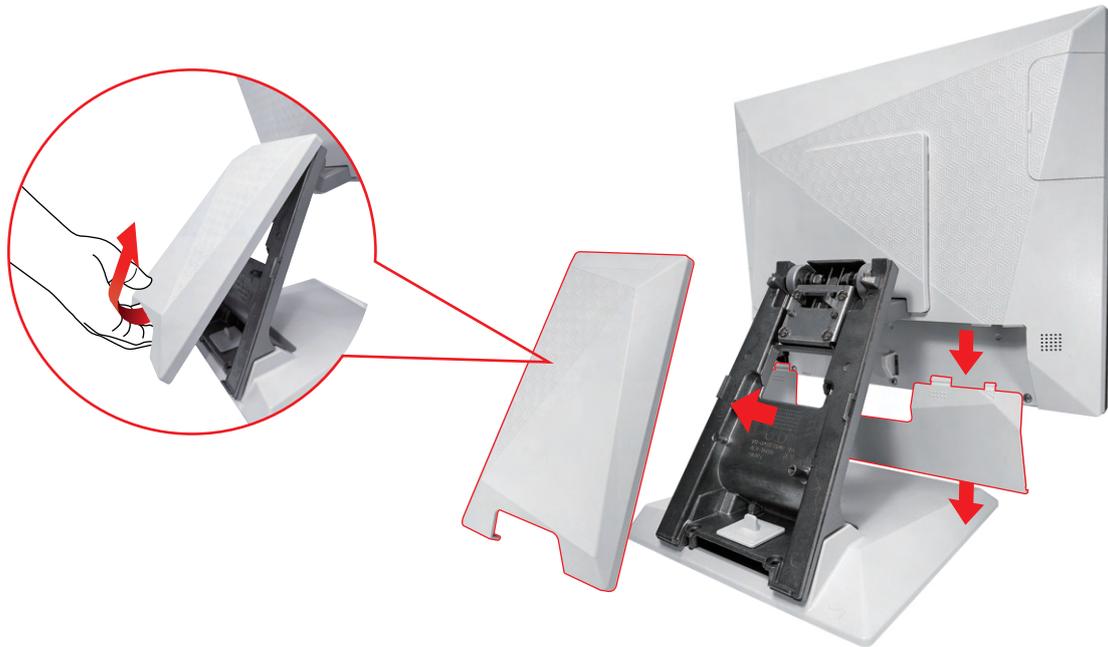
Caution

- Caution when disconnecting DC power supply.
The neck part of the power jack must be removed pulled before disassembly.

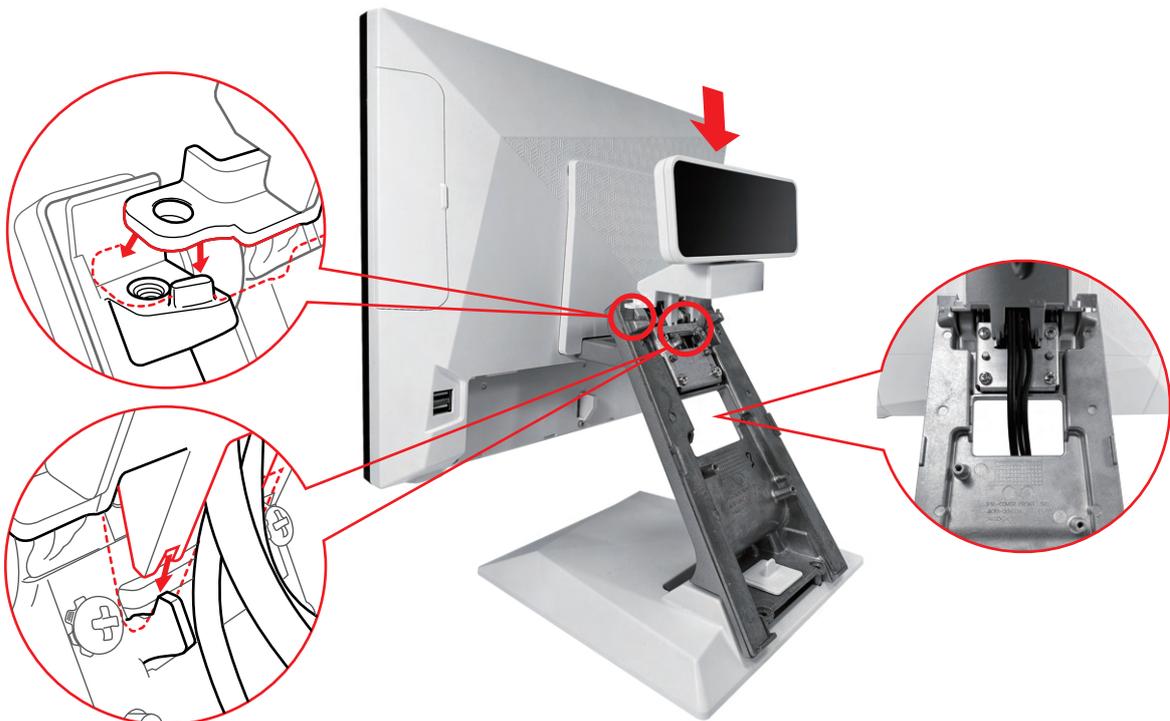
Part 4. System Extension & Disassemble

02. 2 Line Display

1. Power off the system and peripherals.
2. Disassemble the interface cover and the cable cover as you see in below picture.



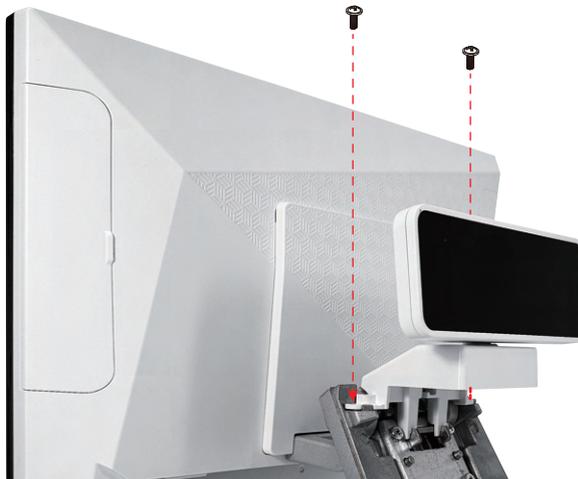
3. Arrange the cables as shown below and assemble the 2 LINE display.



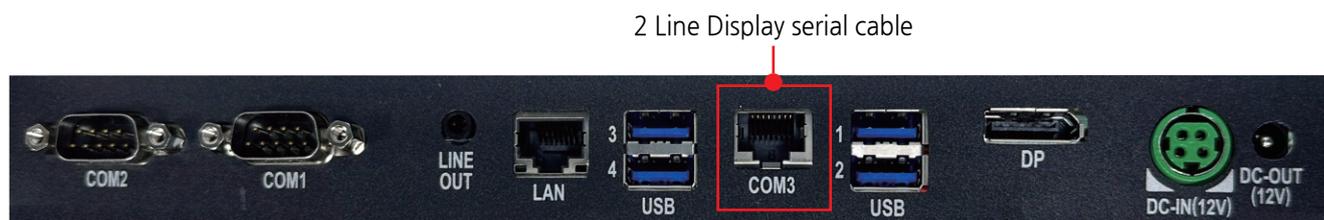
Part 4. System Extension & Disassemble

02. 2 Line Display

4. Fasten the 2 LINE display by fastening the 2 screws as you see in below picture.

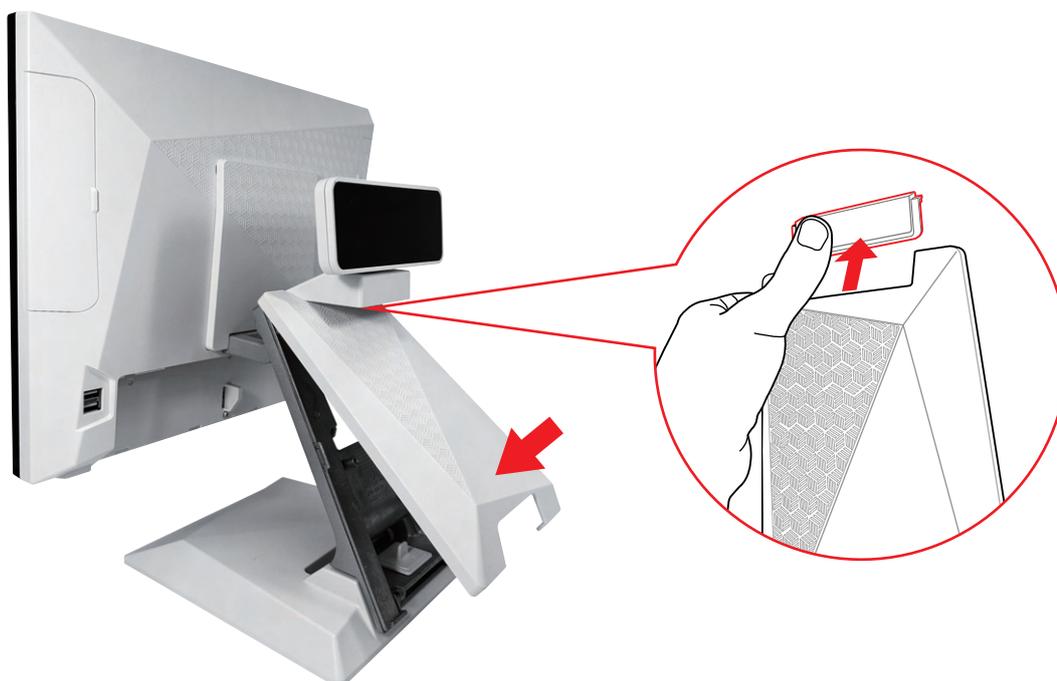


5. Connect the serial cable to COM3 as indicated.



6. Disassemble the cable cover dummy as you see in below picture.

7. Reassemble the cable cover after removing the dummy as you see in below picture.

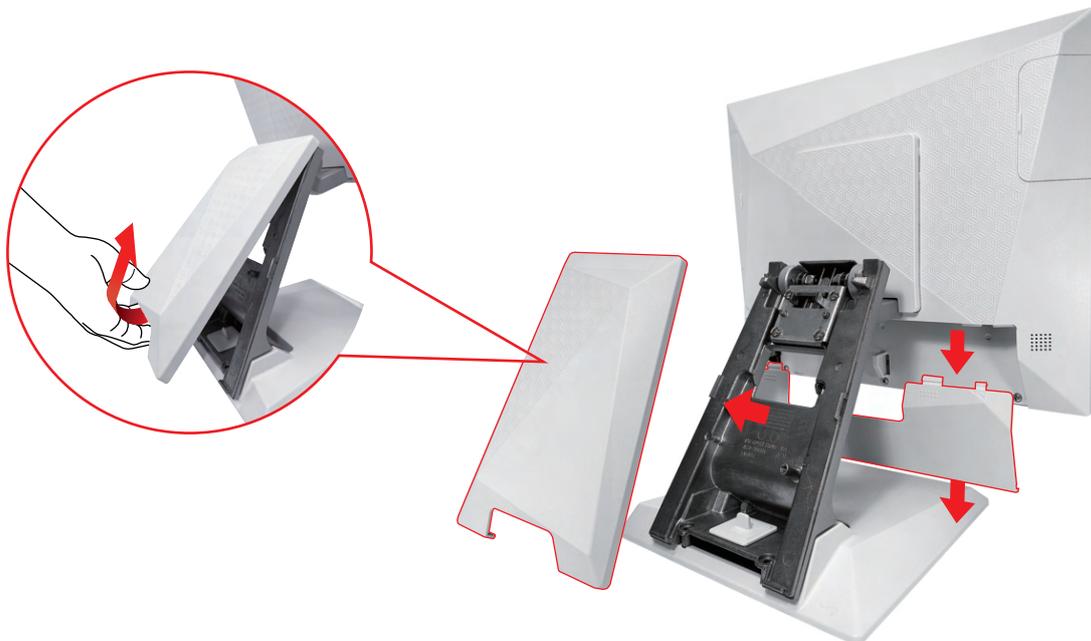


Part 4. System Extension & Disassemble

03. Dual Display

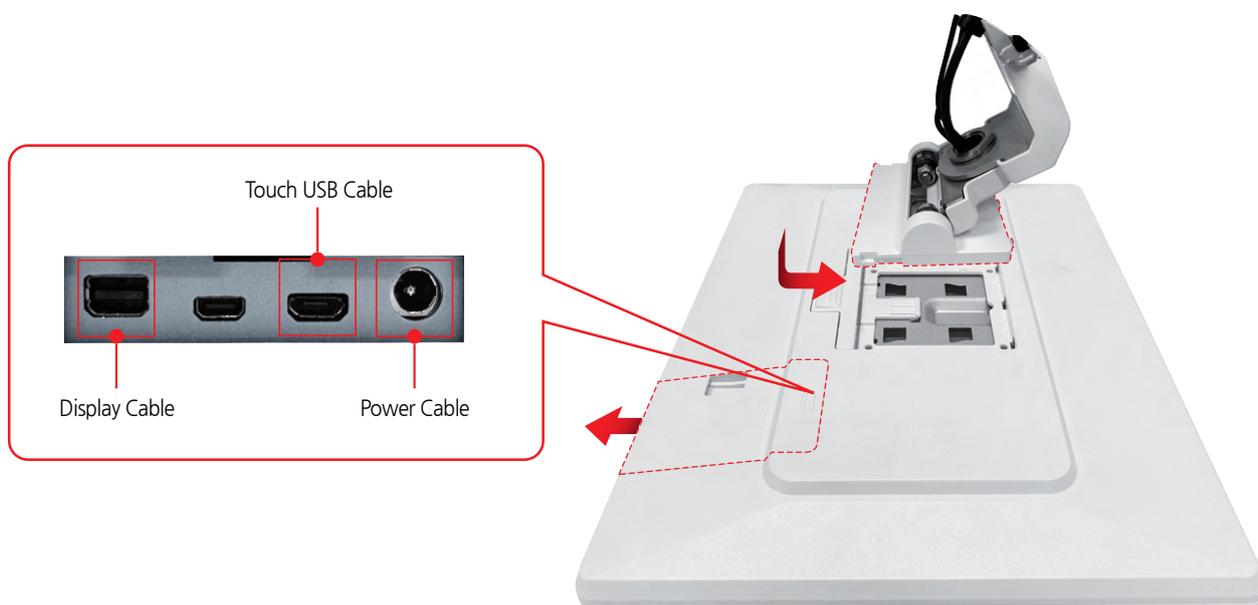
* Assemble & Disassemble structure is same regardless of the size of the dual display.

1. Power off the system and peripherals.
2. Disassemble the interface cover and the cable cover as you see in below picture.



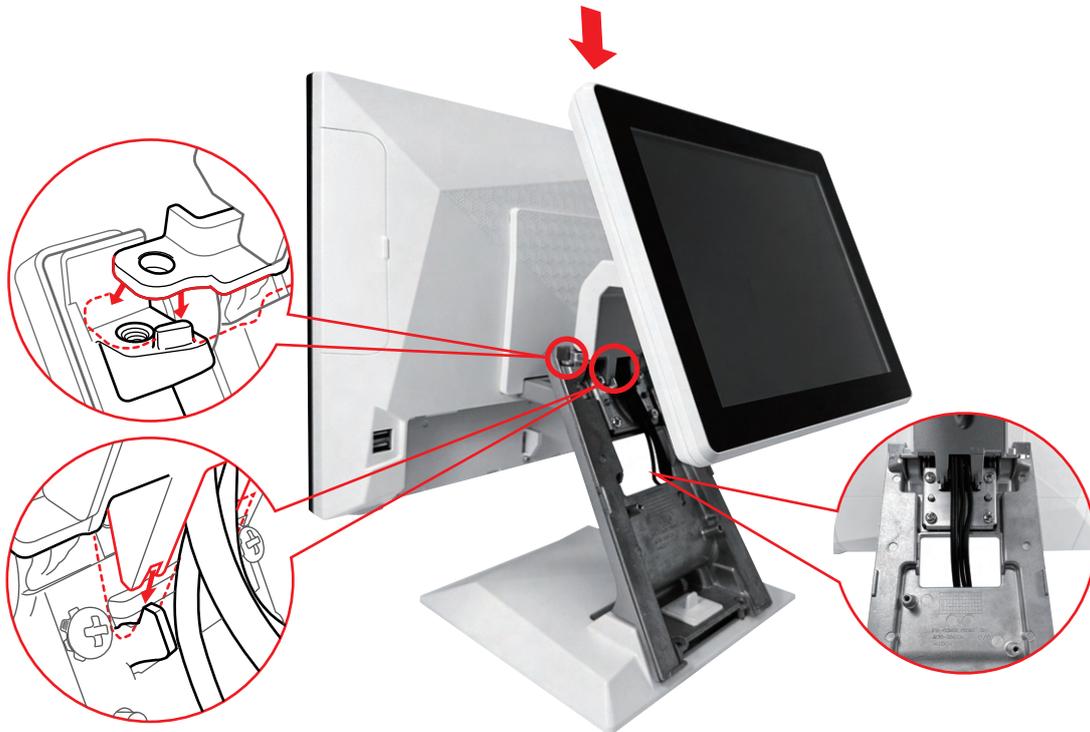
3. 15" Dual Display

- In the case of a 15" dual display, assemble the display unit and hinge.
- Disassemble the interface cover of the 15" dual display and connect the cables.



03. Dual Display

4. Arrange the cables as shown below and assemble the dual display.



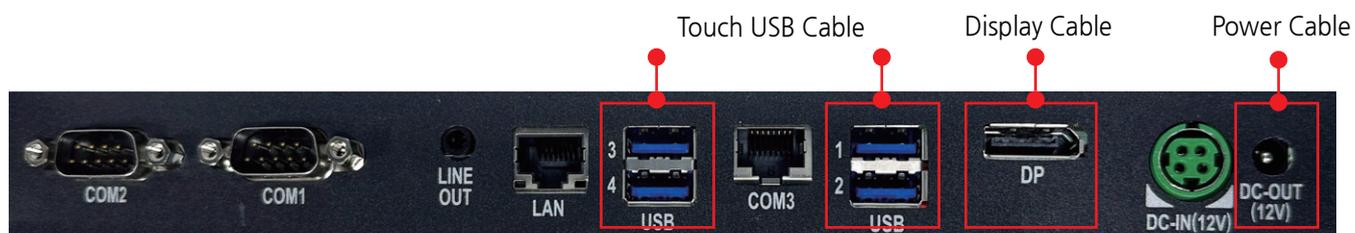
5. Fasten the dual display by fastening the 2 screws as you see in below picture.



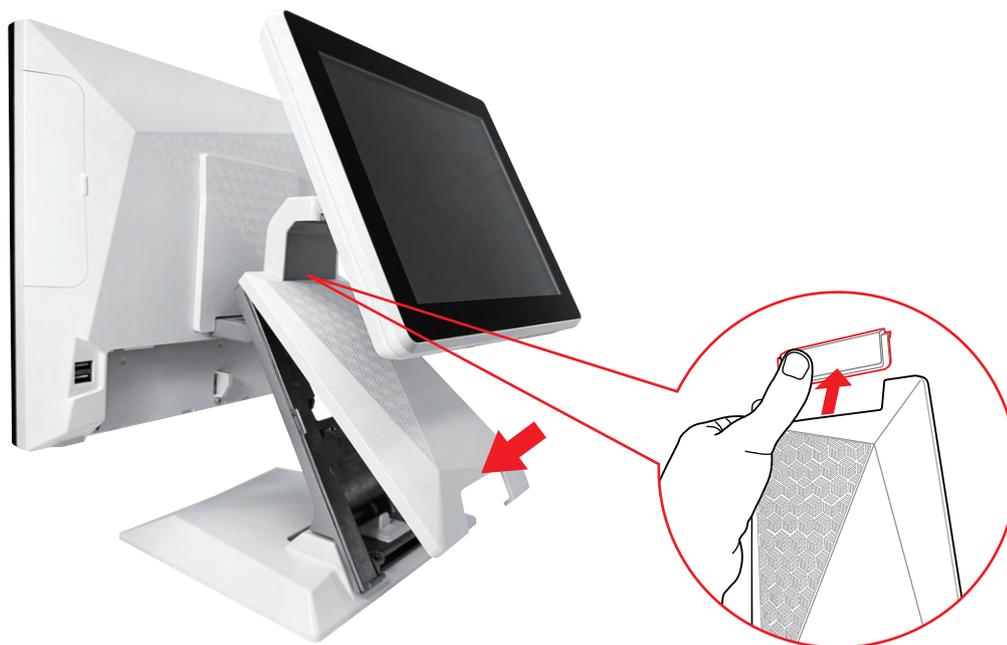
Part 4. System Extension & Disassemble

03. Dual Display

6. Connect the power cable and display cable to the connector.
If the dual display is a touch type, connect the USB cable.



7. Disassemble the cable cover dummy as you see in below picture.
8. Reassemble the cable cover after removing the dummy as you see in below picture.



Part 4. System Extension & Disassemble



2 Line Display



9.7" Dual Display



15" Dual Display

04. MSR Module

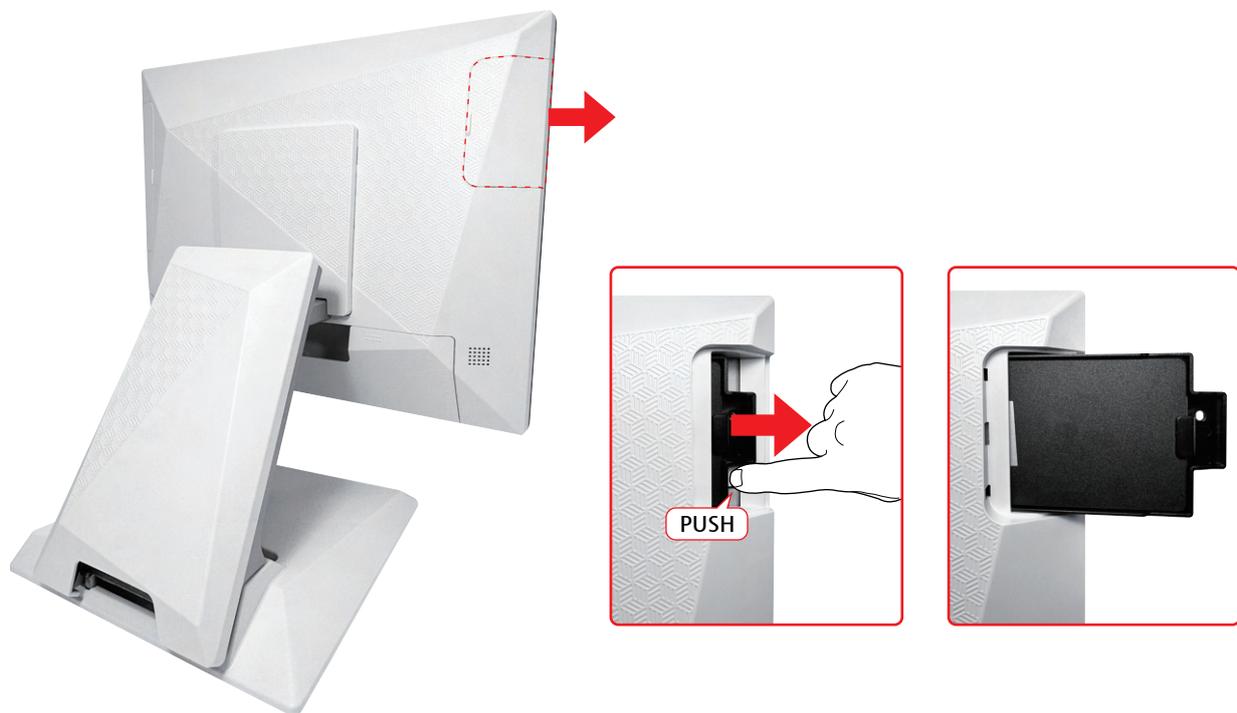
1. Unscrew two screws on the back side of MSR and disassemble from the POS.



Part 4. System Extension & Disassemble

05. SSD / HDD

1. Confirm that the power of peripherals and systems are turned off.
2. Disassemble the SSD cover as you see in below picture.
3. Press the protrusion and pull the SSD (or HDD) in the direction of the arrow to release it.



• HDD assemble and confirmation of it working

1. Assemble the SSD (or HDD) following the above direction in reverse order and connect the peripheral and DC power cable.
2. Press the power button to start the system and check the newly installed SSD (or HDD) is properly connected.

Part 4. System Extension & Disassemble

06. Memory

There are times when the main memory capacity needs to be increased.

The standard of currently connected memory and new memory needs to be figured out.

The maximum memory capacity for J6412 are 32GB

When memory is installed, the BIOS will automatically realize the type, capacity and speed of the memory.

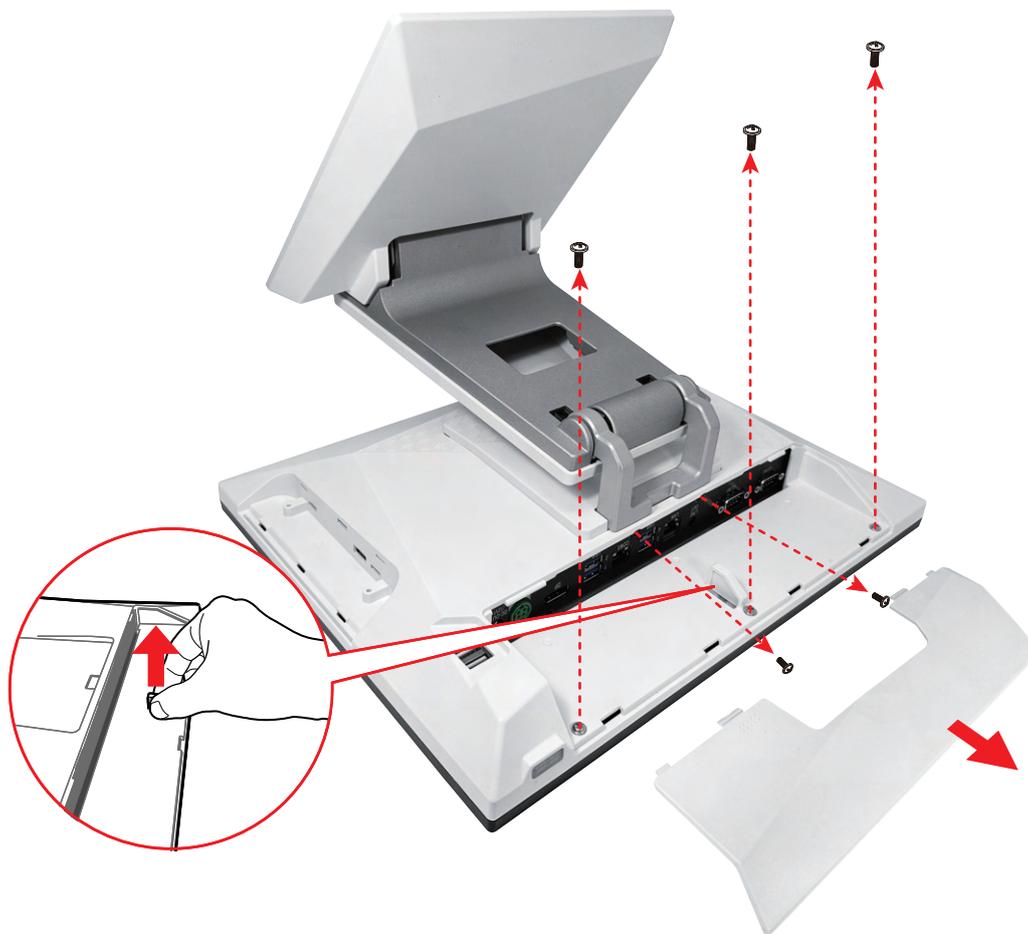
1. To increase the main memory, turn the system off.
 - Before disassembling the system the power and peripheral cables must be disconnected.
2. Turn the system so that the stand is facing up and unscrew two screws on the back of MSR and disassemble the module.
3. Remove SSD cover and disassemble the SSD (or HDD).



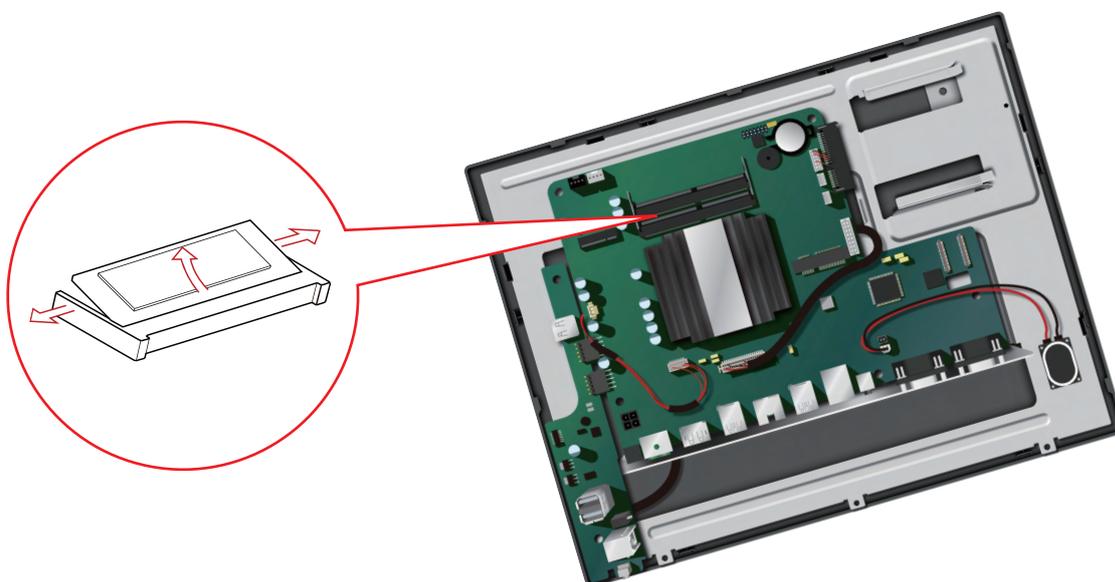
Part 4. System Extension & Disassemble

06. Memory

4. After removing interface cover, unscrew five screws and pull the hook in the direction of arrow and disassemble the motherboard protection cover.



5. Pull the lever on the both side as shown in the below picture and disassemble the memory.



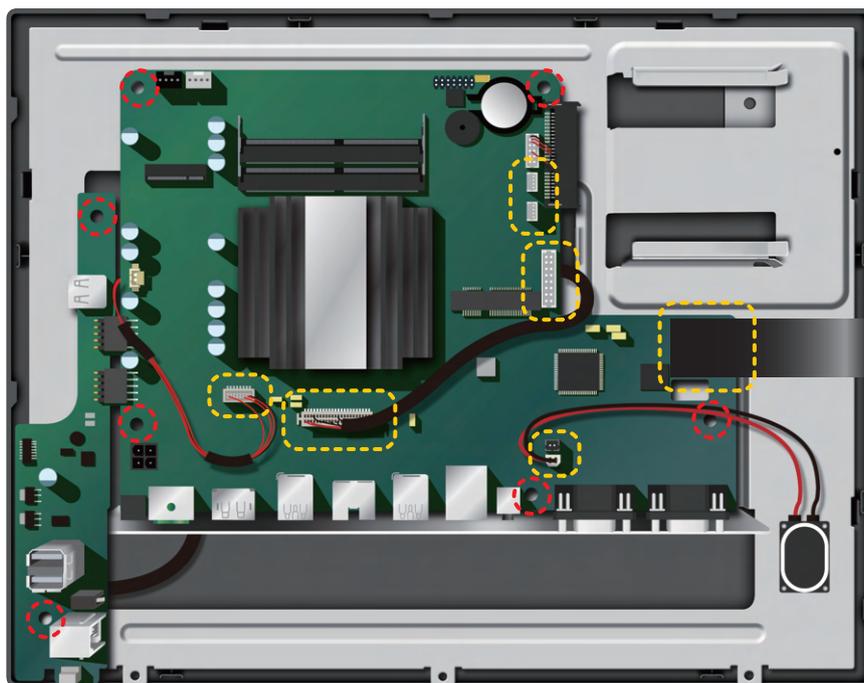
Part 4. System Extension & Disassemble

07. Touch Panel & LCD

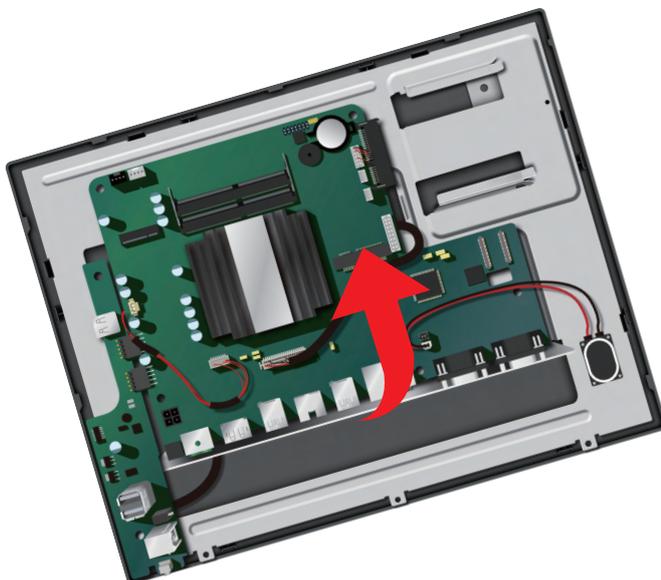


- During disassemble of LCD or Touch Panel, due to foreign substance or carelessness, it could be damaged. Please be assisted from the service center that we certify.

1. Proceed up to No. 4 of 06. Memory and disassemble the touch cable and other seven cables. Then, unscrew seven screws.



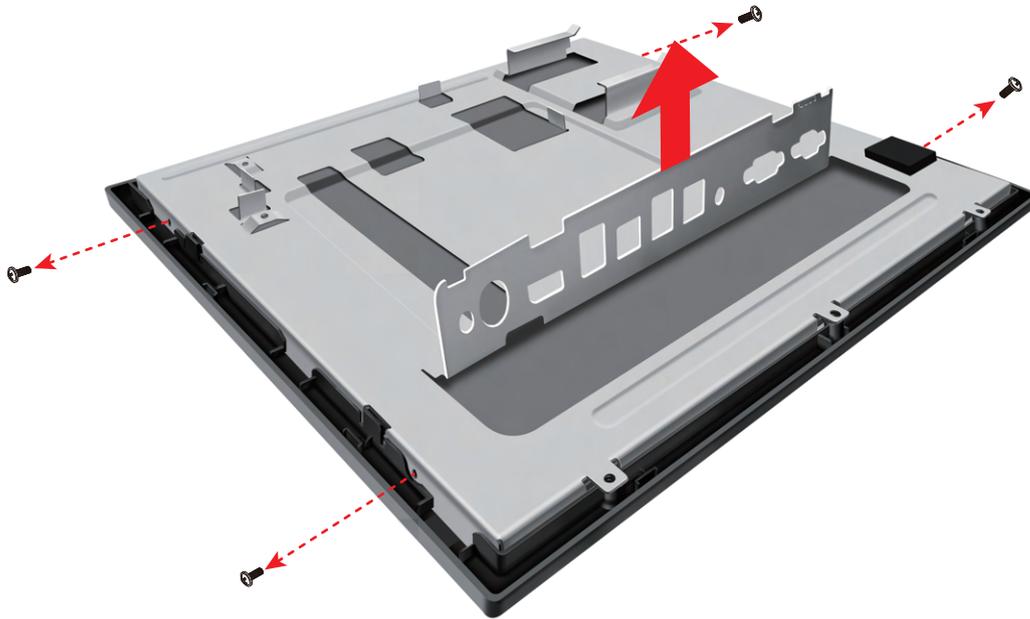
2. Disassemble the motherboard by pulling it in the direction of arrow as below picture.



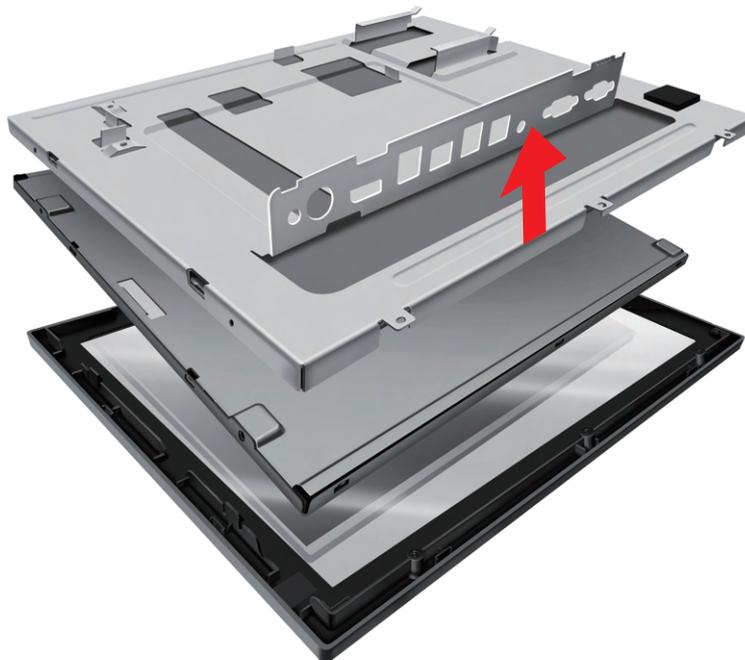
Part 4. System Extension & Disassemble

07. Touch Panel & LCD

3. Disassemble four screws located on the side of display bracket.



4. Lift up the display bracket to separate it from LCD.

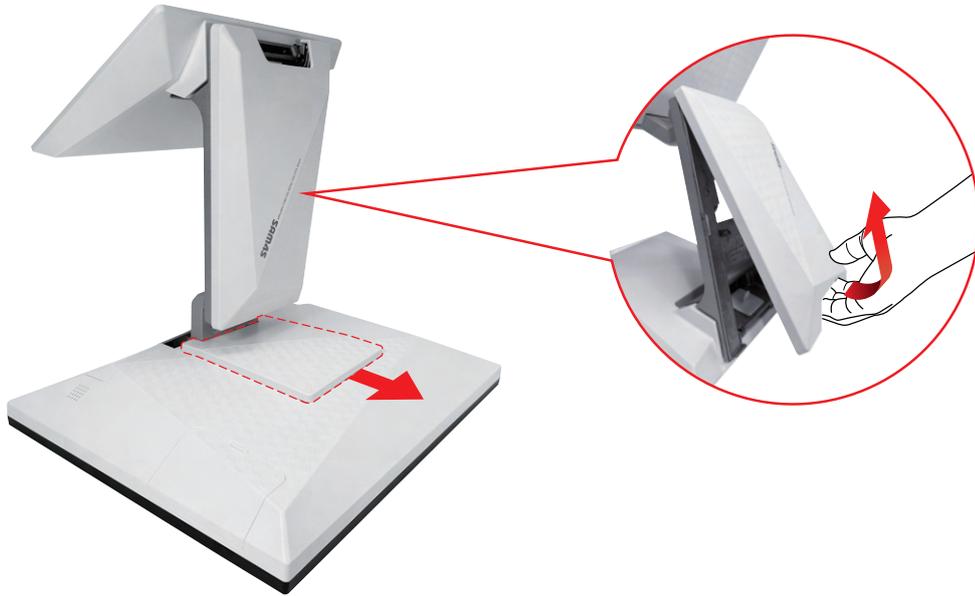


- Please be cautious to prevent cables from being damaged during the process.
- Due to pressure between touch panel and LCD, the touch panel could suddenly fall from LCD.
- Please be cautious to prevent from any kind of damage.
- After disassemble, be cautious to prevent foreign substance to get on LCD or touch part of the monitor or have external damage.

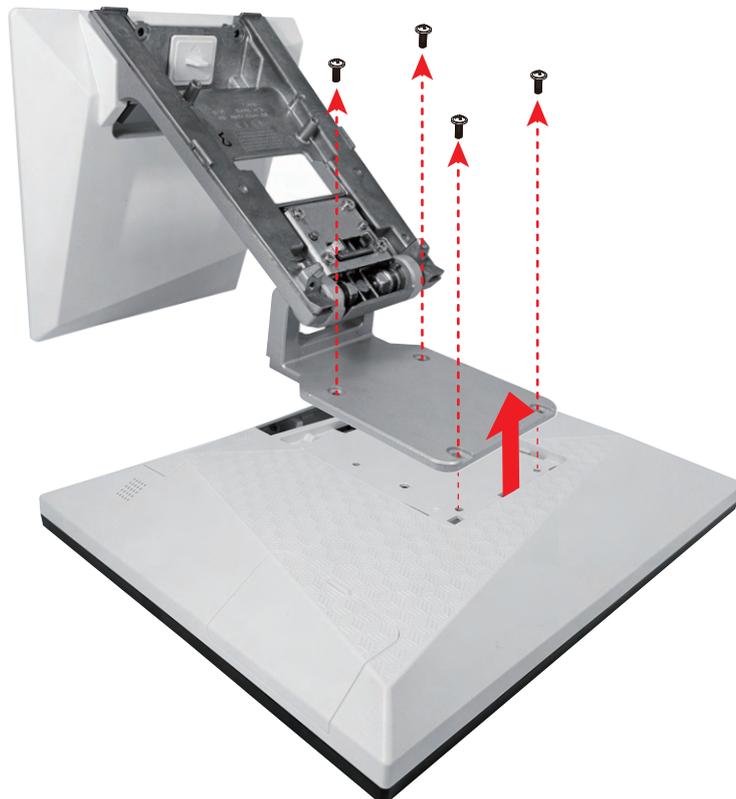
Part 4. System Extension & Disassemble

08. Stand

1. Disassemble the hinge cover by pushing it in the direction of the arrow as shown in the figure, and disassemble the cable cover on the back of the system.



2. Unscrew the four screws and disassemble the stand.



01. Understanding BIOS

- **Understanding BIOS Set up**

BIOS(Basic Input and Output System) provides configuration and set up information for driving the main board. BIOS values are saved in CMOS ROM on the main board. BIOS Setup 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 to enter SETUP message.
- When this message show up, press or <Delete> key to enter SETUP screen. (Touch the 'Setup' message)



Cases of BIOS Setup

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

Appendix A. BIOS Set Up

02. Serial voltage change & Using Keyboard shortcut

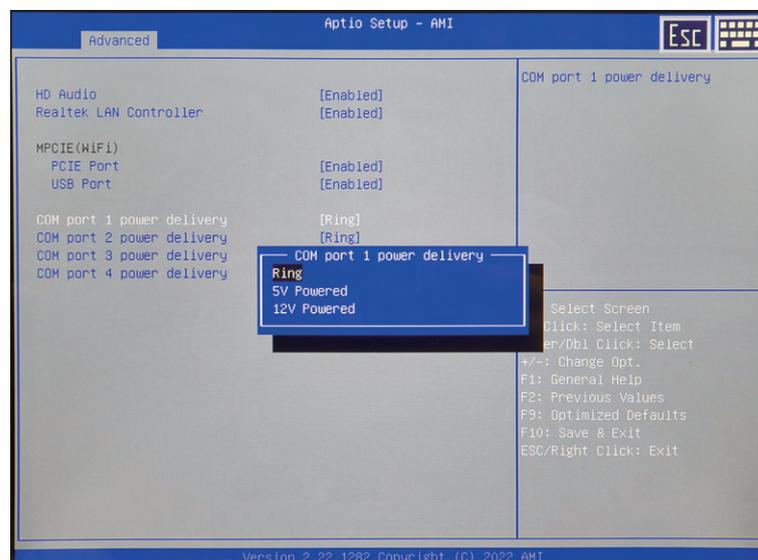
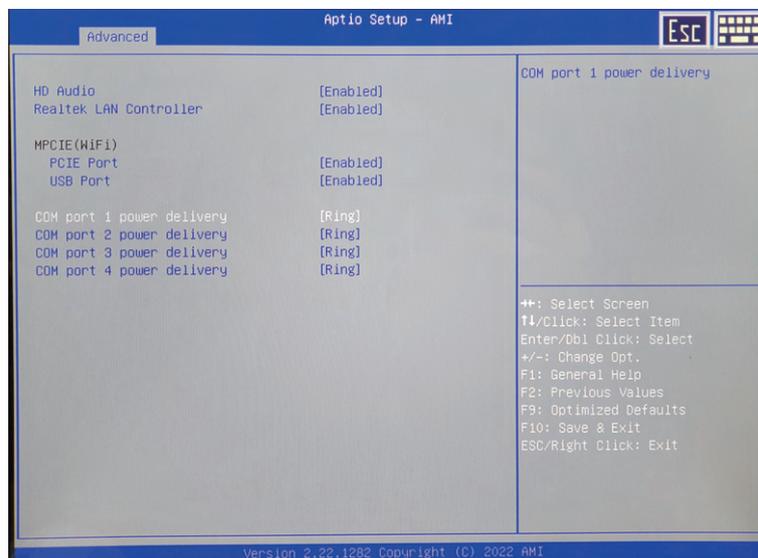
1. Advanced Menu

Use this menu to set up for system performance.

- Advanced > Onboard Device Configuration > COM port 'n' power delivery
: This item allows you to set the output voltage value of Serial port 1/2 PIN9 type
This item allows you to set the output voltage value of Serial port 3 PIN1 type

2. Using keyboard shortcut

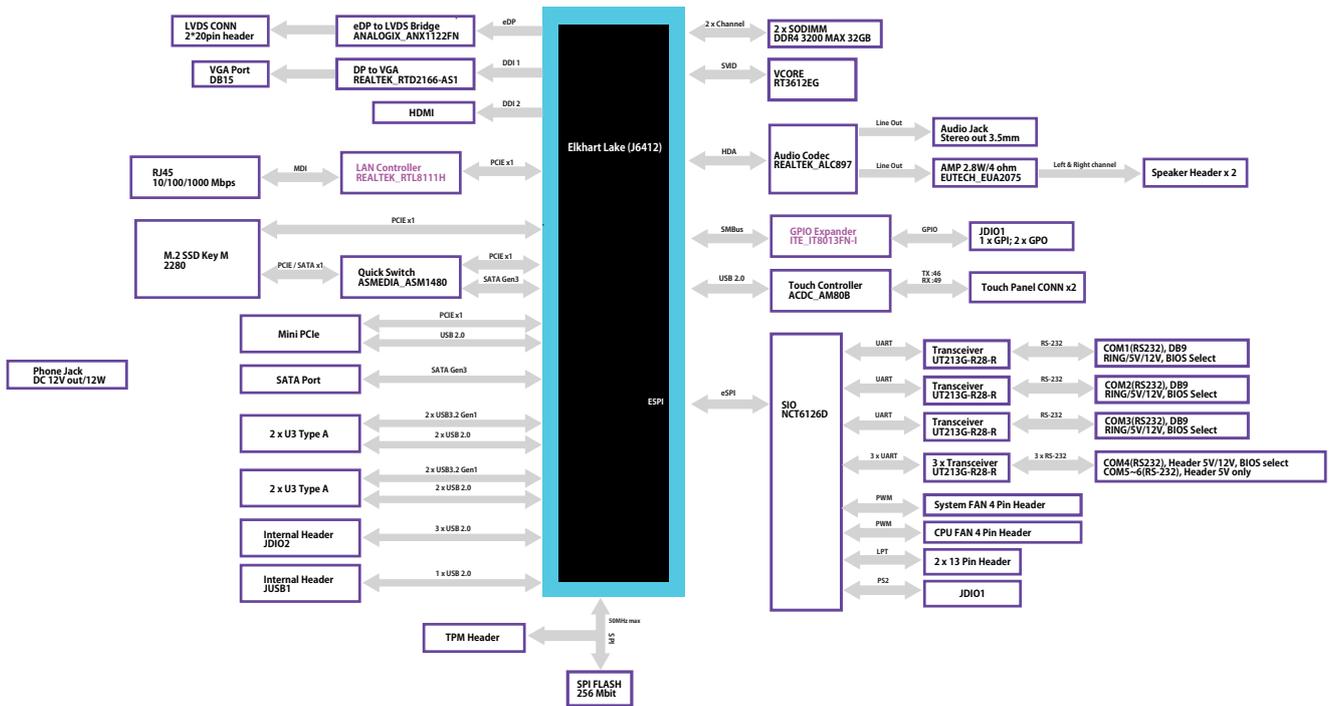
- Press key 'F9' on the keyboard, it is initialized.



Appendix B. System Configuration

01. System Block Diagram

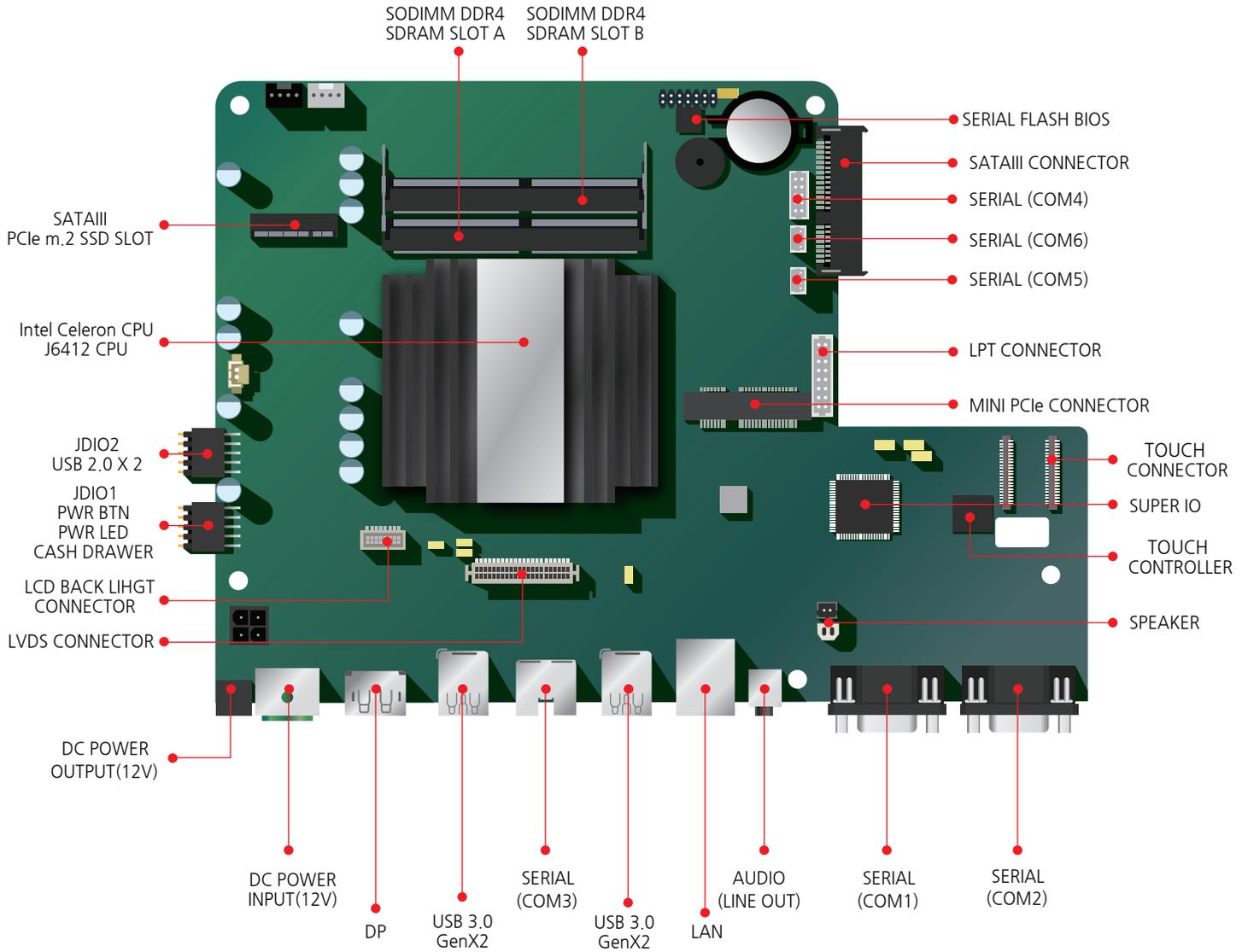
- Elkhart Lake (J6412) System Block Diagram



Appendix B. System Configuration

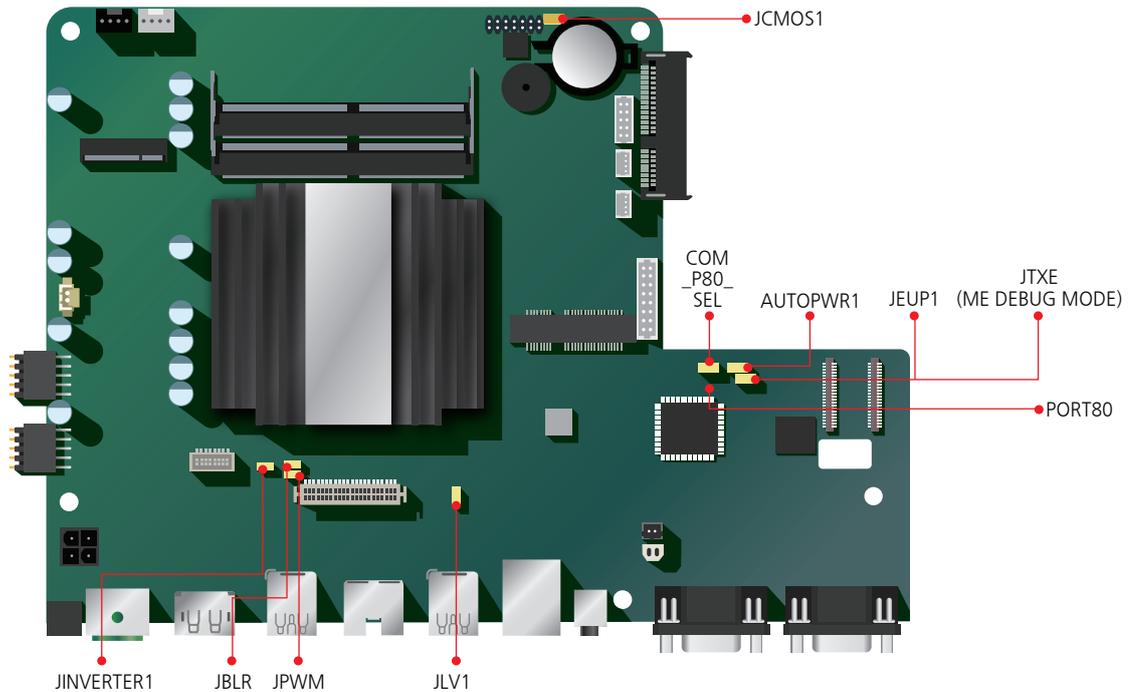
02. Main Chipset & Connector

- Elkhart Lake (J6412) Main Chipset & Connector



03. Main Jumper Setting

- Elkhart Lake (J6412) Main Jumper Setting



JINVERTER1 (Voltage Provided to Panel Backlight)

Function	Jumper Pin
5V	1 - 2
12V	2 - 3(Default)

JBLR(panel Backlight PWM polarity)

Function	Jumper Pin
Reverse	1 - 2
Forward	2 - 3(Default)

JPWM(panel Backlight mode Selection)

Function	Jumper Pin
Voltage mode	1 - 2
PWM mode	2 - 3(Default)

JEUP(EUP Supported/Unsupported)

Function	Jumper Pin
EUP	1 - 2
Non-EUP	2 - 3(Default)

JCMOS1

Function	Jumper Pin
Normal	1 - 2 (Default)
Clear	2 - 3

JLV1 (Voltage Provided to Panel)

Function	Jumper Pin
3.3V	1 - 2 (Default)
5V	3 - 4
12V	5 - 6

JTXE(ME debug mode)

Function	Jumper Pin
ME Unlock	1 - 2
ME Lock	No Jumper

AUTOPWR1 (Auto power on)

Function	Jumper Pin
ATX	1 - 2 (Default)
AT	2

PORT80

Function	Jumper Pin
Non-O_COMC_TXD	1 - 2 (Default)
O_COMC_TXD	2 - 3

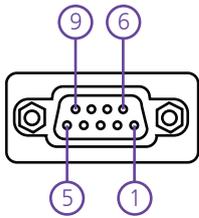
COM_P80_SEL

Function	Jumper Pin
COM_FUNCTION	1 - 2
P80_FUNCTION	2 - 3

Appendix B. System Configuration

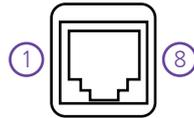
04. IO Pin map

- COM1/2 RS-232 Serial Port (D-SUB9 MALE)



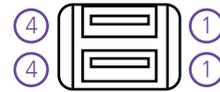
Pin Num	Description
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	Ring / +5V / +12V

- COM3 RS-232 Serial Port (RJ-45)



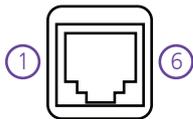
Pin Num	Description
1	Ring / +5V / +12V
2	DSR
3	TXD
4	RXD
5	RTS
6	CTS
7	GND
8	DTR

- USB Port (TYPE A)



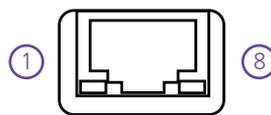
Pin Num	Description
1	VBUS(+5V)
2	D-
3	D+
4	GND

- Cash Drawer Port (RJ-11)



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

- LAN Port (RJ-45)



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] -

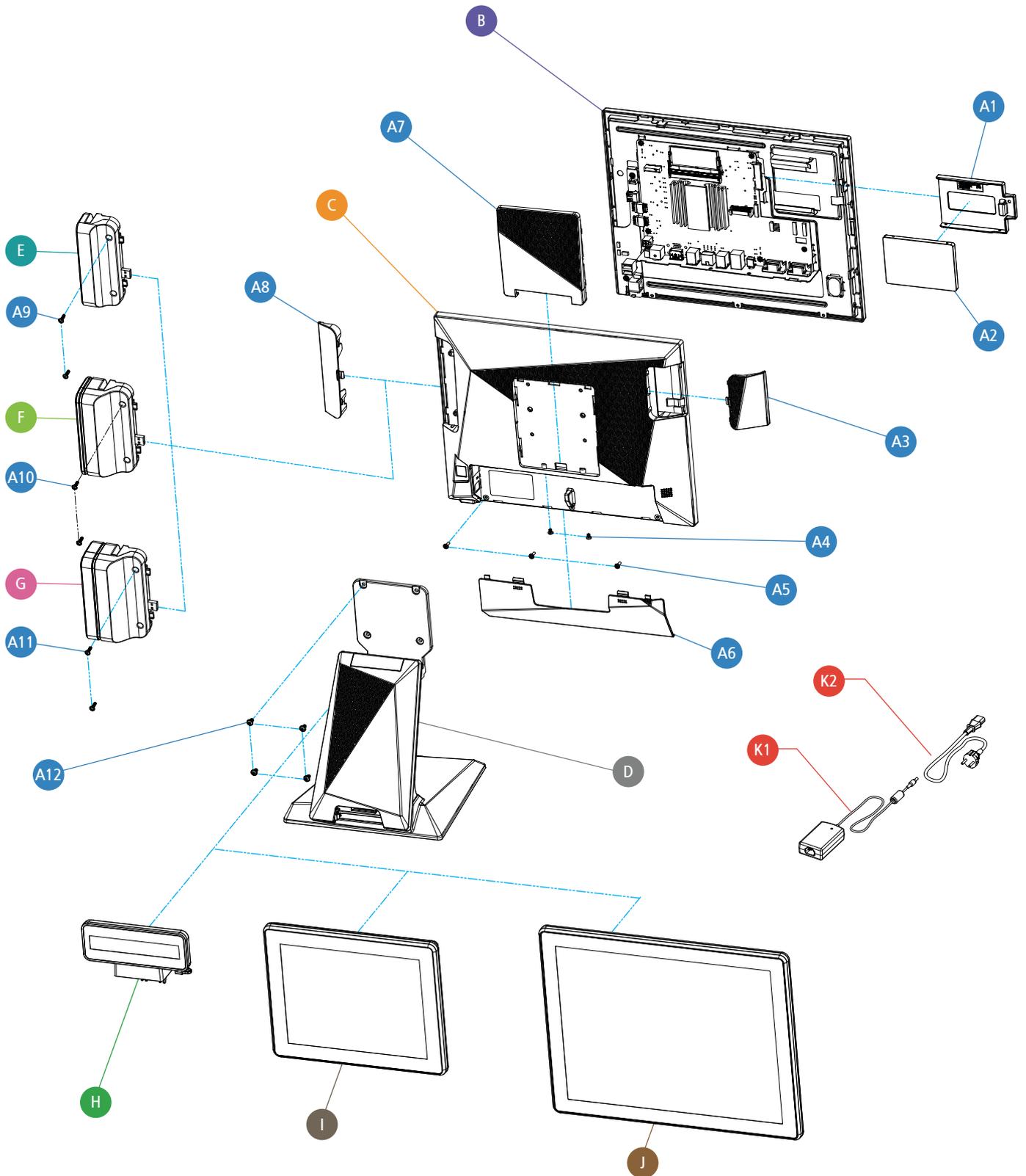
- Power Selection Switch for Cash Drawer



Switch Selection	Voltage
OFF	12V (Default)
ON	24V

05. Parts List

• SET TOTAL



Appendix B. System Configuration

05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
A1	JK72-21234A	PMO-HOLDER HDD	1	Y	
A2	-	SSD / HDD 2.5inch	1	Y	
A3	JK75-40020A	PMO-COVER HDD, WHITE	1	Y	
	JK72-21230B	PMO-COVER HDD, BLACK			
A4	S600100044A	SCREW-MACHINE:BH,M3,L5	2	Y	
A5	S600200005A	SCREW-TAPPING:PWH,M3,L10	3	Y	
A6	JK72-21229A	PMO-COVER WIRE, WHITE	1	Y	
	JK72-21229B	PMO-COVER WIRE, BLACK			
A7	JK72-21232A	PMO-COVER HINGE, WHITE	1	Y	
	JK72-21232B	PMO-COVER HINGE, BLACK			
A8	JK72-21231A	PMO-COVER MSR, WHITE	1	Y	
	JK72-21231B	PMO-COVER MSR, BLACK			
A9	S600200014A	SCREW-TAPPING:PWH,M3,L12	2	Y	
A10	S600200014A	SCREW-TAPPING:PWH,M3,L12	2	Y	
A11	S600200014A	SCREW-TAPPING:PWH,M3,L12	2	Y	
A12	S600100039A	SCREW-MACHINE:PWH,M4,L8	4	Y	
B	-	ASSY MAIN DISPLAY FRONT(15") + BOARD	1	Y	
C	JK95-71001A	ASSY MAIN DISPLAY REAR(15"), DRAWER, WHITE	1	Y	
	JK95-71001B	ASSY MAIN DISPLAY REAR(15"), COM4, WHITE			
	JK95-71001C	ASSY MAIN DISPLAY REAR(15"), DRAWER, BLACK			
	JK95-71001D	ASSY MAIN DISPLAY REAR(15"), COM4, BLACK			
D	SA95-71002A	ASSY STAND, WHITE, SAM4S	1	Y	
	SA95-71002B	ASSY STAND, BLACK, SAM4S			
	SA95-71002C	ASSY STAND, WHITE, NO LOGO			
	SA95-71002D	ASSY STAND, BLACK, NO LOGO			
E	QMR-TFZ0NW	MSR Reader, WHITE	1	Y	
	QMR-TFZ0NB	MSR Reader, BLACK			
F	-	MSR & IC Reader	1	Y	
G	QMR-TFZ0DW	MSR & DALLAS, WHITE	1	Y	
	QMR-TFZ0DB	MSR & DALLAS, BLACK			
	QMR-TFZ0FW	MSR & FINGER PRINTER, WHITE			
	QMR-TFZ0FB	MSR & FINGER PRINTER, BLACK			
H	FCD-L40/DSPNNWN(STD)	2LINE DUAL DISPLAY, WHITE	1	Y	
	FCD-L40/DSPNNBN(STD)	2LINE DUAL DISPLAY, BLACK			

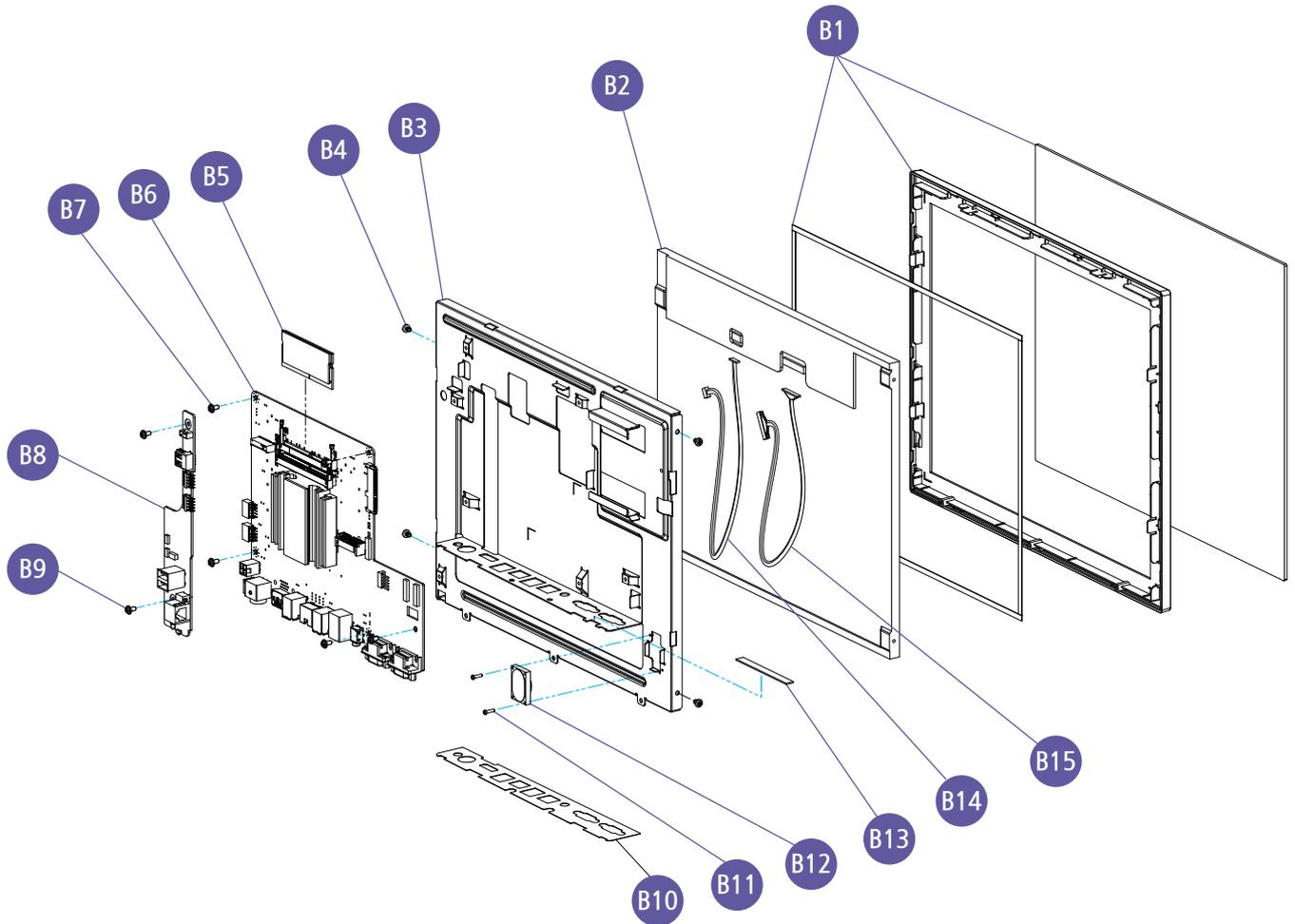
Appendix B. System Configuration

05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
I	FCD-100/DSP6PWN(STD)	9.7" DUAL DISPLAY, PCT TOUCH, WHITE	1	Y	
	FCD-100/DSP6PBN(STD)	9.7" DUAL DISPLAY, PCT TOUCH, BLACK			
	FCD-100/DSPNPWN(STD)	9.7" DUAL DISPLAY, NO TOUCH, WHITE			
	FCD-100/DSPNPBN(STD)	9.7" DUAL DISPLAY, NO TOUCH, BLACK			
J	FCD-150/DSP6P*N(STD)	15" DUAL DISPLAY, TOUCH, DP	1	Y	*COLOR
	FCD-150/DSP6H*N(STD)	15" DUAL DISPLAY, TOUCH, DP+HDMI			
	FCD-150/DSPNP*N(STD)	15" DUAL DISPLAY, NON TOUCH, DP			
	FCD-150/DSPNH*N(STD)	15" DUAL DISPLAY, NON TOUCH, DP+HDMI			
K1	JK44-10012A	POWER-SMPS:12V/5A,60W	1	Y	
K2	JK39-20004A	CBF POWER CORD	1	Y	EUROPE
	JK39-20004B				USA
	JK39-20004C				UK
	JK39-20004D				AUSTRALIA
	JK39-20004E				KOREA
	JK39-20004F				SOUTH AFRICA
	JK39-20004G				ISRAEL
	JK39-20004H				INDIA
	JK39-20004I				ARGENTINA
	JK39-20004J				

05. Parts List

• MAIN DISPLAY FRONT



Appendix B. System Configuration

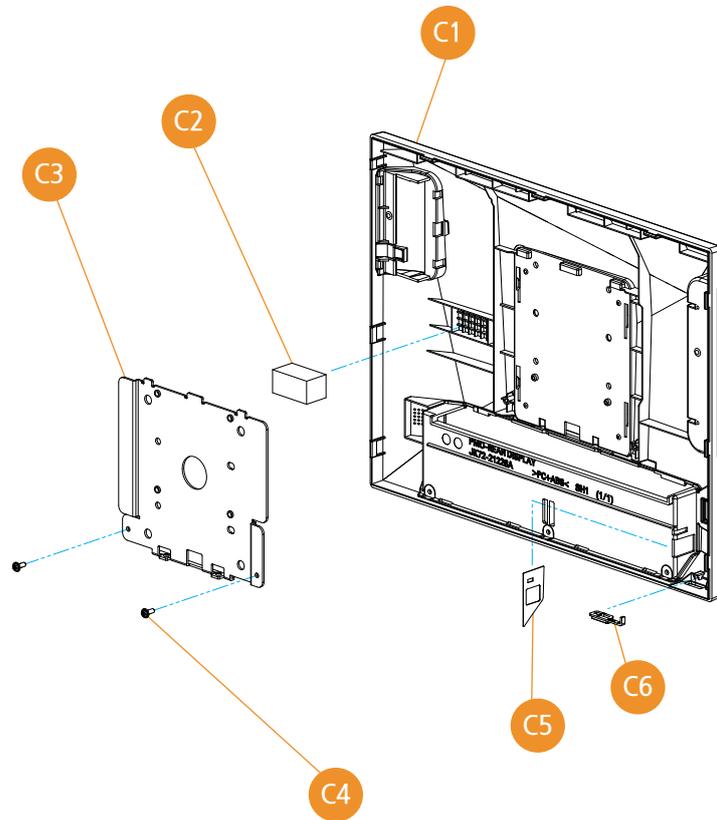
05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
B1	SA91-20101A	ASSY DISPLAY FRONT(15"), BLACK, SAM4S	1	Y	
	SA91-20101B	ASSY DISPLAY FRONT(15"), BLACK, NO LOGO			
B2	SA95-70567A	LCD:LED PANEL,15inch	1	Y	
B3	JK70-20634A	IPR-BRKT DISPLAY_15, WINDOW	1	Y	
	JK70-20634A	IPR-BRKT DISPLAY_15, Android			
B4	S600100044A	SCREW-MACHINE:BH,M3,L5	4	Y	
B5	-	UNIT-DDR4	1	Y	
B6	SA95-70999A	ASSY-MOTHER BD:J6412,PCAP,ASUS	2	Y	
B7	S600200028A	SCREW-TAPPING:PWH,M3,L6	5	Y	
B8	SA92-11028A	PBA SUB:SAPPHIRE,OSD&DRW	1	Y	
B9	S600200028A	SCREW-TAPPING:PWH,M3,L6	2	Y	
B10	JK68-40406A	LABEL(R)-INTERFACE	1	Y	
B11	S600200032A	SCREW-TAPPING:PH,M2,L8	2	Y	
B12	S300400005A	UNIT-SPEAKER	1	Y	
B13	JK70-60033B	RMO-FOAM GASKET	1	Y	
B14	JK39-80051A	HARNESS-INVERTER:8P, LED PANEL, 250mm	1	Y	
B15	JK39-80042B	HARNESS-LVDS:240mm	1	Y	

Appendix B. System Configuration

05. Parts List

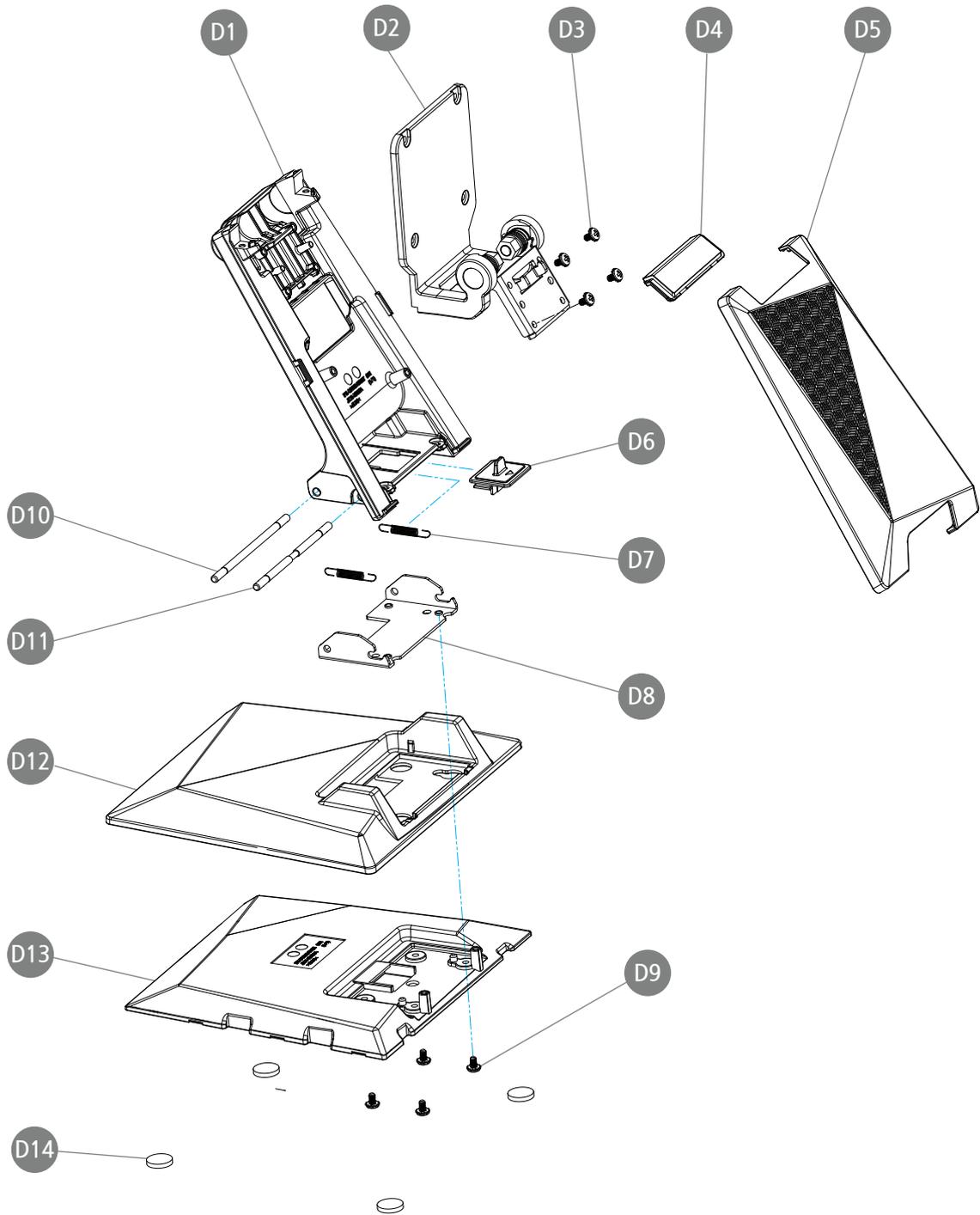
• MAIN DISPLAY REAR



No.	Part Code	Part Name	Q'TY	Serviceable	
C	JK95-71001A	ASSY MAIN DISPLAY REAR(15"), DRAWER, WHITE	1	Y	
	JK95-71001B	ASSY MAIN DISPLAY REAR(15"), COM4, WHITE			
	JK95-71001C	ASSY MAIN DISPLAY REAR(15"), DRAWER, BLACK			
	JK95-71001D	ASSY MAIN DISPLAY REAR(15"), COM4, BLACK			
C1	JK72-21228A	PMO-REAR DISPLAY, WHITE	1	Y	
	JK72-21228B	PMO-REAR DISPLAY, BLACK			
C2	JK73-11041A	RMO-PAD POWER	1	Y	
C3	JK70-20635A	IPR-BRKT REAR DISPLAY	1	Y	
C4	S600200006A	SCREW-TAPPING-PWH,M3,L8	2	Y	
C5	JK68-40405A	LABEL(R)-INTERFACE_R, DRAWER	1	Y	
	JK68-40405B	LABEL(R)-INTERFACE_R, COMPORT			
C6	JK72-21233A	PMO-BUTTON POWER	1	Y	

05. Parts List

• STAND



Appendix B. System Configuration

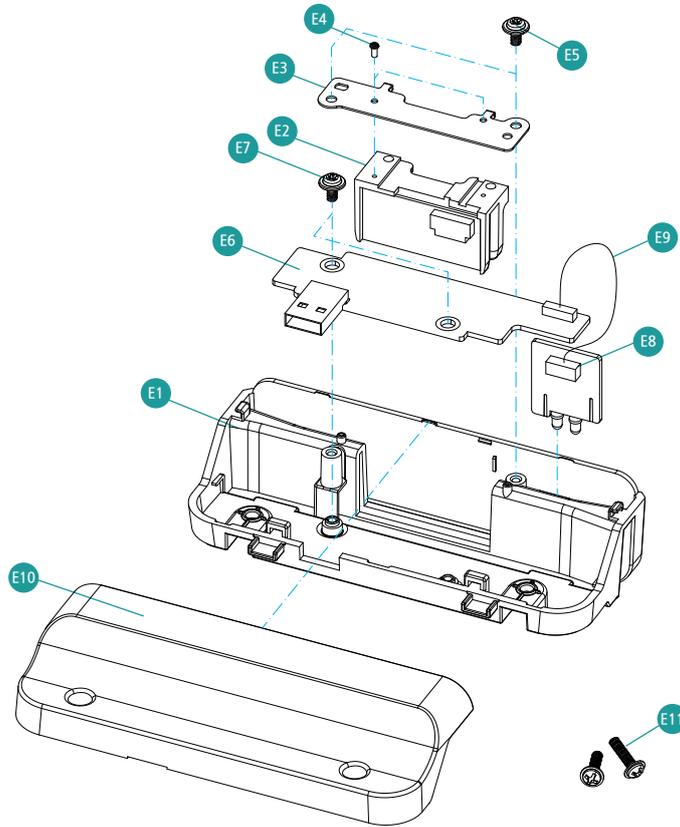
05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
D	SA95-71002A	ASSY STAND, WHITE, SAM4S	1	Y	
	SA95-71002B	ASSY STAND, BLACK, SAM4S			
	SA95-71002C	ASSY STAND, WHITE, NO LOGO			
	SA95-71002D	ASSY STAND, BLACK, NO LOGO			
D1	JK70-20632A	IPR-COVER FRONT	1	Y	
D2	JK75-40023A	ASSY-HINGE MAIN	1	Y	
D3	S600600007A	SCREW-ASSY MACH:BH,M4,L8	4	Y	
D4	JK72-21236A	PMO-CAP COVER REAR, WHITE	1	Y	
	JK72-21236B	PMO-CAP COVER REAR, BLACK			
D5	JK72-21235A	PMO-COVER REAR, WHITE, SAM4S	1	Y	
	JK72-21235B	PMO-COVER REAR, BLACK, SAM4S			
	JK72-21235C	PMO-COVER REAR, WHITE, NO LOGO			
	JK72-21235D	PMO-COVER REAR, BLACK, NO LOGO			
D6	JK72-21237A	PMO-LEVER RELEASE, WHITE	1	Y	
	JK72-21237B	PMO-LEVER RELEASE, BLACK			
D7	JK70-30067A	SPRING LEVER RELEASE	2	Y	
D8	JK70-20636A	IPR-BRKT STAND	1	Y	
D9	S600600007A	SCREW-ASSY MACH:BH,M4,L8	4	Y	
D10	JK70-70159A	ICT-SHAFT HINGE ROTATE	1	Y	
D11	JK70-70158A	ICT-SHAFT HINGE SLIDE	1	Y	
D12	JK72-21240A	PMO-COVER STAND, WHITE	1	Y	
	JK72-21240B	PMO-COVER STAND, BLACK			
D13	JK70-20633A	IPR-STAND BASE	1	Y	
D14	JK73-11023A	RMO-FOOT RUBBER	4	Y	

Appendix B. System Configuration

05. Parts List

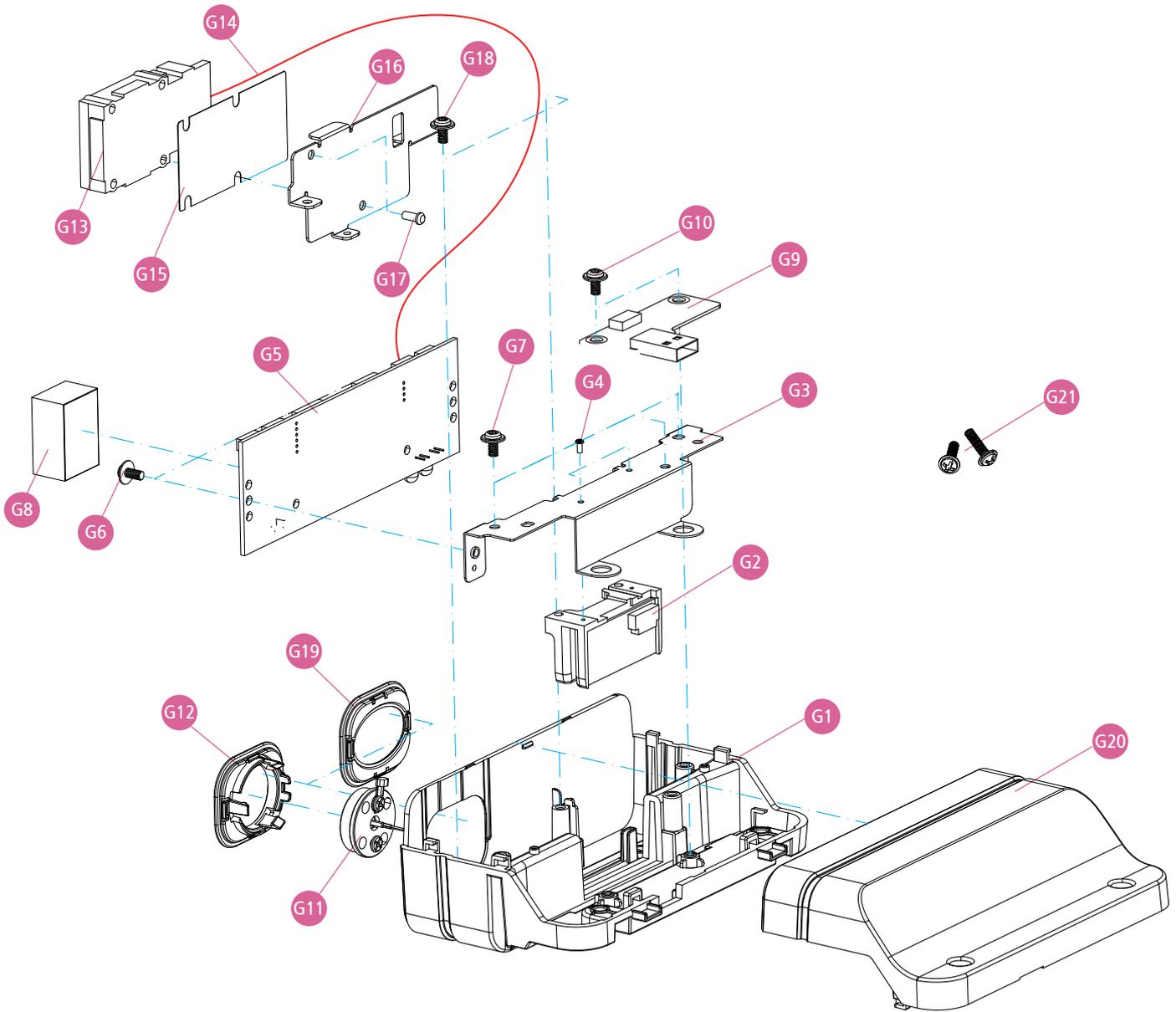
• MSR



No.	Part Code	Part Name	Q'TY	Serviceable	Remark
E	QMR-TFZ0NW	MSR Reader, WHITE	1	Y	
	QMR-TFZ0NB	MSR Reader, BLACK			
E1	JK72-21150A	PMO-MSR UPPER, WHITE	1	Y	
	JK72-21150B	PMO-MSR UPPER, BLACK			
E2	JK48-10049A	MSR MODULE	1	Y	
E3	JK70-20488A	IPR-BRKT MSR	1	Y	
E4	S600300026A	SCREW-DELTA PT:M1.7,L3.5	2	Y	
E5	S600200028A	SCREW-TAPPING:PWH,M3,L6	2	Y	
E6	JK92-10234A	MSR BOARD:3TRACK	1	Y	
E7	S600200028A	SCREW-TAPPING:PWH,M3,L6	2	Y	
E8	JK92-10237A	LED BOARD	1	Y	
E9	JK39-80131A	HARNESS-LED	1	Y	
E10	JK72-21151A	PMO-MSR LOWER, WHITE	1	Y	
	JK72-21151B	PMO-MSR LOWER, BLACK			
E11	S600200014A	SCREW-TAPPING:PWH,M3,L12	2	Y	

05. Parts List

• Dallas_Finger Printer



Appendix B. System Configuration

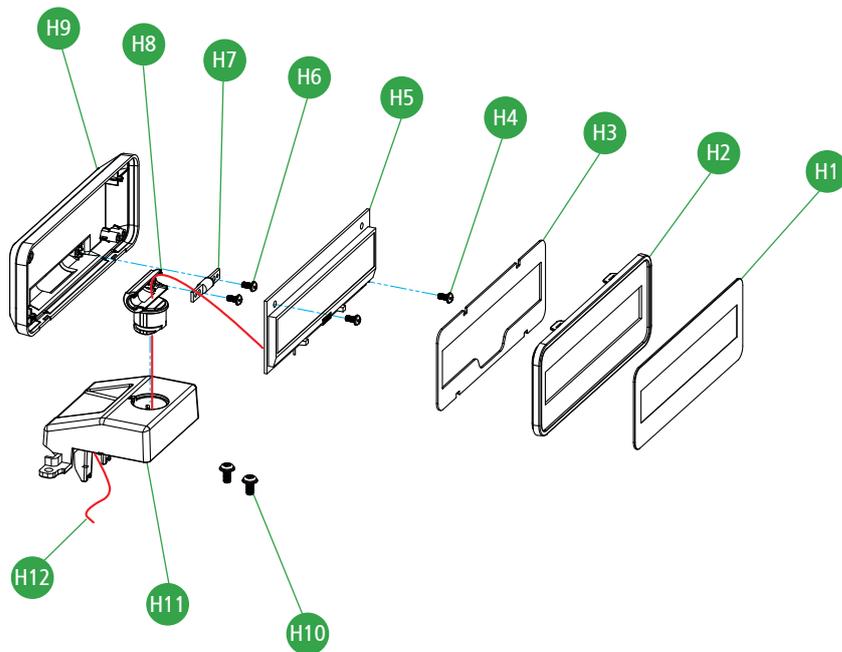
05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
G	QMR-TFZ0DW	MSR & DALLAS, WHITE	1	Y	
	QMR-TFZ0DB	MSR & DALLAS, BLACK			
	QMR-TFZ0FW	MSR & FINGER PRINTER, WHITE			
	QMR-TFZ0FB	MSR & FINGER PRINTER, BLACK			
G1	JK72-21154A	PMO-MSR DALLAS UPPER, WHITE	1	Y	
	JK72-21154B	PMO-MSR DALLAS UPPER, BLACK			
G2	JK70-20489A	IPR-BRKT MSR IC	1	Y	
G3	JK48-10049A	MSR MODULE	1	Y	
G4	S600300026A	SCREW-DELTA PT:M1.7,L3.5	2	Y	
G5	JK95-70930A	ASSY-DALLAS BOARD	1	Y	
G6	S600200028A	SCREW-TAPPING:PWH,M3,L6	2	Y	
G7	S600200028A	SCREW-TAPPING:PWH,M3,L6	3	Y	
G8	JK73-11034A	RMO-PDA(D)	0.5	Y	
G9	JK92-10233A	PBA-SUB:IC CARD	1	Y	
G10	S600200028A	SCREW-TAPPING:PWH,M3,L6	2	Y	
G11	JK95-70134C	UNIT-DALLAS MODULE	1	Y	DALLAS
G12	JK72-20403A	PMO-CAP DALLAS, BLACK	1	Y	DALLAS
	JK72-20403C	PMO-CAP DALLAS, WHITE			
G13	-	FPR : U.are.U 4500 Module	1	Y	Separate sale
G14	JK39-40820A	HARNESS-FINGER PRINT:5P,140mm	1	Y	
G15	JK68-40165A	LABEL(R)-INSULATION	1	Y	
G16	JK70-20490A	IPR-BRKT MSR FPR	1	Y	FINGER PRINTER
G17	S600100048A	SCREW-MAHCINE:PH,M2,L14	2	Y	FINGER PRINTER
G18	S600200028A	SCREW-TAPPING:PWH,M3,L6	2	Y	
G19	JK72-20402A	PMO-CAP FPR, BLACK	1	Y	FINGER PRINTER
	JK72-20402C	PMO-CAP FPR, WHITE			
G20	JK72-21155A	PMO-MSR DALLAS LOWER, WHITE	1	Y	
	JK72-21155B	PMO-MSR DALLAS LOWER, BLACK			
G21	S600200014A	SCREW-TAPPING:PWH,M3,L12	2	Y	

Appendix B. System Configuration

05. Parts List

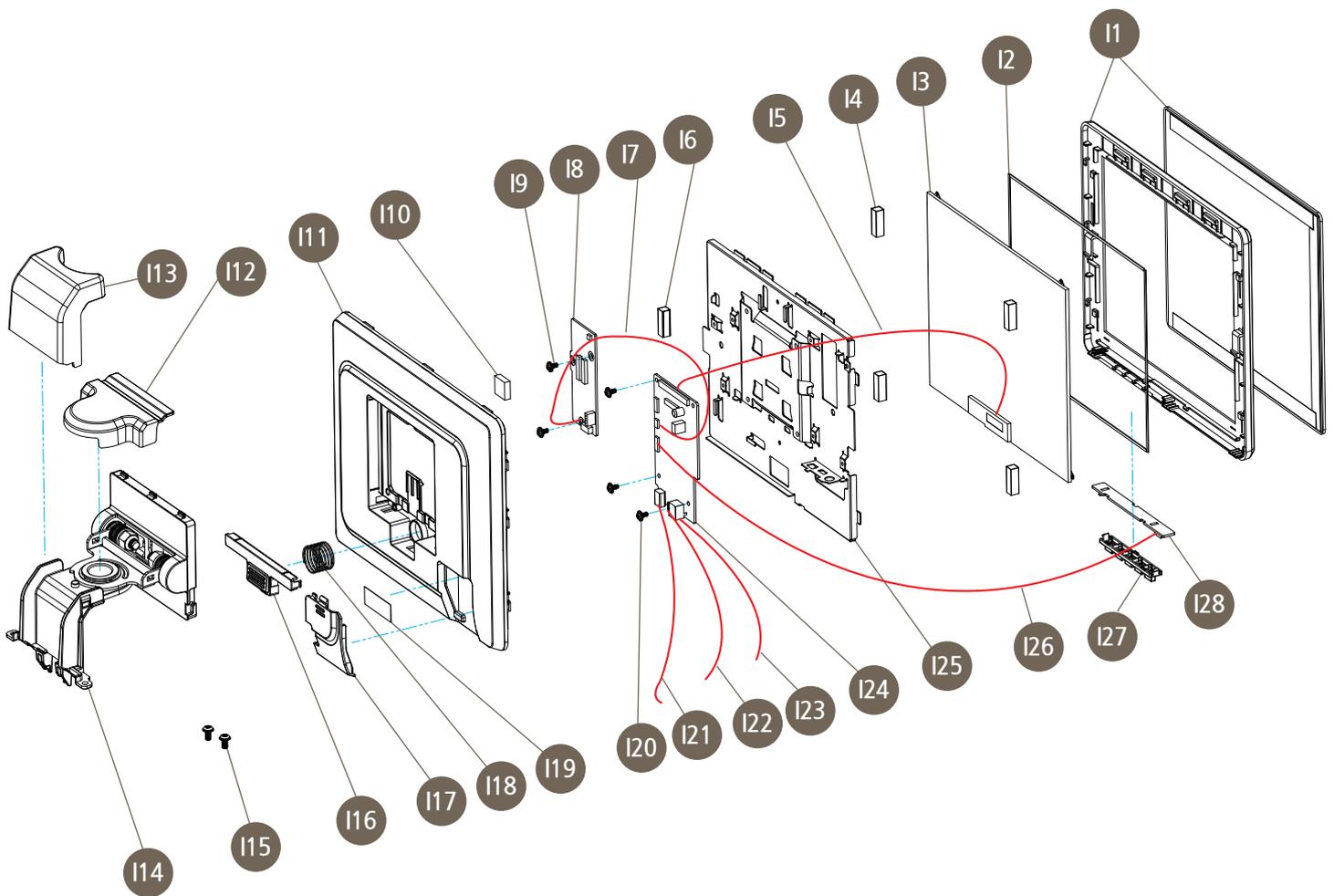
• 2 Line Display



No.	Part Code	Part Name	Q'TY	Serviceable	Remark
H	FCD-L40/DSPNNWN(STD)	2LINE DUAL DISPLAY, WHITE	1	Y	
	FCD-L40/DSPNNBN(STD)	2LINE DUAL DISPLAY, BLACK			
H1	JK72-21161A	PMO-WINDOW FRONT_2LINE	1	Y	
H2	JK72-21156A	PMO-FRONT DISPLAY_2LINE, WHITE	1	Y	
	JK72-21156B	PMO-FRONT DISPLAY_2LINE, BLACK			
H3	JK68-40387A	LABEL(R)-EMI FABRIC	1	Y	
H4	S600200010A	SCREW-TAPPING:PH,M3,L6	2	Y	
H5	JK07-80002A	LCD:PC-POS,2LINE	1	Y	
H6	S600200010A	SCREW-TAPPING:PH,M3,L6	2	Y	
H7	JK75-40004A	MEC-HINGE ASSY	1	Y	
H8	JK72-21160A	PMO-TURRET BODY_2LINE, WHITE	1	Y	
	JK72-21160B	PMO-TURRET BODY_2LINE, BLACK			
H9	JK72-21157A	PMO-REAR DISPLAY_2LINE, WHITE	1	Y	
	JK72-21157B	PMO-REAR DISPLAY_2LINE, BLACK			
H10	S600100039A	SCREW-MACHINE:PWH,M4,L8	2	Y	
H11	JK72-21238A	PMO-BASE 2LINE, WHITE	1	Y	
	JK72-21238B	PMO-BASE 2LINE, BLACK			
H12	JK39-80132A	HARNESS-2LINE	1	Y	

05. Parts List

• 9.7inch Dual Display



Appendix B. System Configuration

05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
1	FCD-100/DSP6PWN(STD)	9.7" DUAL DISPLAY, PCT TOUCH, WHITE			
	FCD-100/DSP6PBN(STD)	9.7" DUAL DISPLAY, PCT TOUCH, BLACK			
	FCD-100/DSPNPWN(STD)	9.7" DUAL DISPLAY, NO TOUCH, WHITE			
	FCD-100/DSPNPBN(STD)	9.7" DUAL DISPLAY, NO TOUCH, BLACK			
11	SA95-70895A	ASSY FRONT DISPLAY_9.7,TOUCH,WHITE	1	Y	TOUCH
	SA95-70895B	ASSY FRONT DISPLAY_9.7,TOUCH,BLACK			
	SA95-70895C	ASSY FRONT DISPLAY_9.7,WHITE			NONE TOUCH
	SA95-70895D	ASSY FRONT DISPLAY_9.7,BLACK			
12	JK73-11031C	RMO-RUBBER TAPE LCD(S)	2	Y	
	JK73-11031D	RMO-RUBBER TAPE LCD(L)	2	Y	
13	JK07-70020A	LCD:LED PANEL,9.7INCH	1	Y	
14	JK68-40377A	LABEL(R)-EMI FABRIC_DUAL	4	Y	
15	JK39-70018A	CABLE-FFC:LVDS,9.7	1	Y	
16	JK68-40377A	LABEL(R)-EMI FABRIC_DUAL	1	Y	TOUCH
17	JK39-80127A	HARNESS-PCT:4P-4P	1	Y	TOUCH
18	JK48-10039B	UNIT-PCT CONTROLLER	1	Y	TOUCH
19	S600200028A	SCREW-TAPPING:PWH,M3,L6	2	Y	TOUCH
110	JK73-10013A	RMO-PAD:SPONGE	1	Y	TOUCH
111	JK72-21154A	PMO-REAR DISPLAY_9.7,WHITE	1	Y	
	JK72-21154B	PMO-REAR DISPLAY_9.7,BLACK			
112	JK72-21128A	PMO-COVER SWIVEL FRONT,WHITE	1	Y	
	JK72-21128B	PMO-COVER SWIVEL FRONT,BLACK			
113	JK72-21239A	PMO-COVER SWIVEL REAR,WHITE	1	Y	
	JK72-21239B	PMO-COVER SWIVEL REAR,BLACK			
114	JK75-40024A	ASSY-HINGE TILT SWIVEL,WHITE	1	Y	
	JK75-40024B	ASSY-HINGE TILT SWIVEL,BLACK			
115	S600100039A	SCREW-MACHINE:PWH,M4,L8	2	Y	
116	JK72-21148A	PMO-HINGE LEVER, WHITE	1	Y	
	JK72-21148B	PMO-HINGE LEVER, BLACK			
117	JK72-21146A	PMO-COVER WIRE_9.7, WHITE	1	Y	
	JK72-21146B	PMO-COVER WIRE_9.7, BLACK			
118	JK70-30061A	SPRING-LEVER	1	Y	
119	JK68-40371A	LABEL(R)-DUAL DISPLAY:DP	1	Y	
120	S600200028A	SCREW-TAPPING:PWH,M3,L6	3	Y	

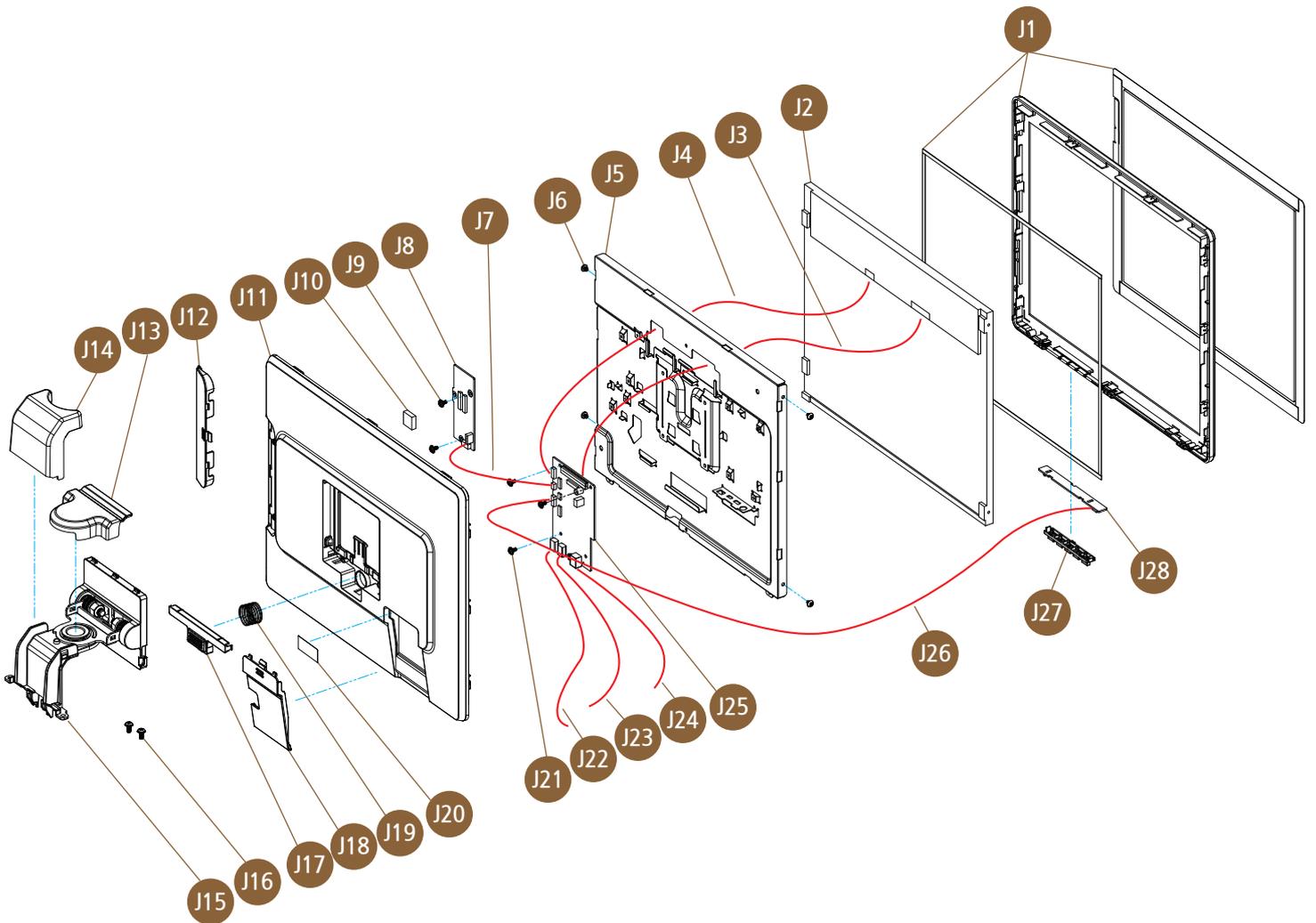
Appendix B. System Configuration

05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
I21	JK39-90045A	CABLE-mini DP - DP	1	Y	
I22	JK39-90048A	CABLE-USB	1	Y	TOUCH
I23	JK39-90047A	CABLE-DC	1	Y	
I24	JK49-10026A	UNIT-AD BOARD:DP	1	Y	
I25	JK70-20487A	IPR-BRKT DISPLAY_9.7	1	Y	
I26	JK39-80128A	HARNESS-OSD:8P-7P	1	Y	
I27	JK72-21149A	PMO-BUTTON OSD,WHITE	1	Y	
	JK72-21149B	PMO-BUTTON OSD,BLACK			
I28	JK49-10032A	UNIT-OSD BOARD	1	Y	

05. Parts List

• 15inch Dual Display



Appendix B. System Configuration

05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
J	FCD-150/DSP6P*N(STD)	15" DUAL DISPLAY, TOUCH, DP	1	Y	*COLOR
	FCD-150/DSP6H*N(STD)	15" DUAL DISPLAY, TOUCH, DP+HDMI			
	FCD-150/DSPNP*N(STD)	15" DUAL DISPLAY, NON TOUCH, DP			
	FCD-150/DSPNH*N(STD)	15" DUAL DISPLAY, NON TOUCH, DP+HDMI			
J1	SA95-70889A	ASSY FRONT DISPLAY_15,TOUCH,WHITE	1	Y	TOUCH
	SA95-70889B	ASSY FRONT DISPLAY_15,TOUCH,BLACK			
	SA95-70889C	ASSY FRONT DISPLAY_15,WHITE			NONE TOUCH
	SA95-70889D	ASSY FRONT DISPLAY_15,BLACK			
J2	SA95-70567A	LCD:LED PANEL, 15inch	1	Y	
J3	JK39-80125A	HARNESS-LVDS	1	Y	
J4	JK39-80126A	HARNESS-BACKLIGHT	1	Y	
J5	JK70-20458A	IPR-BRKT DISPLAY_15,DP	1	Y	DP
	JK70-20458B	IPR-BRKT DISPLAY_15,DP+HDMI			DP+HDMI
J6	S600100044A	SCREW-MACHINE:BH,M3,L5	4	Y	
J7	JK39-80127A	HARNESS-PCT:4P-4P	1	Y	TOUCH
J8	JK48-10039B	UNIT-PCT CONTROLLER	1	Y	TOUCH
J9	S600200028A	SCREW-TAPPING:PWH,M3,L6	2	Y	TOUCH
J10	JK73-10013A	RMO-PAD:SPONGE	1	Y	TOUCH
J11	JK72-21135B	PMO-REAR DISPLAY_15,with HOLE, WHITE	1	Y	
	JK72-21135D	PMO-REAR DISPLAY_15,with HOLE, BLACK			
J12	JK72-21137A	PMO-DUMMY MSR_15, WHITE	1	Y	
	JK72-21137B	PMO-DUMMY MSR_15, BLACK			
J13	JK72-21128A	PMO-COVER SWIVEL FRONT,WHITE	1	Y	
	JK72-21128B	PMO-COVER SWIVEL FRONT,BLACK			
J14	JK72-21239A	PMO-COVER SWIVEL REAR,WHITE	1	Y	
	JK72-21239B	PMO-COVER SWIVEL REAR,BLACK			
J15	JK75-40024A	ASSY-HINGE TILT SWIVEL,WHITE	1	Y	
	JK75-40024B	ASSY-HINGE TILT SWIVEL,BLACK			
J16	S600100039A	SCREW-MACHINE:PWH,M4,L8	2	Y	
J17	JK72-21148A	PMO-HINGE LEVER, WHITE	1	Y	
	JK72-21148B	PMO-HINGE LEVER, BLACK			
J18	JK72-21136A	PMO-COVER WIRE_15, WHITE	1	Y	
	JK72-21136B	PMO-COVER WIRE_15, BLACK			
J19	JK70-30061A	SPRING-LEVER	1	Y	

Appendix B. System Configuration

05. Parts List

No.	Part Code	Part Name	Q'TY	Serviceable	Remark
J20	JK68-40371A	LABEL(R)-DUAL DISPLAY:DP	1	Y	DP
	JK68-40371B	LABEL(R)-DUAL DISPLAY:DP+HDMI			DP+HDMI
J21	S600200028A	SCREW-TAPPING:PWH,M3,L6	3	Y	
J22	JK39-90045A	CABLE-mini DP - DP	1	Y	
J23	JK39-90048A	CABLE-USB	1	Y	TOUCH
J24	JK39-90047A	CABLE-DC	1	Y	
J25	JK49-10026A	UNIT-AD BOARD:DP	1	Y	DP
		UNIT-AD BOARD:HDMI			DP+HDMI
J26	JK39-80128A	HARNESS-OSD:8P-7P	1	Y	
J27	JK72-21149A	PMO-BUTTON OSD,WHITE	1	Y	
	JK72-21149B	PMO-BUTTON OSD,BLACK			
J28	JK49-10032A	UNIT-OSD BOARD	1	Y	