

User Manual

Version V1.1 Jul. 2014

VariPOS™ 715S



Contents

Contents-----	2
Notices-----	3
Safety information-----	4
CE verification-----	5
FCC verification-----	6
Welcome-----	7
Package contents-----	7
Getting to know your VariPOS715S-----	8
Front view-----	8
Rear view-----	9
Standard I/O interface-----	9
Using the touch screen-----	10
USB3.0 installation and enable-----	13
Specification-----	15
System Assembly & Disassembly-----	17
Open the system-----	17
Replace the HDD-----	19
Install the Customer display-----	21
Install the second display-----	22
Power configuration for COM PORTS and VGA PORT-----	24
How to configure the 2 nd display resolution-----	25
Install the cash drawer-----	27
Install the MSR & I-Button Reader-----	29
Install the Die-casting aluminum base-----	30
Motherboard information-----	31
Motherboard Layout-----	31
Connectors & Jumper Settings-----	32
Spare parts list-----	33
Version Change History-----	35

Notices

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.

Proprietary information contained in this document is copyright protected. Photocopying, producing or translating this document or any part of it without obtaining a written consent from Poindus is prohibited. Changes in this document or in the products described herein may be made without prior notice. Incidental or consequential damage/s related to the use of this document is not Poindus liability.

Including but not limited to the implied warranties of merchantability or fitness for a particular purpose, POINDUS make this publication available without warranty of any kind.

TRADEMARK

Poindus®/ VariPOS™ are registered trademarks of Poindus Systems.

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 information

IMPORTANT SAFETY INSTRUCTIONS

- 1) Carefully read and follow these instructions. Pay attention to the danger and caution labels displayed on the product.
- 2) Only operate the product based on the type of power indicated on the label. Consult your dealer or local power company if unsure of the type of power available.
- 3) Make sure the power cord is placed safely where it would not be walked on. Do not rest anything on the power cord.
- 4) In disconnecting the machine from the electrical power supply, first switch off the power button, and then remove the power plug from the wall socket.
- 5) This product must not be placed on an unstable platform such as a stand or table for its fall may cause serious damage to the product.
- 6) Slots and openings are there to provide proper ventilation, prevent overheating and ensure reliable operation of the product, thus must not be blocked or covered. Do not place the product on a bed, sofa, rug or the like so as to avoid blocking the openings. Unless proper ventilation is provided, never place the product over or near a radiator, heat register or a built-in installation.
- 7) Never insert any kind of objects through the openings/slots to avoid touching dangerous voltage points which could cause electric shock or fire.
- 8) If there is smoke or strange smell, unplug the power cord from the power outlet immediately and request repair from your dealer or POINDUS.

CE



This device complies with the requirements of the VariPOS™ directive 2004/108/EC with regard to "Electromagnetic compatibility".

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



CERTIFICATE OF COMPLIANCE



The product listed in follows was (were) tested in the Neutron SAFETY Laboratory to comply with the required criteria levels of the follow-mentioned Generic Standards or the requirements of Low Voltage Directive 2006/95/EC relating to electrical equipment designed for use within certain voltage limits.

Equipment **POS**
Model No. **VariPOS 715S**
Brand Name **Poindus**
Applicant **Poindus Systems Corp.**
Address **5F, No. 59, Ln. 77, Xing-Ai Rd., Neihu District, Taipei City 114, Taiwan**

Standard(s) **IEC 60950-1:2005 (2nd Edition); Am 1:2009**
 EN 60950-1:2006+A11:2009+A1:2010+A12:2011

Report(s) **NEI-LVD-1-S1406066**

The test data, data evaluation and equipment configuration contained in our test report(s) above was(were) obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TÜV and TAF according to the ISO-17025 quality assessment standard and technical standard(s). The test data contained in the referenced test report relate only to the EUT sample and item(s) tested.

Jackie Chiu
Authorized Signatory

Neutron Engineering Inc.
 B1, No. 37, Lane 365, YangGuang St., NeiHu
 District 114., Taipei, Taiwan.

TEL : +886-2-26573299
 FAX : +886-2-26573331



VERIFICATION



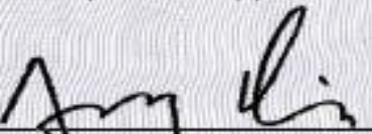
This is to certify that the product listed in follows was (were) tested in the Neutron EMC Laboratory to comply with the criteria limits Class A of conducted and radiated emissions of the Technical Standards FCC Part 15, Subpart B, established by the FCC, USA.

Equipment POS
Model Name VariPOS 715S
Brand Name Poindus
Applicant Poindus Systems Corp.
Address 5F, No. 59, Ln. 77, Xing-Ai Rd., Neihu District, Taipei City 114, Taiwan

Standard(s) FCC Part 15, Subpart B: 2013
 ANSI C63.4-2009
 ICES-003 Issue 5: 2012
 CISPR 22: 2008
 CAN/CSA-CISPR 22-10

Report(s) NEI-FCCE-1-1406066

The test data, data evaluation, and equipment configuration contained in our test report(s) above was (were) obtained utilizing the test procedures, test instruments, test sites that has been accredited by the Authority of TAF according to the ISO-17025 quality assessment standard and technical standard(s). The test data contained in the referenced test report relate only to the EUT sample and item(s) tested.



Andy Chiu
 Authorized Signatory

Neutron Engineering Inc.
 B1, No. 37, Lane 385, YangGuang St.,
 NeiHu District 114, Taipei, Taiwan.
 TEL: +886-2-2657-3299
 FAX: +886-2-2657-3331

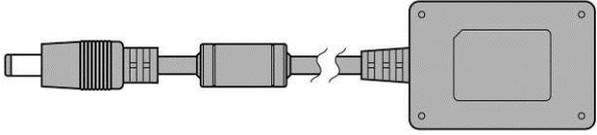
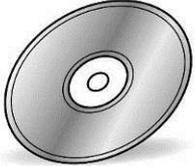
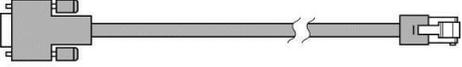


Welcome

Congratulations on your purchase of VariPOS715S. The following illustration displays the package contents of your new product. If any of the following items is damaged or missing, please contact Poindus.

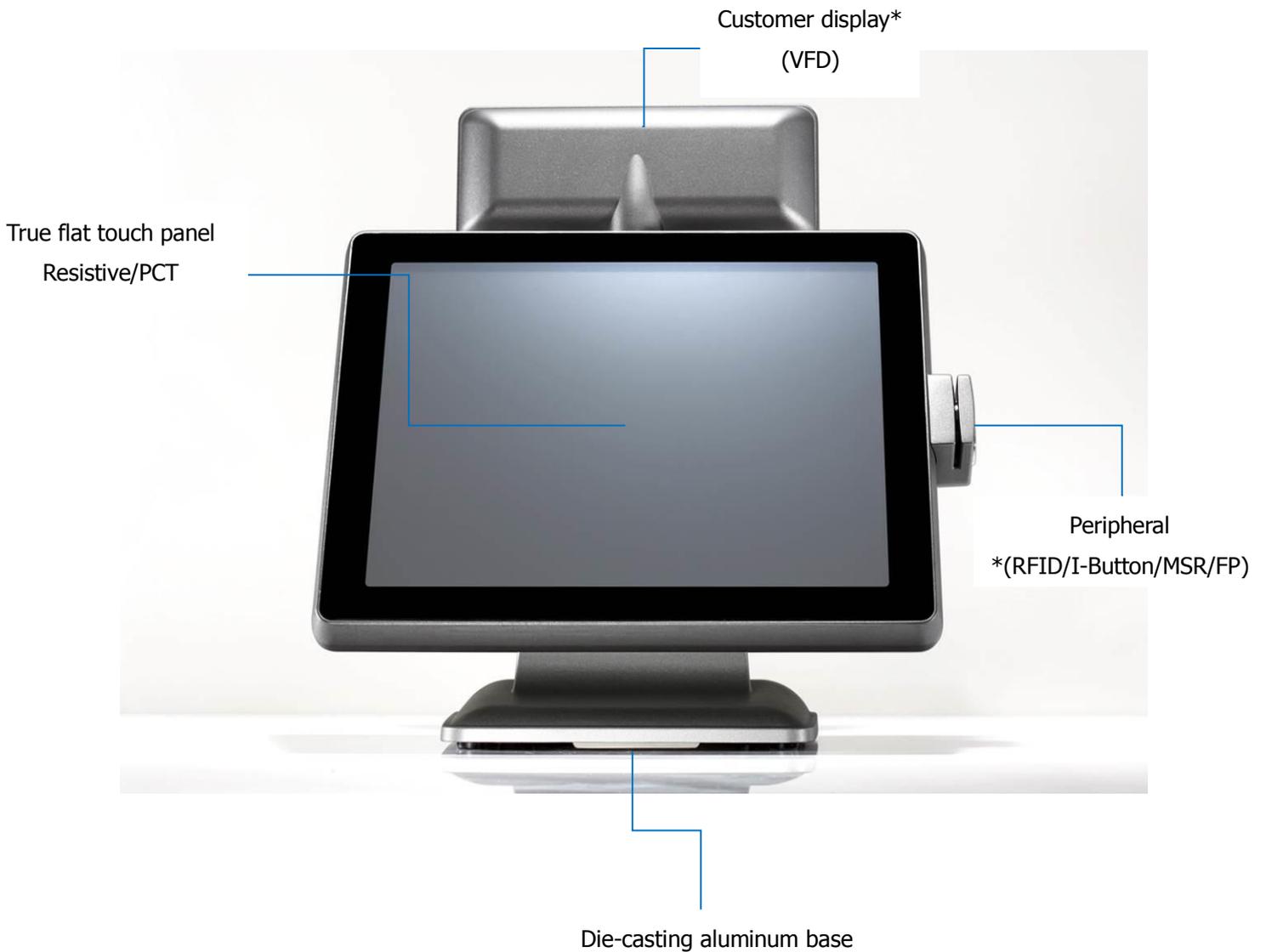
Package contents

【 VariPOS 715S™ 】

	
<p>VariPOS</p>	<p>Power adapter</p>
	
<p>Driver bank CD</p>	<p>Power cord</p>
	
<p>COM-RJ45 cable (x3)</p>	

Getting to know your VariPOS715S

Front view



*all peripherals are depends on customer's demand

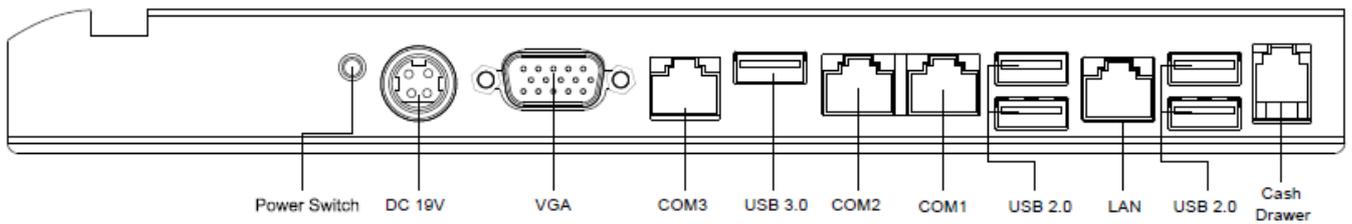
Rear view



*all peripherals are depends on customer's demand

I/O interface

【Standard Version】



Using the touch screen

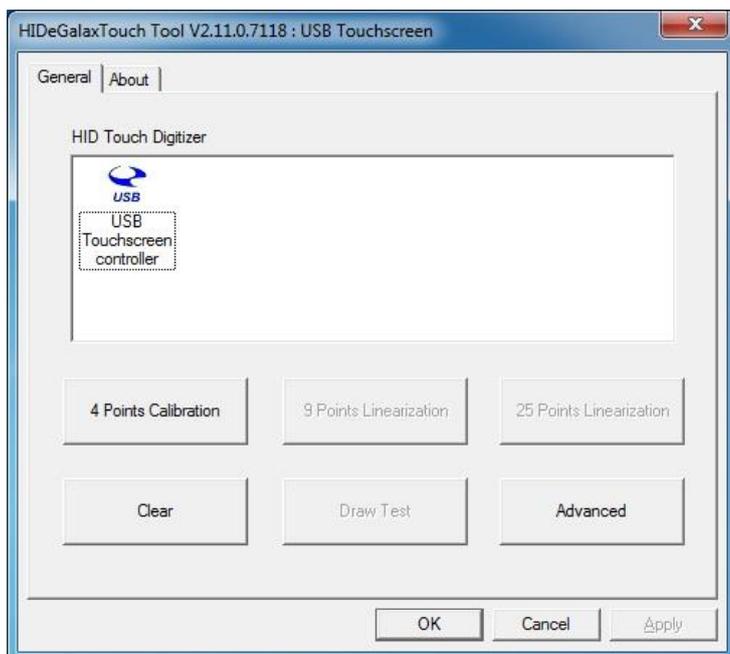
Touch Driver Installation:

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.

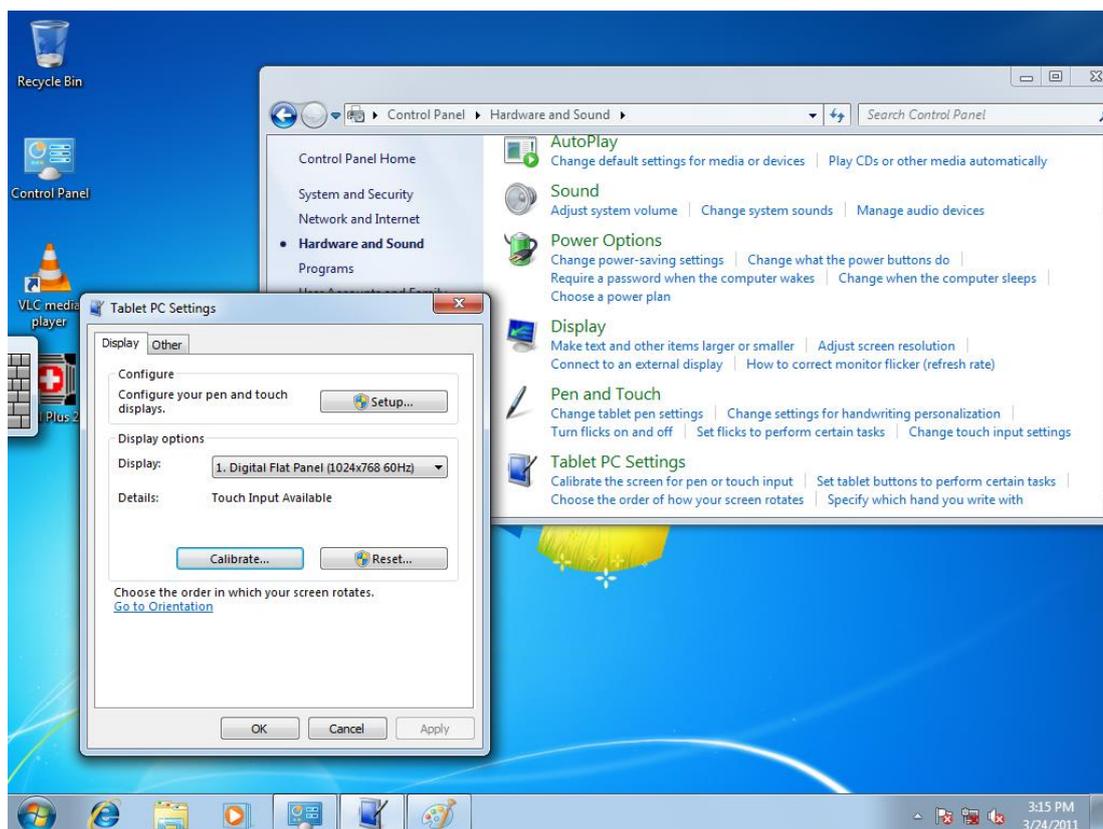
Please insert the Driver CD into the drive and double click on the "v2.11.0.7118" to pick up the models.

Notice:

1. Calibration with touch utility in WINXP/WIN7 for **Resistive touch**: please click the icon as picture below for "4 Points Calibration".



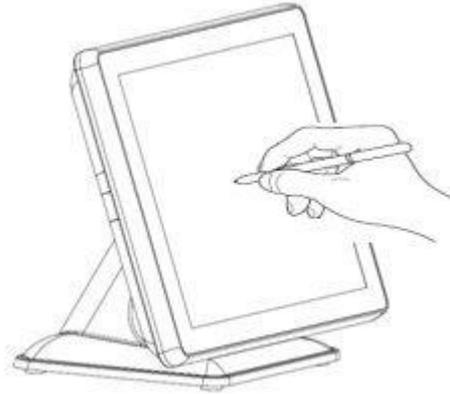
2. If you need further configuration please click "Advanced"
3. If you use the **PCT** touch panel, please refer to below picture to calibration in WIN7.



With a finger to touch, you can make VariPOS work at your command.

Your touch functions like a mouse device:

- Touch = left-click on the mouse
- Touch and hold = right-click on the mouse



Cleaning the touch screen

The touch screen requires periodic cleaning to achieve the best touch sensitivity. Keep the screen clean from foreign objects or excessive dust accumulation.

To clean the screen:

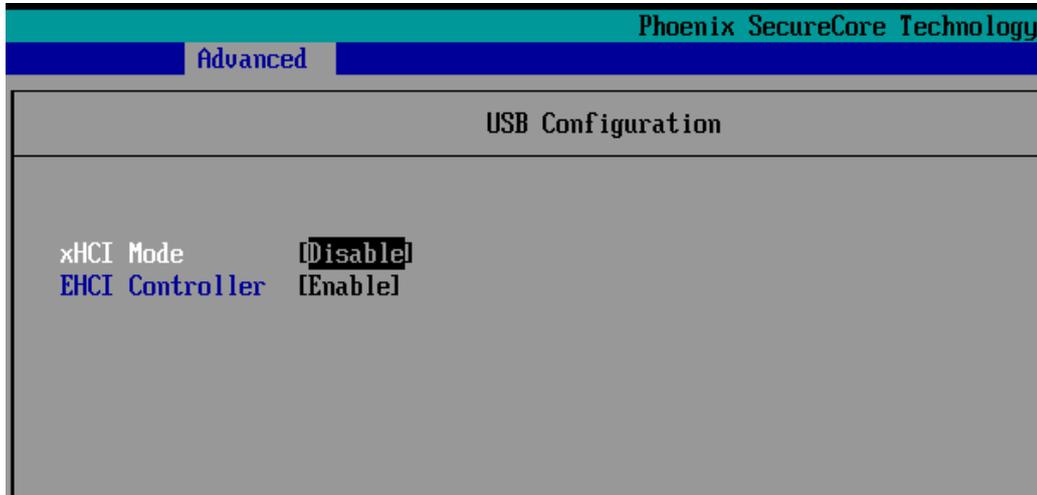
- Turn off the system and disconnect the power cord from the wall.
- Spray a small amount of a household glass cleaner onto the supplied cleaning cloth and gently wipe the screen surface.
- Do not spray the cleaner directly on the screen. (**Resistive touch panel only**)
- Do not use an abrasive cleaner or a coarse cloth when cleaning the screen.

USB3.0 installation and enable

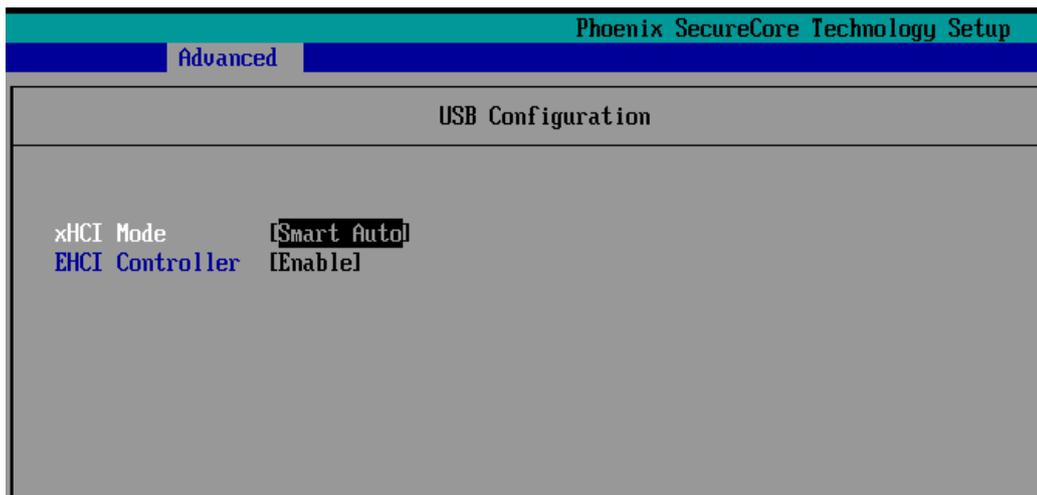
Step1: Update BIOS version to D36-150

BIOS Download link: <https://www.dropbox.com/s/4dy1sitq1ynxer/D36M-150.zip?dl=0>

Step2: XHCI mode [Disable] and EHCI Controller [Enable] then install Windows 7.



Step3: After installation Windows 7 is done, select BIOS XHCI mode to [Smart Auto].



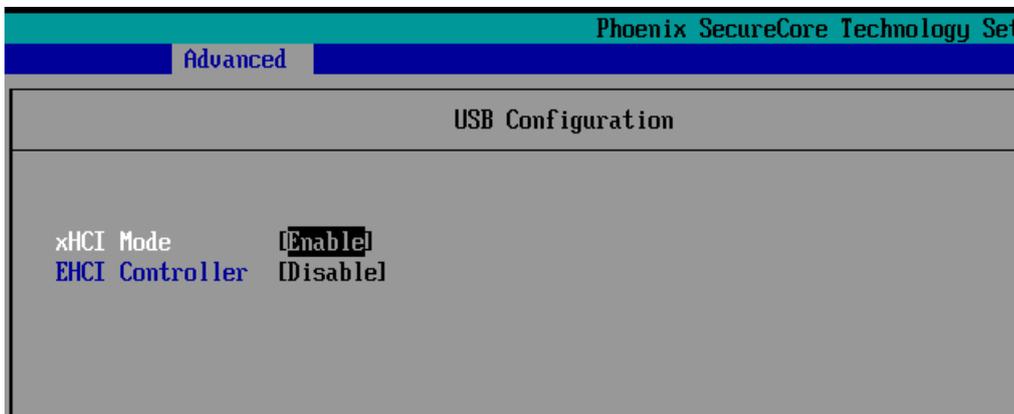
Step4: Install USB 3.0 driver in windows 7.



Step4-1: Install driver done.



Step5: When install USB 3.0 driver is done, adjust BIOS XHCI mode [Enable] and EHCI Controller [Disable].



Follow above steps now your USB 3.0 work well in Windows 7.

Specification

Motherboard	
CPU	Intel Bay Trail CPU Intel® Celeron J1900 quad-core 2.0GHz with L2 Cache 2MB (Fanless)
Chipset	CPU Integrated
System Memory	1 x SO-DIMM L(1.35V) DDRIII 1600MHz, up to 8GB
Display	
TFT LCD	38.1cm (15")
Brightness	250nits (LED Backlight)
Resolution	1024 x 768
Touch Screen	True Flat Projected Capacitive Technology / True Flat 5-Wire Resistive
Storage	
HDD / SSD Type	1 x SATA 6.4cm (2.5")HDD , SSD (optional)
I/O Ports -External	
DC Input	1 x Mini Din 4P (DC 19V only)
Cash Drawer	1 x RJ-11 (Power Pin 12V or 24V(default))
Network (LAN)	1 x Gigabit Ethernet by RJ-45
USB Port	4 x USB 2.0/ 1 x USB3.0
Serial Port	3 x RS-232(RJ48 connector) COM1/COM2/COM3 Pin9 w/RI/5V/12V Selectable by BIOS (default is RI)
VGA Port	1 x DB-15 VGA Port

I/O Ports -Internal	
Card Reader & I-Button	COM6 : Internal Pin header for Card Reader & I-Button
Audio	HD Audio, 2W Speaker x 2
Bus Expansion	1 x Mini-PCI-E Slot
Compliance	IP 66 on front panel
System Management	Desktop Management Interface (DMI)
	Preboot Execution Environment (PXE)
	Wake on LAN (WoL)
	Advanced Configuration and Power Interface (ACPI)
OS Support	Windows 7 Professional for Embedded Systems, Windows Embedded Standard 7, Windows Embedded POSReady 7
Power Supply	External adapter, DC Model:65 Watts, Voltage:+19VDC 3.42 A max
Material	Main Unit: Die-casting aluminum ; I/O Cover: Plastic
Color	Main Unit: Black
Certifications	CE, FCC, RoHS
Dimension(W x H x D)	370 x 300 x 236 mm
Weight	5.68 Kg (Aluminum Base: 1 Kg)
VESA Mounting	100 x 100mm
Operating Temperature	0°C ~ 40°C, 10% ~ 90% RH, non-condensing
Storage Temperature	-20°C ~ 60°C, 10% ~ 90% RH, non-condensing

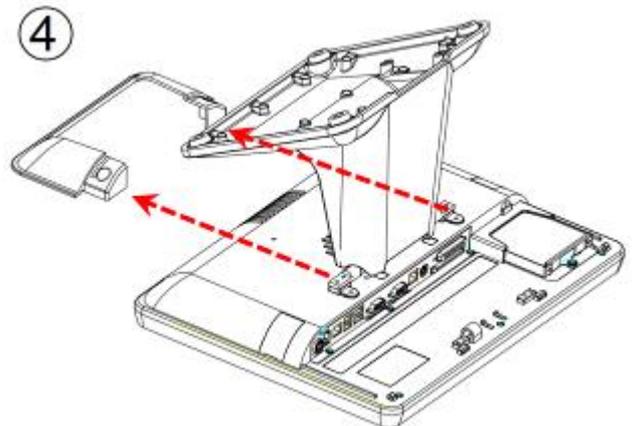
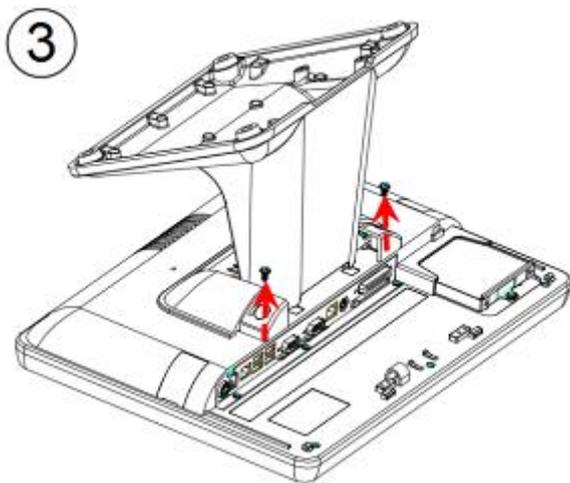
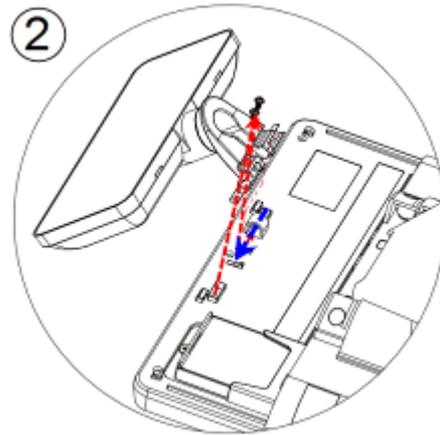
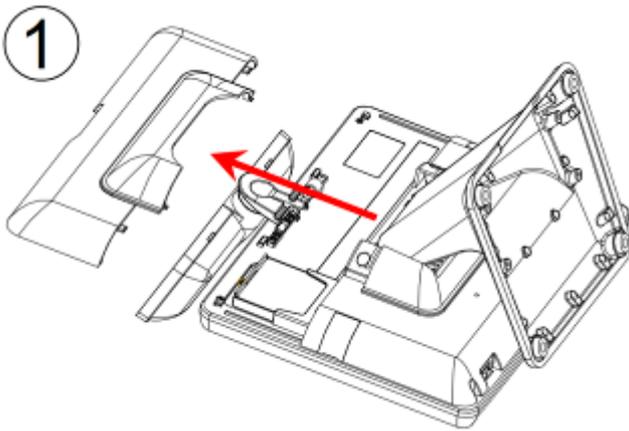
*Poindus reserves the right to change the specification without prior notice.

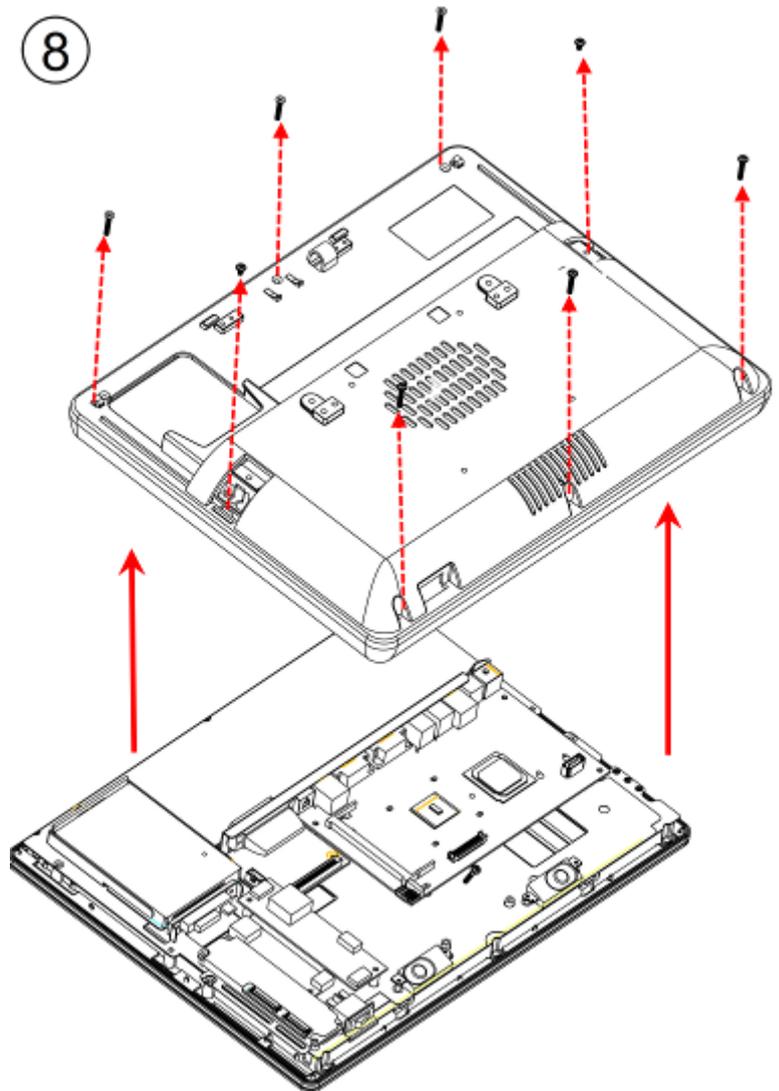
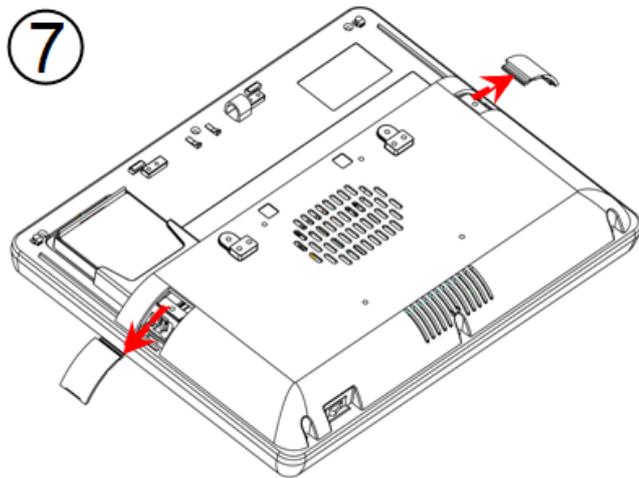
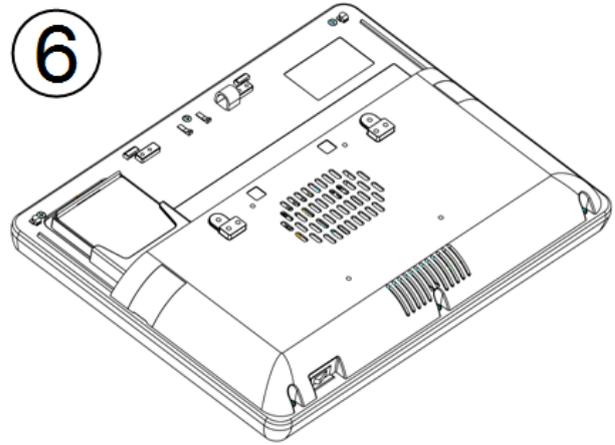
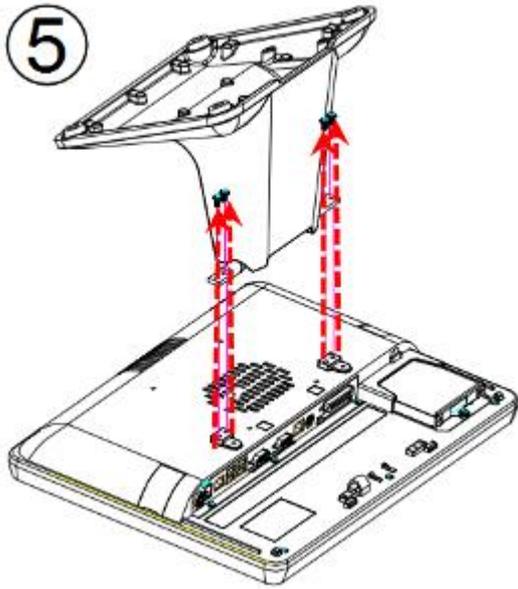
System Assembly & Disassembly

Open the System

To access the inside system, you need to open the system first and the procedure of opening the system is as below:

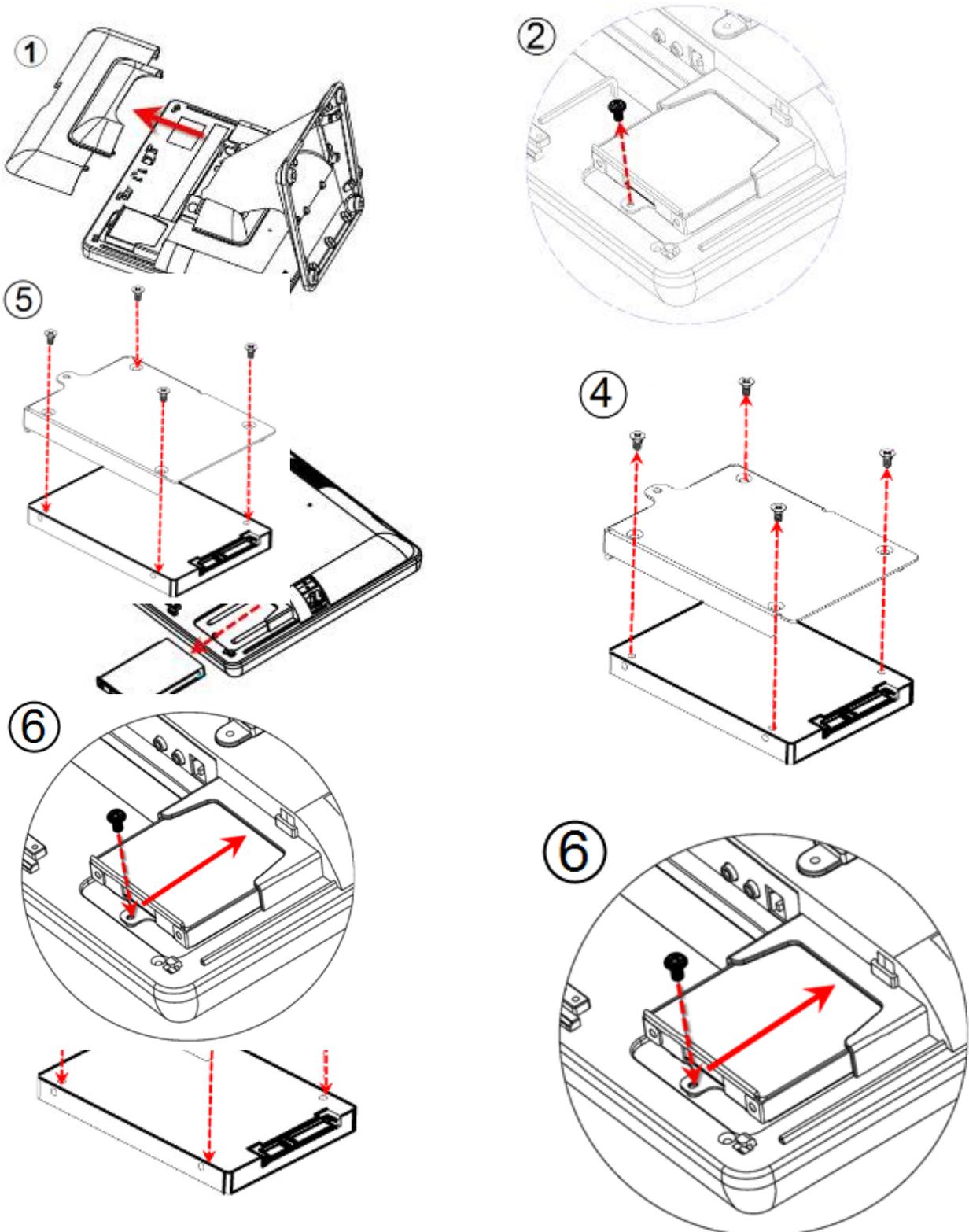
1. Open the back IO cover
2. Release the screws of VFD
3. Release the screws of hinge cover
4. Remove the plastic hinge cover parts
5. Release the screws of base
6. Open the plastic cover from two sides
7. Release the screws of aluminium back frame





Replace the HDD

1. Open the IO back cover
2. Release the 1x screw from HDD tray
3. Remove the HDD tray.
4. Release the 4 x round screws on the HDD tray and replace HDD
5. Screw 4 x round screws on the HDD tray and insert the HDD tray into the whole system HDD slot
6. Fix HDD tray on the system with the 1x screw



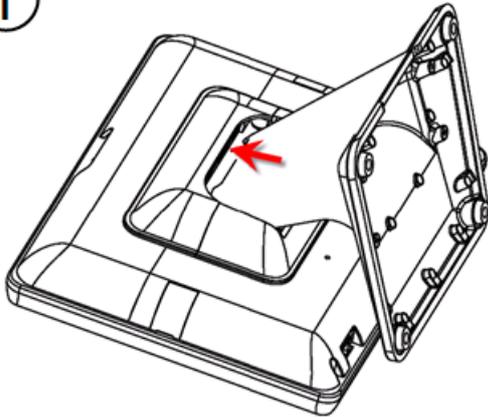
Screw Pack

Item	Part No.	Description	Q'ty
A	3SMFH30042N0	F-HEAD SCREW:M3*0.5-4mm,NI(for HDD)	4
B	3SMPW03042M0	P-HEAD SCREW:M3*0.5-4mm,NI(for HDD bracket)	2
C	3SMPW03061C0	P-HEAD SCREW:M3*0.5-6mm,NI black(to fasten VFD)	2
D	3SMPW03081C0	P-HEAD SCREW:M3*0.5-8mm,NI black(to fasten 2 nd display)	4

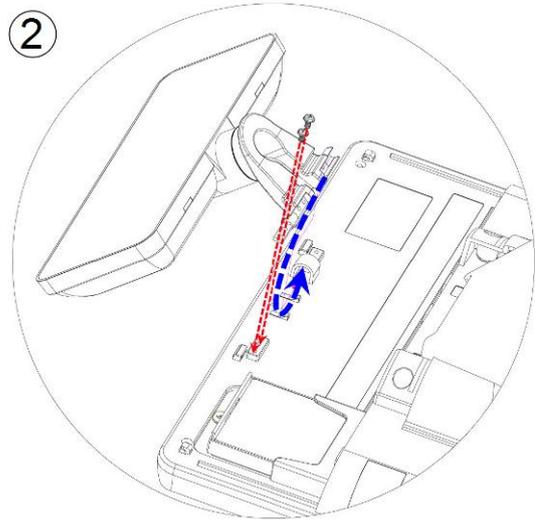
Install a Customer Display

1. Put the panel on the flat table & open the IO back cover of system.
2. Assemble the customer display hinge into the customer display slot and fasten 2 x screws.
3. Connect the customer display into COM3 via the cable management slot and adjust COM3 voltage to +12V in BIOS (refer to Chapter 6)
4. Fasten the IO cover into the right position and turn the system on the right position.

1



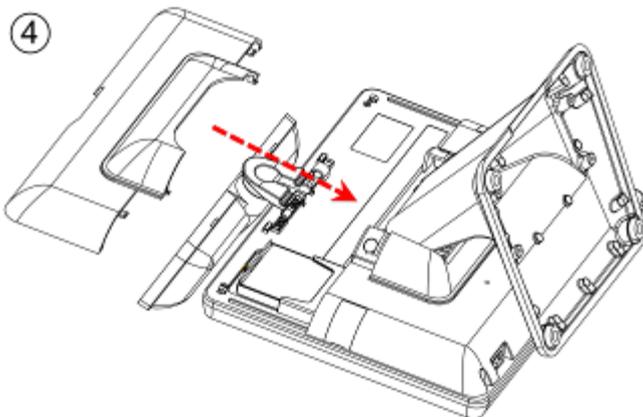
2



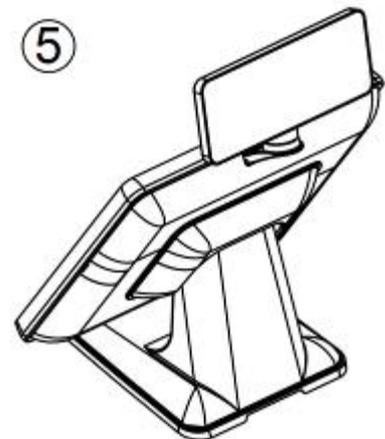
3



4



5



Install a Second Display

1. Slide the 2nd display hinge into the hinge holder on VariPOS.



2. Tighten the 4 screws that attached in the accessory box.



3. Plug the VGA cable to VGA port on the terminal.



4. Done

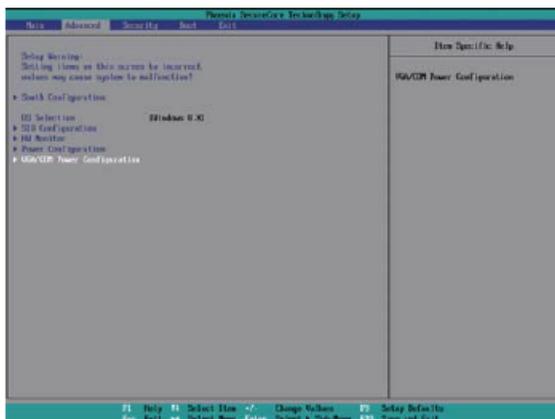


VariPRO715S Power configuration for COM PORTS and VGA PORT

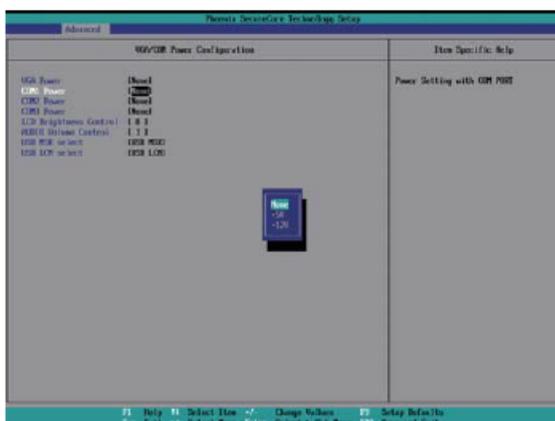
COM1/COM2/COM3 Power Setting

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 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.



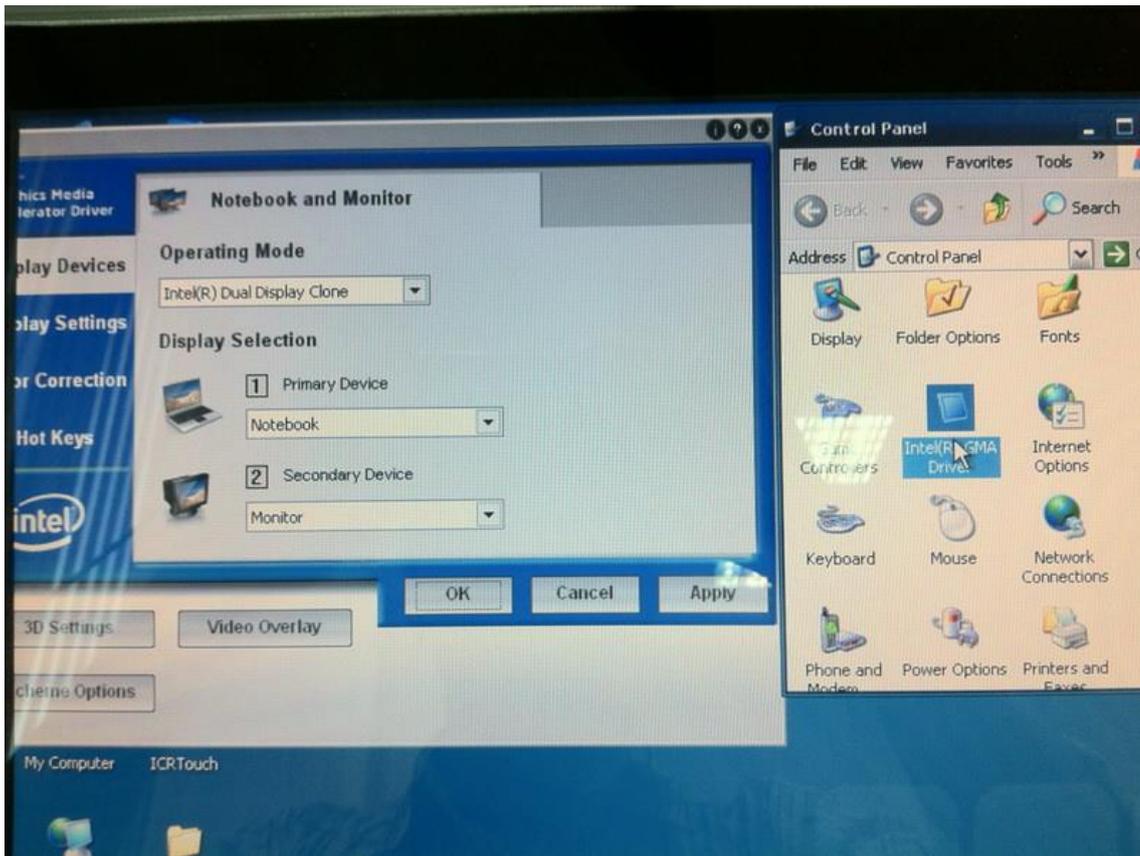
4. To enable the power, select COM1, COM2 or COM3 Power setting and press <Enter>. Select Power and press <Enter>. Save the change by pressing F10.



How to configure 2nd display resolution

1. Please access control panel → "Intel GMA Driver".

The Primary Device is "Notebook" and Secondary Device is "Monitor"



2. Clone mode, the resolution for both display is 800*600



3. Extend mode, the resolution for main display is 1024*768 and 2nd display is 800*600.

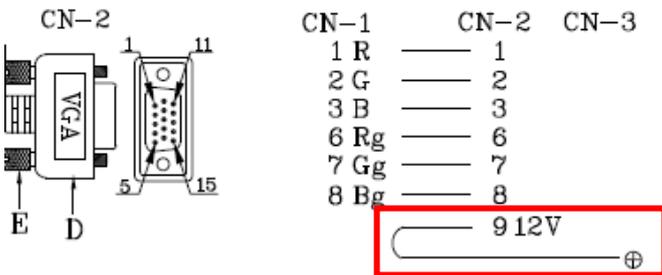


Notice:

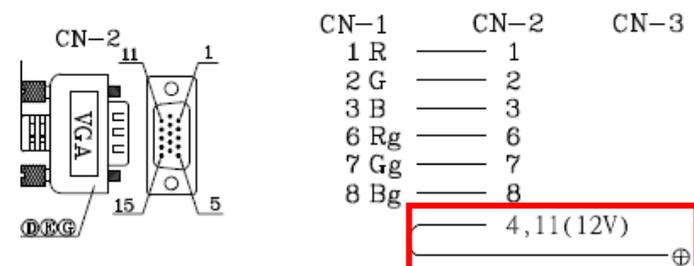
Due to the pin assignment* of VGA port of 2nd display are different between VariPOS and VariPOS S series.

When you order the 2nd display (7" or 10.4") please understand which product you will use.

*3CW000005080: 7" 2nd display VGA cable for VariPOS



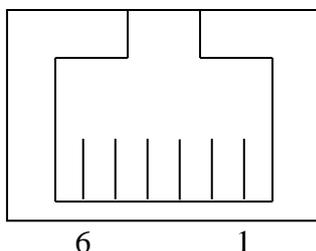
3CW000005120: 7" 2nd display VGA cable for VariPOS S series



Install a Cash Drawer

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

Cash Drawer Pin Assignment



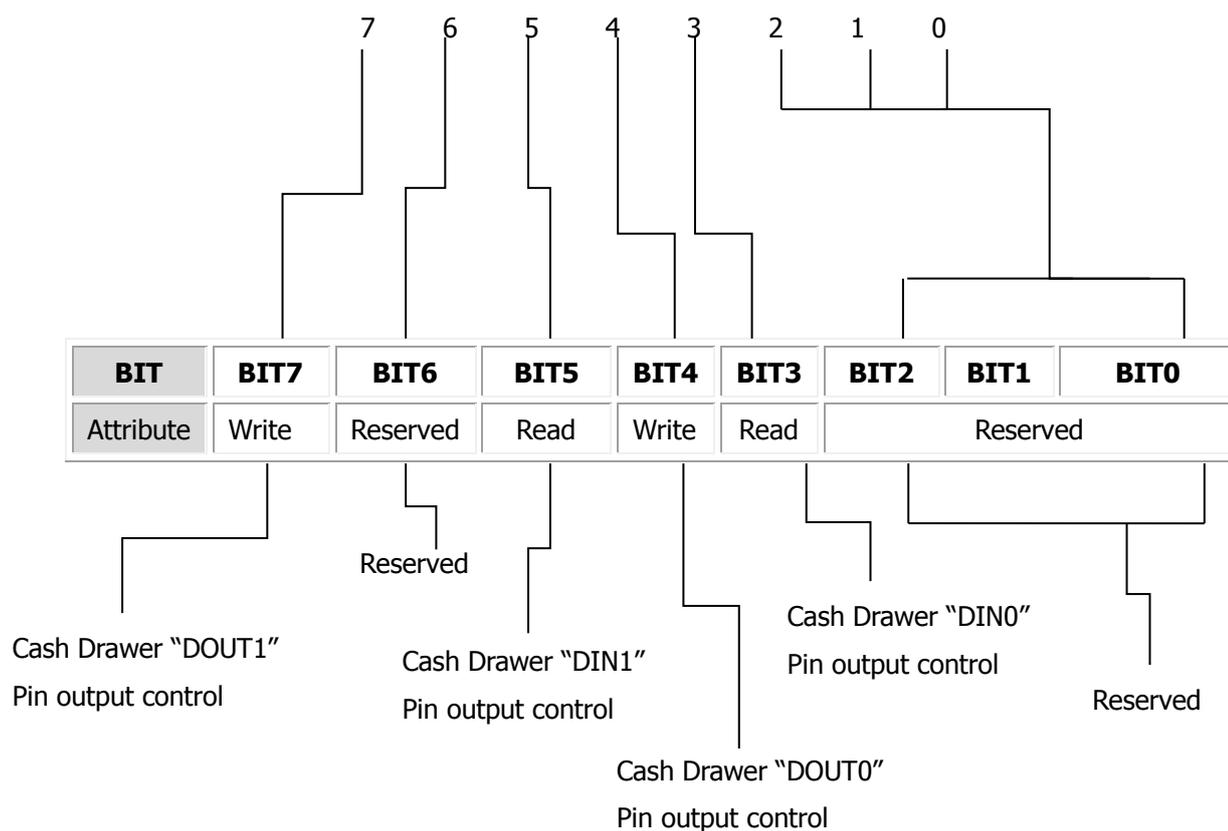
Pin	6	5	4	3	2	1
Signal	GND	DOUT bit1	12V/19V	DIN bit0	DOUT bit0	GND

Cash Drawer Controller I/O Address

Register Location: 482h

Attribute: Read / Write

Size: 8bit



Cash drawer bit define should be follow DIN0/DOUT0 for cash drawer 1 DIN1/DOUT1 for cash drawer 2:

Bit 0: Reserved

Bit 1: Reserved

Bit 2: Reserved

Bit 3: Cash Drawer "DIN0" pin output control.

= 1: the Cash drawer closed or no Cash Drawer

= 0: the Cash Drawer opened

Bit 4: Cash Drawer "DOUT0" pin output control.

= 1: opening the cash drawer

= 0: allow close the cash drawer

Bit 5: Cash Drawer "DIN1" pin output control.

= 1: the Cash drawer closed or no Cash Drawer

= 0: the Cash Drawer opened

Bit 6: Reserved

Bit 7: Cash Drawer "DOUT1" pin output control.

= 1: opening the cash drawer

= 0: allow close the cash drawer

Note: Please follow the cash drawer control signal to control the cash drawer

Cash Drawer Control Command Example

Use Debug.EXE program under DOS

Command	Cash Drawer
O 482 10	Open cash drawer
O 482 00	Allow to close

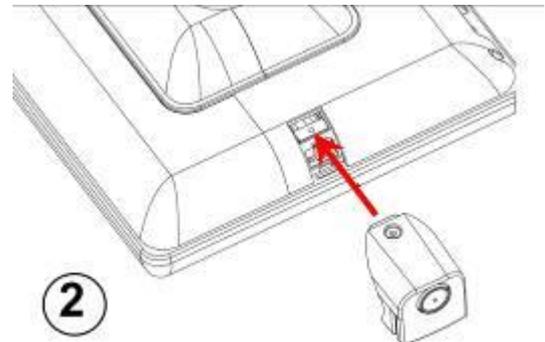
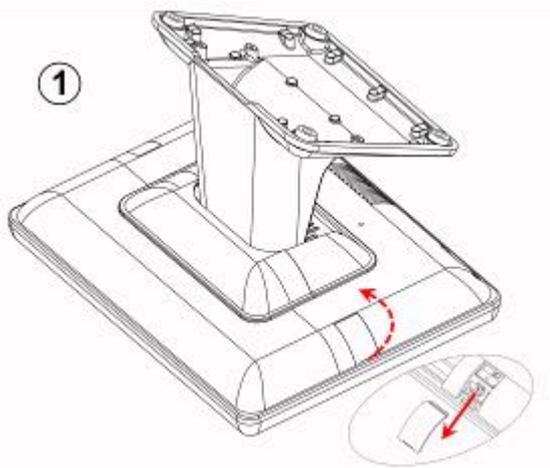
- Set the I/O address 482h bit4 =1 (opening cash drawer by "DOUT bit0" pin control)
- Set the I/O address 482h bit4 =0 (allow to close cash drawer)

Command	Cash Drawer
I 482	The status of cash drawer

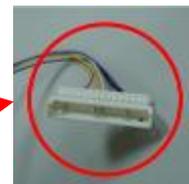
- The I/O address 482h bit3 =1 (Cash Drawer is opened or not exist)
- The I/O address 482h bit3 =0 (Cash Drawer is closed)

Install the MSR & I-Button Reader

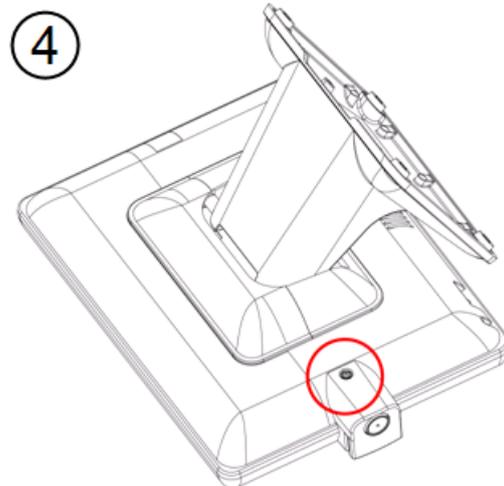
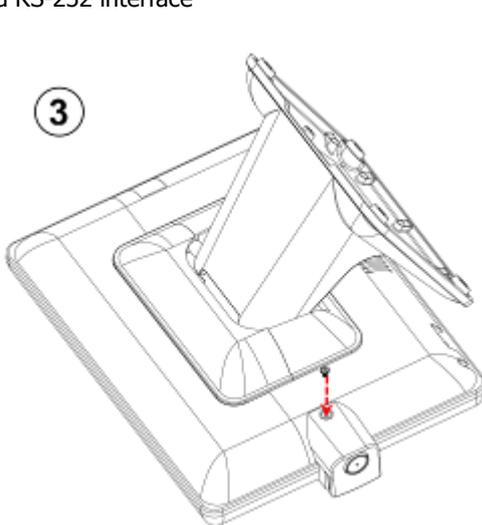
1. Open the right side cover of system. * MSR connection is supported on the right side
2. Connect MSR to System connector, system connector supports PS/2 and RS-232 interface.
3. Fasten the MSR screw on system



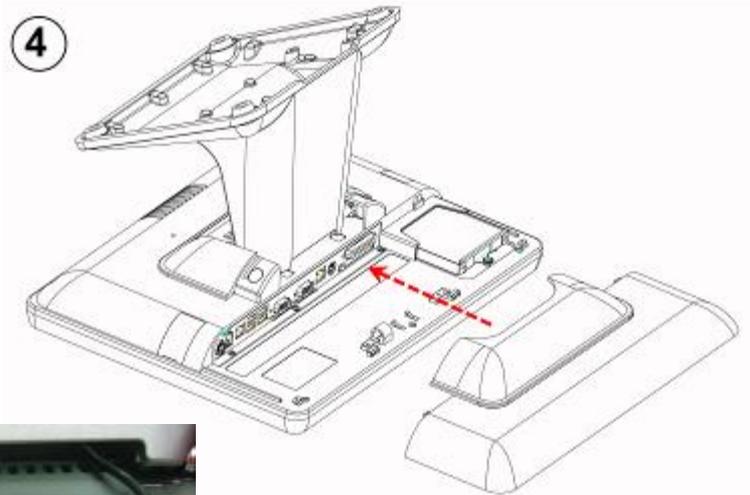
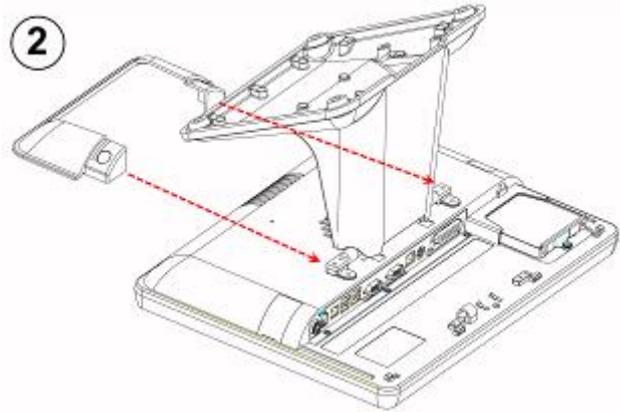
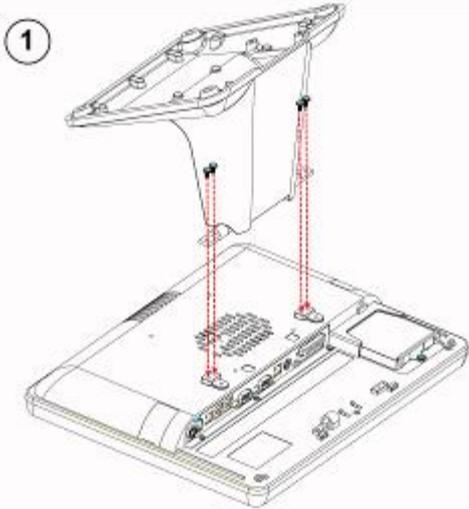
System connector supports PS/2 and RS-232 interface



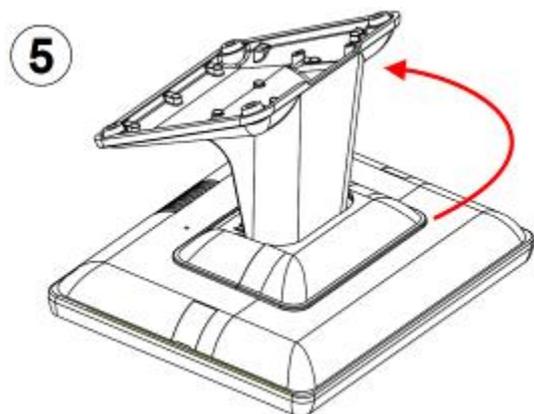
MSR: RS-232 Interface



Install the Die-casting aluminum base

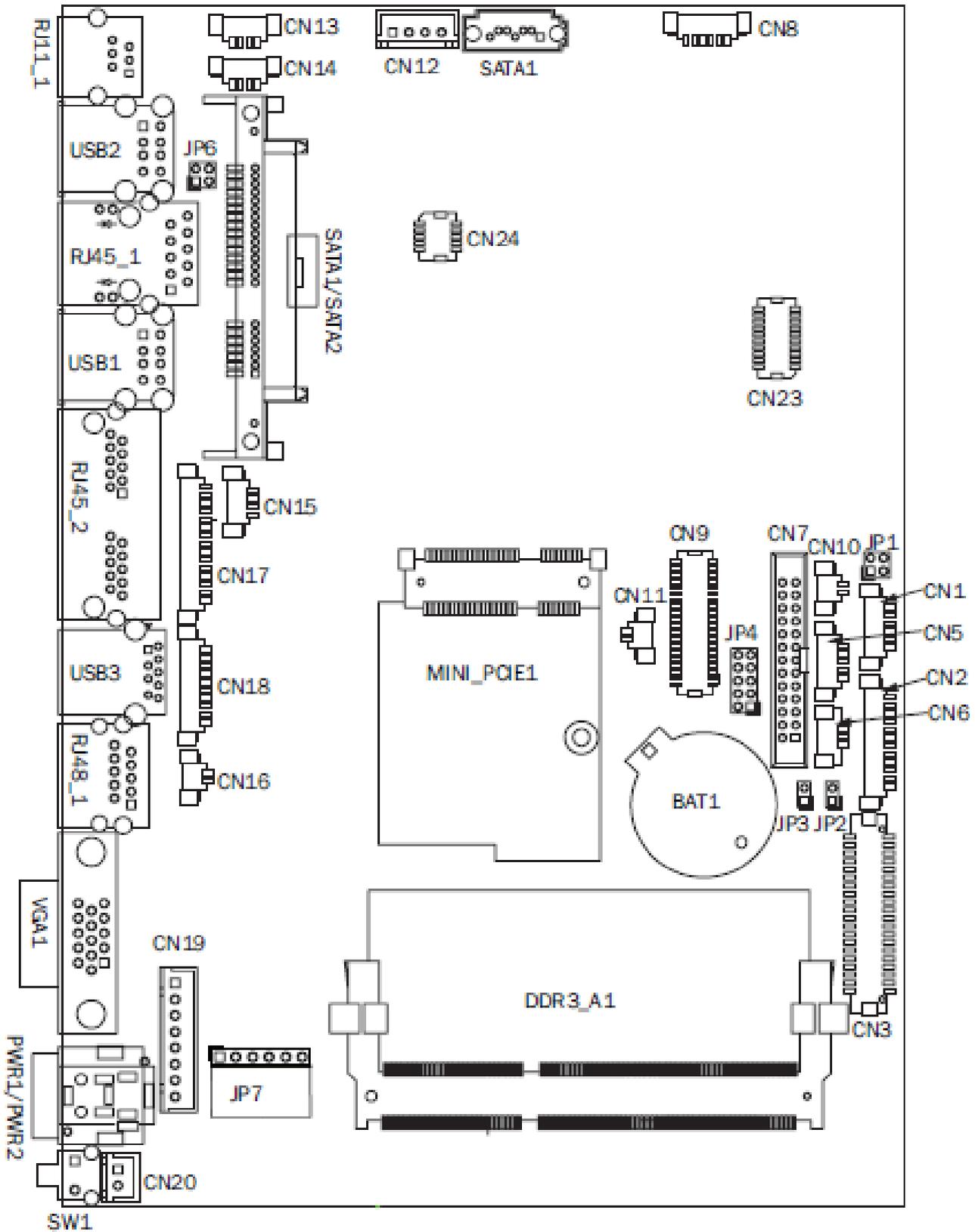


Power & VFD Cable Management



Motherboard information

Motherboard Layout



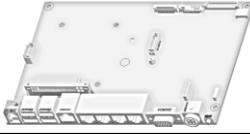
Connectors & Jumper Settings

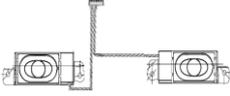
Connector	Function
CN1	Front I/O board
CN2	Inverter connector
CN3	LVDS connector
CN6	System FAN connector
CN7	LPT port connector
CN8	Speaker & MIC connector
CN9	40 pin external connector
CN10	HDD LED connector
CN11	Power LED connector
CN12	SATA power connector
CN13/14	USB port (internal)
CN15	PS2 keyboard connector
CN16	LPT touch
CN17	MSR connector
CN18	COM5 (touch) connector
CN19	Wide Range
CN20	Power button (internal)
CN21	LCM connector
CN22	POS325 51 pin 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

JP6: Cash Drawer

SJ1	Description
1-2	+19V
3-4	+12V

Spare parts List

Part Number	Photo	Description
731PA98TH011		SPARE PARTS: TOUCH RESISTIVE 15.2" FG, 6PIN(5-Wire) MILDEX
731PA98TH020		SPARE PARTS: BEZEL+MILDEX(G1F) PCAP TF TOUCH
51D360V10001		SPARE PARTS: MB D36 Bay Trail J1900 W/4PIN DC-JACK/LVDS/AUDIO/51PIN/TOUCH/EC
6RMS02G5AA00		RAM SO-DIMM 2G DDR3 (1.35V)
6RMS04G5AA00		RAM SO-DIMM 4G DDR3 (1.35V)
6HD14320C201		HDD SATAIII 2.5" 320GB 5400RPM 7MM WD (WD3200LPVX-00V0TT0)
731PA98PN010		PANEL LED 15" LED INNOLUX XGA(1024*768) 250NITS +LVDS CABLE
6PWA0651B802		POWER ADAPTER 65W/19V
3CXMS220260A		Y CABLE SATA 7P+15P(HDD) W/SCREW HOLE TO SATA 90° W/LOCK 7P/4P P=2.5 L=345+325mm
3CW000005050		CABLE 15P(MB) TO 15P(MSR) P=1.25 L=230
3CW112051200		CABLE 12P(MB) P=1.25 TO 5P(LED BACKLIGHT), L=250

<p>3CWW04043200</p>		<p>CABLE 4P(DOCKING BD) TO 4P(USB BD) P=1.25 L=400 FOR J2 580</p>
<p>3CWL40205700</p>		<p>CABLE 40P(MB) TO 20P(LCD) L=390 15" AU 24BIT 250NITS "G150XG03 V.0"</p>
<p>3CWS02SW1201</p>		<p>CABLE+SWITCH 2P TO ROCK SWITCH 2P L=400 ATX POWER</p>
<p>3XWK2W14001A</p>		<p>SPEAKER 2W/8Ω 80db W/CABLE 6P P=1.25 L=450mm</p>
<p>3CMD9MJT0100</p>		<p>CABLE DB9(M) TO 10P(RJ-45)+NUT SERIAL L=250</p>

Version Change History

Version	Change Date	Change Content
V1.0	Jul, 2014	1 st Release
V1.1	Jul, 2015	Add dual cash drawer function