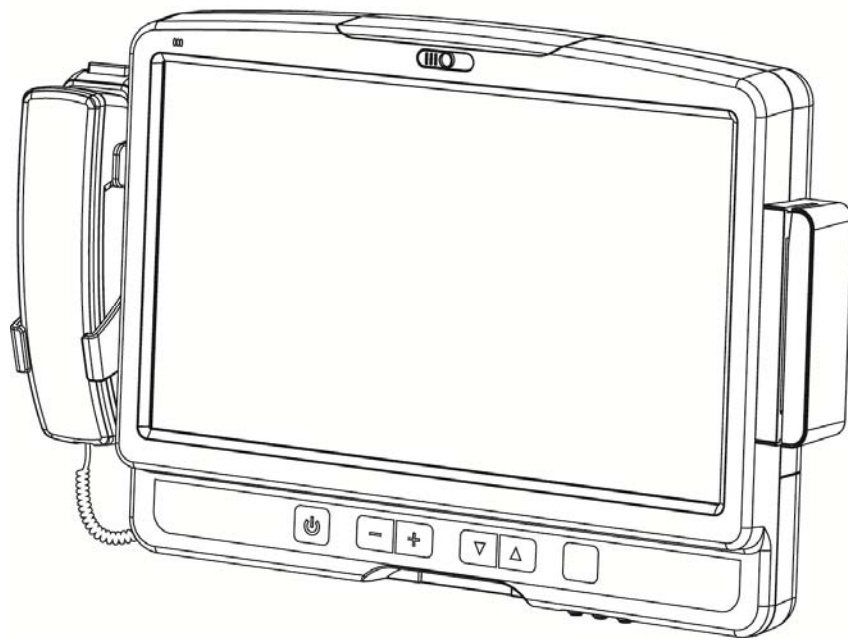


# User Manual

Version 1.1 September 2014

## Bedside Terminal Hardware System



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Manual Version 1.1

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# Safety

## IMPORTANT SAFETY INSTRUCTIONS

1. To disconnect the machine from the electrical Power Supply, turn off the power switch and remove the power cord plug from the wall socket. The wall socket must be easily accessible and in close proximity to the machine.
2. Read these instructions carefully. Save these instructions for future reference.
3. Follow all warnings and instructions marked on the product.
4. Do not use this product near water.
5. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious damage to the product.
6. Slots and openings in the cabinet and the back or bottom are provided for ventilation; to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
7. This product should be operated from the type of power indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
8. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
9. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
10. To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.)
11. No modification of this equipment is allowed.



**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

UL



MEDICAL EQUIPMENT  
WITH RESPECT TO ELECTRIC SHOCK  
FIRE AND MECHANICAL HAZARDS ONLY  
IN ACCORDANCE WITH ANSI/AAMI ES60601-1  
AND CAN/CSA-C22.2 No. 60601-1:08

## Class I equipment

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

## 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

## ATTENTION



Attention, consult ACCOMPANYING DOCUMENTS

External equipment intended for connection to signal input/output or other connectors, shall comply with relevant UL standards (e.g. UL 60950-1 for IT equipment and UL 60601-1 / IEC 60601-1 series for medical electrical equipment)."

Anyone who connects additional equipment to the signal input part or signal output part is configuring a medical system, and is therefore, responsible that the system complies with the requirements of the system standard IEC 60601-1

## Caution!

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## 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 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.

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.

## Troubleshooting

For your own safety and that of your equipment, always take the following precautions. Disconnect the power plug (by pulling the plug, not the cord), from your computer if any of the following conditions exists:

- The power cord or plug becomes frayed or otherwise damaged.
- You spill something into the case.
- Your computer has been dropped or the case has been otherwise damaged.
- You suspect that your computer needs service or repair.
- You want to clean the computer or screen.
- You want to remove/install any parts.

Repair of the device may only be carried out by trained service personnel. We recommend that a service contract be obtained with supplier and that all repairs also be carried out by them. Otherwise the correct functioning of the device may be compromised.



Please read the user manual

# Revision History

Revision	Date	Description
V1.0	June, 2011	<ul style="list-style-type: none"><li>● Release</li></ul>
V1.1	August, 2014	<ul style="list-style-type: none"><li>● Remove C43 motherboard</li><li>● Add C73 motherboard</li><li>● Replace MSR module with 2<sup>nd</sup> smart IC card reader</li></ul>

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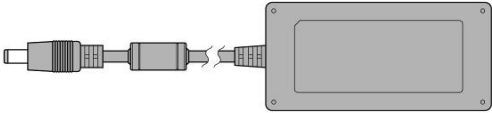
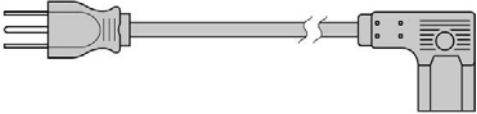
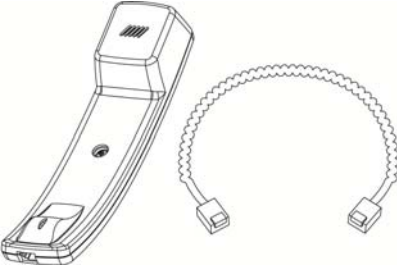
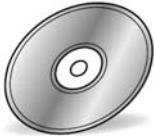
# 1 Intended Use

According to the Instructions for Use (IFU) of the manufacturer, the Bedside Terminal has the following intended use:

The Bedside Terminal Hardware System is a computing device capable of storing, retrieving and sending data electronically. This Bedside Terminal Hardware System, including its user interface, battery, PCB and power supply, is intended to be fixed to a stand in medical care environment. This Bedside Terminal Hardware System must be operated by professional personnel.

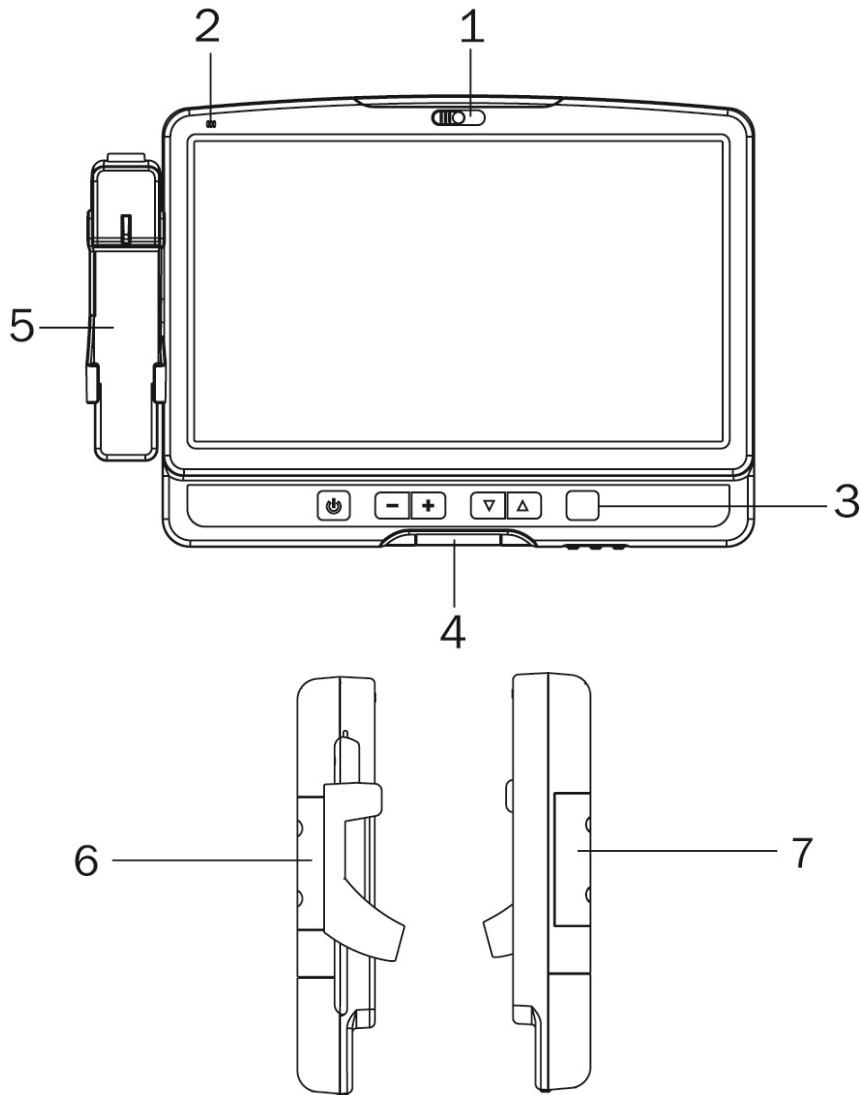
# 2 Item Checklist

## 2-1 Standard Items

	
a. System	b. Power adapter (60W)
	
c. Power cable	d. Phone module
	
e. Driver CD	

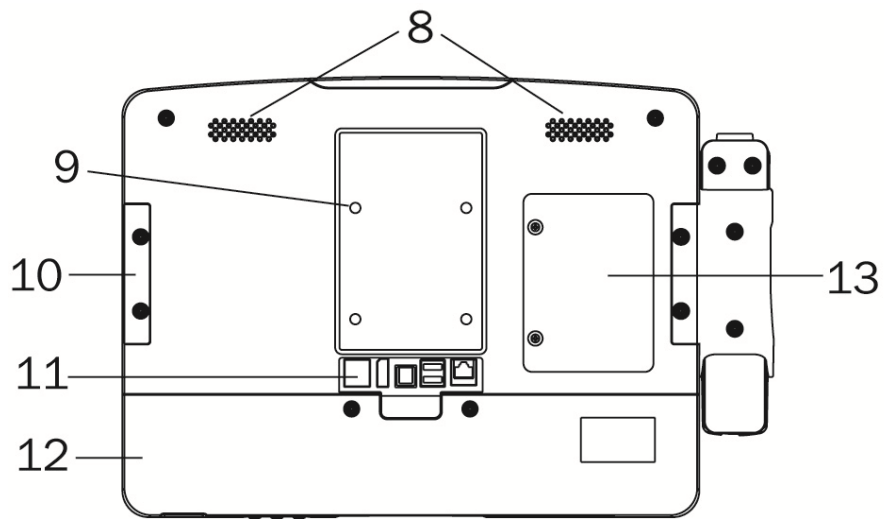
# 3 System View

## 3-1 Front View & Side View



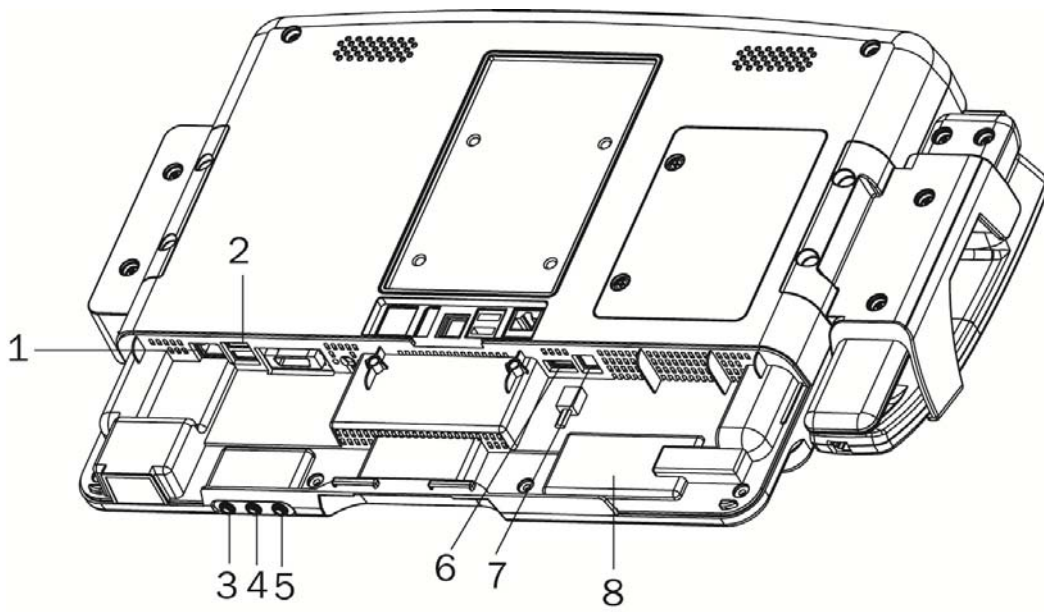
No.	Description
1	Build-in camera
2	Build-in microphone
3	Key pad (power, volume button)
4	Smart card reader slot
5	Phone
6	Phone holder
7	2 <sup>nd</sup> smart card reader dummy cover

### 3-2 Rear View



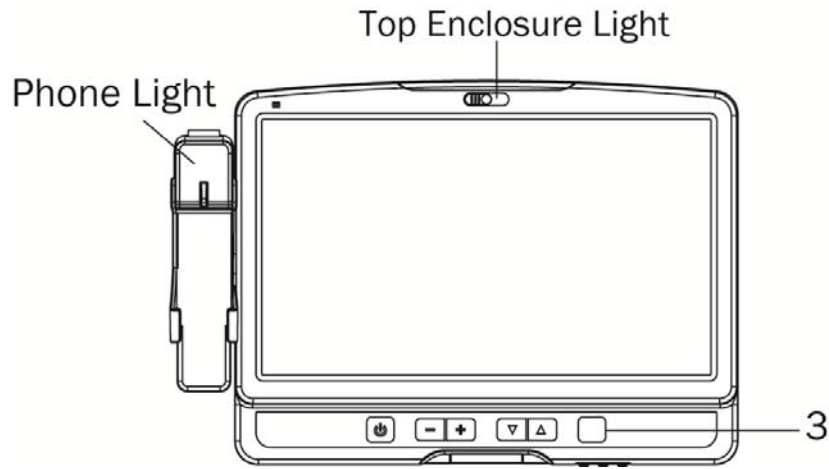
No.	Description
8	Speakers
9	VESA holes x 4
10	2 <sup>nd</sup> smart card reader dummy cover
11	Rear I/O (from right to left: RJ48, USBx2, DC-IN, Display port , LAN)
12	Cable cover
13	HDD door

### 3-3 I/O View



No.	Description
1	LAN (RJ45)
2	USB x 2
3	USB x 1
4	Phone Jack (RJ11)
5	Audio Line-out
6	Audio Line-in
7	Audio MIC-IN
8	RFID sensor

### 3-4 Indicator Lights



Light	LED Color	Status
Top enclosure light	blue	ornament light
Phone light	blue	phone rings

Symbols on Label and abbreviations on this equipment (from left to right):

- Power on/off
- Volume down
- Volume up
- Channel down
- Channel up

# 4 Driver Installation

## 4-1 Driver List

Folder/File	File Description
<CD>:\ K936_C73.htm	Driver List
<CD>:\COMMON\INTEL\Chipset\i9xx	Chipset Driver
<CD>:\COMMON\INTEL\VGA\GMA3150	VGA Driver
<CD>:\COMMON\Audio\Realtek_HD_Codec-AEC_enable	Audio driver with AEC enable
<CD>:\COMMON\ POS_Touch	POSTouch Driver
<CD>:\COMMON\Lan_driver\Intel	10/100/1000Mb LAN Driver

-The following procedures are for Windows 2000/XP, other platforms are similar.

## 4-2 Chipset Driver Installation

Function	OS	Note
Chipset	Windows	Installation Guide
Intel SATA AHCI	Windows XP driver	User manual
	WinXP	Installation Guide
	WinXP (64bit)	
VGA	Vista	
	Vista (64bit)	
	Win7	
	Win7 (64bit)	
	Linux	



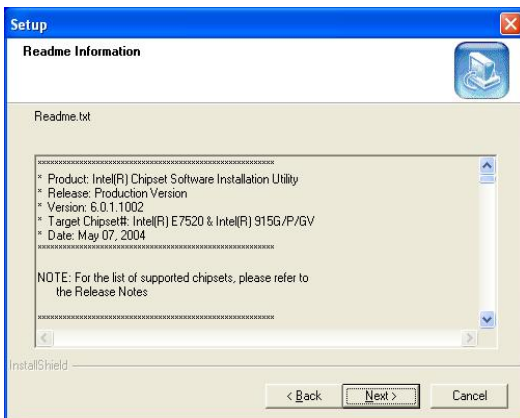
- Click “Windows” in the Driver List menu of K936 C43 and then double-click “v9.1.1”
- Double-click “infinsts911\_autol.exe” on the My computer window.



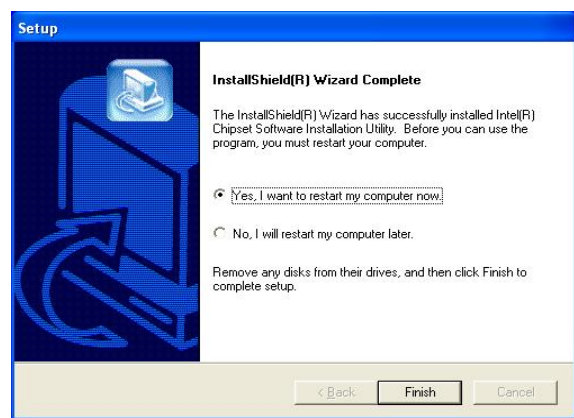
- Click the “Next” button on the Welcome window.



- Click the “Yes” button on the License Agreement window.



- Click the “Next” button on the Readme Information window.

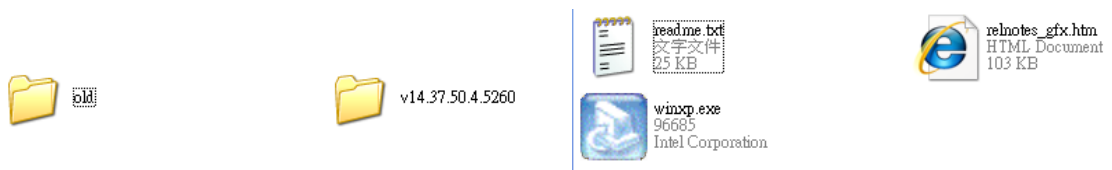


- Click the “Finish” button and restart your system.

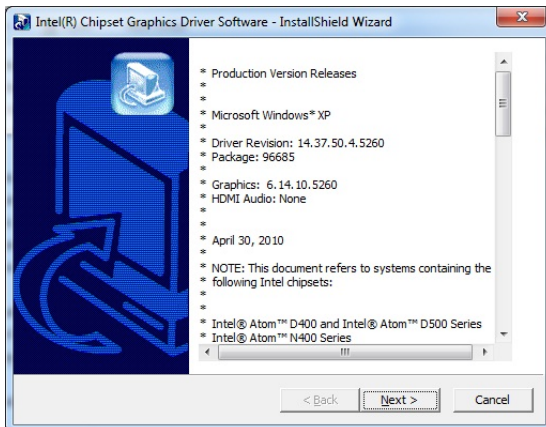


## 4-3 VGA Driver Installation

Function	OS	Note
<a href="#">Chipset</a>	<a href="#">Windows</a>	<a href="#">Installation Guide</a>
<a href="#">Intel SATA AHCI</a>	<a href="#">Windows XP driver</a>	<a href="#">User manual</a>
<a href="#">VGA</a>	<a href="#">WinXP</a>	<a href="#">Installation Guide</a>
	<a href="#">WinXP (64bit)</a>	
	<a href="#">Vista</a>	
	<a href="#">Vista (64bit)</a>	
	<a href="#">Win7</a>	
	<a href="#">Win7 (64bit)</a>	
	<a href="#">Linux</a>	



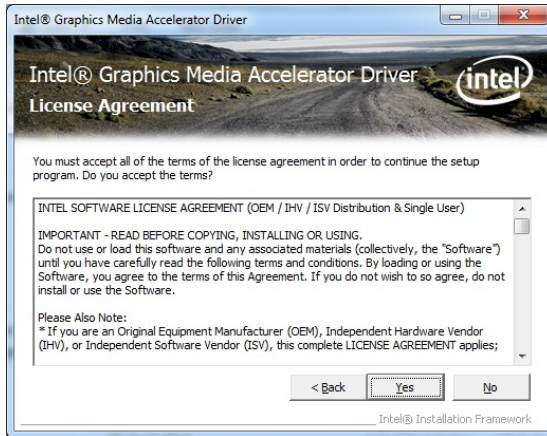
- Click “WinXP” of “VGA” section in the Driver List menu and then double-click “v14.37.50.4.5260”
- Double-click “winxp.exe” on the My computer window..



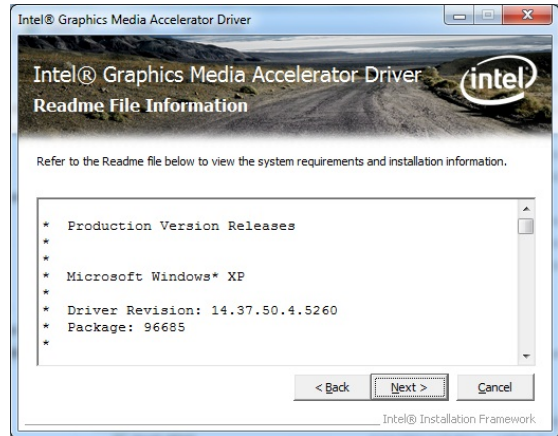
- Click the “Next” button on the Intel(R) Chipset Graphics Driver Software- Install Shield(R) Wizard dialog.



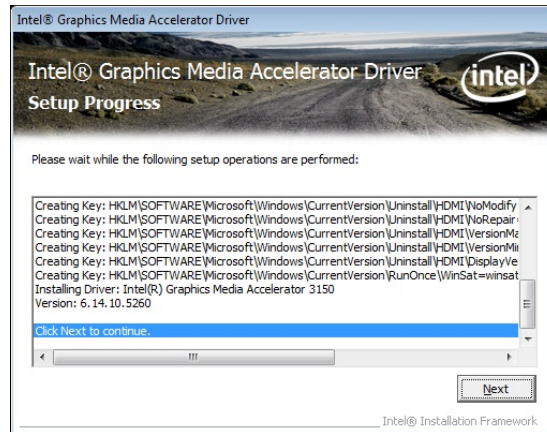
- Click the “Next” button on the Intel(R) Graphics Media Accelerator Driver dialog.



e. Click the “Yes” button on the Intel(R) Graphics Media Accelerator Driver dialog.



f. Click “Next” button on the Intel(R) Graphics Media Accelerator Driver dialog.



g. Click “Next” button on the Intel(R) Graphics Media Accelerator Driver dialog.



h. Select “Yes, I want to restart my computer now” and click the “Finish” button on the Intel(R) Graphics Media Accelerator Driver dialog.

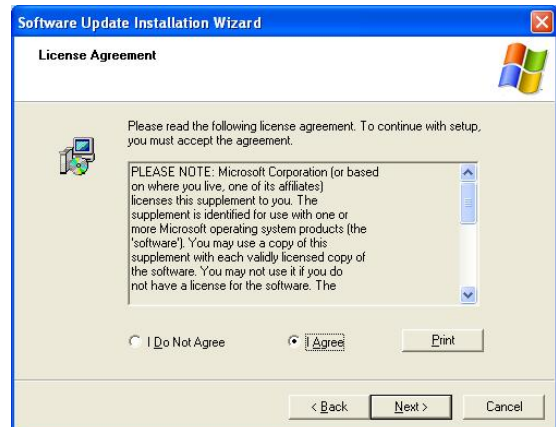
## For WinXP and POSReady 2009 upgrade

VGA Upgrade	WinXP	For WinXP & POSReady 2009
-------------	-------	---------------------------

a. Click “WinXP” of “VGA” section in the Driver List menu.



b. Click the “Next” button on the Software Update Installation Wizard dialog.



c. Click “I Agree” and click “Next” button on the Software Update Installation Wizard dialog.



d. Click the “Finish” button on the Software Update Installation Wizard dialog to restart your system.

## 4-4 Audio Driver Installation

Audio <ul style="list-style-type: none"><li>• <a href="#">Realtek HD Codec with AEC enable</a></li></ul>	<a href="#">Windows</a>	<ul style="list-style-type: none"><li>• Default enable AEC function</li><li>• <a href="#">User's manual</a></li></ul>
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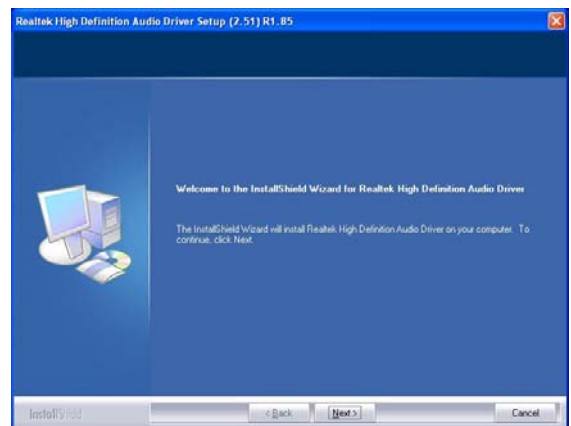
a. Click “Windows” of the “Audio” section in the Driver List menu.



b. Double-click “R254+AEC” on the My Computer window.



c. Double-click “Setup.exe” on the My Computer window.



d. Click “Next” button on the Realtek Audio Setup window.



e. Click “Finish” button on the Realtek Audio Setup window.

## 4-5 10/100/1000Mb LAN Driver Installation

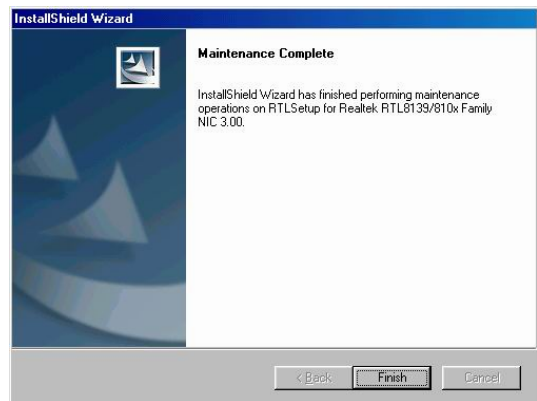
1000Mb LAN	<a href="#">DOS</a>	
• <a href="#">Intel</a>	<a href="#">Windows</a>	
	<a href="#">Windows(64bit)</a>	
	<a href="#">Linux</a>	



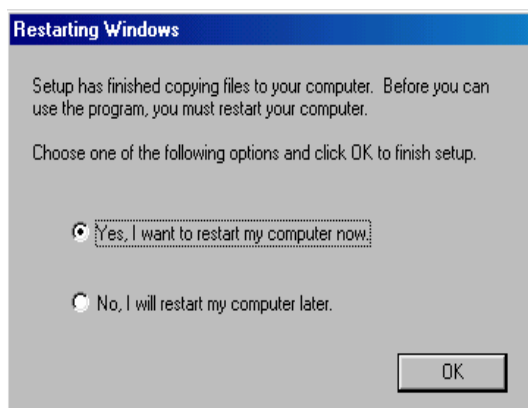
- In the "intel" section, click on "Windows" and click on "Alpha"
- Double-click "v15.6"



- Double-click Setup.exe



- Click the Finish button on the Maintenance Complete window.



- Click the OK button and restart your system.

## 4-6 POSTouch Driver Installation



a. In the “Touch Screen auto...” section, click “Windows”.



b. Click “Install Touch Driver” on “FT Touch Auto Install V1.0.4.1” window to detect the touch type in your system.



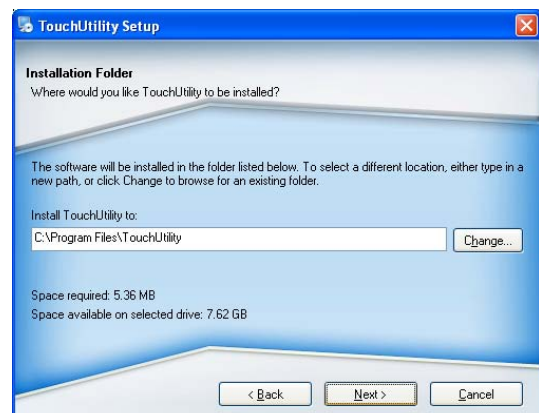
c. “FT Touch Auto Install” program will detect what touch type and interface being installed on the system.



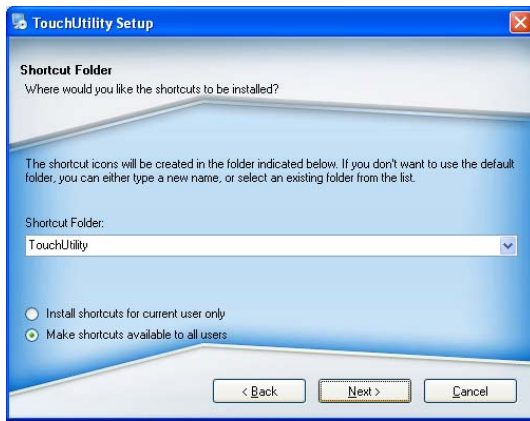
d. Click “Next”.



e. Select “I agree...” and click “Next”.



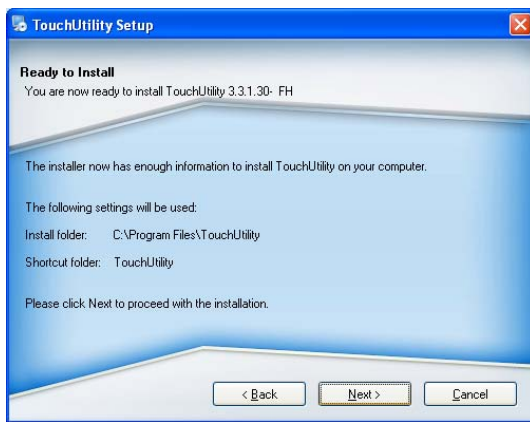
f. Select the installation folder for the touch utility driver and click “Next”.



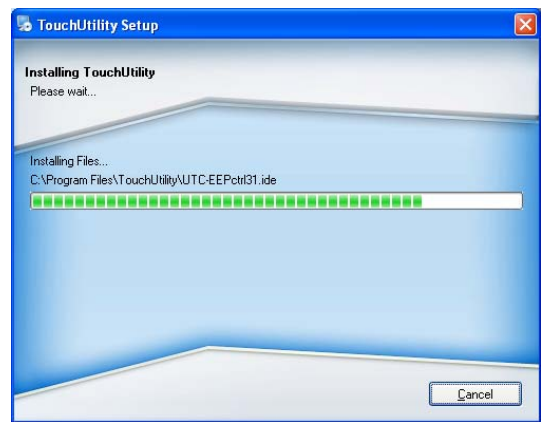
g. Select the shortcut folder for the touch utility driver and click "Next".



h. Click "Next".



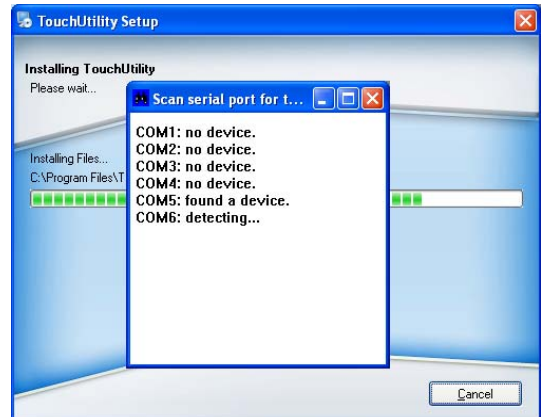
i. Click "Next".



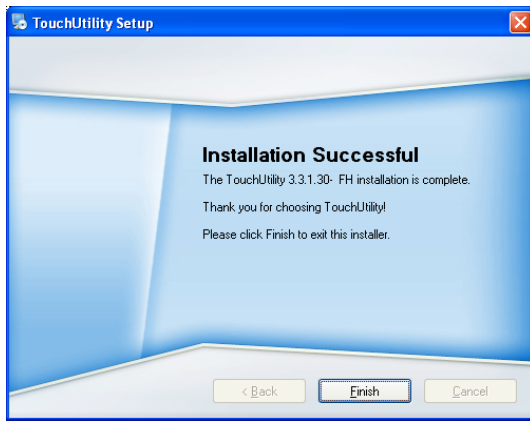
j. The computer is installing the touch driver



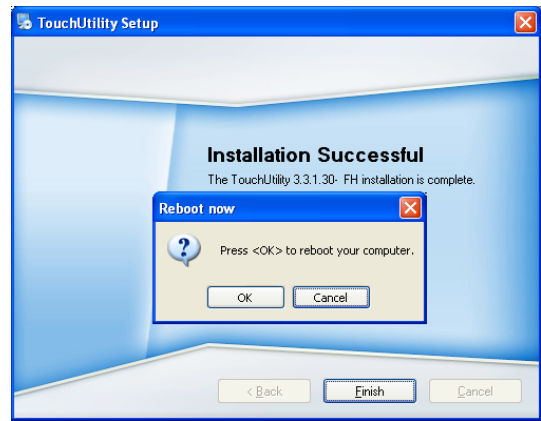
k. Click "Continue Anyway" button.



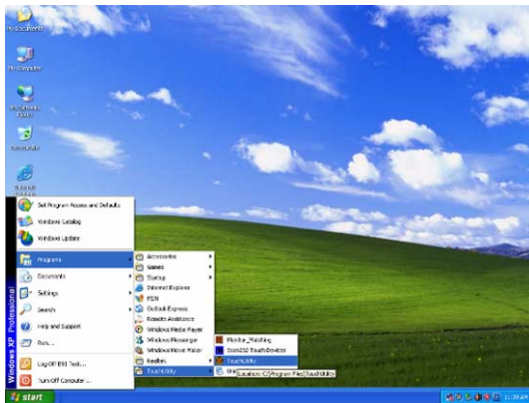
l. The serial ports are scanned for a touch device. The Touch panel is on COM5.



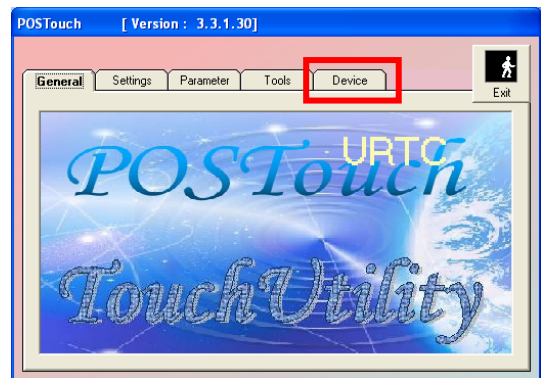
m. Click "Finish".



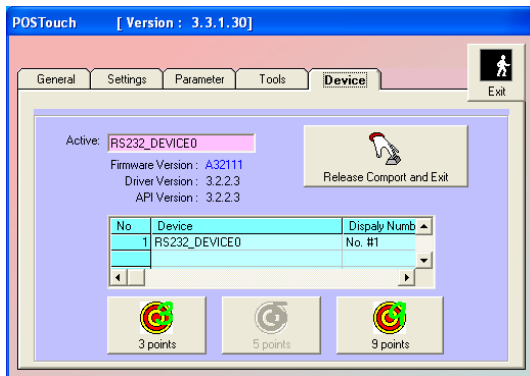
n. Click "OK" to restart the computer and finish the touch utility installation.



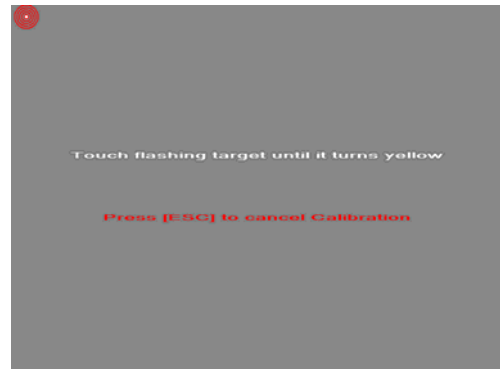
o. The computer has restarted. Click on the "Start" button, select "Programs", then select "Touchutility".



p. Select the Device tab.



q. Click on the 3 points or the 9 points calibration button.



r. Follow the instructions on the screen to do the calibration of the touch panel.

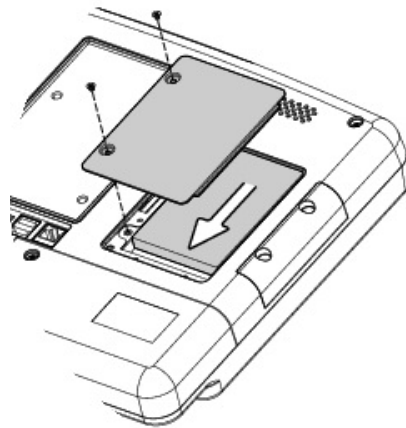


Touch anywhere on the screen to save the calibration.



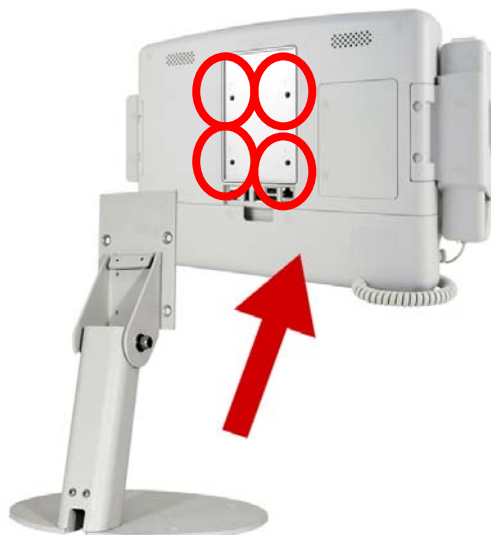
# 5 System Assembly

## 5-1 HDD Replacement



1. Find the HDD door at the rear right side of the system and loosen the screws(x2).
2. To replace the HDD, push the HDD outwards as picture shown.

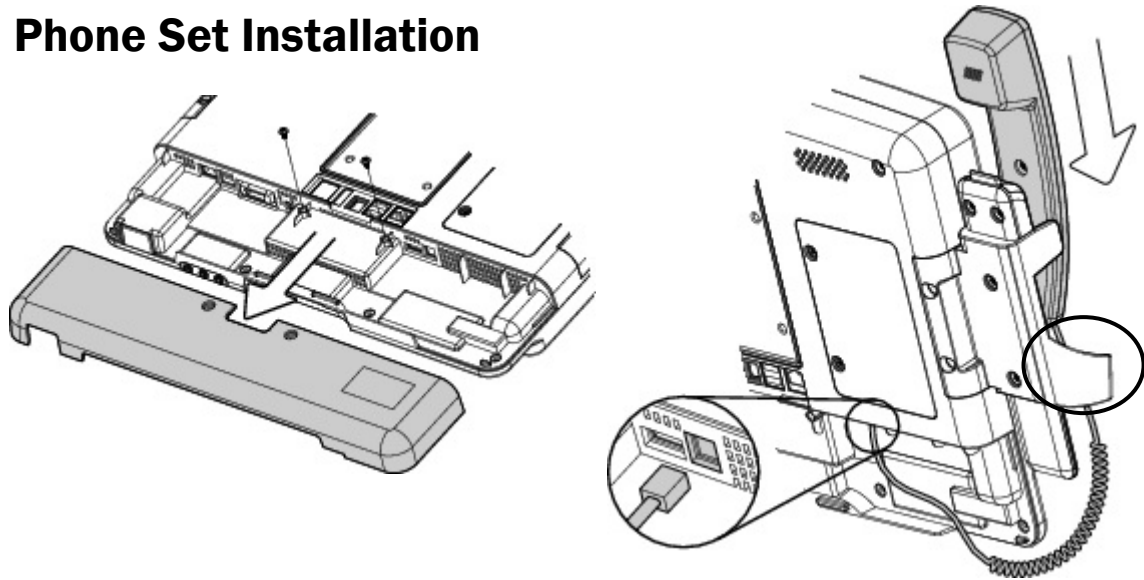
## 5-2 Stand Assembly



1. To install the stand, attached the stand module to the rear of the system and fasten the screws (x4) to secure the stand to the system.

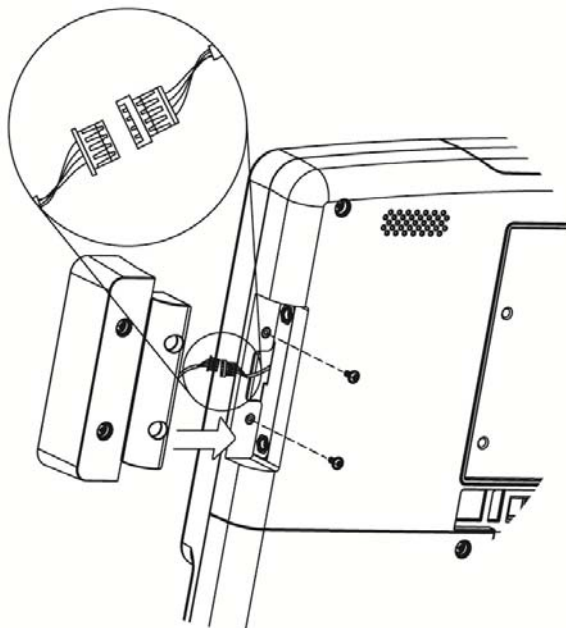
# 6 Peripheral Installation

## 6-1 Phone Set Installation



1. Loosen the screws(x2) to open the cable cover.
2. Slide the phone module into the phone set holder and connect the phone cable to the connector on the phone module.
3. Connect the other end of the phone cable to the connector on the system.

## 6-2 2<sup>nd</sup> Smart IC Card Reader Installation



1. Connect the cable to connector to the on system side.
2. Fasten screws(x2) to secure the module.

# 7 Specification

<b>Model</b>	<b>K936</b>
<b>Motherboard</b>	<b>C73</b>
Processor	Intel® Ivy Bridge CPU, BGA, 22nm Celeron 1047UE 1.4G, LLC 2M, 17W
Core logic	HM76
System memory	2 x DDR3 SO-DIMM slot up to 8GB FSB 1333/1600Mhz
Graphic memory	DX11, HD Graphics, 350MHz
LAN controller / PHY	Intel WG82583V / Intel WG82579V
Audio controller	Realtek ALC 662-GR HD codec
I/O controller	Winbond W83627UHG
Watch dog timer	Hardware WDT
Cooling	Fanless
DC-in	12V ~ 48V (wide range)
<b>LCD Touch Panel</b>	
LCD size	15.6" LED LCD
Resolution	1366 x 768
Brightness	220 nits
Touch screen	5-Wire Resistive
<b>Storage</b>	
Hard drive	1 x 2.5" Slim SATA HDD or SSD
<b>Expansion</b>	
Mini PCI-E	2 x Full size slot(2W each, total 4W)
<b>Audio/Light sensor</b>	
Speaker	2 x 2W Built-in
<b>External I/O</b>	
Line-out	2
Mic-in	1
USB 2.0	3
USB 3.0	2
LAN (10/100/1000)	2 x RJ45
Power button	1
Reset button	1
Display port	1 for DVI-D
COM	1 x RJ48

<b>Model</b>	<b>K936</b>
<b>Motherboard</b>	<b>C73</b>
Phone jack	1 x RJ11
<b>Power</b>	
Power adaptor	Medical Grade 12V/60W
<b>Mechanism</b>	
Mounting	75x75mm VESA Standard
Special material	Antibacterial Plastic Housing
<b>Peripheral</b>	
Webcam	2M Pixel Camera & Camera Latch
VOIP phone	1 x Handset & Cradle
Smart IC card reader	1
RFID	1
2 <sup>nd</sup> Smart IC card reader	Optional
Scanner	1 x 2D Optional Scanner
<b>Certificate</b>	
EMC & Safety	FCC / CE / EN60601-1-2 / UL60601-1 3 <sup>rd</sup> /ANSI/AAMI ES60601-1
<b>Environment for System</b>	
Operation temperature	0 °C ~ 35 °C (32 °F ~ 95 °F)
Storage temperature	-20 ° ~ 60 °C (-4 °F ~ 140 °F)
Storage humidity	30% ~ 93% RH Non-condensing
Atmospheric pressure range	700 - 1060 hPa
<b>Dimension/Weight</b>	
Dimension	390 x 55 x 297 mm (15.4" x 2.2" x 11.7")
Weight	4kgs w/o Handset & Cradle

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

Application: Access to patient records / Hospital administration system / Bed management

Manufactory information:

Factory: Flytech Technology Co., Ltd.

Address: NO.36 Huaya 3rd Rd., Guishan Township, Taoyuan County 33383, Taiwan

Tel No: 886-3-272-9688 Fax No: 886-3-272-9666

Note: Cleaning solution-Wipe with cloth using clean water, 2 times a week.

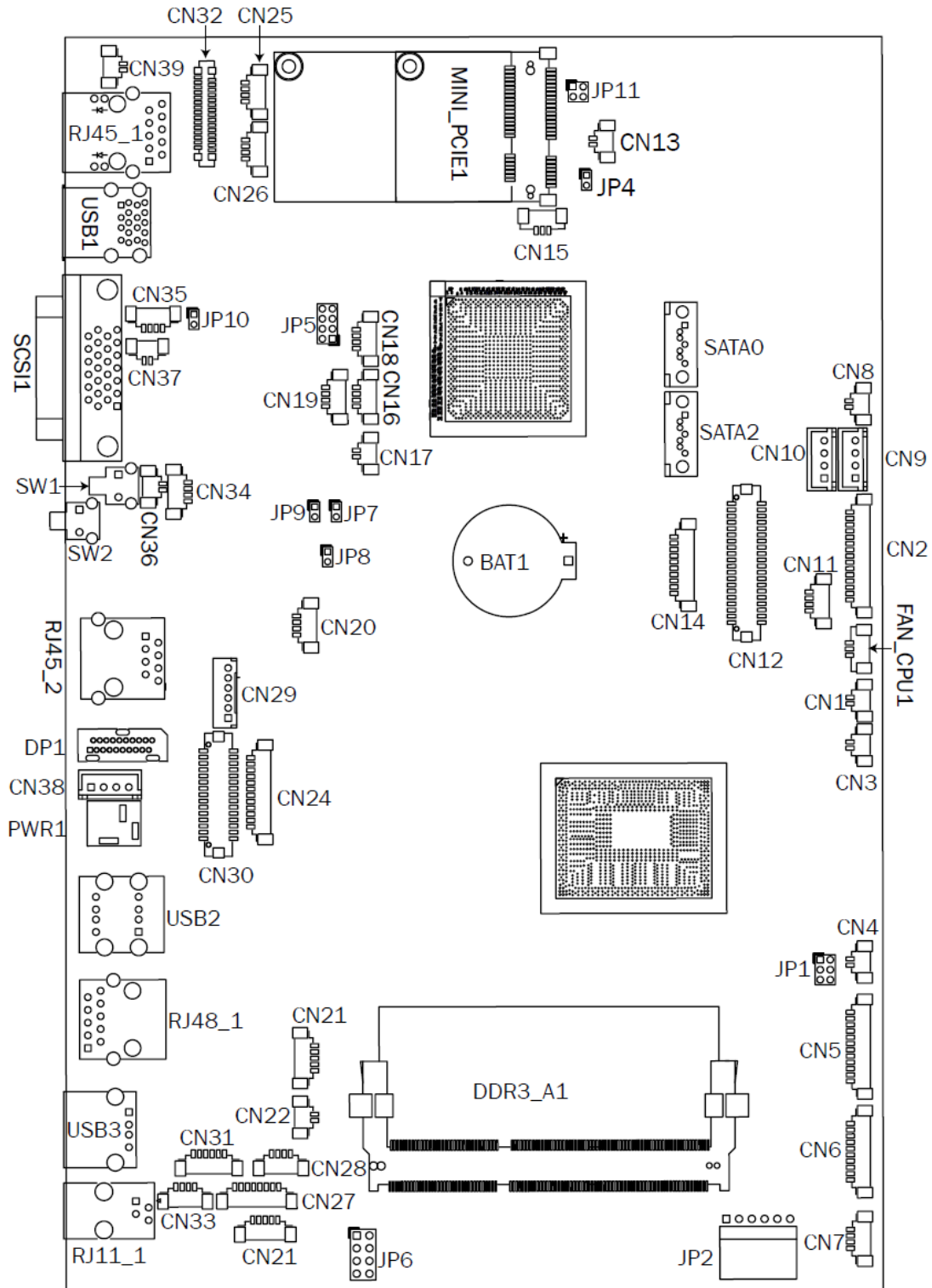
Adaptor Manufacturer: FSP TECHNOLOGY INC.

Model: PMP60-12-B16

Rating: 100-240V,47-63Hz,1.22-0.68A

# 8 Jumper Setting

## 8-1 C73 Motherboard Layout



## 8-2 Connectors & Functions

Connector	Function
CN3	USB Port For Web Cam
CN4	Speaker & MIC
CN5	Cradle
CN6	Speaker
CN7	Audio Jack (Line out & MIC)
CN9	Inverter
CN10	Build-In MIC
CN14	Membrane
CN15	30P All-In-One (Membrane, 2D scanner, RFID, Smart card, Audio Jack)
CN18	Audio Jack (Line Out)
CN19/JP5	System Indicator
CN20	IrDA
CN21	LVDS
CN22	Power LED
CN23	PS/2 Keyboard
CN24	MSR
CN25	COM1
CN26	System FAN
CN27	MIC for AEC
CN28	Power Button
CN29/30	SATA Power
CN31	HDD LED
CN32/35	Internal USB
CN33	USB Port For DVD Dong
CN34	LAN2 LED
CN36	Battery
CN37	USB Port For RFID
CN38	2D Scanner
CN39	USB Port For Smart Card
CN40	LAN1 LED
DP3	DVI
PWR3	+19V DC Jack
RJ11_3	Handset
RJ45_3	LAN2
RJ45_4	LAN1
RJ48_1	COM
SATA1/2	SATA
USB3	USB3

<b>Connector</b>	<b>Function</b>
JP3	Touch
JP4	Inverter Selection
JP6	LCD ID Setting
JP7	MCU Power Button
JP8	Power Mode Setting
JP9	MCU Mode Setting
JP10	System Reset
JP11	CMOS Operation Mode

## 8-3 Jumper Setting

Inverter Selection	
Function	JP4 (1-2) (3-4) (5-6)
▲ CCFL	<pre> 1 3 5 □ □ ■ □ □ ■ 2 4 6           </pre>
LED	<pre> 1 3 5 ■ ■ □ ■ ■ □ 2 4 6           </pre>

System Indicator	
Function	JP5 (1-2) (3-4) (5-6) (7-8)
▲ Disable	<pre> 1 3 5 7 ■ ■ □ □ ■ ■ □ □ 2 4 6 8           </pre>
Enable	<pre> 1 3 5 7 □ □ ■ ■ □ □ ■ ■ 2 4 6 8           </pre>

MCU Power Button	
Function	JP7 (1-2)
Disable	<pre> 1 □ □ 2           </pre>
▲ Enable	<pre> 1 ■ ■ 2           </pre>

▲ = Manufacturer Default Setting

Note:  OPEN

 SHORT



<b>Power Mode Setting</b>	
<b>Function</b>	<b>JP8</b> (1-2)
ATX Power	1 <input type="checkbox"/> <input type="checkbox"/> 2
▲AT Power	1 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 2

<b>MCU Mode Setting</b>	
<b>Function</b>	<b>JP9</b> (1-2)
▲Normal	1 <input type="checkbox"/> <input type="checkbox"/> 2
ISP Debug	1 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 2

<b>System Reset</b>	
<b>Function</b>	<b>JP10</b> (1-2)
▲System Normal	1 <input type="checkbox"/> <input type="checkbox"/> 2
System Reset	1 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 2

<b>CMOS Operation Mode</b>	
<b>Function</b>	<b>JP11</b> (1-2)
▲CMOS Normal	1 <input type="checkbox"/> <input type="checkbox"/> 2
CMOS Reset	1 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 2

# 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”.