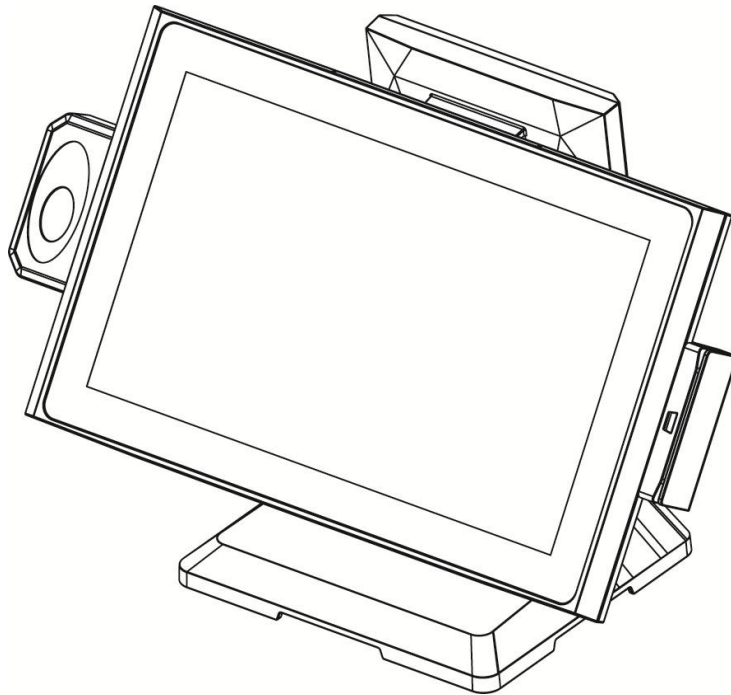


# USER MANUAL

Version 2.0 May 2020

## Acrobat All-in-One



The information contained in this document is subject to change without notice. We make no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. We shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

This document contains proprietary information that is protected by copyright. All rights are reserved. No part of this document may be photocopied, reproduced or translated to another language without the prior written consent of the manufacturer.

## **TRADEMARK**

Intel®, Pentium® and MMX are registered trademarks of Intel® Corporation. Microsoft® and Windows® are registered trademarks of Microsoft Corporation. Other trademarks mentioned herein are the property of their respective owners.

# Safety

## IMPORTANT SAFETY INSTRUCTIONS

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



### CE MARK

This device complies with the requirements of the EEC directive 2004/108/EC with regard to “Electromagnetic compatibility” and 2006/95/EC “Low Voltage Directive”



### FCC

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation

## CAUTION ON LITHIUM BATTERIES

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



### Battery Caution

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



### Safety Caution

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

#### 4.7.3.2 Materials for fire enclosures

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

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

## LEGISLATION AND WEEE SYMBOL

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



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

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

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

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

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

# Revision History

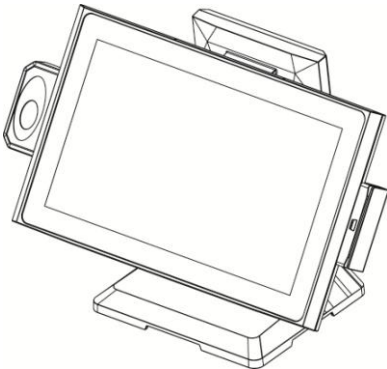
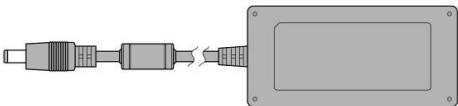


Revision	Date	Description
V1.0	July, 2014	● Release
V1.1	November, 2014	● J1900 motherboard added
V2.0	May, 2020	● D2550motherboard removed ● Android Qualcomm motherboard added

# Table of Contents

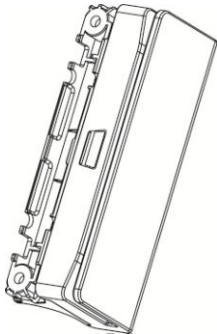
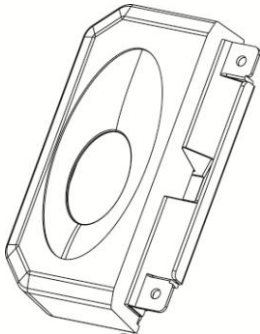
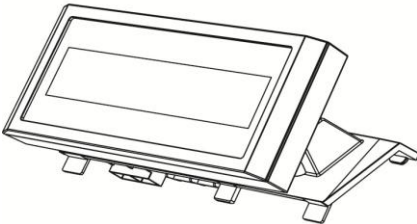
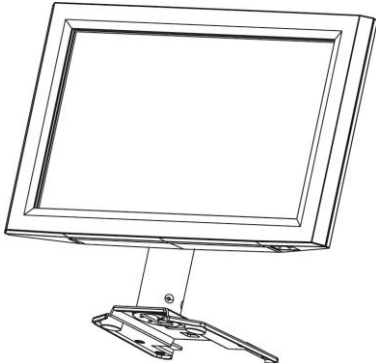
<b>1 Item Checklist.....</b>	<b>1</b>
1-1 Standard Items.....	1
1-2 Optional Items .....	2
<b>2 System View .....</b>	<b>3</b>
2-1 View angle of 0 degree .....	3
2-2 View angle of 60 degree .....	4
2-3 Dimension.....	5
2-4 I/O View.....	7
<b>3 System Assembly &amp; Disassembly.....</b>	<b>10</b>
3-1 Install the Power Adapter.....	10
3-2 Replace the HDD.....	11
3-3 Disassemble the Stand.....	11
<b>4 Peripherals Installation.....</b>	<b>12</b>
4-1 Install the MSR Module .....	12
4-2 Install the Fingerprint Module .....	13
4-3 Install the Customer Display.....	14
4-4 Install the 2nd Display .....	15
4-5 Install the Cash Drawer.....	16
<b>5 Specification .....</b>	<b>20</b>
<b>6 Jumper Setting.....</b>	<b>26</b>
6-1 Android D16 Motherboard.....	26
6-2 Windows Motherboard D36 J1900.....	33
6-3 Android F16 Motherboard .....	38
<b>Appendix: Driver Installation.....</b>	<b>42</b>

# 1 Item Checklist

## 1-1 Standard Items

	
a. System	b. Power adapter (65W)
	
c. Power cable	d. COM-RJ45 cable (x2)- Windows

**1-2    Optional Items**

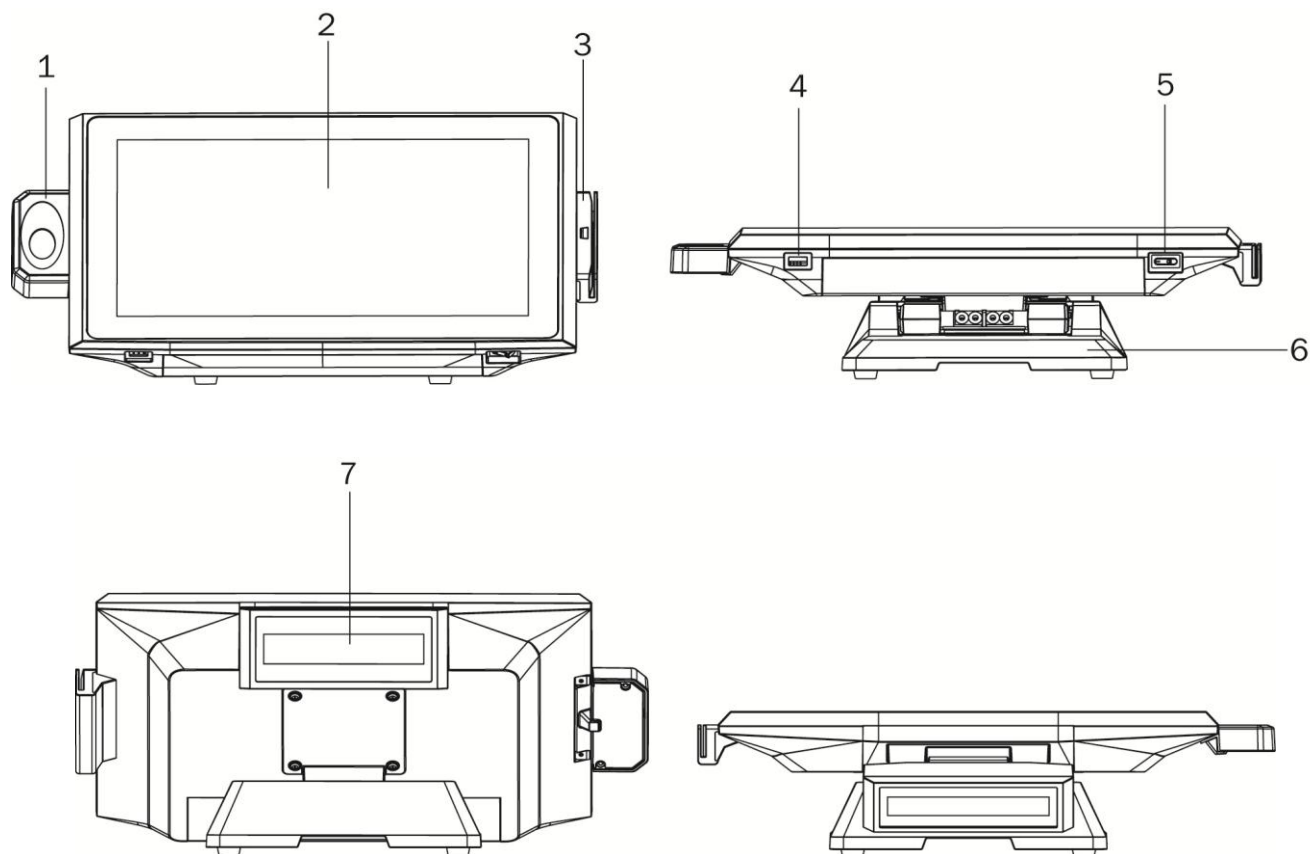
	
a.    MSR module	b. Fingerprint module
	
c.    Customer display	d.    2 <sup>nd</sup> display



## 2 System View

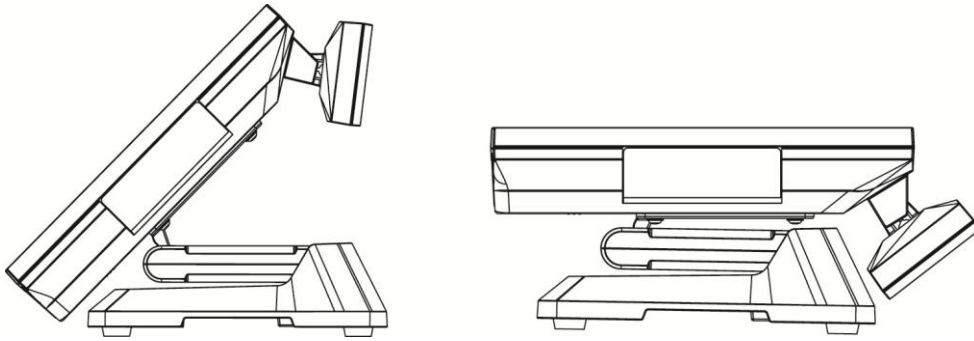
### 2-1 View angle of 0 degree

#### 2-1-1 Front & Rear View



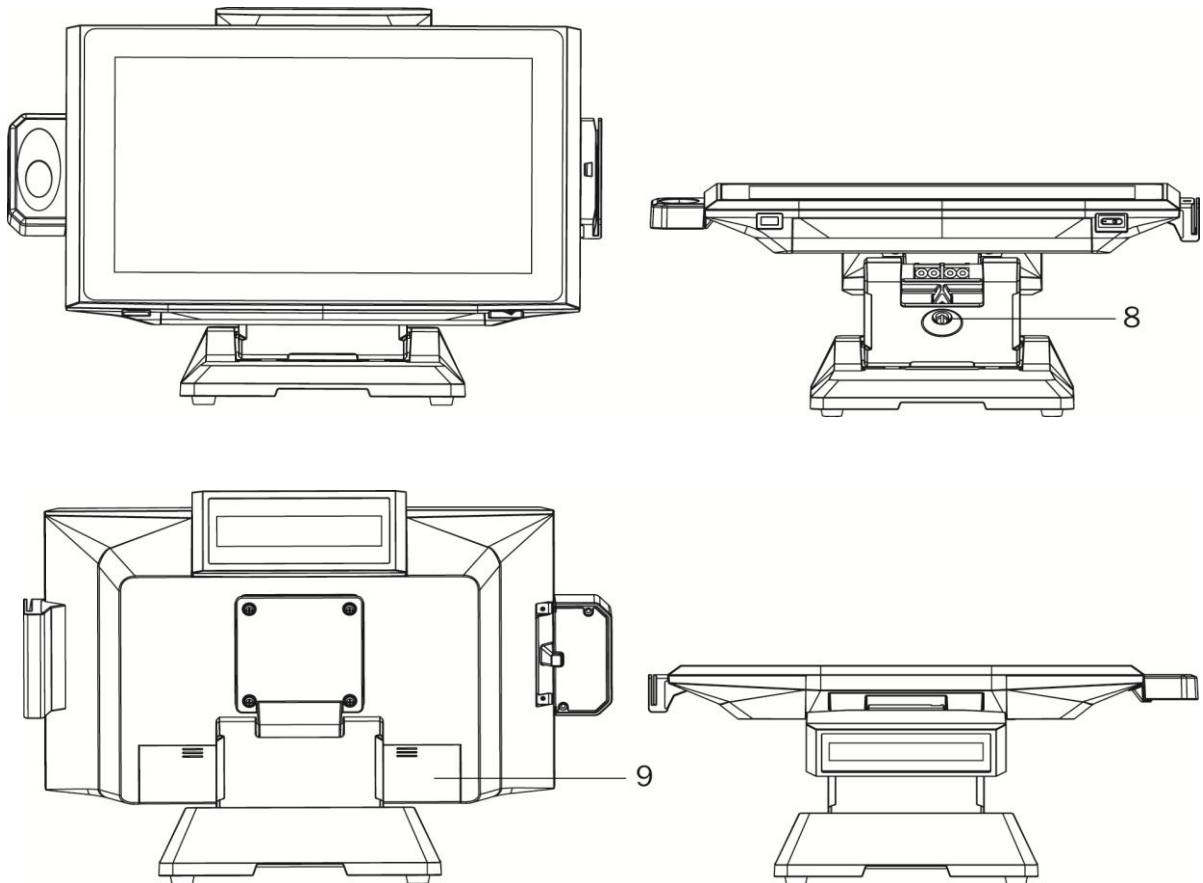
No.	Description
1	Fingerprint reader
2	Touch screen
3	MSR
4	USB (resistive glass only)
5	Power button
6	Swing arm base
7	Customer display (LCM)

## 2-1-2 Side View



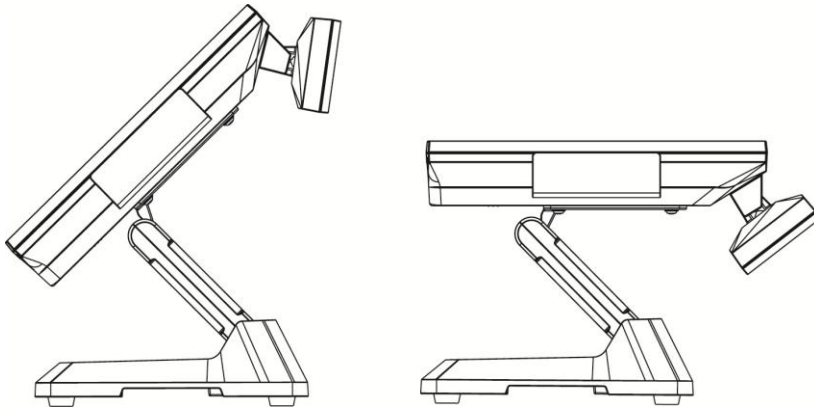
## 2-2 View angle of 60 degree

### 2-2-1 Front & Rear View



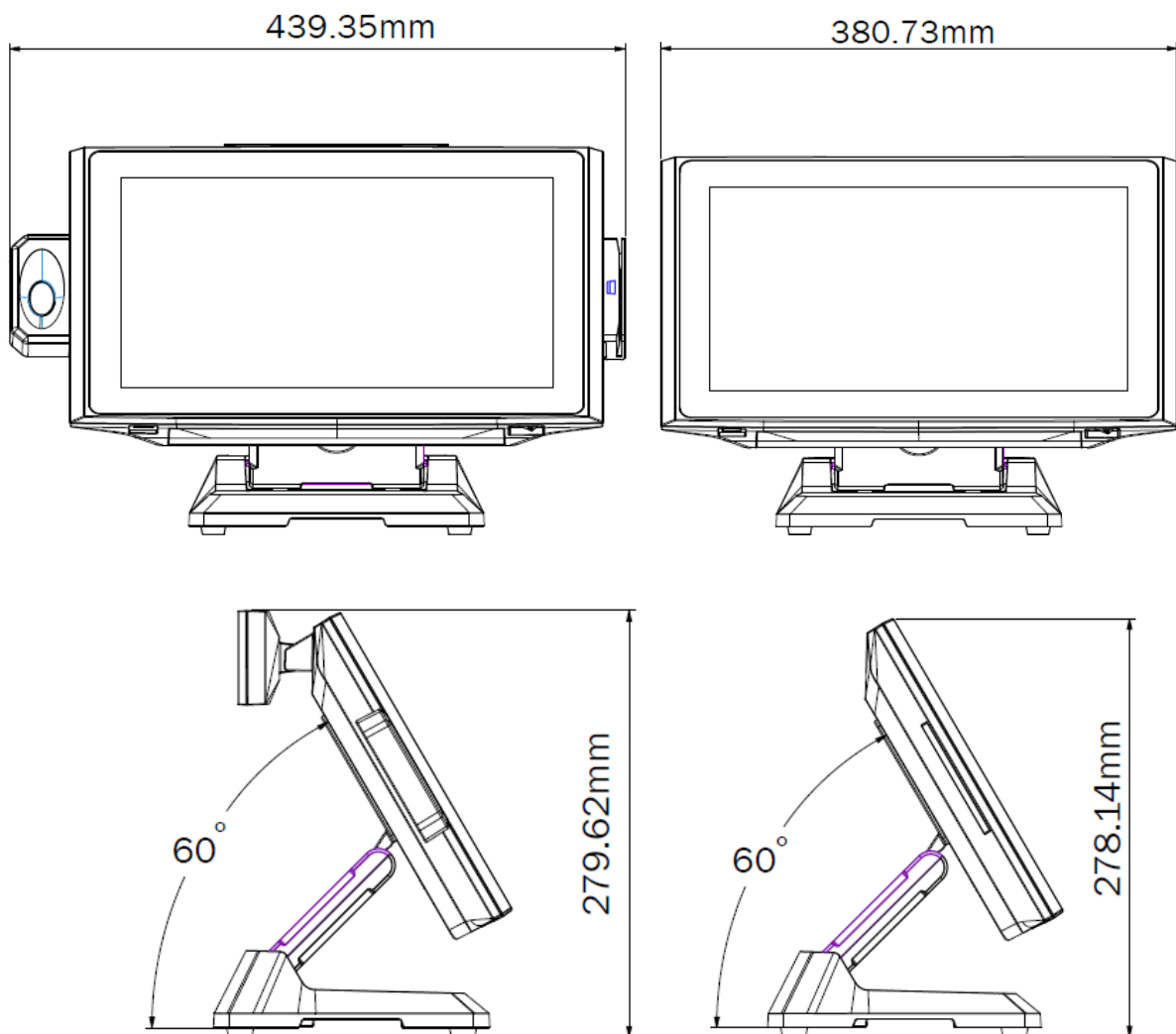
No.	Description
8	Thumb screw for the cable cover
9	Cable cover

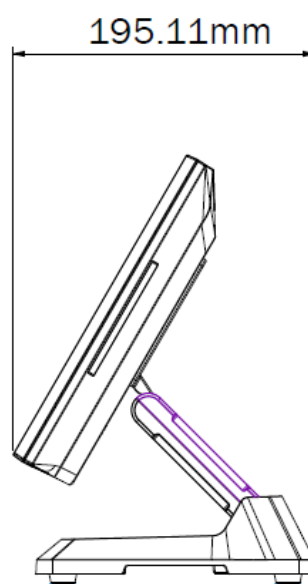
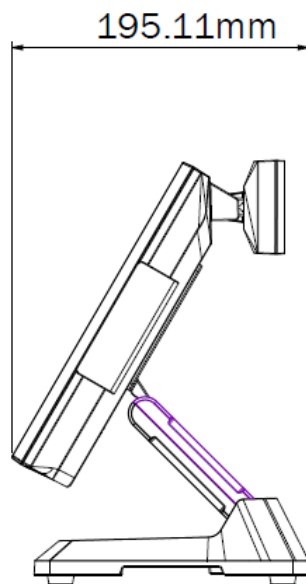
## 2-2-2 Front & Rear View



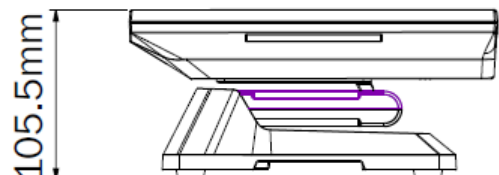
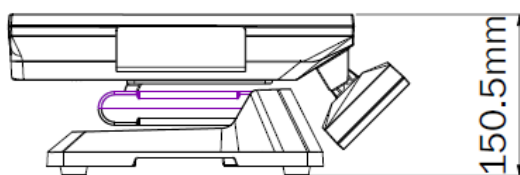
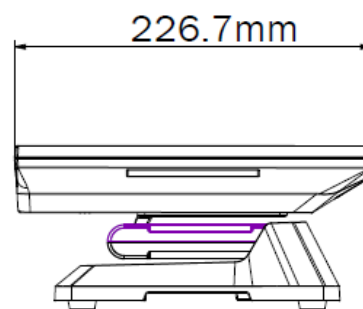
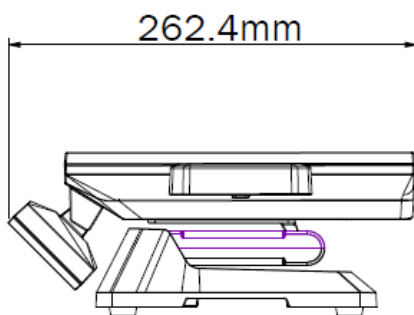
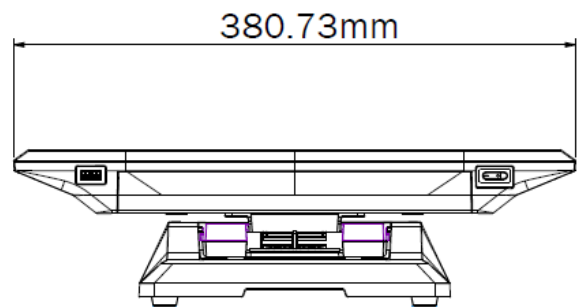
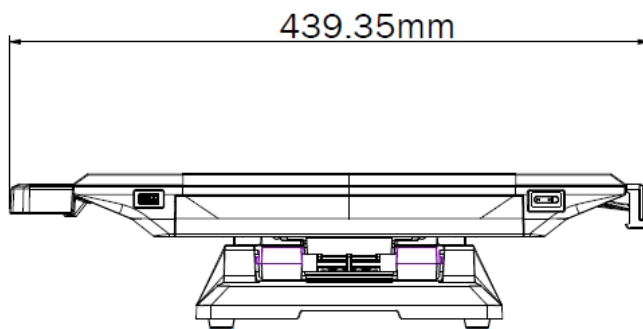
## 2-3 Dimension

### 2-3-1 View Angle of 60 degree



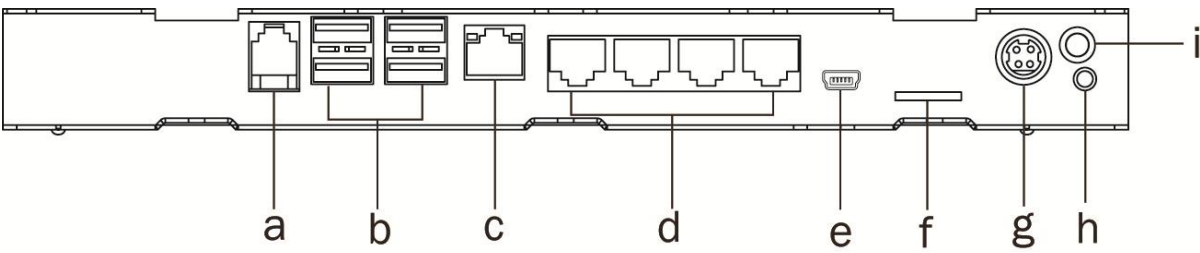


### 2-3-2 View Angle of 0 degree



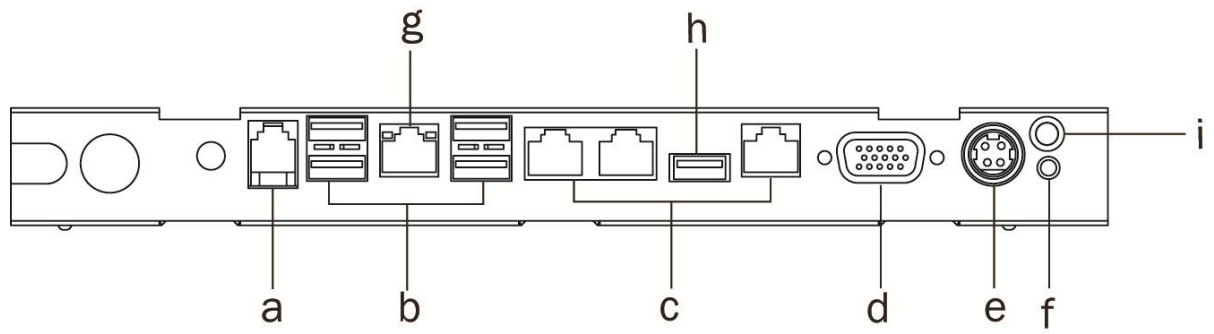
# 2-4 I/O View

## Android Motherboard (iMX.6)



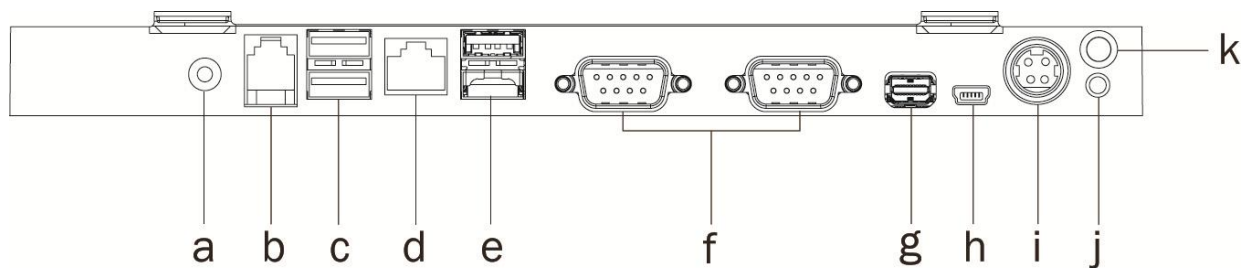
No.	Description
a	Cash drawer
b	USB x 4 (USB2.0)
c	LAN
d	COM1~4 (from left to right)
e	OTG USB
f	Micro SD *removed from later version
g	DC Jack 19V
h	Power button
i	Power LED

## Windows Motherboard (J1900)



No.	Description
a	Cash drawer
b	USB x 4 (USB2.0)
c	COM1~3 (from left to right)
d	VGA
e	DC Jack 19V
f	Power button
g	LAN
h	USB x1 (USB3.0)
i	Power LED

## Android Motherboard (Qualcomm)



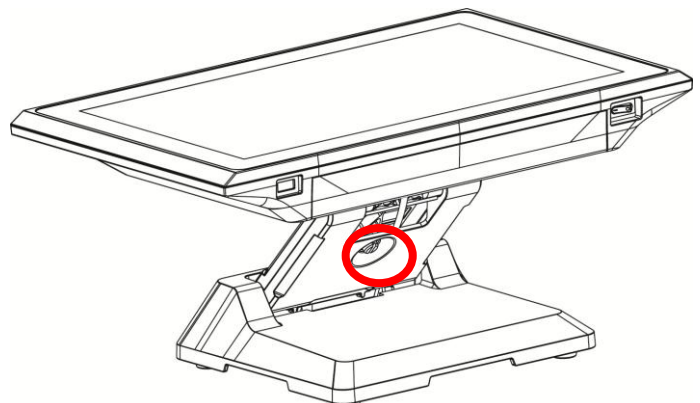
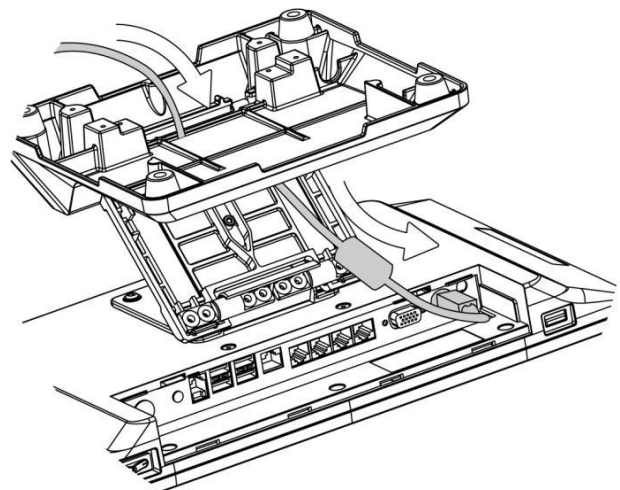
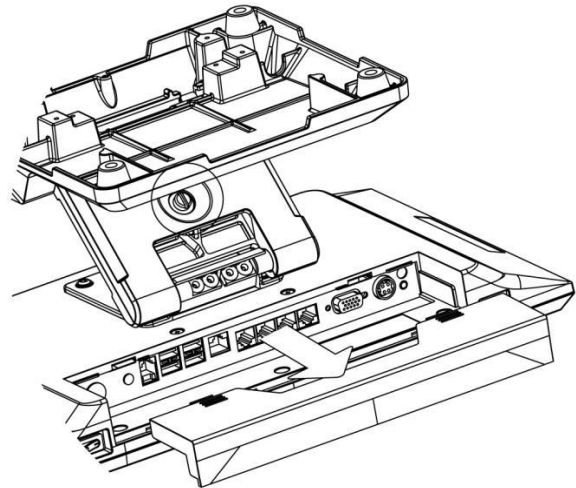
No.	Description
a	Line out (option)
b	Cash drawer
c	USB 2.0 x 2
d	LAN
e	USB 3.0 x 2
f	COM1~2 (from left to right)
g	FeDP (option)
h	Micro USB
i	DC Jack 19V
j	Power button
k	Power LED

## 3 System Assembly & Disassembly

### 3-1 Install the Power Adapter

The system is equipped with a power adapter. Please plug it into the system as shown below.

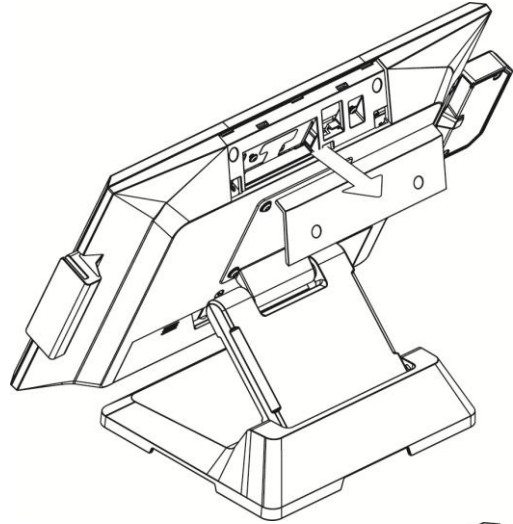
1. Place the system face down.
2. The swing arm base is designed to allow for clean cable management. There is a cable channel through the swing arm base, which has a quick access cover. Please loosen the thumb screw (x1) of the cable cover first..
3. Pull the cable cover for the I/O panel outward.
4. Fish the power cable through the gap of the bottom as shown in the picture.
5. Find the DC Jack on the I/O panel.(refer to chapter 2-4.) and connect the power cable directly to the DC Jack connector.
6. Finally attach the cable cover and fasten the thumb screw.



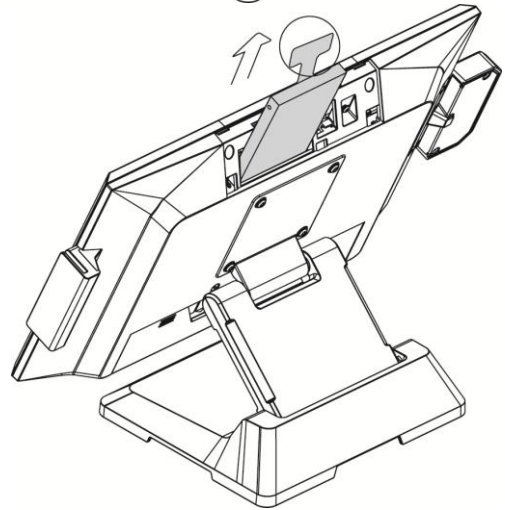


## 3-2 Replace the SSD (Windows)

1. Remove the SSD dummy cover.

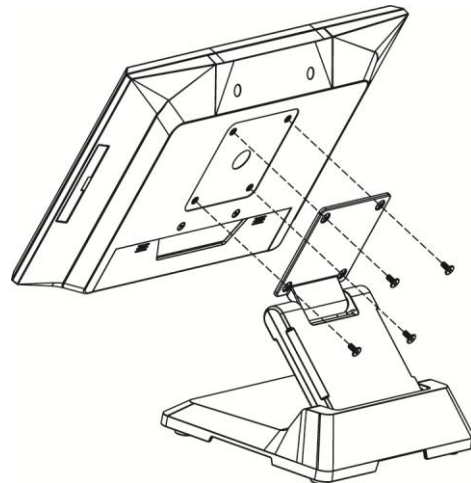


2. Hold the plastic tab and pull the SSD outward.



## 3-3 Disassemble the Stand

1. To separate the stand and the LCD monitor, remove the screws (x4) from the stand directly.
2. Reverse the steps above to attach stand to the system.

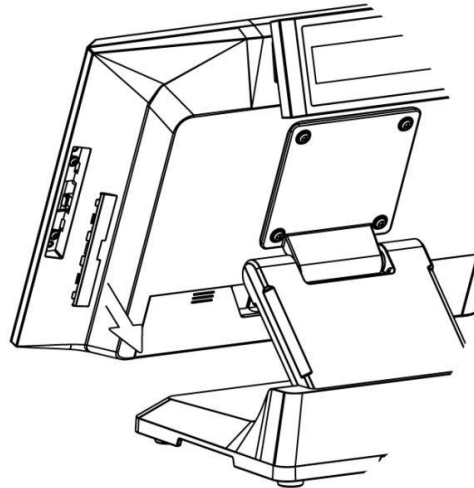


# 4 Peripherals Installation

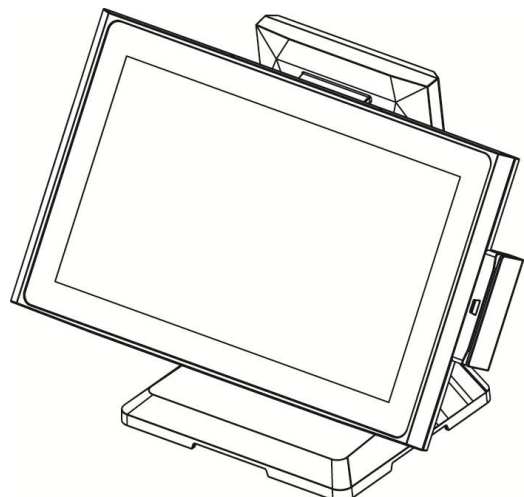
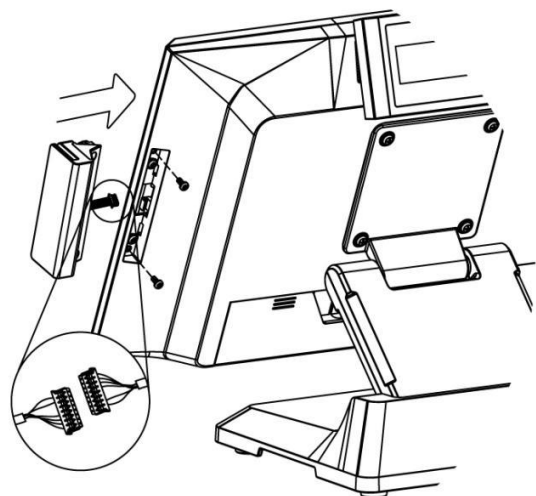
## 4-1 Install the MSR Module

MSR module can be installed to either side of the system. Choose one side and follow the steps below. Make sure the unit is powered down before starting.

1. Remove the dummy cover first.

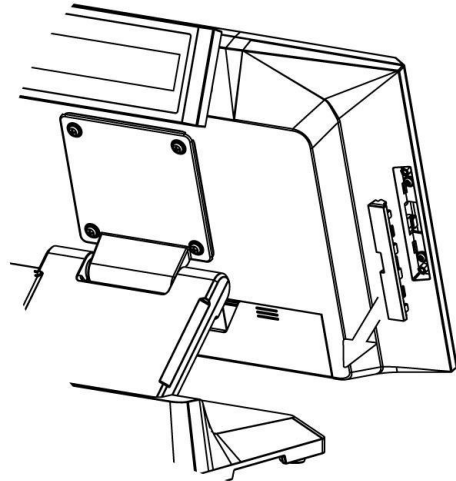


2. Connect the MSR cable to the connector on the system side.
3. Insert the MSR module in place and fasten the screws (x2) on the back to secure the module.

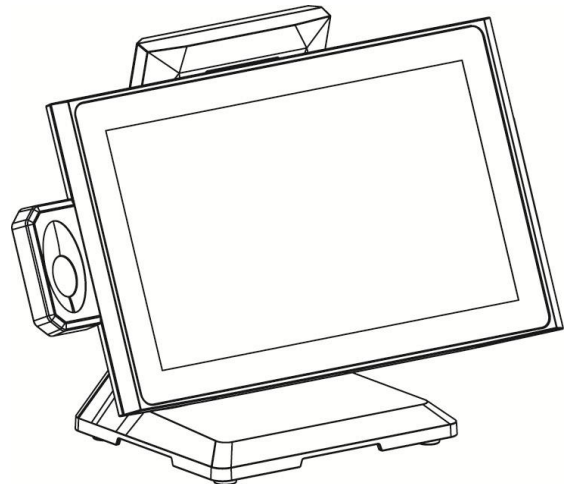
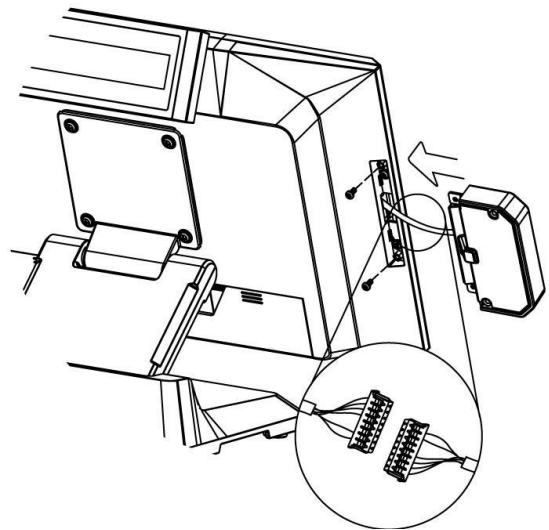


## 4-2 Install the Fingerprint Module

1. Remove the dummy cover first.

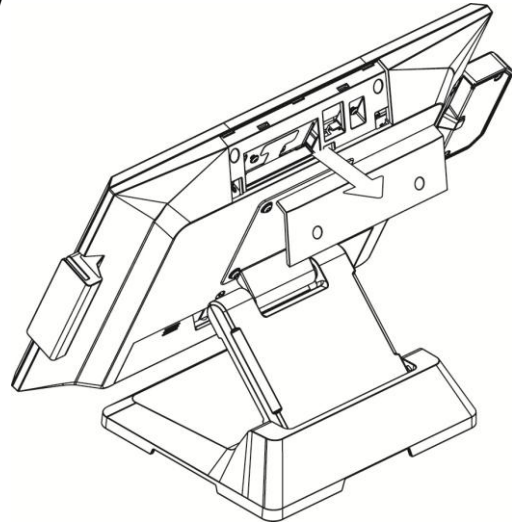


2. Connect the fingerprint cable to the connector on the system side.
3. Insert the fingerprint module in place and fasten the screws (x2) on the back to secure the module.

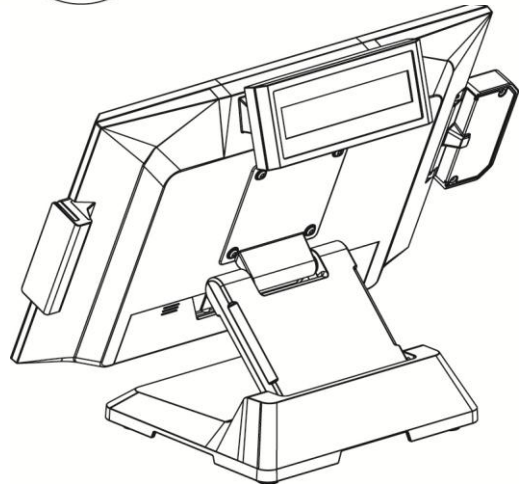
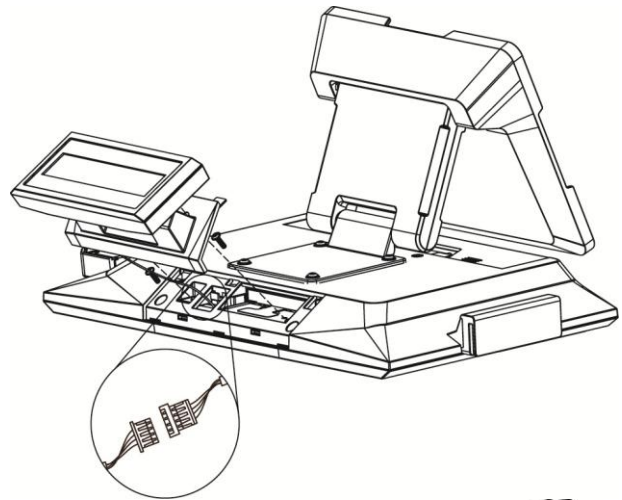


## 4-3 Install the Customer Display

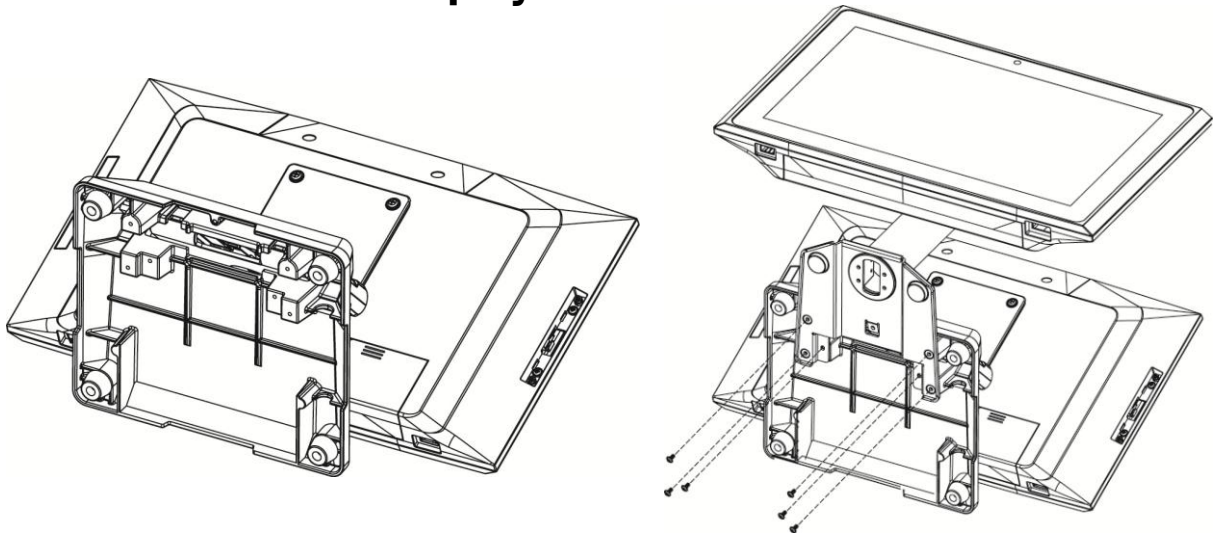
1. Remove the HDD dummy cover first.



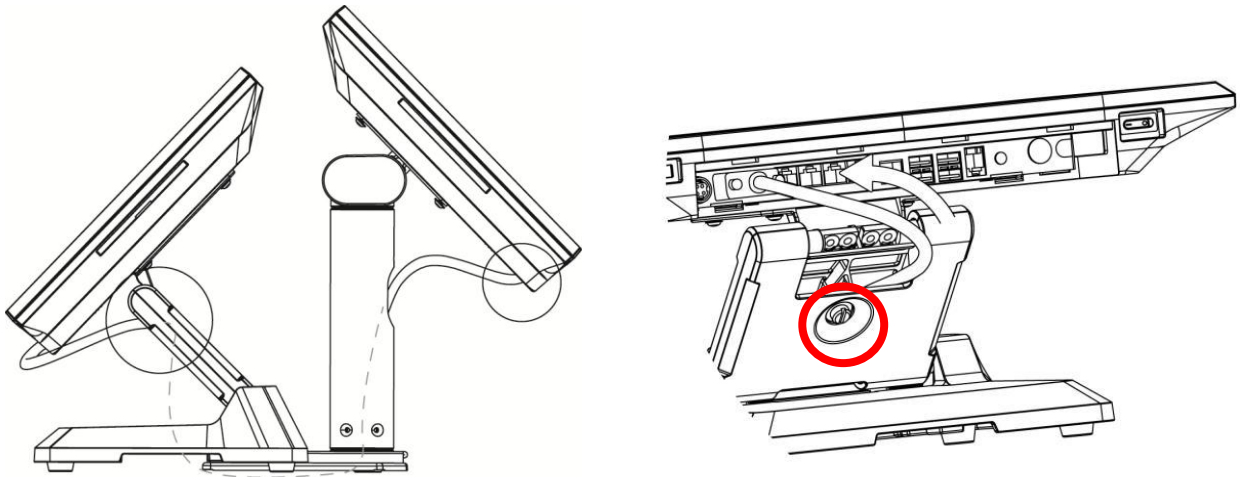
2. Connect the customer display cable (x1) to the connector on system side.
3. Attach the customer display and fasten the screws (x2) to fix it.



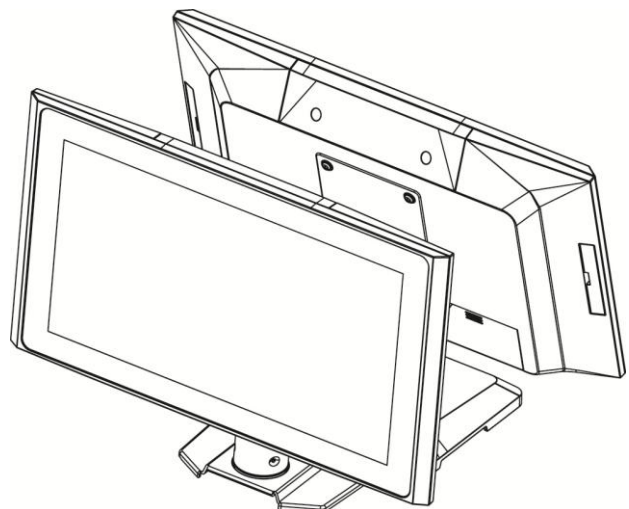
## 4-4 Install the 2nd Display



1. Place the system face down. Making sure not to scratch the screen.
2. Attach the 2<sup>nd</sup> display module to the bottom of the stand. Fix the stand with 2<sup>nd</sup> display module with screws (x6).



3. Thread two ends of the VGA cable respectively through the gaps on the 2<sup>nd</sup> display and system stand as shown in the above picture.
4. When the VGA cable is routed through the stand gap, close the cable cover and fasten the thumb screw. Finally connect the other end of the cable to the system port.

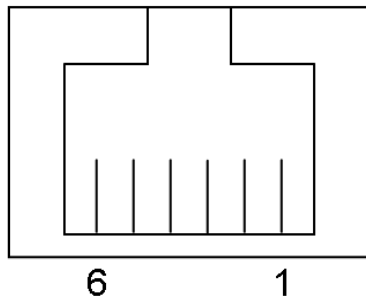


# 4-5 Install the Cash Drawer

## 4-5-1 For Android motherboard

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

### Cash Drawer Pin Assignment



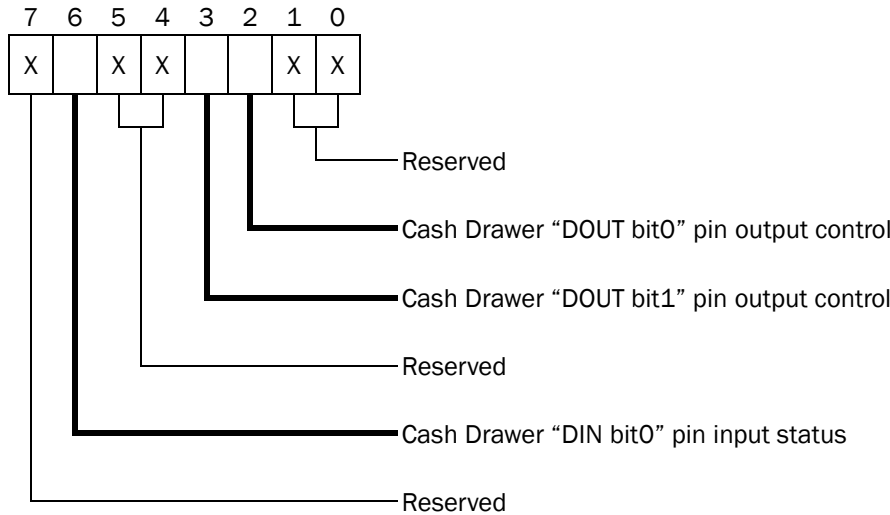
Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V / 19V
5	DOUT bit1
6	GND

### Cash Drawer Controller Register

The Cash Drawer Controller use one I/O addresses to control the Cash Drawer.

**Register Location:** 48Ch  
**Attribute:** Read / Write  
**Size:** 8bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	Reserved	Read	Reserved		Write		Reserved	



Bit 7: Reserved

Bit 6: Cash Drawer "DIN bit0" pin input status.

= 1: the Cash Drawer closed or no Cash Drawer

= 0: the Cash Drawer opened

Bit 5: Reserved

Bit 4: Reserved

Bit 3: Cash Drawer "DOUT bit1" pin output control.

= 1: Opening the Cash Drawer

= 0: Allow close the Cash Drawer

Bit 2: Cash Drawer "DOUT bit0" pin output control.

= 1: Opening the Cash Drawer

= 0: Allow close the Cash Drawer

Bit 1: Reserved

Bit 0: Reserved

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer.

### Cash Drawer Control Command Example

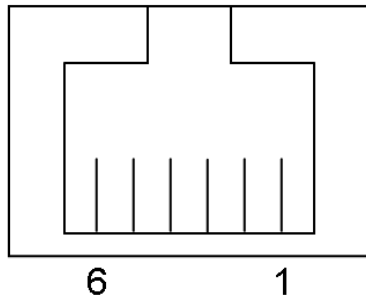
Command	Cash Drawer
O 48C 04	Opening
O 48C 00	Allow to close
<ul style="list-style-type: none"><li>➤ Set the I/O address 48Ch bit2 =1 for opening Cash Drawer by "DOUT bit0" pin control.</li><li>➤ Set the I/O address 48Ch bit2 = 0 for allow close Cash Drawer.</li></ul>	

Command	Cash Drawer
I 48C	Check status
<ul style="list-style-type: none"><li>➤ The I/O address 48Ch bit6 =1 mean the Cash Drawer is opened or not exist.</li><li>➤ The I/O address 48Ch bit6 =0 mean the Cash Drawer is closed.</li></ul>	

## 4-5-2 For J1900 motherboard

You can install a cash drawer through the cash drawer port. Please verify the pin assignment before installation.

### Cash Drawer Pin Assignment



Pin	Signal
1	Cash drawer 2 In
2	Cash drawer 1 Out
3	Cash drawer 1 In
4	12V / 19V (or 24V)
5	Cash drawer 2 Out
6	GND

### Cash Drawer Controller Register

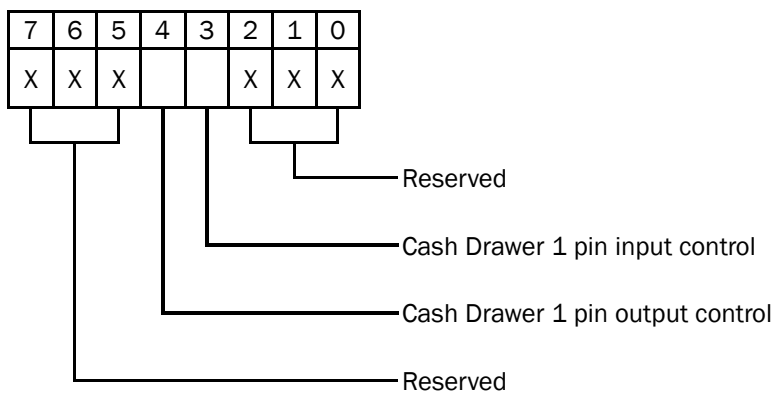
The Cash Drawer Controller use one I/O addresses to control the Cash Drawer.

**Register Location:** 0x482h

**Attribute:** Read / Write

**Size:** 8bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	Reserved			CD1 Out	CD1 In	Reserved		





Bit 7: Reserved  
 Bit 6: Reserved  
 Bit 5: Reserved  
 Bit 4: Cash Drawer 1 pin output control.  
 = 1: Opening the Cash Drawer  
 = 0: Allow close the Cash Drawer  
 Bit 3: Cash Drawer 1 pin input control.  
 = 1: the Cash Drawer closed or no Cash Drawer  
 = 0: the Cash Drawer opened  
 Bit 2: Reserved  
 Bit 1: Reserved  
 Bit 0: Reserved

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer.

Note: Please follow the Cash Drawer control signal design to control the Cash Drawer.

#### Cash Drawer Control Command Example

Command	Cash Drawer
O 482 10	Opening
O 482 00	Allow to close
➤ Set the I/O address 482h bit4 =1 for opening Cash Drawer by “DOUT bit0” pin control. ➤ Set the I/O address 482h bit4 = 0 for allow close Cash Drawer.	

Command	Cash Drawer
I 482	Check status
➤ The I/O address 482h bit3 =1 mean the Cash Drawer is opened or not exist. ➤ The I/O address 482h bit3 =0 mean the Cash Drawer is closed.	

## 5 Specification

<b>Model Name</b>	<b>Acrobat All-in-One</b>
<b>Motherboard</b>	<b>Android iMX6</b>
CPU support	Freescall iMX6 Quad CPU, 1GHz (ARM Cortex A9) - MCIMX6U5DVM10AB
System memory	1GB DDR3 (RAM file system)
System storage	8G (Boot from EMMC)
Touch controller	Microchip AR1021
<b>LCD Touch Panel</b>	
LCD size	14" LED Panel
Brightness	200 nits
Maximal resolution	1366 x 768
Touch screen type	Projected Capacitive
Tilt angle	10°~90°
<b>Storage</b>	
Flash memory card	1 x 8GB eMMC
<b>Expansion</b>	
miniPCI-E slot	1
<b>Rear I/O</b>	
USB	5 x USB Type A (default) (USB 2.0)
Serial / COM	COM1/2/3/4 powered RS232 0/5/12V ; COM1/COM2 default 0V by Jumper; COM3 default 5V; COM4 default 12V COM3's and COM4's default value should be modified by APP
LAN (10/100/1000)	1 (RJ45)
DC jack	1 (4-pin type)
VGA	1 ( +12V power, by jumper setting)
Cash drawer	12V/24V; default value should be modified by APP
Power switch	1
Micro SD (removed!)	1
Mini USB	1
<b>Indicator</b>	
Power LED	1

Model Name	Acrobat All-in-One	
Motherboard	Android iMX6	
Power		
Power adapter	65W/19V	
Peripherals		
MSR	1 (USB)	
iButton	1 (USB)	
Fingerprint	1 (USB)	
Customer display	LCM display 2 x 20 characters (USB)	
Communication		
Wireless LAN	802.11 b/g/n Wireless LAN card & antenna (option)	
Environment		
EMC & Safety	FCC/CE Class A, LVD	
Operating temperature	0°C ~ 35 °C (32 °F ~ 95 °F)	
Storage temperature	-20 °C ~ 60 °C (-4 °F ~ 140 °F)	
Humidity	20% ~ 85% RH non condensing	
Dimension- 0 deegree	w/Peripheral	439.35mm x 262.4mm x 105.5mm
	w/o Peripheral	380.73mm x 226.7mm x 105.5mm
Dimension- 60 deegree	w/Peripheral	439.35mm x 195.11mm x 279.62mm
	w/o Peripheral	380.73mm x 195.11mm x 278.14mm
Weight (N.W./G.W.)	3.7kg / 4.7kg	
OS support	Android 7.1.1	

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

<b>Model Name</b>	<b>Acrobat All-in-One</b>
<b>Motherboard</b>	<b>Windows J1900</b>
CPU support	Intel Celeron J1900 2.41GHz, L2 2MB (10W)
System memory	1 x DDR3 -1066/1333Hz, SO-DIMM, up to 8GB
Graphic memory	Intel HD graphic DX11 and OCL1.1
<b>LCD Touch Panel</b>	
LCD size	14" LED Panel
Brightness	220 nits
Maximal resolution	1366 x 768
Touch screen type	True Flat P-cap touch
Tilt angle	10°~90°
<b>Storage</b>	
SSD	1 x 2.5" SATA SSD
CF card	1 (option)
<b>Expansion</b>	
miniPCI-E slot	1
<b>Rear I/O</b>	
USB	5: 4x USB2.0, 1x USB.30
Serial / COM	3 x RJ-45 COM (COM1 / COM2 W/5V, COM3 W/12V powered enabled by BIOS)
LAN (10/100/1000)	1 (RJ45)
DC jack	1 (4-pin type)
VGA	1 ( +12V power, by BIOS setting)
Cash drawer	1 (RJ11, 12V/24V, default 24V)
Power switch	1
<b>Indicator</b>	
Power LED	1
<b>Power</b>	
Power adapter	65W/19V
<b>Peripherals</b>	
MSR	1 (USB)
iButton	1 (USB)
Fingerprint	HID Global Steelcoat series(USB)
Customer display	LCM display 2 x 20 characters (USB)

Model Name	Acrobat All-in-One	
Motherboard	Windows J1900	
Second display	optional 8", 14" and 15" 2nd display	
Communication		
Wireless LAN	802.11 a/b/g/n/ac Wireless LAN card & antenna (option)	
Environment		
EMC & Safety	FCC/CE Class A, LVD	
Operating temperature	0°C ~ 35 °C (32 °F ~ 95 °F)	
Storage temperature	-20 °C ~ 60 °C (-4 °F ~ 140 °F)	
Humidity	20% ~ 85% RH non condensing	
Dimension- 0 deegree	w/Peripheral	439.35mm x 262.4mm x 105.5mm
	w/o Peripheral	380.73mm x 226.7mm x 105.5mm
Dimension- 60 deegree	w/Peripheral	439.35mm x 195.11mm x 279.62mm
	w/o Peripheral	380.73mm x 195.11mm x 278.14mm
Weight (N.W./G.W.)	3.7kg / 4.7kg	
OS support	POSReady 7 32/64bit, Windows 10 Enterprise IOT 64 bit, Windows 10 Professional 64 bit, Linux	

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

<b>Model Name</b>	<b>Acrobat All-in-One</b>
<b>Motherboard</b>	<b>Android Qualcomm</b>
CPU support	Qualcomm Snapdragon 450 (MSM8953)
System memory	3GB LPDDR3 (colayout with 2GB LPDDR3)
System storage	32GB eMMC (colayout with 16GB eMMC)
Graphic memory	Adreno506; 650MHz
<b>LCD Touch Panel</b>	
LCD size	14" LED Panel
Brightness	220 nits
Maximal resolution	1366 x 768
Touch screen type	True flat (P-CAP)
Tilt angle	10°~90°
<b>Storage</b>	
HDD Drive	N/A
<b>Expansion</b>	
Micro SD	1
<b>Rear I/O</b>	
USB 2.0	2 x Type-A
USB 3.0	2 x Type-A
Micro USB	1 (client, no support host function)
Serial / COM	2 x DB-9/M (COM1 / COM2) (only TX, RX,RTS, CTS)
LAN (10/100/1000)	1 (RJ45)
DC jack	1 x 4-pin w/ lock (co-layout with 2-pin NB type)
FeDP	1 x mini-DP for 2 <sup>nd</sup> display (2-lane eDP/USB2.0/audio(R-CH)/power button/power) default main
Cash drawer	1 x RJ-11 (2in 2out)
Line out	1 (option)
<b>Indicator</b>	
Power LED	1
Power Button	1
<b>Power</b>	
Power adapter	65W/19V
<b>Peripherals</b>	
MSR	1 (USB)
iButton	1 (USB)

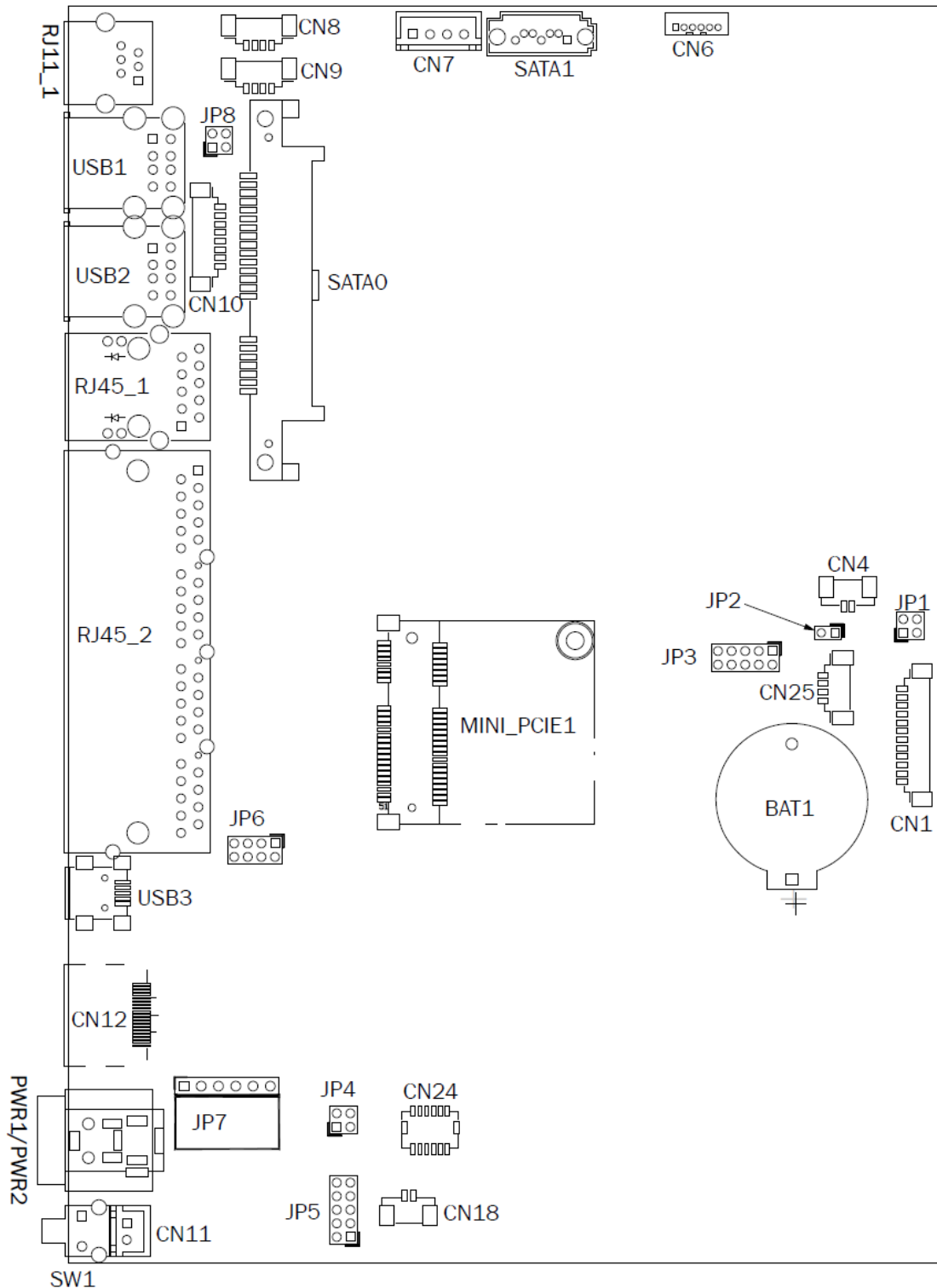
Model Name	Acrobat All-in-One	
Motherboard	Android Qualcomm	
Fingerprint	1 (USB)	
Customer display	LCM display 2 x 20 characters (USB)	
Second display	14” 2 <sup>nd</sup> display(touch option)	
Communication		
Wireless LAN	802.11 b/g/n/ac Wireless LAN card & antenna	
Environment		
EMC & Safety	FCC/CE Class A, LVD	
Operating temperature	0°C ~ 35 °C (32 °F ~ 95 °F)	
Storage temperature	-20 °C ~ 60 °C (-4 °F ~ 140 °F)	
Humidity	20% ~ 85% RH non condensing	
Dimension- 0 deegree	w/Peripheral	439.35mm x 262.4mm x 105.5mm
	w/o Peripheral	380.73mm x 226.7mm x 105.5mm
Dimension- 60 deegree	w/Peripheral	439.35mm x 195.11mm x 279.62mm
	w/o Peripheral	380.73mm x 195.11mm x 278.14mm
Weight (N.W./G.W.)	3.7kg / 4.7kg	
OS support	Android v9.0	

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

# 6 Jumper Setting

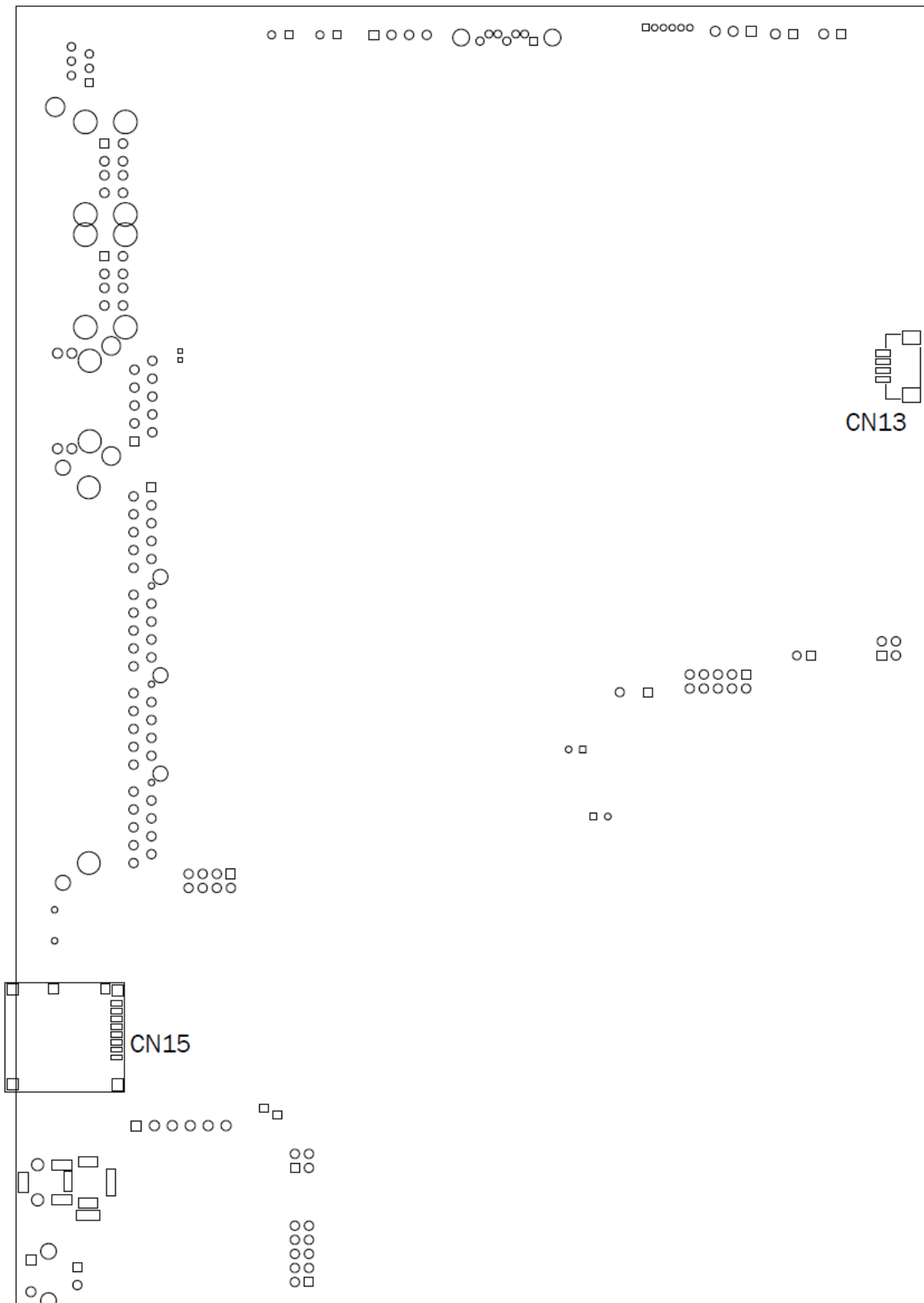
## 6-1 Android iMX6 Motherboard

### 6-1-1 Motherboard Layout



Android V1.0 Top Layer







## 6-1-2 Connectors & Functions



Connector	Function
CN1	LVDS inverter connector
CN3	LVDS connector
CN4	Power LED connector
CN6	Speaker & MIC connector
CN7	SATA power connector
CN8/9	USB port (internal)
CN11	Power button connector
CN13	USB port (internal for LCM)
CN15	Micro SD card slot
CN18	HDD LED connector
CN24	NFC connector
CN25	USB port (internal)
PWR1	DC Jack (2 pin)
PWR2	DC Jack (4 pin)
RJ11_1	Cash drawer connector
RJ45_1	LAN connector
RJ45_2	COM1/ COM2/ COM3/ COM4
USB1/2	USB2.0
SW1	Power button
MINI_PCIE1	MINI PCI Express slot
JP1	Inverter select
JP3	LCD ID setting
JP4	COM1 for debug setting
JP5	Boot source setting
JP6	COM3/4 power setting
JP7	Touch connector
JP8	Cash drawer power setting

## 6-1-3 Jumper Setting

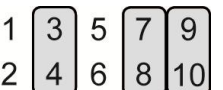


### Inverter Selection

Function	JP1 (1-2) (3-4)
▲ LED	
CCFL	

### Debug Port Setting

Function	JP4 (1-2) (3-4)
▲ COM1	
COM debug	

### Boot Source Setting

Function	JP5 (1-2) (3-4) (5-6) (7-8) (9-10)
▲ eMMC	
SD	
USB (download)	

▲ = Manufacturer Default Setting



OPEN



SHORT

### Cash Drawer Power Setting

Function	JP8 (1-2) (3-4)
+12V	<div> <div>1</div>3           <div>2</div>4         </div>
+19V	<div> 1<div>3</div> 2<div>4</div> </div>
▲ Controlled by MCU	<div> 1 3           <div>2 4</div> </div>

### COM 1 & COM2 Power Setting

Function	JP6 (1-2) (3-4) (5-6) (7-8)
COM1 +5V	<div> <div>1</div>3 5 7           <div>2</div>4 6 8         </div>
COM1 +12V	<div> 1<div>3</div>5 7           2<div>4</div>6 8         </div>
▲ COM1 +0V	<div> 1 3 5 7           <div>2</div>4 6 8         </div>
COM2 +5V	<div> 1 3<div>5</div>7           2 4<div>6</div>8         </div>
COM2 +12V	<div> 1 3 5<div>7</div> 2 4 6<div>8</div> </div>
▲ COM2 +0V	<div> 1 3 5 7           2 4 6<div>8</div> </div>

▲ = Manufacturer Default Setting



OPEN



SHORT

## LCD ID Setting

Panel Number	Resolution	LVDS		Output Interface	JP3 (1-2) (3-4) (5-6) (7-8) (9-10)
		Bits	Channel		
1	1024 x 768	24	Single	LVDS Panel	<div>1 3 5 7 9</div> <div>2 4 6 8 10</div>
2	1366 x 768	18	Single	LVDS Panel	<div>1 3 5 7 9</div> <div>2 4 6 8 10</div>

▲ = Manufacturer Default Setting



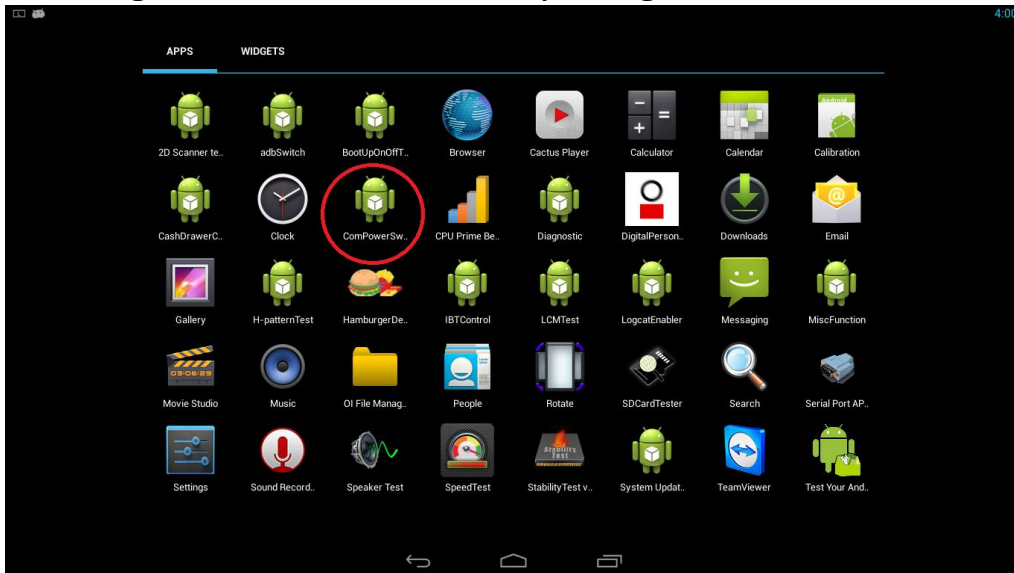
OPEN



SHORT

## COM3/COM4 Power Setting

COM3 and COM4 can be set to provide power to your serial device. The voltage can be set to +5V or +12V by setting the Android APPS.



1. Enter APPS and double click on **ComPowerSwitch 1.0**.



COM3 Power Switch **None**

COM4 Power Switch **None**

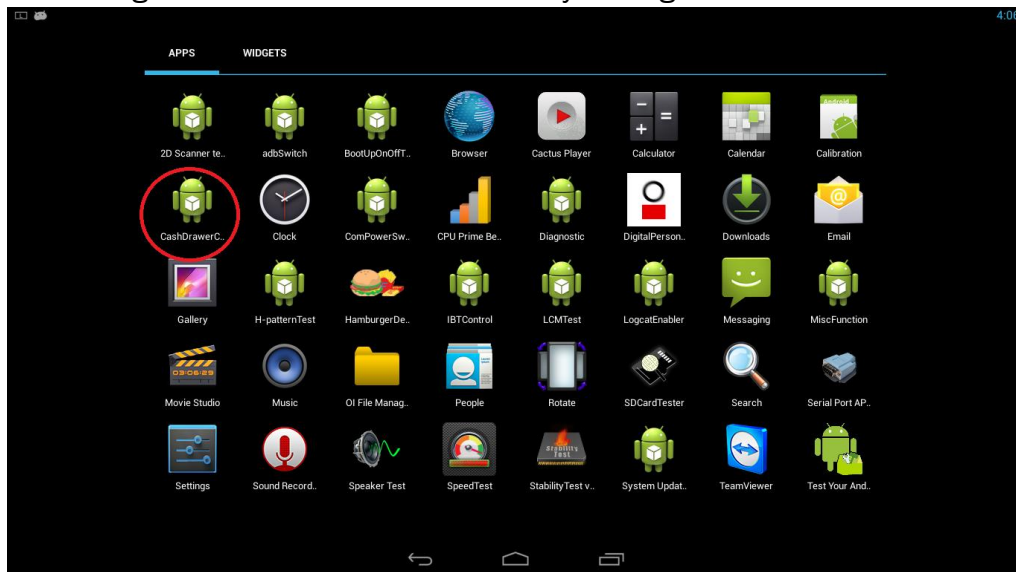
MCU Ver: MBC4-003



2. To enable the power, pull the drop down menu to select the power for COM3 or COM4.

## Cash Drawer Power Setting

Cash drawer can be set to provide power to your serial device.  
The voltage can be set to +12V or +19V by setting the Android APPS.



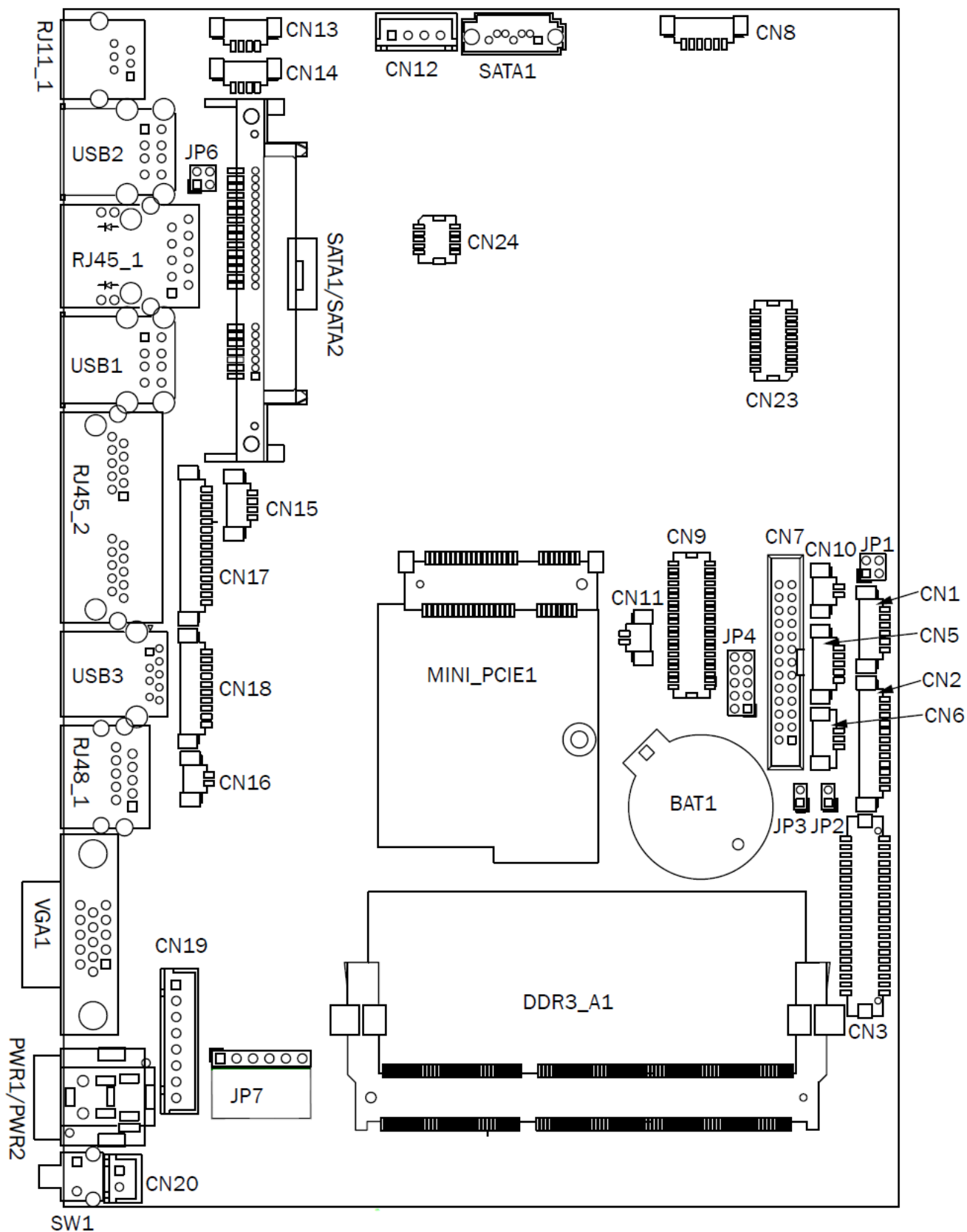
1. Enter APPS and double click on **CashDrawerControl 1.0**.



2. To enable the power, click the icon to turn the power switch on.
3. Select +12V or +19V for cash drawer power.

## 6-2 Windows Motherboard J1900

### 6-2-1 Motherboard Layout



## 6-2-2 Connectors & Functions

Connector	Function
CN1	Front I/O board
CN2	Inverter connector
CN3	LVDS connector
CN6	System FAN connector
CN7	LPT port connector
CN8	Speaker & MIC connector
CN9	40pin external connector
CN10	HDD LED connector
CN11	Power LED connector
CN12	SATA power connector
CN13/14	USB port (internal)
CN15	PS2 keyboard connector
CN16	LPT touch
CN17	MSR connector
CN18	COM5 (touch) connector
CN19	Wide Range
CN20	Power button (internal)
CN21	LCM connector
CN22	POS325 51pin connector
PWR1/PWR2	DC Jack
RJ11_1	Cash drawer connector
RJ45_1	LAN connector
RJ45_2	COM1/ COM2
RJ48_1	COM3
DDR3_A1	DDR3 SO-DIMM
SATA0/SATA2	SATA
USB1/USB2	USB2.0
USB3	USB3.0
VGA1	CRT connector
SW1	Power button
MINI_PCIE1	MINI PCIE
JP1	Inverter select
JP4	LCD ID setting
JP6	Cash drawer power setting
JP7	Touch connector



## 6-2-3 Jumper Setting

### Inverter Selection

Function	JP1 (1-2) (3-4)
▲ LED	<div> <div>1</div>3 <div>2</div>4 </div>
CCFL	<div> 1 <div>3</div> 2 <div>4</div> </div>

### Cash Drawer Power Setting

Function	JP6 (1-2) (3-4)
▲ +19V	<div> <div>1</div>3 <div>2</div>4 </div>
+12V	<div> 1 <div>3</div> 2 <div>4</div> </div>

### LCD ID Setting

Panel Number	Resolution	LVDS		Output Interface	JP4 (1-2) (3-4) (5-6) (7-8) (9-10)
		Bits	Channel		
1	800 x 600	18	Single	LVDS Panel	<div> 1 <div>3</div>5 <div>7</div>9 2 <div>4</div>6 <div>8</div>10 </div>
2	800 x 600	24	Single	LVDS Panel	<div> <div>1</div>3 <div>5</div>7 <div>2</div>4 <div>6</div>8 <div>9</div>10 </div>
3	1024 x 768	18	Single	LVDS Panel	<div> 1 3 <div>5</div>7 <div>2</div>4 <div>6</div>8 <div>9</div>10 </div>
4	1024 x 768	24	Single	LVDS Panel	<div> <div>1</div>3 <div>5</div>7 <div>2</div>4 <div>6</div>8 <div>9</div>10 </div>
5	1366 x 768	18	Single	LVDS Panel	<div> 1 <div>3</div>5 <div>7</div>9 2 <div>4</div>6 <div>8</div>10 </div>
6	1366 x 768	24	Single	LVDS Panel	<div> <div>1</div>3 5 <div>7</div>9 <div>2</div>4 6 <div>8</div>10 </div>

7	1024 x 600	18	Single	LVDS Panel	<div> <div>1</div> <div>3</div> <div>5</div> <div>7</div> <div>9</div> </div> <div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> </div>
8	1280 x 1024	24	Dual	LVDS Panel	<div> <div>1</div> <div>3</div> <div>5</div> <div>7</div> <div>9</div> </div> <div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> </div>
9	1440 x 900	24	Dual	LVDS Panel	<div> <div>1</div> <div>3</div> <div>5</div> <div>7</div> <div>9</div> </div> <div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> </div>
15	1920 x 1080	24	Dual	LVDS Panel	<div> <div>1</div> <div>3</div> <div>5</div> <div>7</div> <div>9</div> </div> <div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> </div>
				CRT	<div> <div>1</div> <div>3</div> <div>5</div> <div>7</div> <div>9</div> </div> <div> <div>2</div> <div>4</div> <div>6</div> <div>8</div> <div>10</div> </div>

▲ = Manufacturer Default Setting



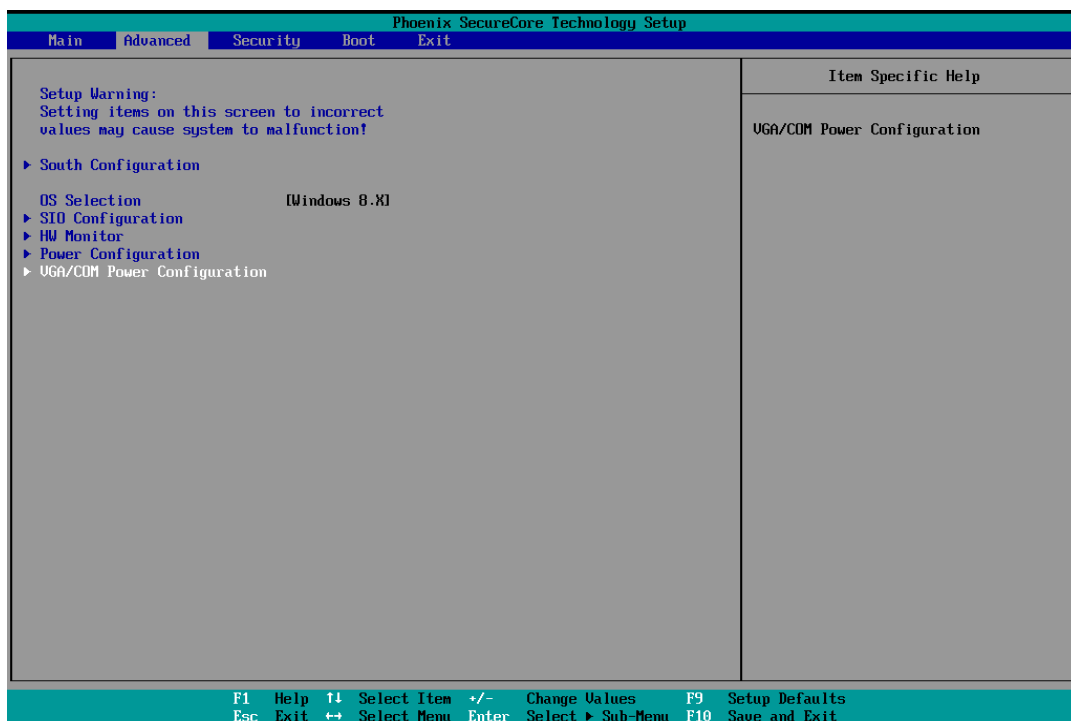
OPEN



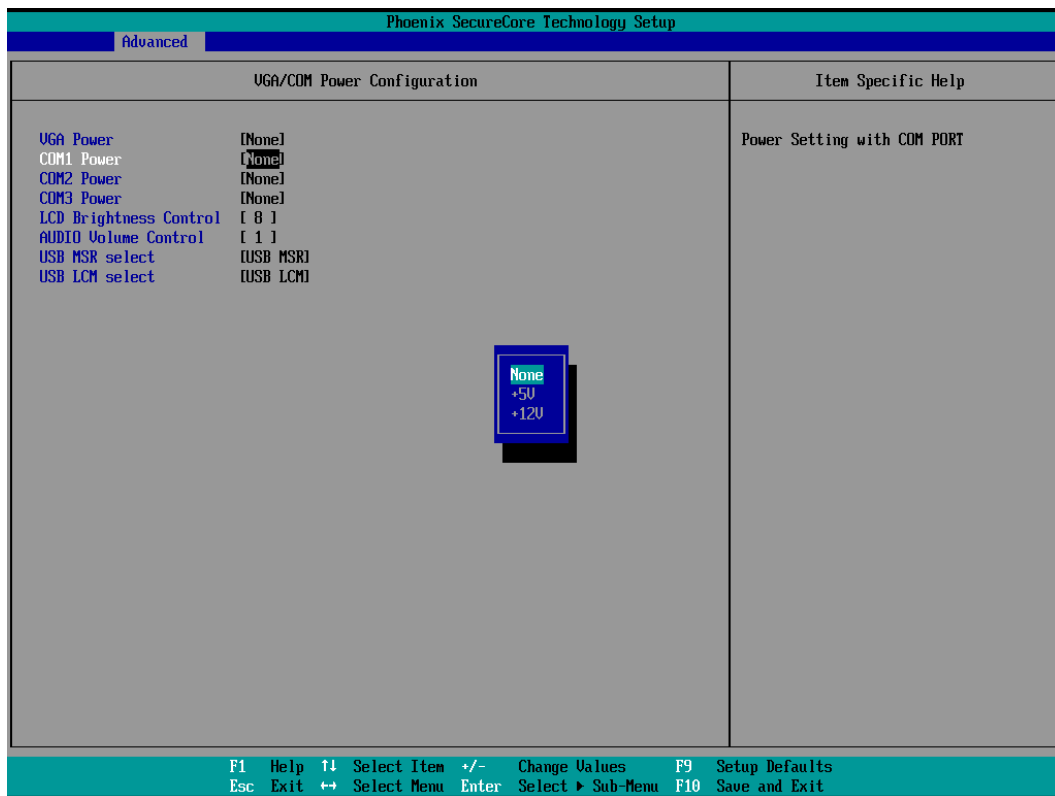
SHORT

## COM1/COM2/COM3 Power Setting

COM1, COM2 and COM3 can be set to provide power to your serial device. The voltage can be set to +5V or +12V in the BIOS.



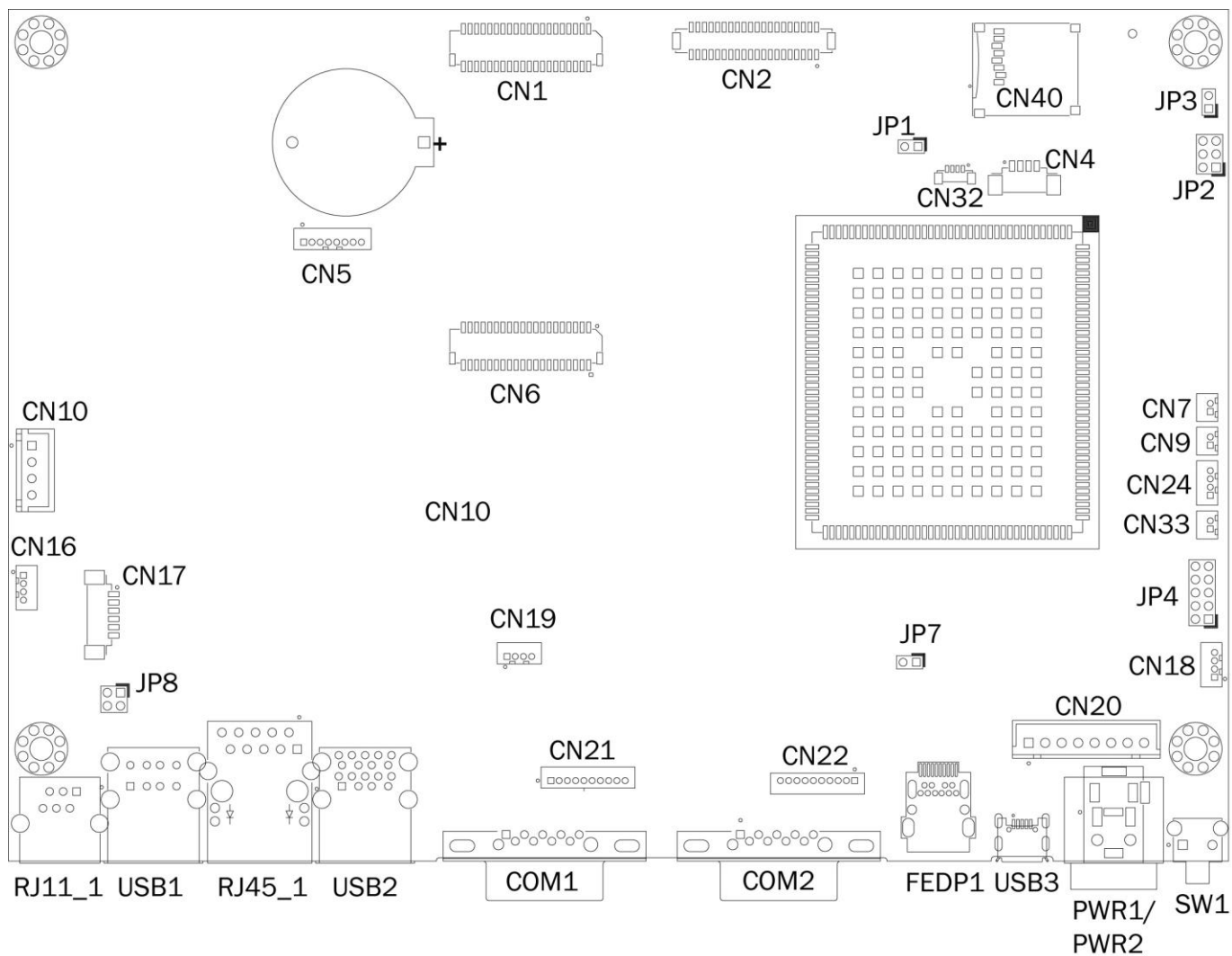
1. Power on the system, and press the <DEL> key when the system is booting up to enter the BIOS Setup utility.
2. Select the Advanced tab.
3. Select **VGA/COM Power Configuration** Ports and press <Enter> to go to display the available options.



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

## 6-3 Android Qualcomm Motherboard

### 6-3-1 Motherboard Layout



## 6-3-2 Connectors & Functions

Connector	Function
CN1	Main display connector
CN2	40pin external connector
CN4	Power LED connector
CN5	MCU debug connector
CN6	2 <sup>nd</sup> display connector
CN7	Speaker_R connector
CN8	WIFI 5G connector
CN9	Speaker_L connector
CN10	SATA power connector
CN13	WIFI 2.4G connector
CN16/18/19	USB port (internal) connector
CN17	Front USB connector
CN20	Wide range connector
CN22	COM3 connector
CN24	Line out connector
CN32	Digital Mic connector
CN33	Analog MIC connector
CN40	Micro SD card connector
PWR1	DC Jack (2 pin) connector
PWR2	DC Jack (4 pin) connector
RJ11_1	Cash drawer connector
RJ45_1	LAN connector
USB1/USB2	USB 3.0 x 2 connector
USB3	System USB debug connector
FeDP1	FeDP connector
SW1	Power button
COM1/COM2	RS-232 connector
JP2	Speaker watt setting
JP3	Speaker R/L setting
JP8	Cash drawer power setting

## 6-3-3 Jumper Setting

### Speaker Watt Setting

Function	JP2 (1-2) (3-4) (5-6)
with FeDP cable	<div> <div>1 3 5</div> <div>2 4 6</div> </div>
▲ without FeDP cable	<div> <div>1 3 5</div> <div>2 4 6</div> </div>
N/A	<div> <div>1 3 5</div> <div>2 4 6</div> </div>
N/A	<div> <div>1 3 5</div> <div>2 4 6</div> </div>

### Speaker R/L Setting

Function	JP3 (1-2)
▲ R/L separated (two speakers)	<div> <div>1</div> <div>2</div> </div>
R/L mix (single speaker)	<div> <div>1</div> <div>2</div> </div>

### Cash Drawer Power Setting

Function	JP8 (1-2) (3-4)
▲ +12V	<div> <div>1 3</div> <div>2 4</div> </div>
+19V	<div> <div>1 3</div> <div>2 4</div> </div>

▲ = Manufacturer Default Setting



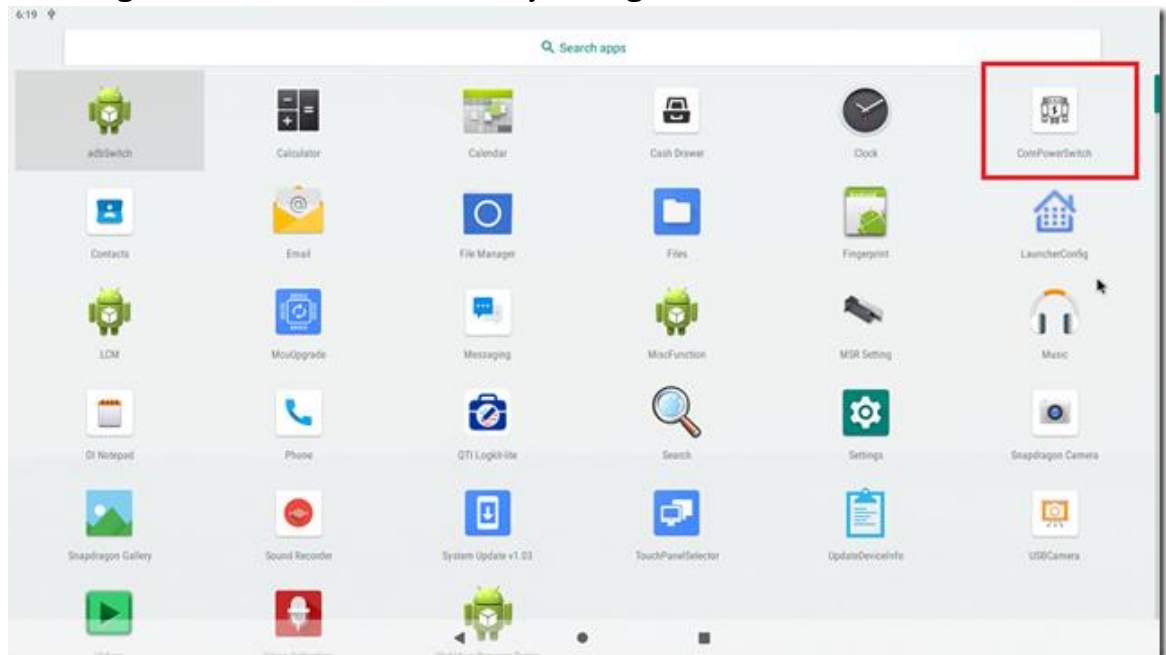
OPEN



SHORT

## COM1/COM2 Power Setting

COM1 and COM2 can be set to provide power to your serial device. The voltage can be set to +5V or +12V by setting the Android APPS.



1. Enter APPS and double click on **ComPowerSwitch**.



2. To enable the power, pull the drop down menu to select the power for COM1 or COM2.

# Appendix: Driver Installation

The shipping package includes a Driver CD. You can find every individual driver and utility that enables you to install the drivers in the Driver CD.

Please insert the Driver CD into the drive and double click on the “index.htm” to pick the models. You can refer to the drivers installation guide for each driver in the “Driver/Manual List”.