USER MANUAL

VERSION 2.1 September 2014

Metal Panel PC Hardware System

TRADEMARK

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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.

Sécurité

INSTRUCTIONS IMPORTANTES RELATIVES À LA SECURITE

1. Pour débrancher la machine de l'alimentation électrique, éteignez l'interrupteur d'alimentation et retirez le cordon d'alimentation de la prise murale. La prise murale doit être facilement accessible et à proximité de la machine.
2. Lisez attentivement ces instructions. Conservez ces instructions pour une référence future.
3. Suivez tous les avertissements et les instructions indiquées sur le produit.
4. Ne pas utiliser ce produit à proximité de l'eau.
5. Ne pas placer ce produit sur un chariot, un support ou une table. Le produit peut tomber,causant de graves dommages à l'appareil.
6. Les fentes et les ouvertures dans le boîtier, l'arrière ou le fond sont prévues pour la ventilation afin d'assurer un fonctionnement fiable du produit et le protéger de la surchauffe. Ces ouvertures ne doivent pas être obstruées ou couvertes. Les ouvertures ne doivent jamais être bloquées en plaçant l'appareil sur un lit, un canapé, un tapis ou autre surface similaire. Ce produit ne doit jamais être placé : à proximité ou sur un radiateur, sur un registre de chaleur ou dans une installation intégrée à moins qu'une ventilation adéquate soit prévue.
7. Ce produit doit être utilisé avec le type d'alimentation indiqué sur l'étiquette.Si vous n'êtes pas sûr du type d'alimentation disponible, consultez votre revendeur ou représentant local de l'entreprise.
8. Ne laissez rien reposer sur le cordon d'alimentation. Ne placez pas ce produit là oùdes personnes peuvent marcher sur le cordon.
9. N'introduisez jamais d'objets d'aucune sorte dans ce produit à travers les fentes du coffret car ils pourraient entrer en contact avec des points sous tension dangereux ou court-circuiter des pièces. Ne renversez jamais de liquide d'aucune sorte sur le produit.

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

AVERTISSEMENT SUR LES BATTERIES AU LITHIUM

Il y a un danger d'explosion si la batterie n'est pas remplacée correctement. Remplacez-la uniquement par une batterie identique ou de type équivalent recommandée par le fabricant.les batteries usagées doivent être mises au rebut conformément aux instructions du fabricant.

⚠ Avertissement Batterie

Risque d'explosion si la batterie est remplacée par un élément incompatible. Jetez les batteries usagées selon les instructions des dispositions locales .

⚠ Avertissement de sécurité

Remarque: Pour répondre à la norme IEC60950-1 alinéa 2.5 (sources d'énergie limitées, LPS) liés la législation, les périphériques doivent être conforme 4.7.3.2 "Matériaux pour enceinte coupe-feu»

4.7.3.2 "Matériaux pour équipements coupe-feu»
Pour les équipements mobiles ayant une masse totale n'excédant pas 18kg :
Les matériaux d'un équipement coupe-feu, dans l'épaisseur de paroi retenue la plus significativement mince, doivent être des matériels de CLASSE V-1 ou doivent passer le test de l'article A.2.

Pour équipements mobiles ayant une masse totale supérieure à 18 kg et pour tous les équipements FIXES :
Les matériaux d'un équipement coupe-feu dans l'épaisseur de paroi retenue la plus significativement mince, doivent être des matériels de CLASSE V-1, doivent être de classe Matériel 5VB ou doivent passer le test de l'article 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.
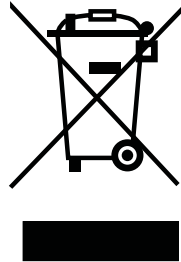
The crossed dust bin symbol on the device means that it should not be disposed of with other household wastes at the end of its working life. Instead, the device should be taken to the waste collection centers for activation of the treatment, collection, recycling and disposal procedure.
To prevent possible 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

Changes to the original user manual are listed below:

Revision	Description	Date
1.0	• Initial release	April 2011
1.1	• IdeaCom touch driver installation added	June 2011
1.2	• C68 MB added	March 2012
1.3	• C56 MB added	June 2012
1.4	• C54 MB added • C48 MB and C56 MB removed	June 2013
2.0	• Add the French language of the Safety, Warning & Caution in the page iii~v	January 2014
2.1	• Add C78 and D66 MB	September 2014

Table of Contents

5. Specification 15

6. Jumper Setting 23

Appendix: Drivers Installation 54

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1. Packing List
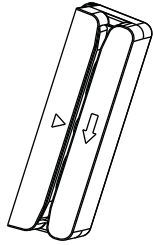
1-1. Standard Items

a.	b.
c.	d.
e.	
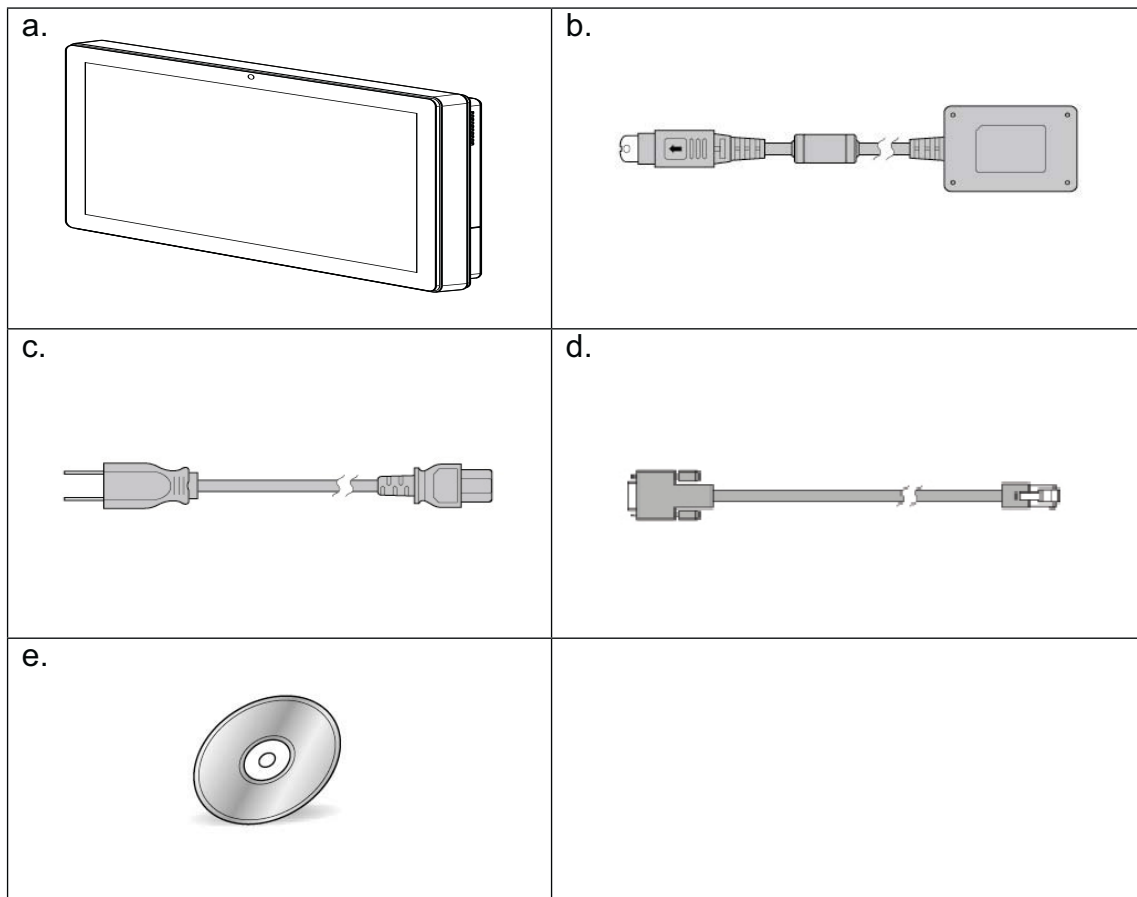
- a. System
- b. Power adapter
- c. Power cord
- d. RJ45-DB9 cable (x2)
- e. Driver bank

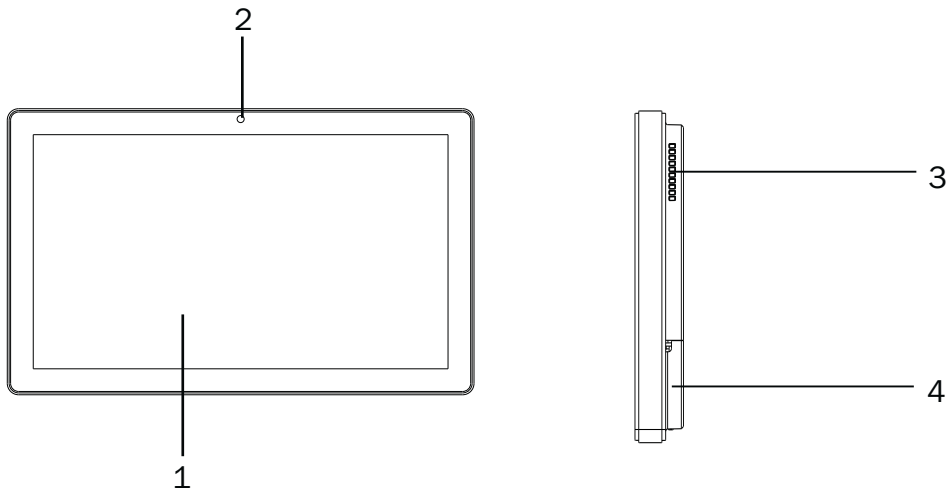Note: Power cord will be supplied differently according to various region or country.

1-2. Optional Items

MSR

2. System View

2-1. Front & Side View

1. Touch screen
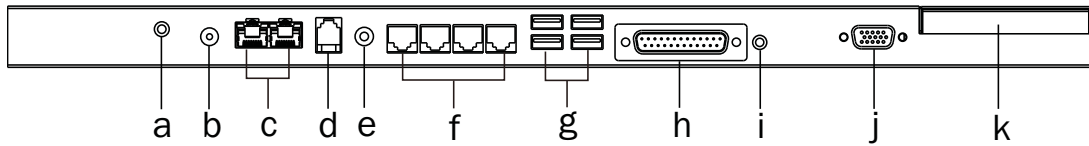2. Built-in web cam
3. Ventilation
4. MSR cable hole

2-2. Rear View
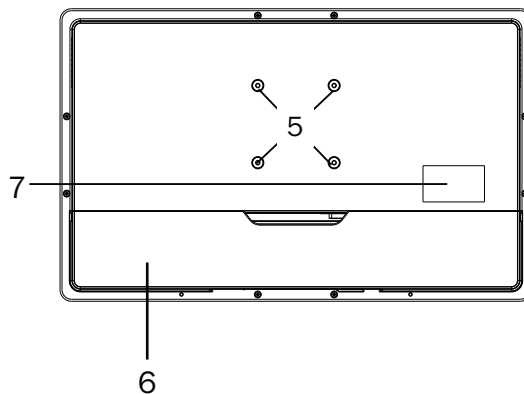
5. VESA mounting holes
6. Cable cover
7. Safety label

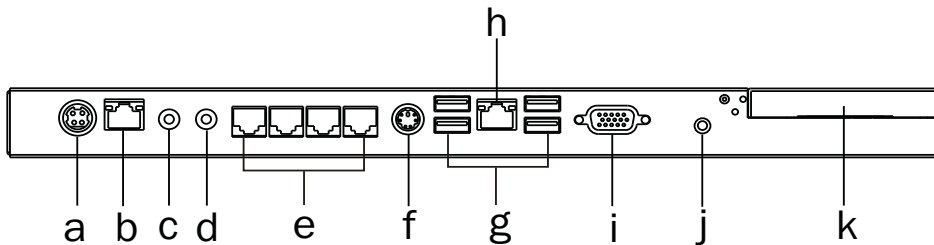# 2-3. I/O view

C68 Motherboard

Item No.	Description
a	MIC IN
b	DC IN
c	LAN (x2)
d	Cash drawer
e	Line Out
f	COM port 1, 2, 3, 4 (from left to right)
g	USB(x4)
h	Printer
i	Power button
j	VGA
k	HDD slot

C54 Motherboard

Item No.	Description
a	DC IN
b	LAN
c	MIC IN
d	Line Out
e	COM port 1, 2, 3, 4 (from left to right)
f	PS/2
g	USB(x4)
h	2nd LAN
i	VGA
j	Power button
k	HDD slot

C78 Motherboard

1. K757_C78
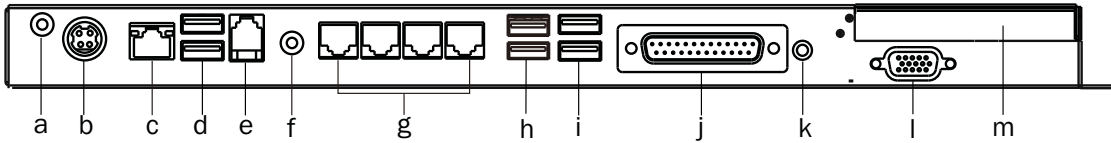
Item No.	Description
a	MIC IN
b	DC IN
c	LAN
d	USB 2.0(x2)
e	Cash drawer
f	Line out
g	COM port 1, 2, 3, 4 (from left to right)
h	USB 3.0(x2)
i	USB 2.0(x2)
j	Printer
k	Power button
l	VGA
m	HDD slot

2. K758_C78
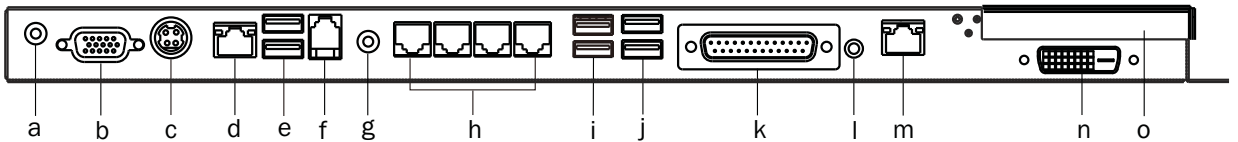
Item No.	Description
a	MIC IN
b	VGA
c	DC IN
d	LAN
e	USB 2.0(x2)
f	Cash drawer
g	Line out
h	COM port 1, 2, 3, 4 (from left to right)
i	USB 3.0(x2)
j	USB 2.0(x2)
k	Printer
l	Power button
m	2nd LAN
n	DVI-D
o	HDD slot

3. K759_C78
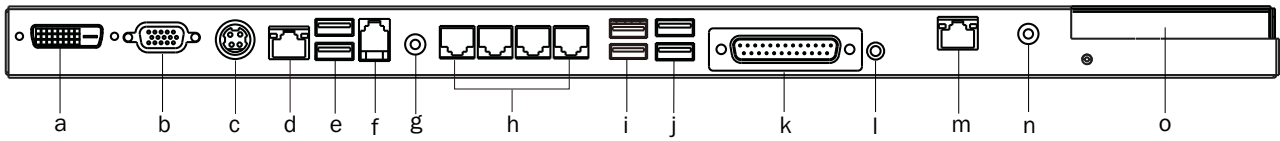
Item No.	Description
a	DVI-D
b	VGA
c	DC IN
d	LAN
e	USB 2.0(x2)
f	Cash drawer
g	Line out
h	COM port 1, 2, 3, 4 (from left to right)
i	USB 3.0(x2)
j	USB 2.0(x2)
k	Printer
l	Power button
m	2nd LAN
n	MIC IN
o	HDD slot

D66 Motherboard
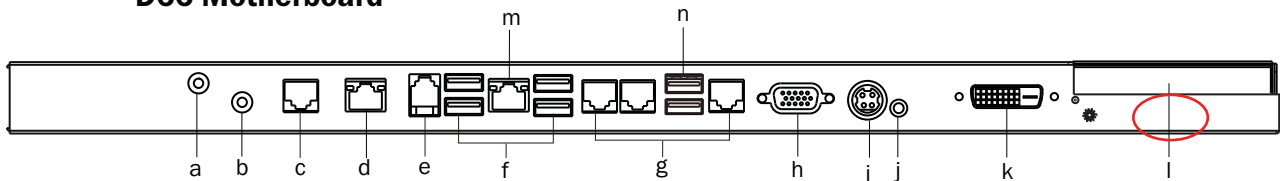
| Item No.	Description
a	MIC IN
b	Line out
c	COM4
d	2nd LAN
e	Cash drawer
f	USB 2.0(x4)
g	COM port 1, 2, 3 (from left to right)
h	VGA
i	DC IN
j	Power button
k	DVI-D
l	HDD slot
m	LAN
n	USB 3.0(x2)

*The location of the DVI port for K757 IO bracket is displayed as the red circle marked in the above figure.
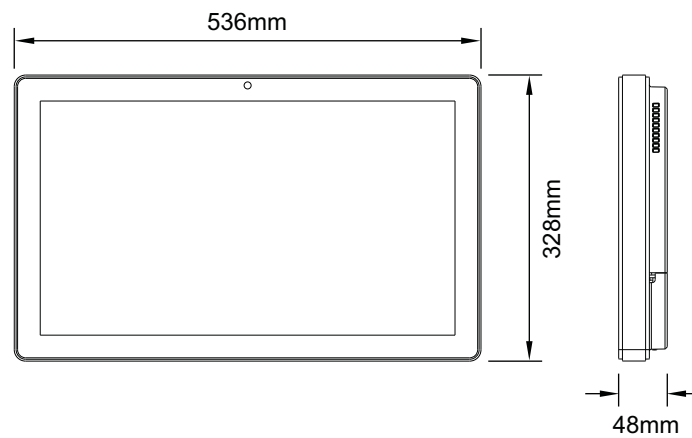
2-4. Dimensions

2-4-1. 15.6" System

396mm

245mm

48mm

2-4-2. 18.5" System

464mm

284mm

48mm

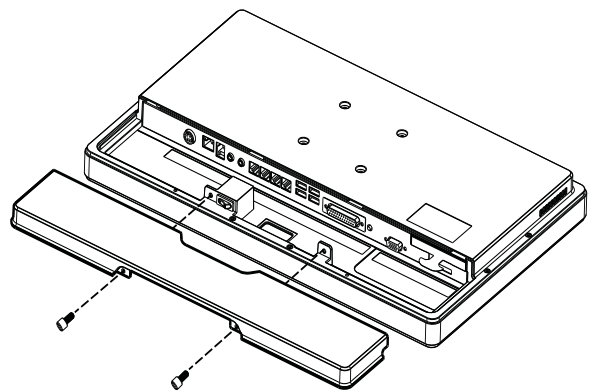### 2-4-3. 21.5" System

536mm

328mm

48mm

7
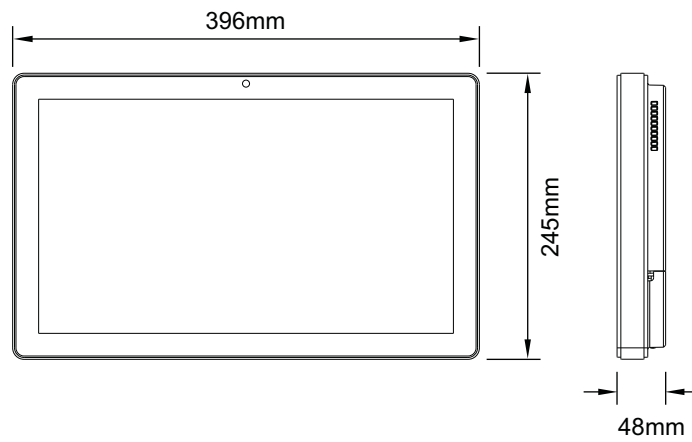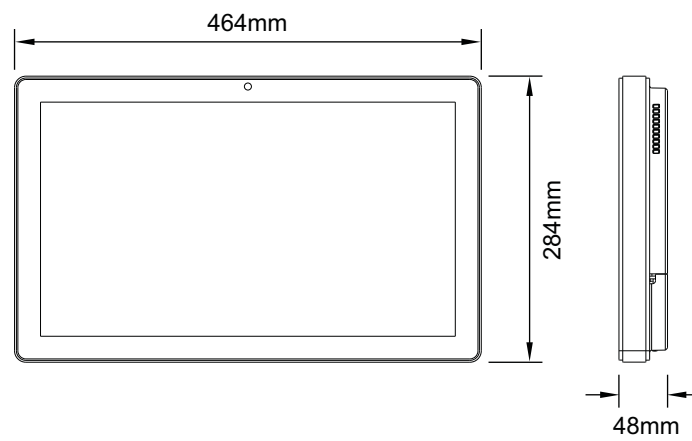
3. System Assembly

3-1. Open the Chassis Cover

The motherboard and RAM module can be replaced by opening the chassis cover, which is located on the back side of the system. Please follow the steps below to open the chassis cover.

1. Turn to the back side of the system and loosen the screws (x2) to release the cable cover first.

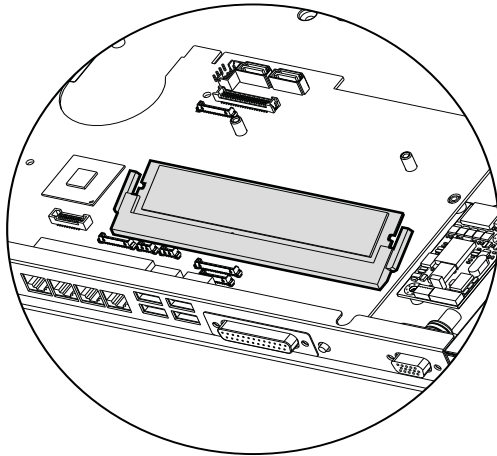2. Loosen the screws (x8) to open the back cover of the system.
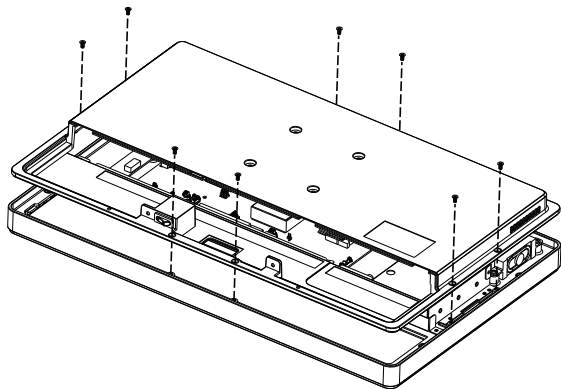
3-2. RAM Module Replacement

To remove and replace the RAM module, please open the chassis cover firstly as steps dscribed in chapter 3-1.
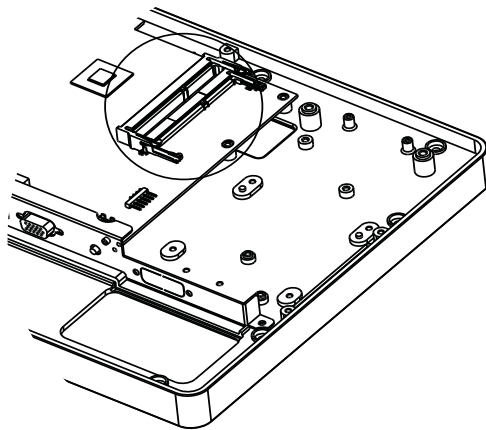
Removing a RAM module

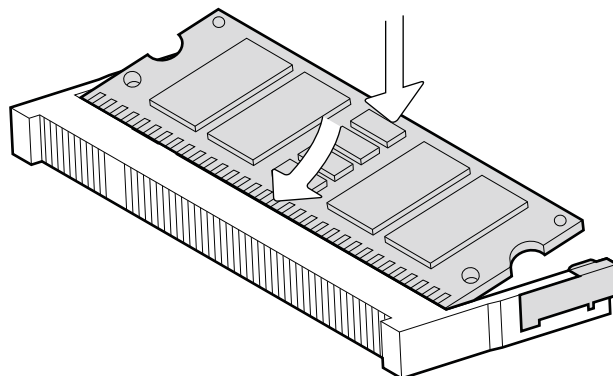1. Find the memory slot at the right side of the motherboard.

C68 Motherboard

C54 Motherboard
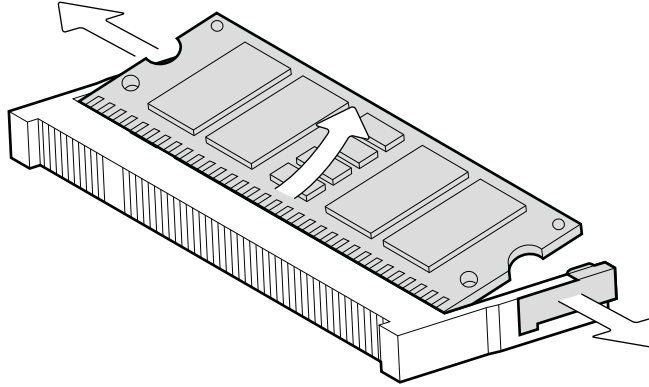

2. Flip the ejector clips outwards to remove the memory module from the memory slot.
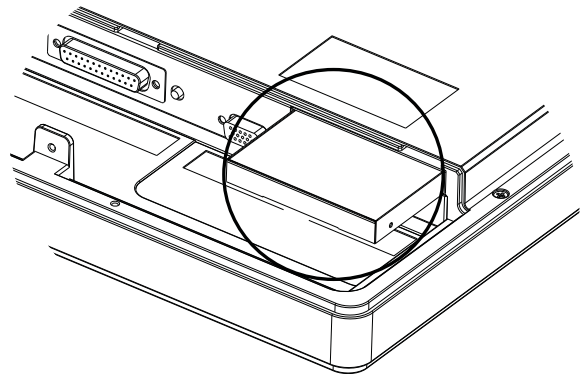
Installing a RAM moudle

3. Slide the memory module into the memory slot and press down until the ejector clips snaps in place.
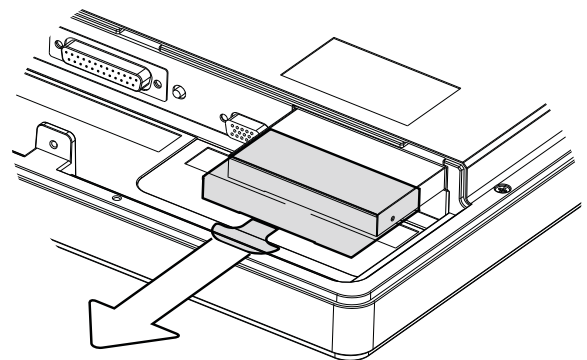

3-3. HDD Replacement

To remove and replace the HDD, please open the cable cover firstly as stpes dscribed in chapter 3-1-1.
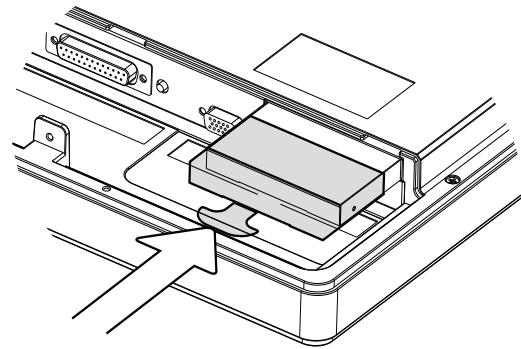
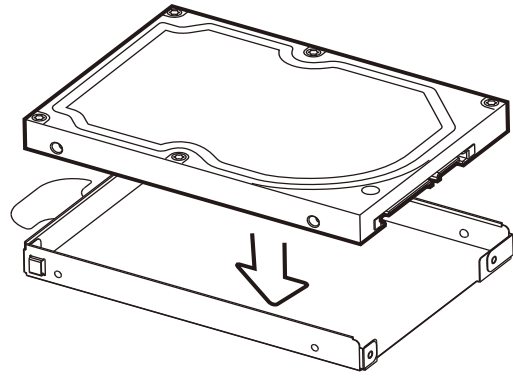1. Find the HDD located at the right side.

2. Pull the HDD tray from the system. For easier removal pull the plastic sheet (see picture) at the same time.

3. Attach the HDD to the HDD tray and slide it into the slot until it snaps in place.

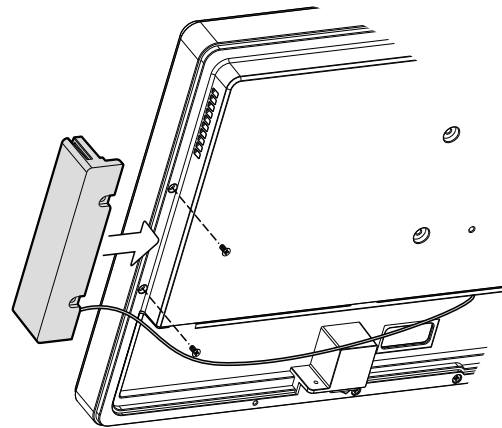* Please note the top of the HDD should be on the upper side.

4. Peripheral Installation
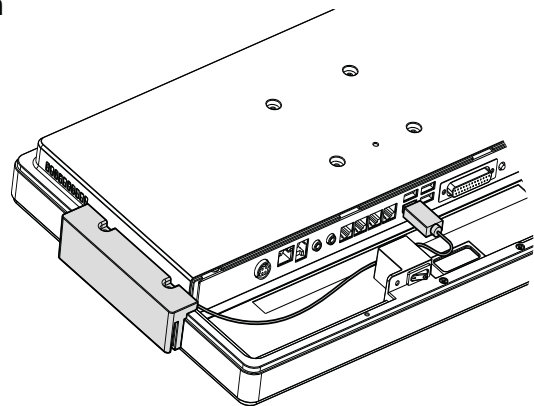
4-1. MSR Installation

To install MSR, please open the cable cover firstly as steps described in chapter 3-1-1.
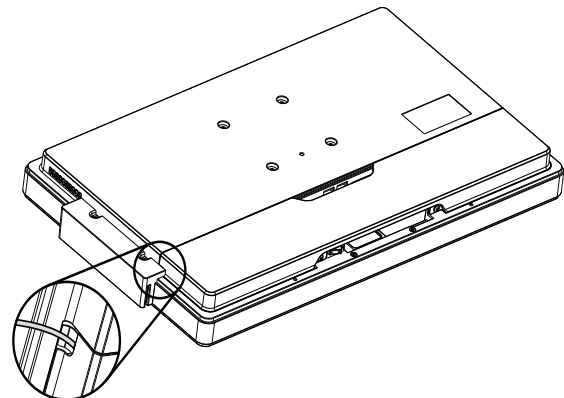
1. Insert MSR module in place and fasten the screws (x2) on the back to secure the module.
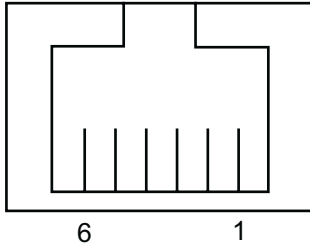
2. Connect MSR cable to the connector on system side.

2. Close the cable cover and fasten screws (x2). Make sure the MSR cable is threaded through the MSR cable hole on the system.

4-2. Cash Drawer Installation

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

Cash Drawer Pin Assignment

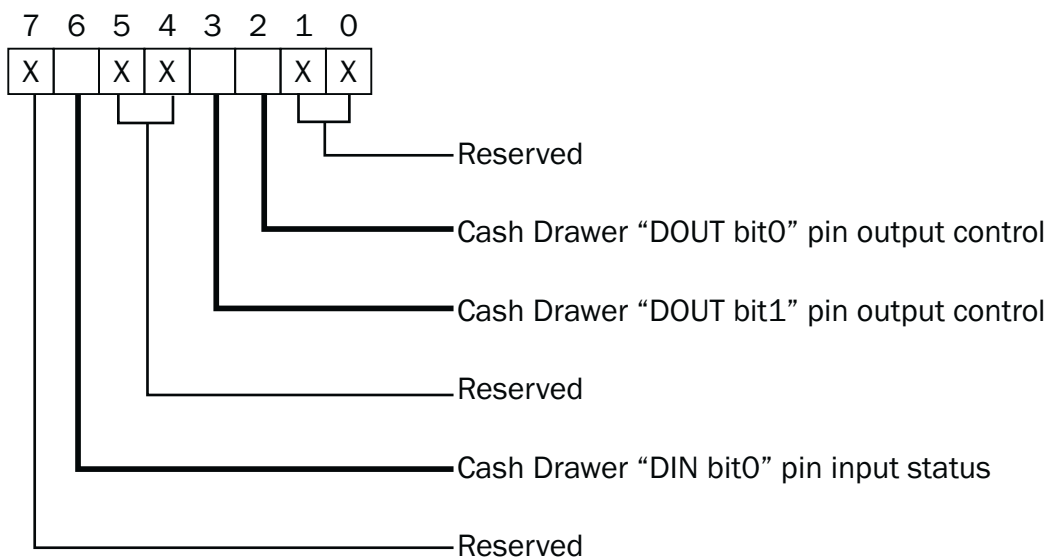| Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V / 19V
5	DOUT bit1
6	GND

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	

7 6 5 4 3 2 1 0

- Reserved
- Cash Drawer "DOUT bit0" pin output control
- Cash Drawer "DOUT bit1" pin output control
- Reserved
- Cash Drawer "DIN bit0" pin input status
- Reserved

13

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

Use Debug.EXE program under DOS or Windows98

Command	Cash Drawer
O 48C 04	Opening
O 48C 00	Allow to close
► Set the I/O address 48Ch bit2 =1 for opening Cash Drawer by "DOUT bit0" pin control. ► Set the I/O address 48Ch bit2 = 0 for allow close Cash Drawer.	

Command	Cash Drawer
I 48C	Check status
► The I/O address 48Ch bit6 =1 mean the Cash Drawer is opened or not exist. ► The I/O address 48Ch bit6 =0 mean the Cash Drawer is closed.	

5. Specification

Model Name	K750		
Mainboard	**C68**		
CPU	Intel® Sandy Bridge CPU, LGA 1155-pin, 32nm i5-2390T 2.7G, 3M cache, 35W i3-2120T 2.6G, 3M cache, 35W Pentium G630T 2.3G, 3M cache, 35W		
Chipset	Intel Q67 PCH (Processor Controller Hub, AMT supported) Intel H61 PCH (Processor Controller Hub,no AMT suport_mainstream)		
System Memory	1 x DDR3 Long DIMM socket up to 8GB, FSB 1066/1333 Mhz		
Graphic Memory	1 x DDR3 Long DIMM socket up to 8GB, FSB 1066/1333 Mhz		
LCD/Touch Panel			
LCD Size	15.6" LED LCD	18.5" LED LCD	21.5" LED LCD
Brightness	220 nits	250 nits	
Maximal Resolution	1366 x 768		1920 x 1080
Touch Screen Type	True flat resistive touch / True flat projected capacitive touch		
Storage			
HDD	2.5" Slim HDD bay, SATA HDD		
Flash Memory	SATA SSD Flash memory card 8G/16G/32G/64G (option)		
Peripherals			
Web Cam (Build-in)	2M Web Cam		
MSR-right side(Optional)	3 Track (USB)		
WiFi (Optional)	802.11 b/g/n WLAN card		
Device Box(Optional)	Smart IC card Reader/Scanner/Function Key Pad/Line Out /Mic In		
Expansion			
Mini PCI-E Socket	1		
External I/O Ports			
USB Port	4 x USB Type A		
Serial/COM	4 (RJ45 type, COM1/COM2 standard COM, COM3/COM4 with +5V/+12V by BIOS setting)		
Parallel	1 x D-sub 25F		
LAN (10/100/1000)	1 x RJ-45		
2nd LAN (10/100/1000)	1 x RJ-45		
2nd VGA	1 x DB 15F		
Cash Drawer	1 x RJ-11 (12V or 24V)		
Audio Jack	1 x Mic-in, 1 x Line-out		
DC Jack	1		
e-SATA	Blind Hole		
Power Button	NA		
Thermal Solution			
Thermal Solution	1 x Fan	2 x Fan	
Audio			
Speaker	2 x 2W		
Power			
Power Adapter	DC 19V/120W		

Control			
Power button	1		
Environment			
EMC & Safety	FCC/CE Class A/LVD/EN 60601-1-2		
Operating Temperature	0°C ~ 35°C (32°F ~ 95°F)		
Storage Temperature	-20° ~ 60°C (-4°F ~ 140°F)		
Humidity	25% - 85% RH non-condensing		
Dust & Water Proof	IP 54 (front panel)		
Dimensions (W x D x H)	396 x 245 x 48 mm	464 x 284 x 48 mm	536 x 328 x 48 mm
Weight (N.W./G.W.)	4.5kg/5.5kg	6.8kg/7.8kg	8kg/9kg
Mounting	75mm x 75mm Standard VESA / Panel Mount		
OS Support	Windows XP Pro, Linux , POS Ready 2009,Windows Vista ,Windows 7		

* This specification is subject to change without prior notice.

Model Name	K750		
Mainboard	**C54**		
CPU	Intel CedarView D2550 processor 1.86GHz 1MB Cache, 32nm, 10W		
Chipset	NM10, 2W		
System Memory	2 x DDR3 SO-DIMM socket up to 4GB, FSB 1066 Mhz		
Graphic Memory	Intel GMA 3650 (Gfx frequency up to 640MHz), DX9		
LCD/Touch Panel			
LCD Size	15.6" LED LCD	18.5" LED LCD	21.5" LED LCD
Brightness	220 nits	250 nits	
Maximal Resolution	1366 x 768		1920 x 1080
Touch Screen Type	Ture flat resistive touch / True flat projected capacitive touch		
Storage			
HDD	2.5" Slim HDD bay, SATA HDD		
Flash Memory	SATA SSD Flash memory card 8G/16G/32G/64G (option)		
Peripherals			
Web Cam (Build-in)	2M Web Cam		
MSR-right side(Optional)	3 Track(USB)		
WiFi (Optional)	802.11 b/g/n WLAN card		
Device Box(Optional)	Smart IC card Reader/Scanner/Function Key Pad/Line Out/Mic In		
Expansion			
Mini PCI-E Socket	1		
External I/O Ports			
USB Port	4 x USB Type A		
Serial / COM	4 (RJ45 type, COM1/COM2 standard COM, COM3/COM4 with +5V/+12V by BIOS setting)		
Parallel	NA		
LAN (10/100/1000)	1 x RJ-45		
2nd LAN (10/100/1000)	1 x RJ-45		
2nd VGA	1 x DB 15F		
Cash Drawer	NA		
Audio Jack	1 x Mic-in, 1 x Line-out		
DC Jack	1		
e-SATA	Blind Hole		
Power Button	1		
Thermal Solution			
Thermal Solution	Fanless		
Audio			
Speaker	2 x 2W		
Power			
Power Adapter	DC 19V/65W		DC 19V/90W
Control			
Power Button	1		

Environment			
EMC & Safety	FCC/CE Class A/LVD/EN 60601-1-2		
Operating Temperature	0°C ~ 35°C (32°F ~ 95°F)		
Storage Temperature	-20° ~ 60°C (-4°F ~ 140°F)		
Humidity	25% - 85% RH non-condensing		
Dust & Water Proof	IP 54 (front panel)		
Dimensions (W x D x H)	396 x 245 x 48 mm	464 x 284 x 48 mm	536 x 328 x 48 mm
Weight (N.W./G.W.)	4.5kg/5.5kg	6.8kg/7.8kg	8kg /9kg
Mounting	75mm x 75mm Standard VESA / Panel Mount		
OS Support	Windows XP Pro, Linux , POS Ready 2009,Windows Vista ,Windows 7		

* This specification is subject to change without prior notice.

Model Name	K750		
Mainboard	**C78**		
CPU	Intel Ivy Bridge CPU Celeron 1037U 1.8G, LLC 2M (17W, 1A) i3-3217U 1.8G, LLC 3M (17W, EIA) i5-3317U 1.7G, LLC 3M (17W, IA) i7-3517UE 1.7G, LLC 4M (17W, EIA)		
Chipset	Intel HM76 4.1W		
System Memory	2 x DDR3 SO-DIMM 2G/4G/8G FSB1333/1666MHz, default 2G		
Graphic Memory	Intel HD Graphics/HD Graphics 4000, integrated in CPU base frequency 350MHz (dynamic up to 1.05GHz)		
LAN controller (Giga LAN)	Intel 82579LM (Phy)		
Audio controller	Realtek ALC662-VD0-GR HD codec		
Super I/O controller	Winbond W83627UHG		
LCD/Touch Panel			
LCD Size	15.6" LED LCD	18.5" LED LCD	21.5" LED LCD
Brightness	220 nits	250 nits	
Maximal Resolution	1366 x 768		1920 x 1080
Touch Screen Type	True flat projected capacitive touch		
Storage			
HDD	2.5" Slim HDD bay, SATA HDD		
Flash Memory	SATA SSD Flash memory card 8G/16G/32G/64G (option)		
Peripherals			
Web Cam (Build-in)	2M Web Cam		
MSR-right side(Optional)	3 Track(USB)		
WiFi (Optional)	802.11 b/g/n WLAN card		
Device Box(Optional)	Smart IC card Reader/Scanner/Function Key Pad/Line Out/Mic In		
Expansion			
Mini PCI-E Socket	1		
External I/O Ports			
USB3.0	2 x USB type A		
USB2.0	4 x USB Type A		
Serial / COM	4 x RJ45 COM ports (COM1/2 standard RS232; COM3/4 powered RS232; COM3 default 5V / COM4 default 12V by BIOS setting)		
Parallel	1 x D-sub 25F		
LAN (10/100/1000)	1 x RJ-45		
2nd LAN (10/100/1000)	1 x RJ-45(option)		
2nd VGA	1 x DB 15 female / K757 default VGA (DVI-D option) / K758 & K759 default (VGA & DVI-D)		
Cash Drawer	1 x RJ11 (12V /24 V)		
Audio Jack	1 x Mic-in, 1 x Line-out		
DC Jack	1 (19V)		
e-SATA	Blind Hole		
Power Button	1		
DVI-D	1		
Thermal Solution			
Thermal Solution	Fanless		
Audio			
Speaker	2 x 2W		

Power	
Power Adapter	DC 19V/90W
Environment	
EMC & Safety	FCC/CE Class A/LVD/EN 60601-1-2
Operating Temperature	0°C ~ 35°C (32°F ~ 95°F)
Storage Temperature	-20° ~ 60°C (-4°F ~ 140°F)
Humidity	25% - 85% RH non-condensing
Dust & Water Proof	IP 65 (front panel)

Dimensions (W x D x H)	396 x 245 x 48 mm	464 x 284 x 48 mm	536 x 328 x 48 mm
Weight (N.W./G.W.)	4.5kg/5.5kg	6.8kg/7.8kg	8kg /9kg
Mounting	75mm x 75mm Standard VESA / Panel Mount		
OS Support	Win XP, XP Embedded, XP professional for Embedded, Linux, Windows 7, Windows 8.1		

* This specification is subject to change without prior notice.

Model Name	K750		
Mainboard	D66		
CPU	Intel Haswell CPU, LGA 1150pins, 22nm i7-4770TE 2.3G(Turbo 3.3G), LLC 8M, 45W i5-4570TE 2.7G(Turbo 3.3G), LLC 4M, 35W i3-4330TE 2.4G, LLC 3M, 35W Pentium G3320TE 2.3G, LLC 3M, 35W Celeron G1820TE 2.2G, LLC 2M, 35W		
Chipset	Intel Lynx Point PCH Q87(AMT technology)		
System Memory	S.O.DIMM x1, FSB 1333/1600MHz, default 2G, max. 8G		
Graphic Memory	IIntel HD Graphics/HD Graphics 4600, integrated in CPU, DX11.1		
LAN controller (Giga LAN)	Intel I218LM (Phy), 2nd LAN Realtek 8111E (F40 board)		
Audio controller	Realtek ALC662VD0-GR		
Super I/O controller	Winbond W83627UHG		
LVDS controller	NXP PTN3460		
BIOS	Phoenix UEFI		
Touch controller	Elo coach V (USB)		
TPM controller	NUVOTON TPM NPCT 420		
LCD/Touch Panel			
LCD Size	15.6" LED LCD	18.5" LED LCD	21.5" LED LCD
Brightness	220 nits	250 nits	
Maximal Resolution	1366 x 768		1920 x 1080
Touch Screen Type	True flat resistive touch / True flat projected capacitive touch		
Storage			
HDD	2.5" Slim HDD bay, SATA HDD		
Flash Memory	SATA SSD Flash memory card 8G/16G/32G/64G (option)		
Peripherals			
Web Cam (Build-in)	2M Web Cam		
MSR-right side(Optional)	3 Track(USB)		
WiFi (Optional)	802.11 b/g/n WLAN card		
Device Box(Optional)	Smart IC card Reader/Scanner/Function Key Pad/Line Out/Mic In		
Expansion			
Mini PCI-E Socket	2 (1 x MB, 1 x F40)		
External I/O Ports			
USB3.0	2 x USB type A		
USB2.0	4 x USB Type A		
Serial / COM	4 (RJ45 COM1 & COM2 0V/5V, COM3 0V/12V, power enabled by BIOS; COM4 0V)		
Parallel	N/A		
LAN (10/100/1000)	2 x RJ-45		
2nd VGA	1 x DB 15 female		
Cash Drawer	1 x RJ11 (12V /24 V)		
Audio Jack	1 x Mic-in, 1 x Line-out		
DC Jack	1 x Latch type (4pin)		
e-SATA	Blind Hole		
Power Button	1		
DVI-D	1		
Thermal Solution			
Thermal Solution	1 x Fan		2 x Fan

Audio			
Speaker	2 x 2W		
Power			
Power Adapter	DC 19V/120W		
Environment			
EMC & Safety	FCC/CE Class A/LVD/EN 60601-1-2		
Operating Temperature	0°C ~ 35°C (32°F ~ 95°F)		
Storage Temperature	-20° ~ 60°C (-4°F ~ 140°F)		
Humidity	25% - 85% RH non-condensing		
Dust & Water Proof	IP 54 (front panel)		
Dimensions (W x D x H)	396 x 245 x 48 mm	464 x 284 x 48 mm	536 x 328 x 48 mm
Weight (N.W./G.W.)	4.5kg/5.5kg	6.8kg/7.8kg	8kg /9kg
Mounting	75mm x 75mm Standard VESA / Panel Mount		
OS Support	Windows 7, POSReady 7, Windows 8.1, Linux		

* This specification is subject to change without prior notice.

6. Jumper Setting

6-1. C68 Motherboard
6-1-1. Motherboard Layout
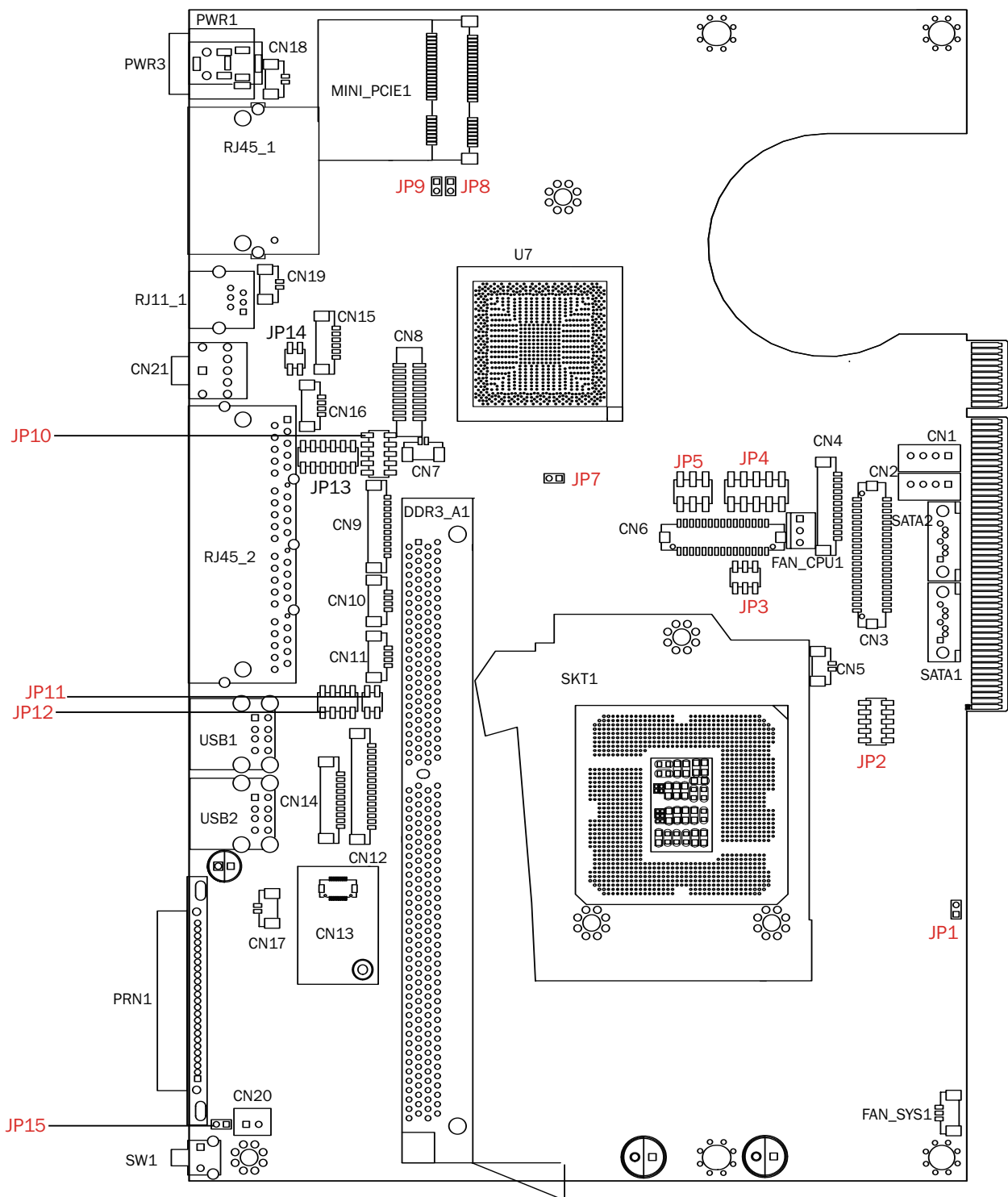
6-1-2. Connectors & Functions

Connector	Function
CN1/2	SATA power Connector
CN3	LVDS Connector
CN4	LVDS INVERTER Connector
CN5	SATA HDD LED Connector
CN6	DVI Connector
CN7	BATTERY Connector
CN9	FT STATUS INTERFACE
CN10/11	USB Port(Internal)
CN12	Card Reader Connector(COM6)
CN13	RF Connector
CN14	COM5 for Touch
CN15	SPEAKER & MIC Connector (Internal)
CN16	PS2 Keyboard Connector
CN17	Power On LED Connector
CN18/CN19	LAN1/2 LED(Internal)
CN20	Power button(Internal)
CN21	Line out JACK
DDR3_A1	DDR3 LONG-DIMM
FAN_CPU1	CPU FAN Connector
FAN_SYS1	System FAN Connector
PRN1	PARALLEL PORT
PWR3	+19V DC JACK
RJ11_1	CASH DRAWER Connector
RJ45_1	LAN1/LAN2 Connector
RJ45_2	COM1/ COM2/ COM3/ COM4
SATA1/2	SATA Connector
USB1	USB4 USB2
USB2	USB3 USB4
JP2	LCD ID Setting
JP3	INVERTER Select
JP4/5	VGA
JP7	CMOS Operation Mode
JP8	ME Update
JP9	H/W Reset
JP10/13	COM2 RS232/485/422 Setting
JP11	USB Touch Power Setting(CN11)
JP12	COM3/COM4 Power Setting
JP14	CASH DRAWER Power Setting
SW1	Power button

6-1-3. Jumper Setting

Power Mode Setting

Function	JP1
▲ATX Power	1 2
AT Power	1 2

COM2 RS232/485/422 Setting

Function	JP10	JP13
▲RS232	1 3 5 7 9 2 4 6 8 10	1 3 5 7 9 11 2 4 6 8 10 12
RS485	1 3 5 7 9 2 4 6 8 10	1 3 5 7 9 11 2 4 6 8 10 12
RS422	1 3 5 7 9 2 4 6 8 10	1 3 5 7 9 11 2 4 6 8 10 12

Cash Drawer Power Setting

Function	JP14
▲+19V	1 3 2 4
+12V	1 3 2 4

▲ = Manufacturer Default Setting

Inverter Selection

Function	JP3
▲ CCFL	1 3 [5] 2 4 [6]
LED	[1] [3] 5 [2] [4] 6

ME Update

Function	JP8
▲ Lock	1 2
Un-lock	1 2

Hardware Reset

Function	JP9
▲ System Normal	1 2
System Reset	1 2

USB Touch Power Setting for CN11 Connector

Function	JP11
+5VSB	[1] 3 [2] 4
▲ +5V	1 [3] 2 [4]

▲ = Manufacturer Default Setting

CMOS Operation Mode

CMOS Reset

To clear the CMOS,
1. Remove the power cable from the system.
2. Open the system, and set the 'CMOS Operation jumper' from 'CMOS Normal' to 'CMOS Reset'. (refer to the jumper shown below)
3. Connect the power cable to the system, and **power on the system:**
   in ATX mode: press the power button and it will fail power on
   in AT mode: turn on system power
4. Remove the power cable from the system.
5. Return the "CMOS Operation mode" jumper setting from "CMOS Reset" to "CMOS normal".
6. Connect the power cable and power on the system.

Function	JP7
▲ CMOS Normal	1 2
CMOS Reset	1 2

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 jumper JP18 on the motherboard. When enabled, the power is available on pin 10 of the RJ45 serial connector. If you use the serial RJ45 to DB9 adapter cable, the power is on pin 9 of the DB9 connector.

By default, the power option is disabled in the BIOS.

BIOS/Utility setup

1. Press <DEL> key to enter BIOS SETUP UTILITY when system boot up.
2. Find tab "Advanced".
3. Select "Power Configuration COM/VGA Ports" and press <Enter> to go to sub screen.
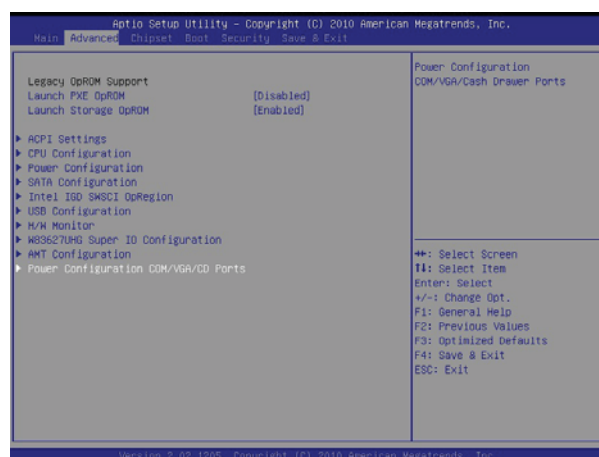
▲ = Manufacturer Default Setting

4. To switch on the power, select "Power". Please save the change before exiting BIOS so as to go for physical jumper adjustment.
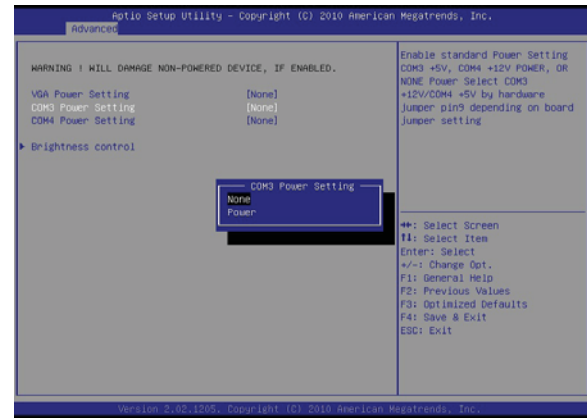
COM3/COM4 Jumper setup

Function		JP12
COM3	▲ +5V	1 3 5 7 2 4 6 8
	+12V	1 3 5 7 2 4 6 8
COM4	+5V	1 3 5 7 2 4 6 8
	▲ +12V	1 3 5 7 2 4 6 8

LCD ID Setting

Panel#	Resolution	LVDS Bits	LVDS Channel	Output Interface	JP2
1	800 x 600	18	Single	LVDS Panel	1 [3 5 7] 9 / 2 [4 6 8] 10 (3-4, 5-6, 7-8 short)
3	800 x 600	24	Single	LVDS Panel	1 3 [5 7] 9 / 2 4 [6 8] 10 (5-6, 7-8 short)
5	1024 x 768	18	Single	LVDS Panel	1 [3] 5 [7] 9 / 2 [4] 6 [8] 10 (3-4, 7-8 short)
7	1024 x 768	24	Single	LVDS Panel	1 3 5 [7] 9 / 2 4 6 [8] 10 (7-8 short)
9	1280 x 1024	24	Dual	LVDS Panel	1 [3 5] 7 9 / 2 [4 6] 8 10 (3-4, 5-6 short)
11	1366 x 768	24	Single	LVDS Panel	1 3 [5] 7 9 / 2 4 [6] 8 10 (5-6 short)
13	1440 x 900	24	Dual	LVDS Panel	1 [3] 5 7 9 / 2 [4] 6 8 10 (3-4 short)
15	1920 x 1020	24	Dual	LVDS Panel	1 3 5 7 9 / 2 4 6 8 10 (none short)
	1366 x 768	18	Single	LVDS Panel	[1] 3 [5] 7 9 / [2] 4 [6] 8 10 (1-2, 5-6 short)
				CRT	1 3 5 7 [9] / 2 4 6 8 [10] (9-10 short)

Remark:

Panel ID#12 is specialized for Sharp 12.1" LQ121S1LG41/LQ121S1LG42 panel.

[1 / 2] Jumper open   [1 / 2] Jumper short

6-2. C54 Motherboard

6-2-1. Motherboard Layout
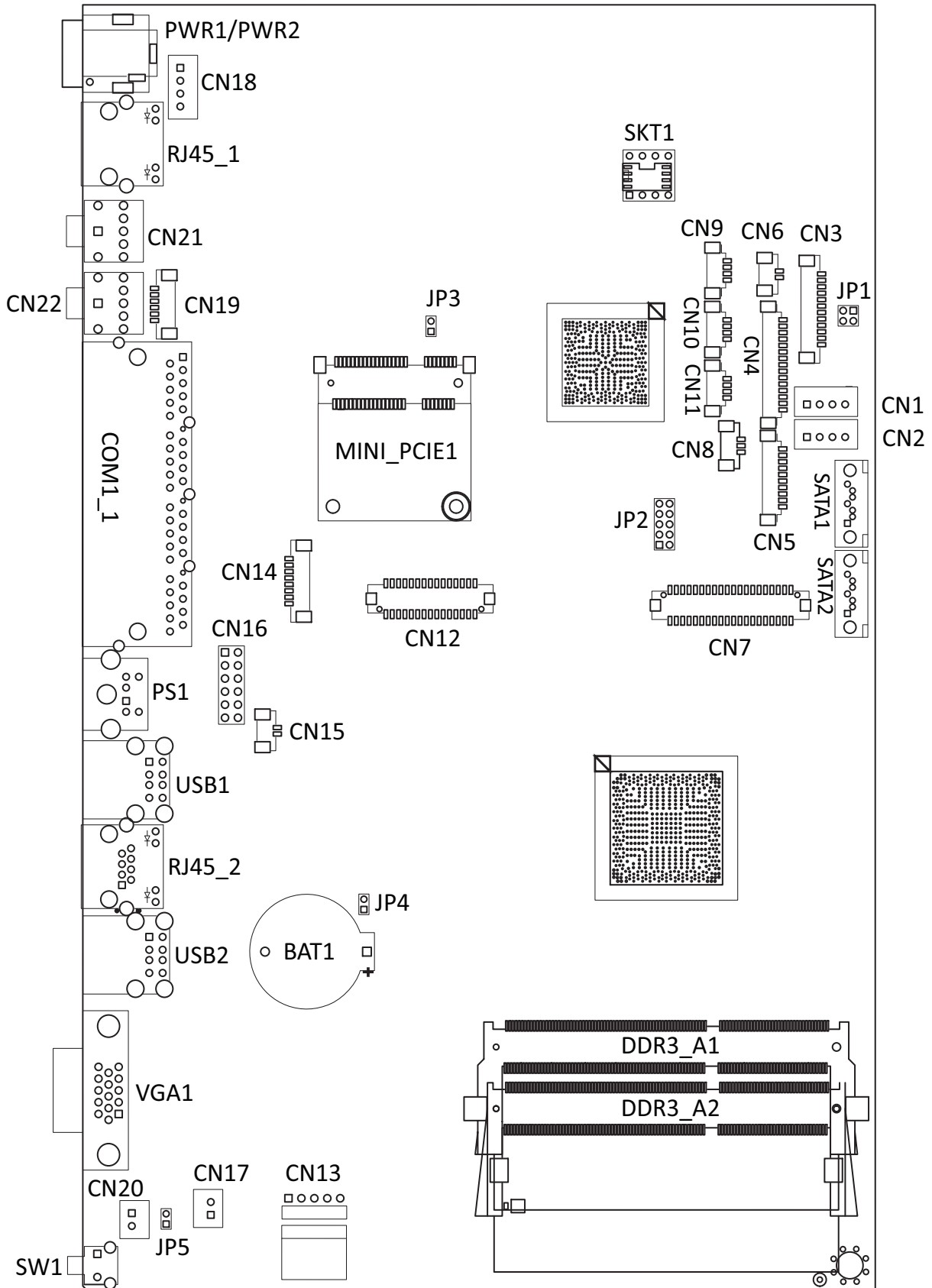
6-2-2. Connectors & Functions

Connector	Function
CN1	SATA Power
CN2	SATA Power
CN3	Inverter
CN4	Card Reader
CN5	COM5 For Touch
CN6	SATA LED
CN7	LVDS
CN9	USB
CN10	USB
CN11	USB
CN12	DVI
CN13	Touch
CN15	Power LED
CN18	Adapter Connector
CN19	Speaker & MIC
CN20	Power On Button
CN21	Audio Jack
CN22	Line Out
COM1_1	COM1~4
RJ45_1	LAN
RJ45_2	LAN
JP1	Inverter Select
JP2	LCD ID Setting

6-2-3. Jumper Setting

LCD Backlight Type

Function	JP1
▲ CCFL	1 3 2 4
LED	1 3 2 4

6-3. C78 Motherboard

6-3-1. Motherboard Layout
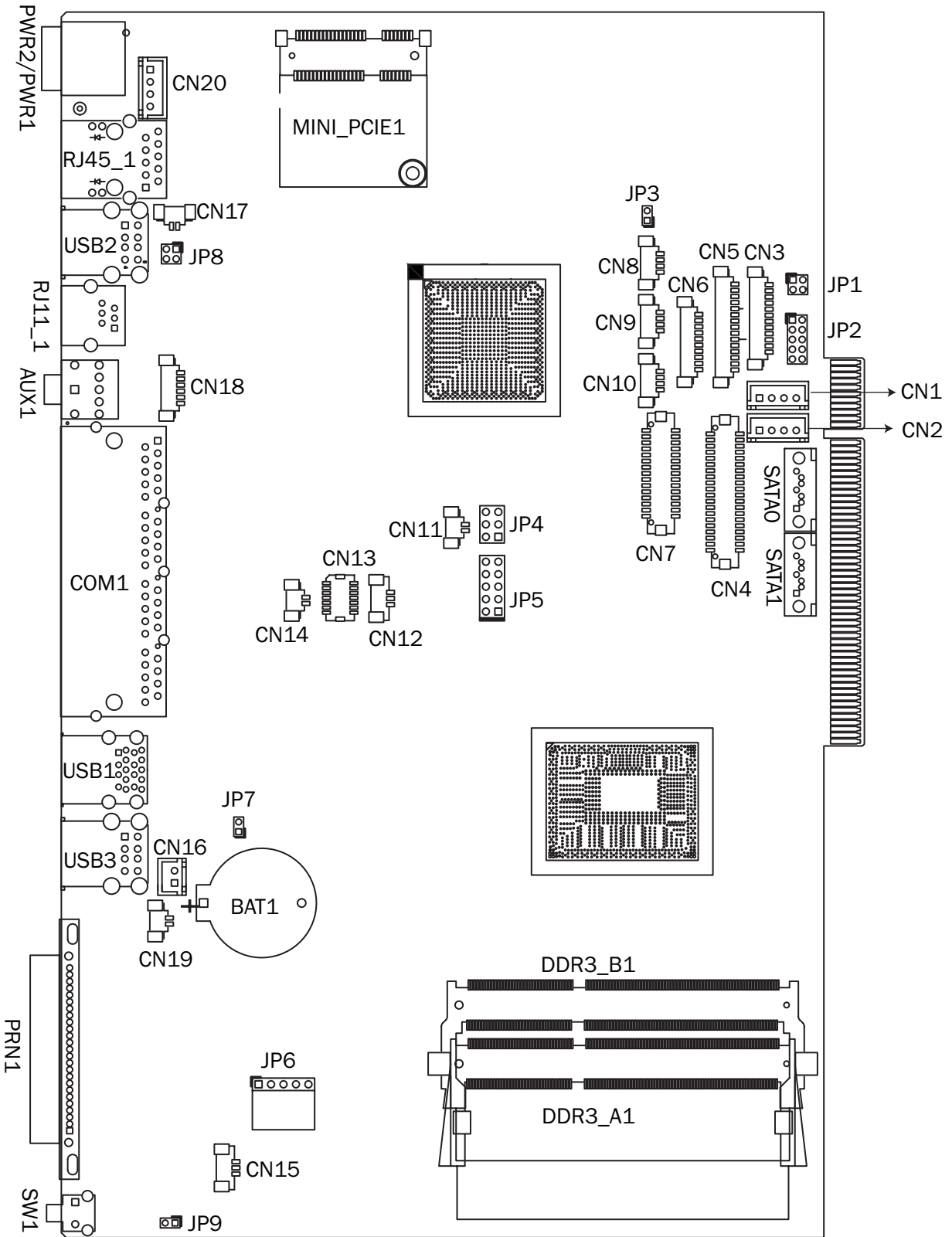
6-3-2. Connectors & Functions

Connector	Function
CN1/2	SATA Power Connector
CN3	Inverter
CN4	LVDS
CN5	MSR Connector
CN7	DVI Connector
CN8/9	USB Connector
CN10	PS2 Keyboard
CN11	HDD LED
CN16	Power On Connector
CN17	LAN LED
CN18	Speaker & MIC Connector
CN19	Power LED
CN20	Power Adaptor Connector
BAT1	CMOS battery
COM1_1	COM1~4
PRN1	Printer Port
PWR2	DC Jack
RJ11_1	Cash Drawer Port
RJ45_1	LAN
SATA0/SATA1	SATA CONN
USB1	USB3.0
USB2/USB3	USB2.0
JP1	Inverter Selection
JP2	LCD ID Setting
JP4/5	CRT Connector
JP6	Touch Connector
JP8	Cash Drawer Power Setting

6-3-3. Jumper Setting

LCD ID Setting

Panel#	Resolution	LVDS Bits	LVDS Channel	Output Interface	JP2
1	800 x 600	18	Single	LVDS Panel	1 2 open; 3-4, 5-6, 7-8 short; 9 10 open
2	800 x 600	24	Single	LVDS Panel	1-2 short; 3 4 open; 5-6, 7-8 short; 9 10 open
3	1024 x 768	18	Single	LVDS Panel	1 2, 3 4 open; 5-6, 7-8 short; 9 10 open
4	1024 x 768	24	Single	LVDS Panel	1-2, 3-4 short; 5 6 open; 7-8 short; 9 10 open
5	1366 x 768	18	Single	LVDS Panel	1 2 open; 3-4 short; 5 6 open; 7-8 short; 9 10 open
6	1366 x 768	24	Single	LVDS Panel	1-2 short; 3 4, 5 6 open; 7-8 short; 9 10 open
7	1024 x 600	18	Single	LVDS Panel	1 2, 3 4, 5 6 open; 7-8 short; 9 10 open
8	1280 x 1024	24	Dual	LVDS Panel	1-2, 3-4, 5-6 short; 7 8, 9 10 open
9	1440 x 900	24	Dual	LVDS Panel	1 2 open; 3-4, 5-6 short; 7 8, 9 10 open
15	1920 x 1080	24	Dual	LVDS Panel	1 2 3 4 5 6 7 8 9 10 (all open)
				CRT	1 2 3 4 5 6 7 8 open; 9-10 short

[diagram] 1 / 2 Jumper open   [diagram] 1 / 2 Jumper short

Inverter Selection

Function	JP1
▲ LED	1 2 / 3 4 (1-2 shorted)
CCFL	1 2 / 3 4 (3-4 shorted)

Cash Drawer Power Setting

Function	JP8
▲ +19V	1 2 / 3 4 (1-2 shorted)
+12V	1 2 / 3 4 (3-4 shorted)

6-4. D66 Motherboard

6-4-1. Motherboard Layout
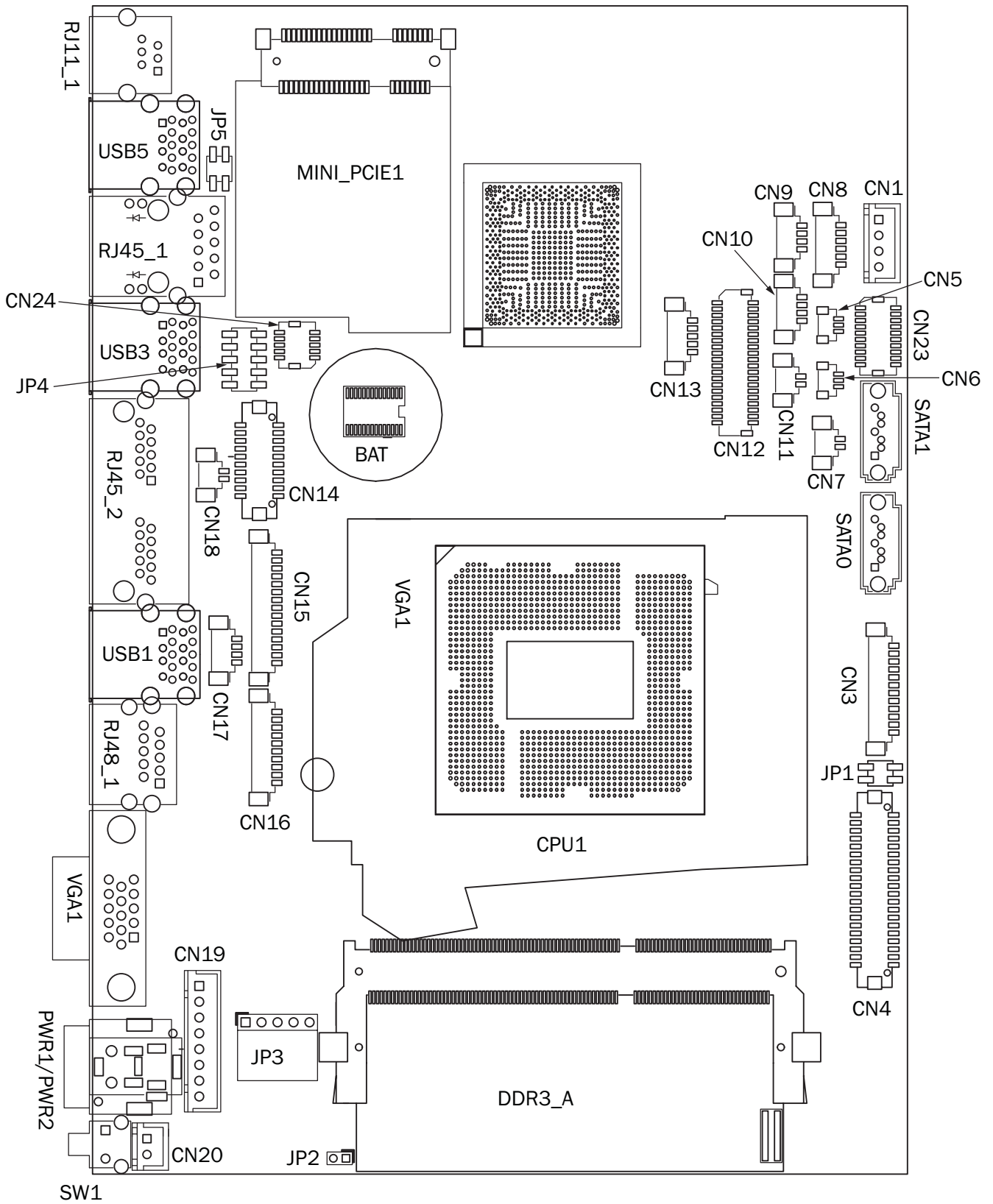
6-4-2. Connectors & Functions

Connector	Function
CN1	SATA power connector
CN3	Inverter connector
CN4	LVDS connector
CN5	CPU FAN connector
CN6	System FAN connector
CN7	HDD LED connector
CN8	Speaker & MIC connector
CN9/10	USB port (internal)
CN11	Power LED connector
CN12	40pin external connector
CN13	EC Debug
CN14	Printer connector
CN15	MSR connector
CN16	COM5 (touch) connector
CN17	PS2 keyboard connector
CN18	RTC connector
CN19	Wide Range
CN20	Power button (internal)
CN21	LCM connector
CN22	51pin connector
CN23	SDU connector
CN24	SDU connector (LAN)
RJ45_1	LAN connector
RJ45_2	COM1/ COM2
RJ48_1	COM3
RJ11_1	Cash drawer connector
PWR1	DC Jack (4 pin)
PWR2	DC Jack (2 pin)
SATA0	SATA0
SATA1	SATA1
SW1	Power button
USB1	USB3.0
USB4	USB2.0
USB6	USB2.0
VGA1	CRT connector
DDR3_A	DDR3 SO-DIMM
JP1	Inverter select
JP2	Hareware Reset
JP3	Touch connector
JP4	LCD ID setting
JP5	Cash drawer power setting

6-4-3. Jumper Setting

Inverter Selection

Function	JP1
▲LED	1 3 2 4
CCFL	1 3 2 4

Cash Drawer Power Setting

Function	JP5
▲ +19V	1 3 2 4
+12V	1 3 2 4

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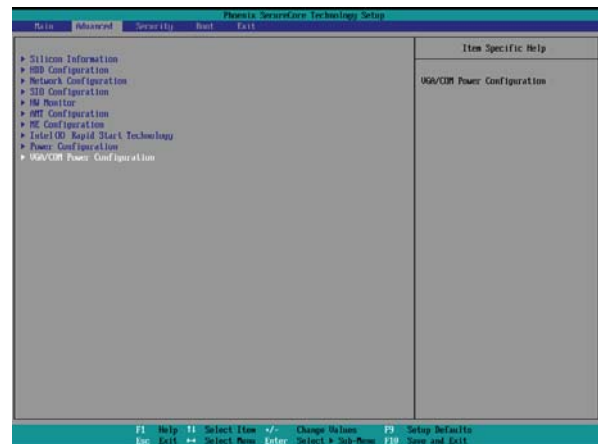
4. To enable the power, select COM1 ,COM2 or COM3 Power setting and press <Enter>. Select Power and press <Enter>. Save the change by pressing F10.
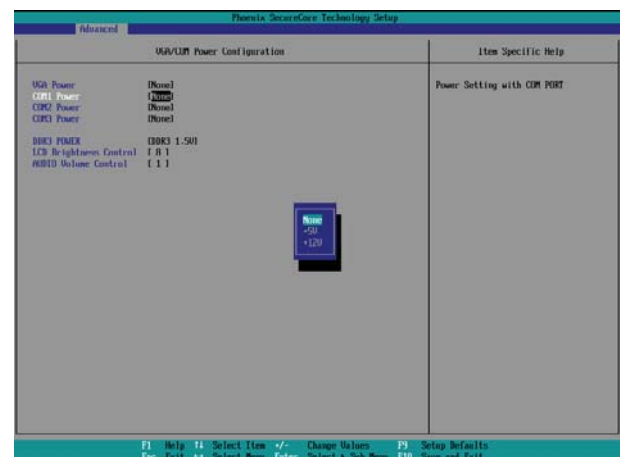
▲ = Manufacturer Default Setting

LCD ID Setting

Panel#	Resolution	LVDS Bits	LVDS Channel	Output Interface	JP4
1	800 x 600	18	Single	LVDS Panel	1 [3 5 7] 9 / 2 [4 6 8] 10 (3-4, 5-6, 7-8 short)
2	800 x 600	24	Single	LVDS Panel	[1] 3 [5 7] 9 / [2] 4 [6 8] 10 (1-2, 5-6, 7-8 short)
3	1024 x 768	18	Single	LVDS Panel	1 3 [5 7] 9 / 2 4 [6 8] 10 (5-6, 7-8 short)
4	1024 x 768	24	Single	LVDS Panel	[1 3] 5 [7] 9 / [2 4] 6 [8] 10 (1-2, 3-4, 7-8 short)
5	1366 x 768	18	Single	LVDS Panel	1 [3] 5 [7] 9 / 2 [4] 6 [8] 10 (3-4, 7-8 short)
6	1366 x 768	24	Single	LVDS Panel	[1] 3 5 [7] 9 / [2] 4 6 [8] 10 (1-2, 7-8 short)
7	1024 x 600	18	Single	LVDS Panel	1 3 5 [7] 9 / 2 4 6 [8] 10 (7-8 short)
8	1280 x 1024	24	Dual	LVDS Panel	[1 3 5] 7 9 / [2 4 6] 8 10 (1-2, 3-4, 5-6 short)
9	1440 x 900	24	Dual	LVDS Panel	1 [3 5] 7 9 / 2 [4 6] 8 10 (3-4, 5-6 short)
15	1920 x 1080	24	Dual	LVDS Panel	1 3 5 7 9 / 2 4 6 8 10 (all open)
				CRT	1 3 5 7 [9] / 2 4 6 8 [10] (9-10 short)

[1 / 2] Jumper open   [1 / 2 shorted] Jumper short

40

Intel Graphics Driver Setting

1. Right click Desktop. Find "Graphics Properties" and enter the manu.

2. Make sure the Display Device is same as follows.
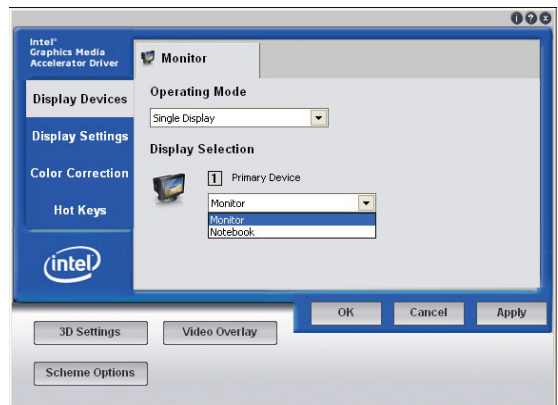
No.	Output Interface	Connector & Jumper	Intel Graphics Driver Device Name
1st	LCD Panel	CN26	Notebook
2nd	VGA Port	JP3/6	Monitor

6-5. IdeaCom Touch Driver Installation

If your system is installing with the POS touch driver, please follow the below steps to remove the driver first.

1. Click <Start>

2. Click <All Programs> in the Start Menu

3. Click <TouchUtility>

4. Click <Unistall TouchUtility>

5. Click <Next>

6. Click <Finish> to exit.
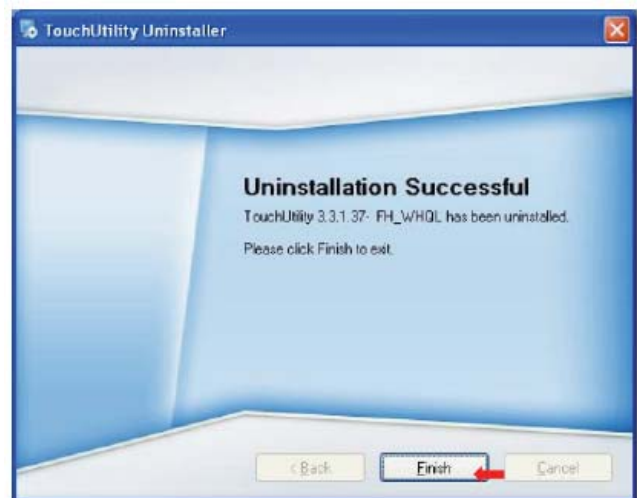
7. Click <OK> to reboot your system to complete the uninstallation of POS touch driver.

Please follow the below steps to install the IdeaCom touch driver.

Driver Location

Folder/File	Fille Description
<CD>:\Common\IdeaCom_Touch\Windows\Release	IdeaCom Touchdriver installation

OS Supported: Windows XP Pro, POS Ready 2009,Windows Vista ,Windows 7(32bit only)

1. Click <Windows> of the IdeaCom Touch section in the driver list menu.
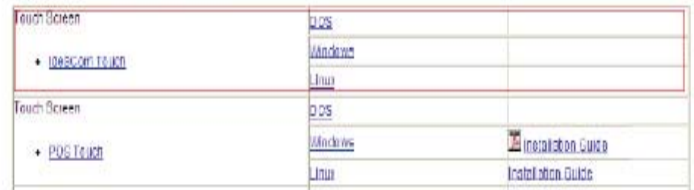
2. Double-click <setup.EXE>
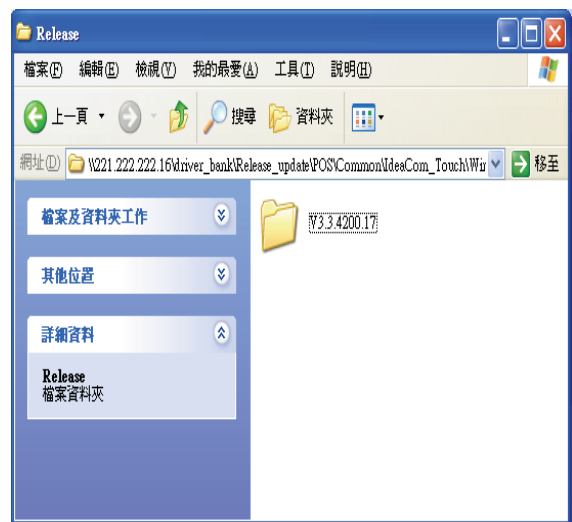
3. Double-click <Setup.exe>
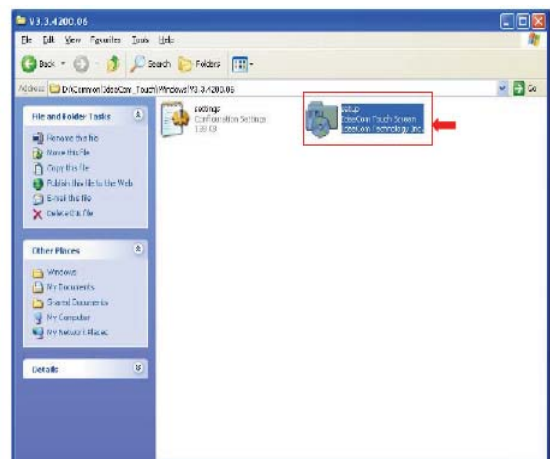
4. Click <Next> to proceed the installation.
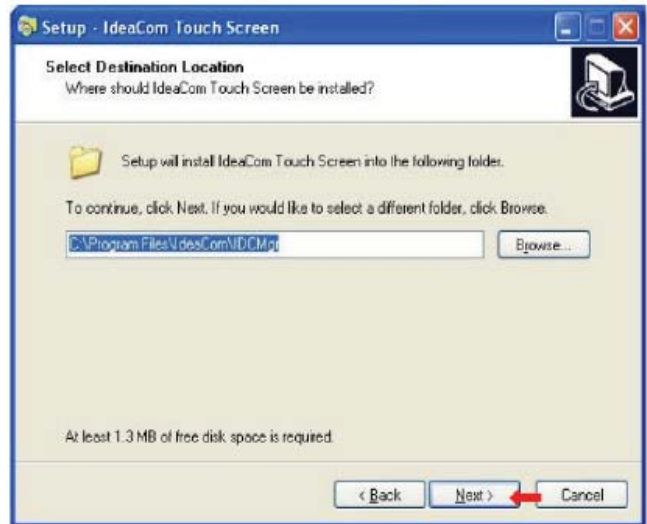
5. Click <Finish> to restart your system.

6-5-1. Gesture Setup example for WinXP

1. Open <IdeaCom Touch Screen
   Manager> utility.
   (You can click IdeaCom Logo or
   select <Start → Programs →
   IdeaCom Touch Screen →
   IdeaCom Touch Screen Manager>
   open the utility)
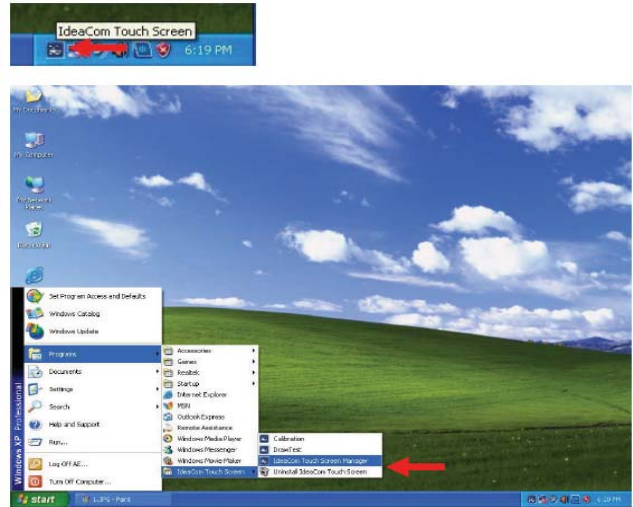
2-1. Open <Windows Picture and Fax
     Viewer> and check <Next Image>
     hot key

2-2.
a. Select <Gesture Setting>
b. Select <Hot Keys>, then set <Right
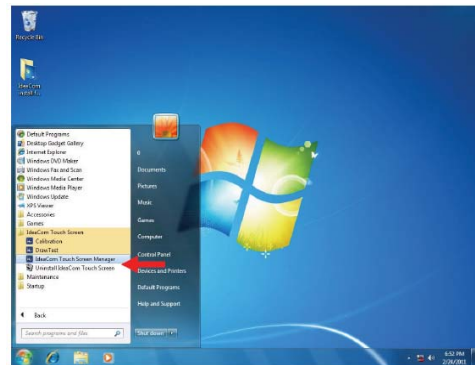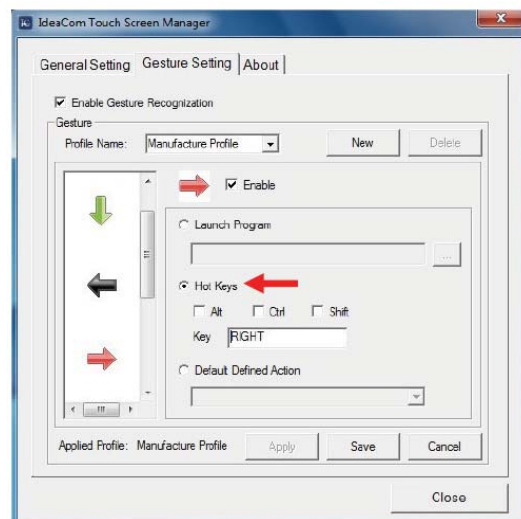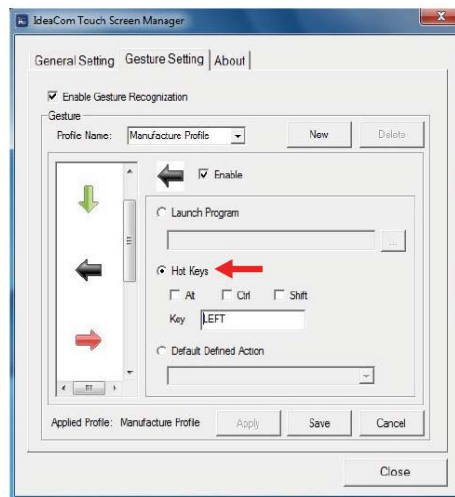   Arrow> hot key
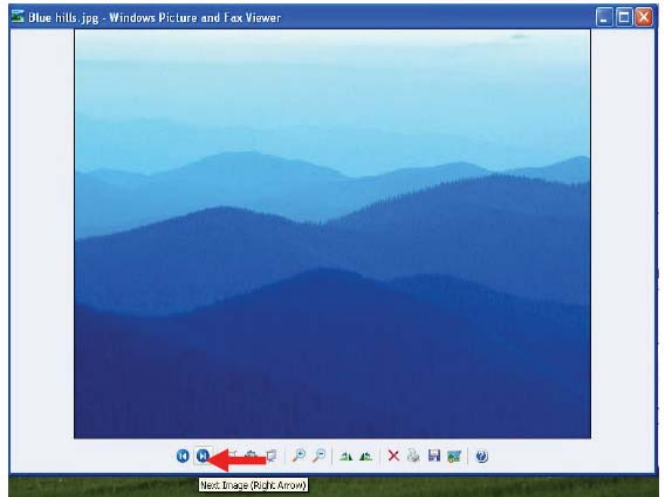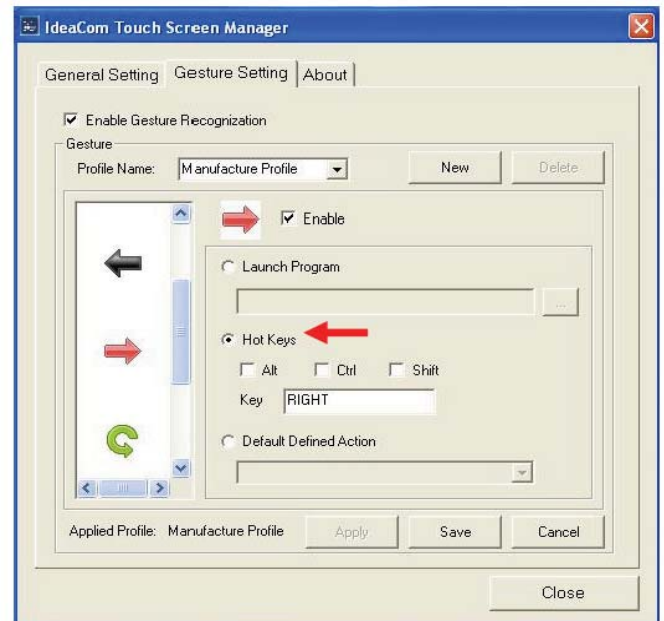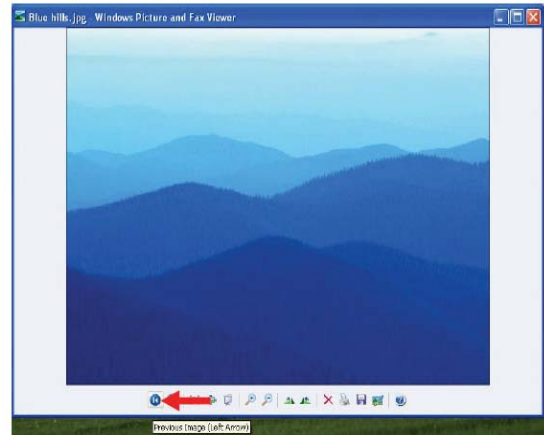
3-1. Check <Previous Image> hot key

3-2. Select <Hot Keys>, then set <Left Arrow> hot key
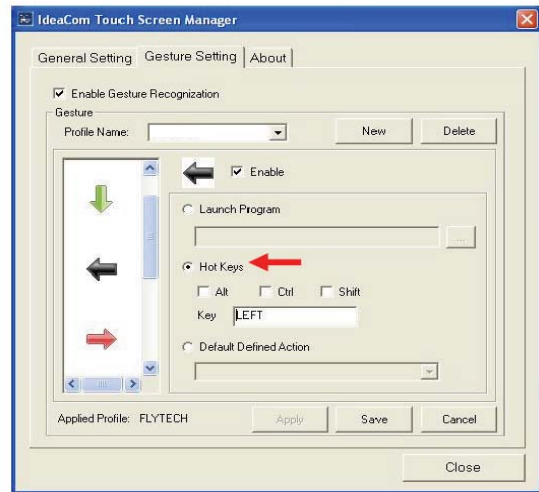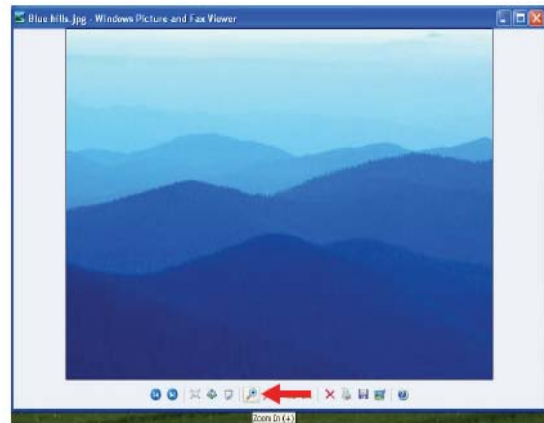
4-1. Check <Zoom In> hot key

4-2. Select <Hot Keys>, then set <Up Arrow> hot key
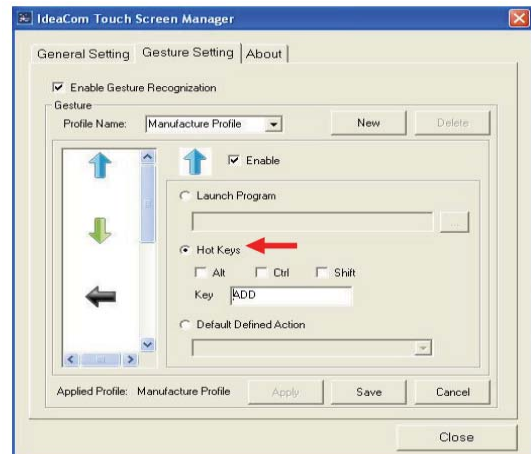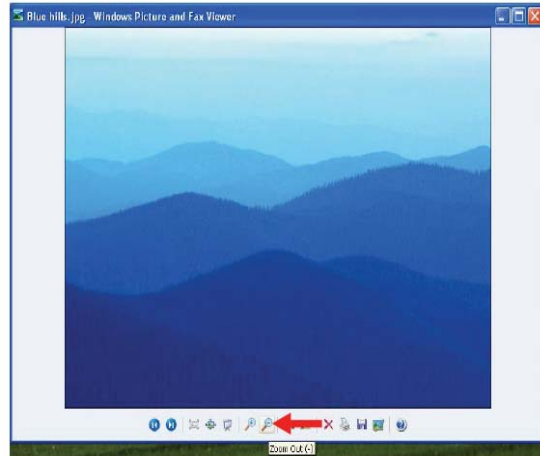
5-1. Check <Zoom Out> hot key

5-2. Select <Hot Keys>, then set <Down Arrow> hot key
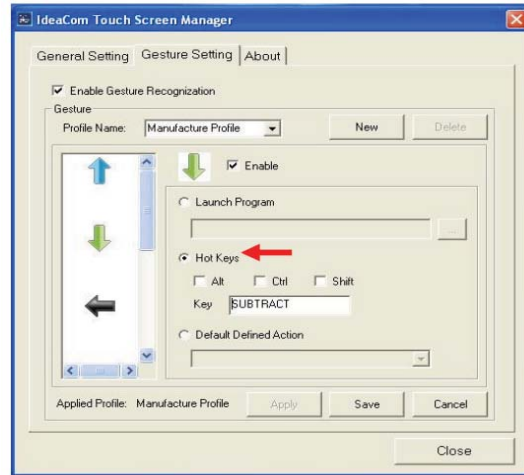
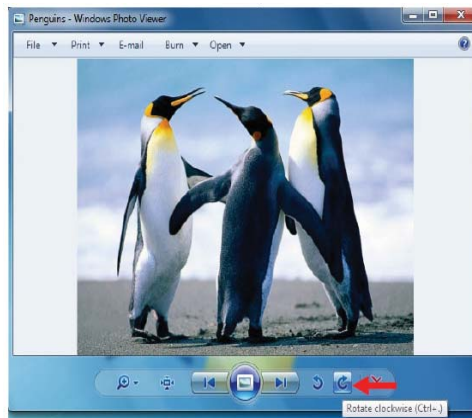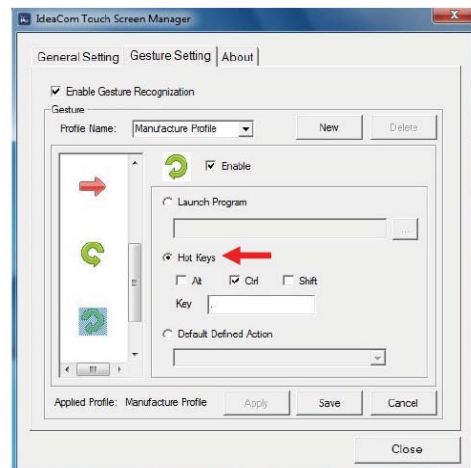6-1. Check <Rotate Clockwise> hot key
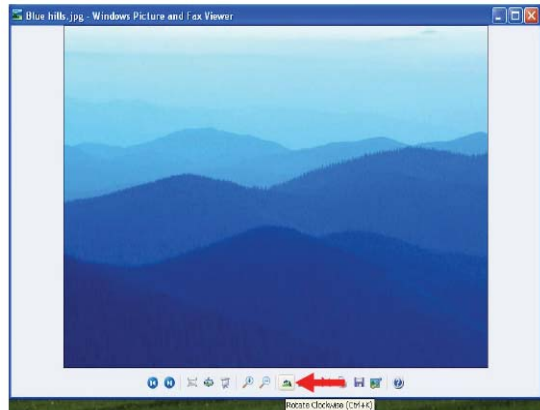
6-2. Select <Hot Keys>, then set <Rotate Clockwise> hot key
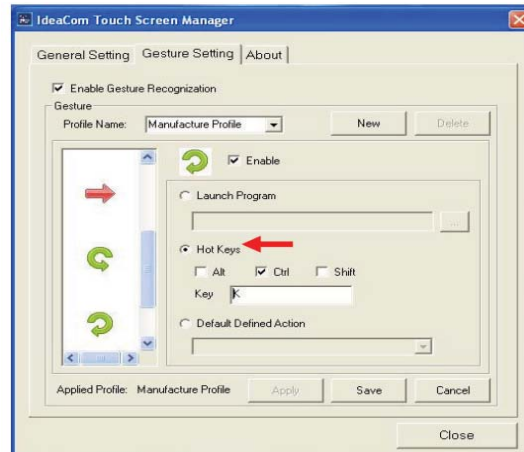
7-1. Check <Rotate
Counterclockwise> hot key
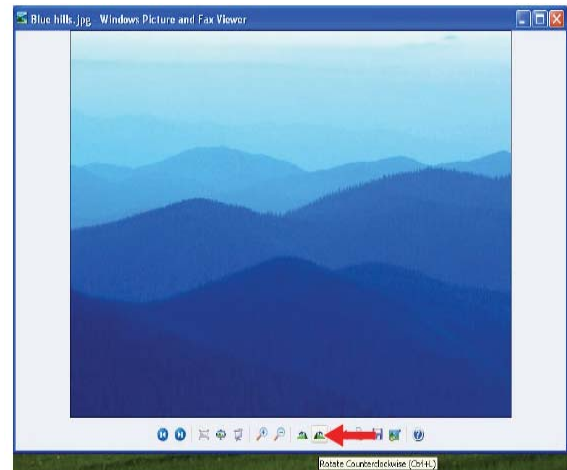
7-2.
a. Select <Hot Keys>, then set
<Rotate Counterclockwise> hot
key
b. Click <Save>
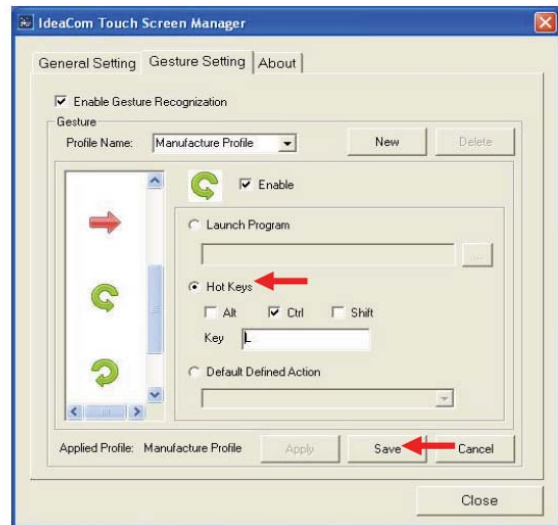
8. Key in <Profile Name> to save,
then click <OK>
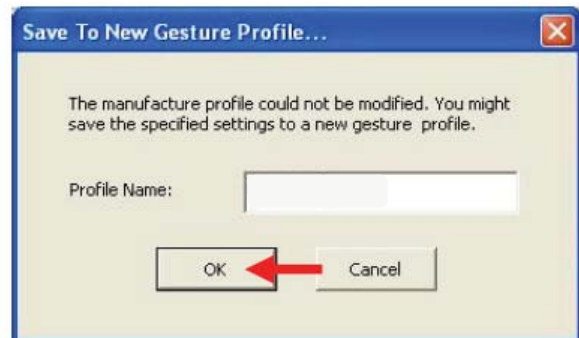
9. Select <Apply> and clicck.
Finally click <Yes> to save the
setting
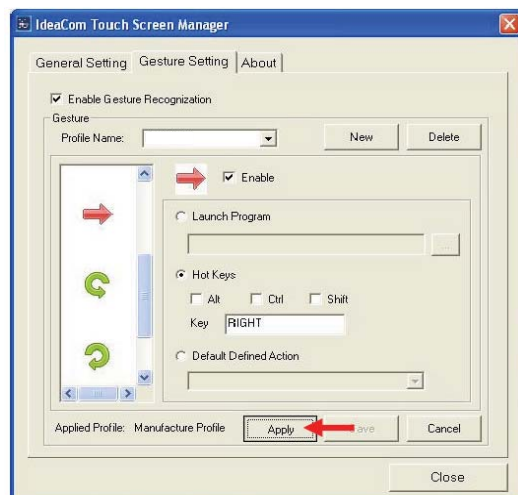
6-5.2. Gesture Setup example for Win7

1. Open <IdeaCom Touch Screen
    Manager> utility.
    (You can click IdeaCom Logo or
    select <Start ➝ All Programs ➝
    IdeaCom Touch Screen ➝
    IdeaCom Touch Screen Manager>
    open the utility)

2-1. Open <Windows Photo Viewer
     and check <Next > hot key

2-2.
a. Select <Gesture Setting>
b. Select <Hot Keys>, then set <Right
   Arrow> hot key

3-1. Check <Previous> hot key

3-2. Select <Hot Keys>, then set <Left Arrow> hot key

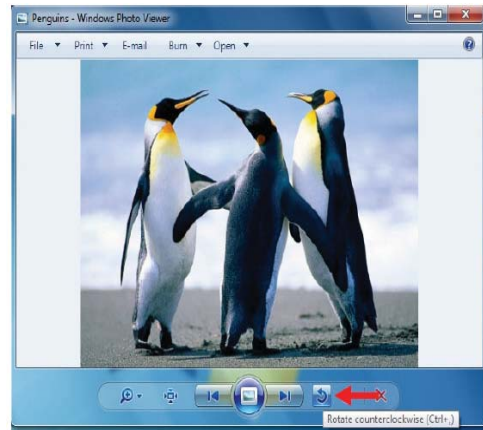4-1. Check <Rotate Clockwise> hot key

4-2. Select <Hot Keys>, then set <Rotate Clockwise> hot key
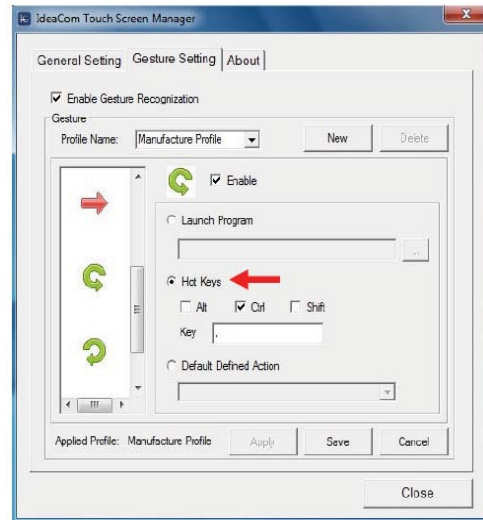
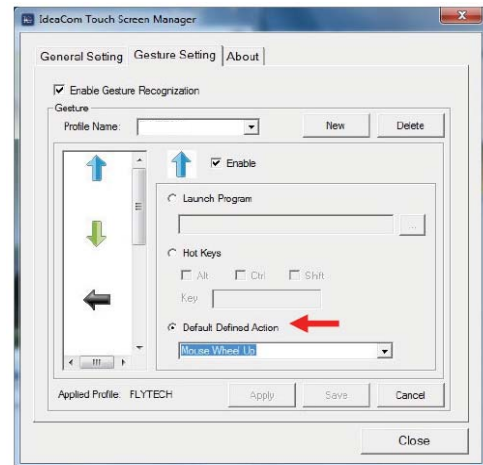5-1. Check <Rotate Counterclockwise> hot key

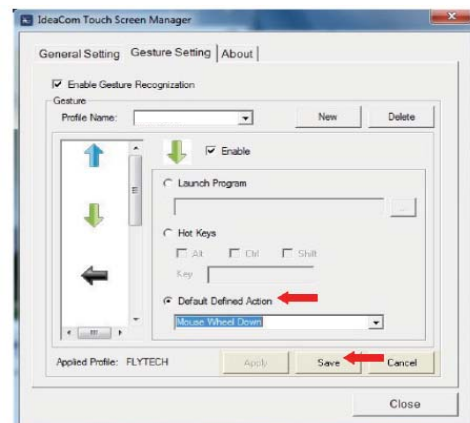5-2. Select <Hot Keys>, then set <Rotate Counterclockwise> hot key

6. Select <Default Defined Action>, then set <Up Arrow> action for zoom in

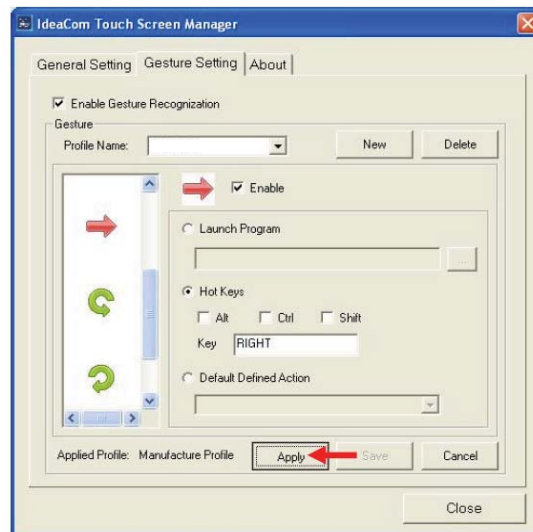7. Select <Default Defined Action>, then set <Down Arrow> action for zoom out. Click<Save>.

8. Key in <Profile Name> to save, then click <OK>

9. Select <Apply> and clicck. Finally click <Yes> to save the setting

Appendix: Drivers Installation

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

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