

Version 1.4 December 2013

# Point-of-Sale Hardware System



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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.

### **CE MARK**

# Ce

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

## FCC

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

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation

## **CAUTION ON LITHIUM BATTERIES**

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



## **Battery Caution**

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



## **Safety Caution**

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

#### 4.7.3.2 Materials for fire enclosures

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

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

### LEGISLATION AND WEEE SYMBOL

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



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

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

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

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

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

## **Revision History**

Revision	Date	Description
V1.0	Sep, 2009	• Release
V1.1	June, 2011	C46 MB added
V1.2	July,2012	<ul> <li>C56 MB added</li> </ul>
N/1 2	December 2012	<ul> <li>I/O port changed</li> <li>Dear sever shanged</li> </ul>
V1.3	December, 2012	<ul> <li>Rear cover changed</li> <li>MSR module changed</li> </ul>
V/4_4	December 2012	C36 MB removed
v1.4	December, 2013	• C76 MB added

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# Item Checklist

## **1-1 Standard Items**



## **1-2** Optional Items

a.	MSR module	b.	Finger print
с.	VFD module	d.	Second display
e.	Wall mount kit	f.	Wireless LAN card
g.	SSD card module		

# System View

## 2-1 Front View



Number	Description
1	Touch screen
2	MSR module (Option)
3	Power button

## 2-2 Rear View



Number	Description
5	VFD cover (for VFD & Second display installation)
6	Stand/Wall mount kit installing place
7	Stand
8	Cable management outlet

## 2-3 Bottom View



Number	Description
9	Stand pad

# 2-4 I/0 View

C46/56 Motherboard





No	Description
а	Cash drawer
b	USB x 4
С	LAN
d	COM1~4 (from right to left)
е	VGA
f	Power jack for system
g	Power button
h	HDD
i	Parallel (standard) / USB x 2 (optional)
j	HDD clip

#### C76 Motherboard

Standard



## Optional



No	Description
а	Cash drawer
b	USB x 4 (2.0)
С	COM1~3 (from left to right)
d	VGA
е	Power jack for system
f	Power button
g	HDD
Н	LAN
i	USB x 2 (3.0)
j	Parallel (standard) / USB x 2 (optional)
k	HDD clip

# **3** Peripherals Installation

## **3-1 MSR Installation**





- 1. Open the dummy cover of the MSR.
- 2. Connect the MSR cable to the connector on the system.



3. Insert the MSR module in place and fasten the screw (x2) on the back to secure the module.

## 3-2 VFD Installation

Accessories:







1. Remove the screws (x2) and slide the VFD cover outward.



- 2. Positioning the VFD metal bracket onto the rear side of the VFD module and fasten the screws (x2).
- 3. Positioning the plastic bracket onto the metal bracket as shown in the picture.





- 4. Fasten the screw (x1) to fix the plastic bracket to the metal bracket and VFD module.
- 5. Slide the VFD module with bracket into the VFD socket.
- 6. Fasten the screws (x2) to fix the VFD module.



7. Connect the VFD cable to the VFD module.



8. Connect the VFD cable to the COM4 port on the System.

## **3-3 Second Display Installation**

To install the 8.4" second display, please open the VFD cover first (See chapter 3-2 step1).

#### **Accessories:**



- 1. Place the system face down, make sure not to scratch the screen.
- 2. Place the metal bracket onto the rear side of the second display and fasten the screws (x4) to fix metal bracket with the system.
- 3. Align the plastic bracket onto the metal bracket, and push to the left side until it clicks in place.





- 4. Fasten the screw (x1) to fix the platic bracket and second display module with metal bracket.
- 5. Slide the second display module into the slot.



- 6. Fasten the scrws (x2) to fix the second display moudle with the system.
- 7. Connect the VGA cable to the second display module and the COM port on the system.



## 3-4 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		Wr	ite	Rese	erved



- 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.EAE program under DOS of Windows90	Use Debug.EXE	program	under DOS	or	Windows98
--	---------------	---------	-----------	----	-----------

Col	mmand	Cash Drawer	
04	8C 04	Opening	
04	80 00	Allow to close	
$\checkmark$	Set the I/O address 48Ch bit2 =1 for opening Cash Drawer by "DOUT		
	bitO" pin control.		
$\succ$	Set the I/O address	48Ch bit2 = 0 for allow close Cash Drawer.	

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

## 3-5 Wall Mount Kit

Before installing the Wall Mount Kit, please remove the stand first if needed. (See Chapter 4-3)



1. The wall mount Kit installing place is at the rear side of the system.



- 2. Place "b" onto the rear side of the LCD rear cover.
- 3. Place "c" onto the hole of the monitor plate and fasten the screw (x1).
- 4. Fasten the screws (x4) to fix the monitor plate.





- 5. Fix "a" on the wall.
- 6. Fasten the thumb screw (x1).
- 7. Align the large end of the teardrop mounting holes (x4) on the wall plate with the screws (x4) on the systems rear cover. Slide the wall plate until the screws are even with the narrow end.

# 4 System Assembly & Disassembly

## 4-1 Replace the HDD



1. Place the system face down. Make sure not to scratch the screen.



2. The HDD is secured by a clip, please push the clip aside as the picture shows.



3. Pull the plastic tab (see picture) to remove the hard drive.

## 4-2 Replace the Power Adapter



1. Unfasten the thumb screw (x1) to seperate the retaining metal bracket from the stand and take out the power adapter.

## 4-3 Remove the System Stand



- 1. Remove the screws (x2) that secure the stand and the system.
- 2. Remove the screws (x4) that fasten the plastic VESA mounting plate and the LCD rear cover.



3. Remove the VESA metal bracket,.

# Specification

Model Name	P0\$335		
Motherboard	C46	C56	C76
CPU support	Intel PineTrial D525 dual-core 1.8G, L2 1M, FSB667/ 800MHz	Intel Cedarview D2550 dual-core 1.86GHz, L2 1M	Intel Ivy Bridge Celeron 1007U Dual Core 1.5 G, LLC 2M, 22nm, 17W
Chipset	CPU integrated graphic + ICH8M	CPU integrated graphic + NM10	Intel PCH HM76
System memory	1 x DDR3 SO-DIMM socket up to 2GB	1 x DDR3 SO-DIMM up to 4GB, 1066MHz	1 x DDR3 -1600Hz, SO-DIMM, default 2GB, max. 8GB
Graphic memory	Intel GMA 3150 share system memory up to 256MB	Intel GMA 3650 (Gfx frequency up to 640MHz), DX9	Intel HD graphic DX11 and OCL1.1
LCD Touch Panel			
LCD size		15" LED	
Brightness	2	50 nits	250~300 nits
Maximal resolution	1024 x 768		
Touch screen type	Resistive		
Tilt angle	10~90°		
Storage			
HDD	One 2.5" SATA HDD bay		
Flash memory	SATA SSD flash card (option)		
Expansion			
PCI-E socket 1			
External I/O Ports			
	1		
Parallel	(one parallel port is included in standard packing; optional packing includes two additional USB port instead of parallel port)		
USB (V2.0)	4 or 6 (printer port is replaced with two additional USB) 8 (2 x USB3.0/2.0, 6 x USB2.0)		
			3 x RJ45 COM ports
	4 x RJ-45 COM connectors (COM1 & COM2 standard		(COM1/2/3 powered RS232;
Serial / COM	RS-232; COM3 & COM4 pin10 with 5V /12V power by		COM1 default 5V; COM2 default
	BIOS)		5V; COM3 default 12V by BIOS
			setting)
LAN (10/100/1000)	1 x RJ45		

Model Name	P0\$335			
Motherboard	C46	C56	C76	
DC jack		1		
2nd VGA	1 (DB-15 Female, power by BIOS configuration)			
Cash drawer	1 (12)	V/24V cash drawer power by BIC	S configuration)	
Audio				
Speaker		2 x 2W speakers (Optior	1)	
Power				
Power adapter		90W, 19V		
Control / Indicator				
Power button		1		
Indicator LED		1		
Peripherals				
Finger print		Digital personal module (US	SB)	
MSR module	MSR (USB)			
Customer display		2 x 20 VFD customer display (COM)		
Second display		8.4" 2nd display without to	uch	
Communication				
Wireless LAN	802.11 b/g/n wireless LAN card & antenna (Option)			
Environment				
EMC & Safety	FCC/CE Class A, LVD			
Operating temperature	0°C ~ 35 °C (32 °F ~ 95 °F)			
Storage temperature	-20 °C ~ 60 °C (-4 °F ~ 140 °F)			
Humidity	20% ~ 85% RH non condensing			
Dimension	LCD 4 degree : 365.2 x 296.2 x 282.2 mm			
(W x D x H)	LCD 84 degree : 365.2 x 217.8 x 343.1 mm			
Weight (N.W./G.W.)	5.8kgs / 6.8kgs			
Mounting	100mm x100mm VESA standard holes			
OS support	Windows® XP Profess POSReady 200 Window Professional for Embedde	sional, Windows Embedded, s XP Embedded, Windows XP ed, WinCE, Windows7, Linux 9,	Windows XP professional, POS Ready 2009, Windows XP Embedded, Windows XP professional for Embedded, Linux, Windows 7, Windows 8	
* This specification is su	bject to change without prio	r notice.		

## 6-1 C46 Motherboard 6-1-1 Motherboard Layout



## 6-1-2 Connectors & Functions

Connector	Function
CN3	USB
CN4	Speaker & MIC CONN
CN5	SATA Power
CN6	USB
CN8	For external Touch
CN9	Card reader
CN12	PS2 Keyboard
CN13	HDD LED CONN
CN16	Inverter
CN17	ТИОСН
CN18	Power LED CONN
CN19	LVDS (24bit)
CN20	SYSTEM FAN
CN21	DC-JACK
CN22	POWER BOTTOM CONN
CN25	Battery CONN
PWR3	DDR3 SO-DIMM1
RJ11_3	SATA Connector
RJ45_3	SATA Connector
RJ45_4	Power Button
SATA2	CMOS Operation Mode
SKT3	VGA Port
USB3	COM2 RS232/485/422 Setting
USB4	LCD ID Setting
VGA3	Power Mode Setting
JP3	Cash Drawer power selection
JP4	AT/ATX
JP5	CMOS Operation Mode
JP6	LCD ID Setting
JP7	H/W RESET
JP8	CRT Power Setting
JP9	COM Power Setting
JP10	Inverter Selection

## 6-1-3 Jumper Setting

#### **Cash Drawer Power Setting**

Function	<b>JP3</b> (1-2) (3-4)
▲+19V	1 3 2 4
+12V	1 3 2 4

#### **Power Mode Setting**

Function	<b>JP4</b> (1-2)
▲ ATX Power	1 2
AT Power	1 2

#### System Reset

Function	<b>JP7</b> (1-2)
▲ System Normal	1 2
System Reset	1 2

#### **CRT Power Ctrl**

Function	<b>JP8</b> (1-2)
<b>▲</b> HW	1 2
BIOS	1 2
▲ = Manufacturer Default Setting OF	PEN SHORT

#### 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)
- 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.

#### **CMOS Operation Mode**

Function	<b>JP5</b> (1-2)
▲ CMOS Normal	1 2
CMOS Reset	1 2

#### **Inverter Selection**

Function	<b>JP10</b> (1-2) (3-4) (5-6)
▲ CCFL	1 3 5 2 4 6
LED	$\begin{bmatrix} 1 & 3 & 5 \\ 2 & 4 & 6 \end{bmatrix}$
▲ = Manufacturer Default Setting	PPEN SHORT

#### COM3 & COM4 Power Setting

COM3 and COM4 can be set to provide power to your serial device. The voltage can be set to +5V or +12V by setting jumper JP9 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 i**n the BIOS.

- 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
- Select Power Configuration
   COM/VGA Ports and press
   <Enter> to go to display the available options.
- 4. To enable the power, select COM3 Power Setting or COM4 Power setting and press
  <Enter>. Select Power and press <Enter>.
  Save the change by pressing F10.

BIOS SETUP UTILITY		
Main Advanced PCIPnP Boot Security Chi	ipset Exit	
Advanced Settings	Power Configuration	
WARNING: Setting wrong values in below sections may cause system to malfunction.	Conv von Pur cs	
► CPU Configuration		
► IDE Configuration		
SuperIO Configuration     Nandware Health Configuration		
► ACPI Configuration		
► AHCI Configuration		
APM Configuration     Deven Configuration	A Calact Screen	
<ul> <li>MPS Configuration</li> </ul>	14 Select Iten	
▶ PCI Express Configuration	Enter Go to Sub Screen	
► USB Configuration	F1 General Help	
	ESC Exit	

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	BIOS SETUP UTILITY	
Advanced		
Power Configuration COM/	VGA Ports	Enable standard Power Setting COM3 +50.
VGA Power Setting COM3 Power Setting COM4 Power Setting	[No Power] [None] [None]	COM4 +120 POWER, OR NONE Power Select COM3 +120/COM4 +50 by backware jummer ping
Brightness Control	CLevel 71 Options None Power	<ul> <li>Action and a set of the set of</li></ul>
u02.68 (C) Comu	right 1985-2009, American M	erratrends, Inc.

Function	<b>JP9</b> (1-2) (3-4) (5-6) (7-8)
▲COM3 +5V	1 3 5 7 2 4 6 8
COM3 +12V	1 3 5 7 2 4 6 8
COM4 +5V	1 3 5 7 2 4 6 8
▲COM4 +12V	1 3 5 7 2 4 6 8

#### COM 3 & COM4 Power Setting

#### **LCD ID Setting**

Posolution		LVDS/TTL		Quitaut Interface	JP6	
Res	Solu	lion	Bits	Channel	Output interface	(1-2) (3-4) (5-6) (7-8)
800	х	600	24	Single		1 3 5 7 2 4 6 8
1024	x	768	24	Single		$\begin{array}{c}1&3&5&7\\2&4&6&8\end{array}$
1366	x	768	24	Single	1 <sup>st</sup> : LCD Panel	$\begin{array}{cccc} 1 & 3 & 5 & 7 \\ 2 & 4 & 6 & 8 \end{array}$
800	x	600	18	Single	2 <sup>nd</sup> : VGA Port	$\begin{bmatrix} 1 & 3 & 5 & 7 \\ 2 & 4 & 6 & 8 \end{bmatrix}$
*800	x	600	18	Single		$   \begin{bmatrix}     1 & 3 & 5 & 7 \\     2 & 4 & 6 & 8   \end{bmatrix} $
1024	x	768	18	Single		$     \begin{bmatrix}       1 & 3 & 5 & 7 \\       2 & 4 & 6 & 8     \end{bmatrix}   $
					CRT only (Pineview CRT only)	1 3 5 7 2 4 6 8

\*Note: specialized for Sharp 12.1" LQ121S1LG41/LQ121S1LG42 panel.

#### **2nd VGA Power Setting**

VGA port power must be enabled through BIOS/Utility. The Default Setting is "No Power".

- 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
- Select "Power Configuration COM/VGA Ports" and press <Enter> to go to display the available options.

HainAdvancedPCIPNPBootSecurityChipsetExitAdvancedSettings			BID2 21	TUP UTILITY			
Advanced Settings       Power Configuration         WARNING: Setting wrong values in below sections may cause system to malfunction.       COM/UGA Ports         > CPU Configuration       SuperIO Configuration         > IDE Configuration       ACPI Configuration         > ACPI Configuration       AHCI Configuration         > AHCI Configuration       Power Configuration         > MPS Configuration       Power Configuration         > Power Configuration       Power Configuration         > POVER Configuration       Power Configuration         > POVER Configuration       Power Configuration         > USB Configuration       Power Configuration         > USB Configuration       Figuration         > USB Configuration       Figuration         > USB Configuration       Extreme Figuration	Main Advanced	PCIPnP	Boot	Security	Chi	pset	Exit
<ul> <li>CPU Configuration</li> <li>SuperIO Configuration</li> <li>Hardware Health Configuration</li> <li>ACPI Configuration</li> <li>AHCL Configuration</li> <li>Power Configuration</li> <li>Power Configuration</li> <li>Power Configuration</li> <li>Port Express Configuration</li> <li>USB Configuration</li> <li>USB Configuration</li> <li>F1 General Help</li> <li>F10 Save and Exit</li> <li>ESC Exit</li> </ul>	Advanced Settings WARNING: Setting w may cause	rong value system to	s in bel malfunc	ow sections tion.		Power COM/V	r Configuration VGA Ports
	<ul> <li>CPU Configuratic</li> <li>IDE Configuratic</li> <li>SuperID Configur</li> <li>Hardware Health</li> <li>ACPI Configurati</li> <li>AHCI Configuratic</li> <li>Power Configuratic</li> <li>POWer Configuratic</li> <li>MPS Configuratic</li> <li>PCI Express Configuratic</li> <li>USB Configuratic</li> </ul>	m m configurat on on m ion COM/Ve m 'iguration m	<b>ion</b> A Ports			¢ †↓ Enter F1 F10 ESC	Select Screen Select Item r Go to Sub Screer General Help Saue and Exit Exit

4. To switch on the power, select "+12V" press <Enter>. Please Save the change by pressing F10.

	BIOS SETUP UTILITY	
Advanced		
Power Configuration COM/	VGA Ports	WARNING, WILL DAMAGE
UGA Power Setting COM3 Power Setting COM4 Power Setting Brightness Control	[No Pover] [None] [None] [Leve] 7]	<ul> <li>MONITOR IF ENABLED</li> <li>Select Screen</li> <li>Select Item</li> <li>Change Option</li> <li>General Help</li> <li>F10 Save and Exit</li> <li>ESC Exit</li> </ul>
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## 6-2 C56 Motherboard 6-2-1 Motherboard Layout



#### Connectors **Functions** CN1 LVDS Inverter Connector CN2 System FAN Connector CN3 LVDS Connector CN4 Power LED Connector CN5 SATA LED Connector CN6 Speaker & MIC Connector CN8 SATA Power Connector CN9 COM5(Touch) Connector CN10 **Printer Port Connector** CN11/12 USB Port(Internal) CN13 LAN LED Connector CN14 **PS2 Keyboard Connector** CN15 Card Reader Connector(COM6) CN16 +19V DC IN Connector CN17 Power button(Internal) Front I/O Connector(USB/power LED/ Power button) CN18 PWR2/3 +19V DC JACK RJ11\_1 Cash Drawer Connector RJ45\_1 LAN Connector RJ45\_2 COM1/ COM2/ COM3/ COM4 DDR2\_A1 DDR3 SO-DIMM SATA1/2/4 SATA Connector SKT1 **BIOS Connector** USB1 USB6 USB7 USB2 USB4 USB5 VGA1 **VGA** Connector SW1 Power button JP1 Inverter Select JP2 **CMOS** Operation Mode JP3 LCD ID Setting JP4 H/W Reset JP5 **COM2** Power Setting JP6 COM3/COM4 Power Setting JP7 Auto Button Setting JP8 **Touch Connector** JP9 CASH DRAWER Power Setting

## 6-2-2 Connectors & Functions

## 6-2-3 Jumper Setting

#### **Cash Drawer Power Setting**

Function	<b>JP9</b> (1-2) (3-4)
▲+19V	1 3 2 4
+12V	$\begin{bmatrix} 1 & 3 \\ 2 & 4 \end{bmatrix}$

#### **Inverter Selection**

Function	<b>JP1</b> (1-2) (3-4) (5-6)
▲ LED	1 3 5 2 4 6
CCFL	1 3 5 2 4 6

#### **COM2** Power Setting

Function	<b>JP5</b> (1-2) (3-4)
▲ No Power	1 3 2 4
COM2 +5V	1 3 2 4
COM2 +12V	1 3 2 4
▲ = Manufacturer Default Setting 0	PEN SHORT

#### COM 3 & COM4 Power Setting

Function	<b>JP6</b> (1-2) (3-4) (5-6) (7-8)
▲COM3 +5V	1 3 5 7 2 4 6 8
COM3 +12V	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
COM4+ 5V	1 3 5 7 2 4 6 8
▲ COM4 +12V	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

#### COM2/COM3/COM4 Power Setting

COM2, 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 JP5 and JP6 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.

- 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.
- Select VGA/COM Power and LCD Brightness Configuration Ports and press <Enter> to go to display the available options.
- To enable the power, select COM2, COM3 or COM4 Power setting and press <Enter>. Select Power and press <Enter>. Save the change by pressing F10.



Phoenix SecureCore Tiano Setup			
Advanced			
VGA/COM Power and LCD Br	ightness Configuration	Item Specific Help	
UGA Power CUM2 Power COM3 Power COM4 Power LCD Brightness Control	[None] [None] [None] [ 8 ] None Powered	Default no power. Power on DB-9/M pin 9 only	
F1 Help T↓ Select Ite Esc Exit ↔ Select Mer	m +/- Change Values u Enter Select⊩Sub-Menu	F9 Setup Defaults I F10 Save and Exit	

LCD ID Setting						
Panel	Pecolution	LVDS		Output	JP3	
Number	Resolution	Bits	Channel	Interface	(1-2) (3-4) (5-6) (7-8) (9-10)	
1	800 x 600	18	Single	LVDS Panel	1 3 5 7 9 2 4 6 8 10	
2	800 x 600	18	Single	LVDS Panel	$ \begin{array}{c} 1 & 3 & 5 & 7 & 9 \\ 2 & 4 & 6 & 8 & 10 \end{array} $	
3	800 x 600	24	Single	LVDS Panel	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
4	1024 x 600	18	Single	LVDS Panel	$ \begin{array}{c} 1 & 3 & 5 & 7 & 9 \\ 2 & 4 & 6 & 8 & 10 \end{array} $	
5	1024 x 768	18	Single	LVDS Panel	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
6	800 x 600	24	Single	LVDS Panel	$\begin{bmatrix} 1 & 3 & 5 & 7 & 9 \\ 2 & 4 & 6 & 8 & 10 \end{bmatrix}$	
7	1024 x 768	24	Single	LVDS Panel	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
10	1366 x 768	18	Single	LVDS Panel	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
11	1366 x 768	24	Single	LVDS Panel	1 3 5 7 9 2 4 6 8 10	
				CRT	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	

\*Panel No.6 for 8.4" (HSD0841SN1-A01)HANNSTAR and 10.4" (A1048N03 V.1) AUO

#### **2nd VGA Power Setting**

- 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.
- Select VGA/COM Power and LCD Brightness Configuration Ports and press <Enter> to go to display the available options.
- To switch on the power, select "+12V" press <Enter>. Please Save the change by pressing F10.

MainAdvancedSecurityBootExitSetup Warning: Setting items on this screen to incorrect values may cause the system to malfunction?Item Specific Help> Boot Configuration > Processor Configuration > Serial AffA (SMA)UGA/COM Power and LCD Brightness Configuration > SID Configuration > SID Configuration > HW Monitor > Intel Fast Flash Standby > Power Configuration > UGA/COM Power and LCD Brightness ConfigurationPower Configuration > HW Monitor > Esc Exit + Select Item */- Change Values Esc Exit + Select Henu Enter Select + Sub-HenuP9Setup Defaults F10	Phoenix SecureCore Tiano Setup					
Setup Warning: Setting items on this screen to incorrect values may cause the system to malfunction!       Item Specific Help         Boot Configuration       WGA/COM Power and LCD Brightness Configuration         Processor Configuration       Serial AfA (SMIA)         North Bridge Configuration       South Bridge Configuration         S1D Configuration       HM Monitor         Intel Fast Flash Standby       Power Configuration         VGA/COM Power and LCD Brightness Configuration       VGA/COM Power and LCD Brightness Configuration	Main Advanced Security Boot Exit					
F1 Help 14 Select Item +/- Change Values F9 Setup Defaults Esc Exit ↔ Select Menu Enter Select → Sub-Menu F10 Save and Exit	Setup Warning: Setting items on this screen to incorrect values may cause the system to malfunction! Boot Configuration Processor Configuration Serial ATA (SATA) North Bridge Configuration South Bridge Configuration SID Configuration HW Monitor Intel Fast Flash Standby Power Configuration VGA/COM Power and LCD Brightness Configuration	Item Specific Help UGA/COM Power and LCD Brightness Configuration				
	F1 Help 14 Select Item +/- Change Values Esc Exit ↔ Select Menu Enter Select ▶ Sub-Men	F9 Setup Defaults u F10 Save and Exit				

Phoenix SecureCore Tiano Setup			
Advanced			
VGA/COM Power and LCD B	ightness Configuration	Item Specific Help	
UGA Power COM2 Power COM3 Power COM4 Power LCD Brightness Control	L 8 1 None Kone L 8 1 +12U	VGA Power	
F1 Help ↑↓ Select It Esc Exit ↔ Select Me	em +/- Change Values nu Enter Select ► Sub-Menn	F9 Setup Defaults u F10 Save and Exit	



#### 

## 6-3-2 Connectors & Functions

Connectors	Functions			
CN1	EC Debug			
CN2	USB/Power Button			
CN3	Inverter Select			
CN4	LVDS Inverter Connector			
CN5	Power LED Connector			
CN6	HDD LED Connector			
CN7	FAN Connector			
CN8	Speaker & MIC Connector			
CN9	SATA Power Connector			
CN10	RTC Connector			
CN11	Printer Port Connector			
CN12	USB (Internal)			
CN13	USB (Internal)			
CN14	PS/2 Keyboard Connector			
CN15	COM4 Connector			
CN16	COM5(Touch) Connector			
CN17	MSR Connector			
CN18	LAN LED Connector			
CN19	DC Jack Connector			
CN20	Power Button			
CN21	LCM Connector			
CN22	BOT 51P Connector			
CN23	iButton Connector			
CN24	SDR Connector			
RJ45_1	LAN Connector			
RJ45_3	COM1/ COM2			
RJ48_1	COM3 Connector			
RJ11_1	Cash Drawer Connector			
PWR1	DC Jack (2 pin)			
PWR2	DC Jack (4 pin)			
SATA3	SATA1			
SATA2	SATA1			
SATA1	SATA2			
SW1	Power button			
USB1	USB3.0			
USB2	USB2.0			
USB3	USB2.0			
VGA1	VGA Connector			
DDR3_A1	DDR3 SO-DIMM			
JP1	Inverter Select			
JP2	LCD ID Setting			
JP3	Auto Power Button			
JP4	H/W Reset			
JP5	RTC Reset			
JP6	ME Debut			
JP7	Touch Connector			
JP8	COM1 Power Setting			
JP9	COM2/COM3 Power Setting			
JP10	Cash Drawer Power Setting			

## 6-3-3 Jumper Setting

#### **Inverter Selection**

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

#### **Cash Drawer Power Setting**

Function	<b>JP10</b> (1-2) (3-4)		
▲+19V	1 3 2 4		
+12V	1 3 2 4		

#### **COM1** Power Setting

Function	<b>JP8</b> (1-2) (3-4)		
▲COM1 +5V	1 3 2 4		
COM1 +12V	1 3 2 4		
▲ = Manufacturer Default Setting	OPEN SHORT		

#### COM2 & COM3 Power Setting

Function	<b>JP9</b> (1-2) (3-4) (5-6) (7-8)
▲COM3 +5V	$\begin{bmatrix} 1 & 3 & 5 & 7 \\ 2 & 4 & 6 & 8 \end{bmatrix}$
COM3 +12V	1 3 5 7 2 4 6 8
▲COM4 +5V	1 3 5 7 2 4 6 8
COM4 +12V	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$

#### COM1/COM2/COM3 Power Setting

COM2, 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 JP8 and JP9 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.

- 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.
- Select VGA/COM Power and LCD Brightness Configuration Ports and press <Enter> to go to display the available options.
- 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.

Phoenix SecureCore Tiano Setup					
Main Advanced	Security	Boot	Exit		
<ul> <li>Silicon Information</li> <li>HDD Configuration</li> <li>Network Configuration</li> <li>SIO Configuration</li> <li>HW Monitor</li> <li>ME Configuration</li> <li>Intel(R) Rapid Start T</li> <li>Power Configuration</li> <li>UGA/COM Power Configuration</li> </ul>	echmology ation			Iter UGA/CC Config	n Specific Help M Power puration
F1 Help ↑↓ Select I Esc Exit ↔ Select M	tem +/- enu Enter	Change U Select ♪	Jalues ⊢Sub-Menu	F9 F10	Setup Defaults Save and Exit

Phoenix SecureCore Tiano Setup				
VGA/COM Power	Item Specific Help			
UGA Power COM1 Power COM2 Power COM3 Power LCD Brightness Control ADUIO Volume Control	[None] [None] [None] [None] [ 8 ] [ 1 ]	UGA Power		
F1 Help 1↓ Select Ito Esc Exit ↔ Select Me	em +/- Change Values nu Enter Select ▶ Sub-Menu	F9 Setup Defaults F10 Save and Exit		

#### **LCD ID Setting**

Panel	Bosolution	LVDS		Output	JP3	
Number	Resolution	Bits	Channel	Interface	(1-2) (3-4) (5-6) (7-8) (9-10)	
1	800 x 600	18	Single	LVDS Panel	1 3 5 7 9 2 4 6 8 10	
2	800 x 600	24	Single	LVDS Panel	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
3	1024 x 768	18	Single	LVDS Panel	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
4	1024 x 768	24	Single	LVDS Panel	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
5	1366 x 768	18	Single	LVDS Panel	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
6	1366 x 768	24	Single	LVDS Panel	$ \begin{bmatrix} 1 & 3 & 5 & 7 & 9 \\ 2 & 4 & 6 & 8 & 10 \end{bmatrix} $	
7	1024 x 600	18	Single	LVDS Panel	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
8	1280 x 1024	24	Dual	LVDS Panel	$ \begin{bmatrix} 1 & 3 & 5 \\ 2 & 4 & 6 \end{bmatrix} 7  9 $ 2 4 6 8 10	
9	1440 x 900	24	Dual	LVDS Panel	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
15	1920 x 1080	24	Dual	LVDS Panel	1 3 5 7 9 2 4 6 8 10	
				CRT	1 3 5 7 9 2 4 6 8 10	
▲ = Manufacturer Default Setting OPEN SHORT						

# **7** 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".