

User Manual

Revision v1.4 September 2011

Bedside Terminal Hardware System



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Manual Version 1.4
Part Number: 3LMKK9380114

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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



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

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

UL



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.

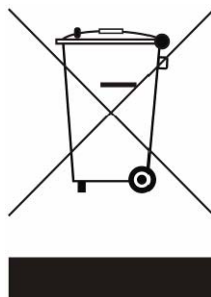
4.7.3.2 Materials for fire enclosures

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

2002/96/EC 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

Changes to the original user manual are listed below:

Version	Date	Description
1.0	2009 July	Initial release
1.1	2009 Sep	Add Arm installation
1.2	2009 Sep	Add Arm application condition Modified connector wording
1.3	2010 May	B68 motherboard added Jumper Setting updated
1.4	2011 September	C48 motherboard added

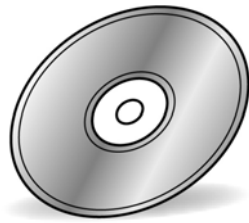
Table Contents

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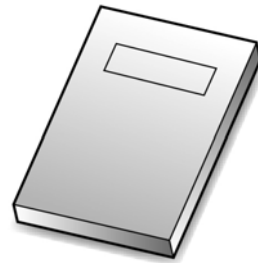
1 Item Checklist

Take the system unit out of the carton. Remove the unit from the carton by holding it by the foam inserts. The following contents should be found in the carton:

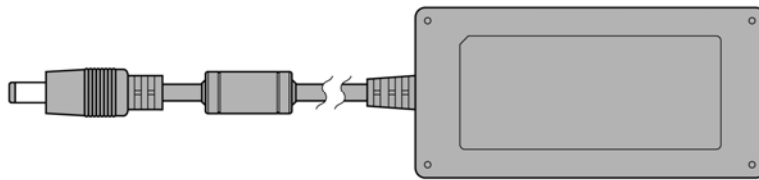
1-1 Standard Items



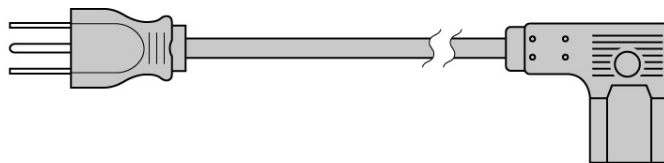
Driver Bank



User Manual



Power Adapter



Power Cable



System



Phone Module

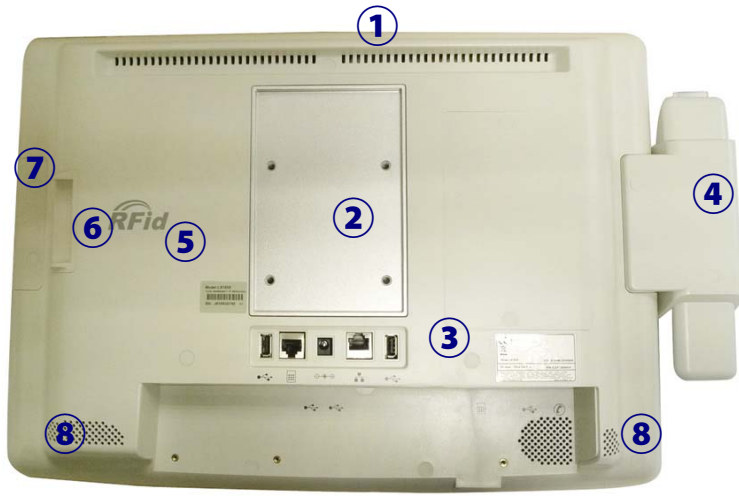
2 System View

2-1 Front View



Number	Description
1	Camera
2	TV key pad (Power, volume and channel button)
3	Smart card reader slot
4	Phone set holder

2-2 Rear View



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)."

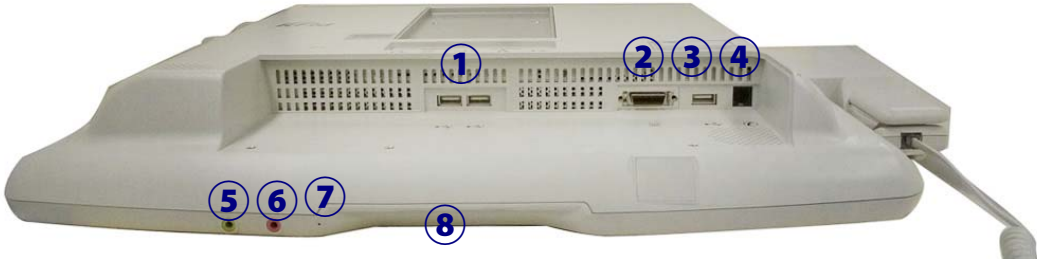
Number	Description
1	Ventilation
2	VESA holes
3	Rear I/O (USBx2, DC-IN, RJ48 , LAN connector)
4	Phone set holder
5	RFID sensor
6	Smart card reader slot
7	MSR slot (optional)
8	Speakers

2-3 Side View



Number	Description
1	Smart card reader slot
2	MSR slot (optional)

2-4 I/O View



Number	Description
1	USB x 2
2	SCSI connector
3	USB x 1
4	Phone jack (RJ11)
5	Audio line-out
6	Audio MIC-in
7	Built-in MIC
8	Smart card reader slot

3 Peripheral Installation

3-1 Phone Set Installation

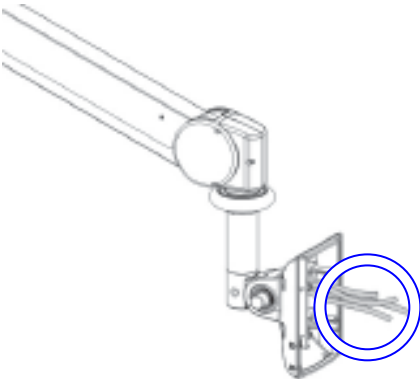


- a. Slide the phone module into the phone set holder as the arrow shown in the picture.
- b. Connect the phone cable to the connector on the phone module.

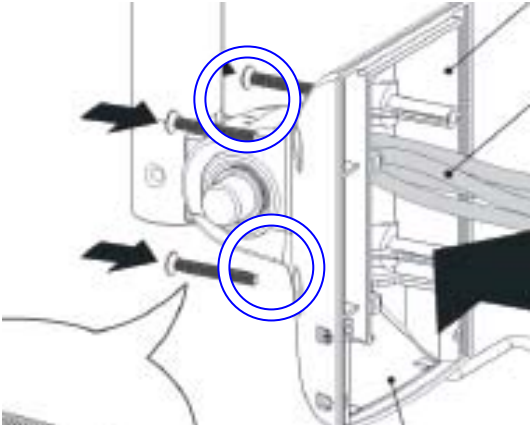


- c. Connect the other end of the phone cable to the connector on the system.

3-2 Arm Installation



a. Connect the cables to the system



b. Fasten the screws(x4).

Note: Only use concrete walls to fix the Arm (and wall box) to.

4 Specification

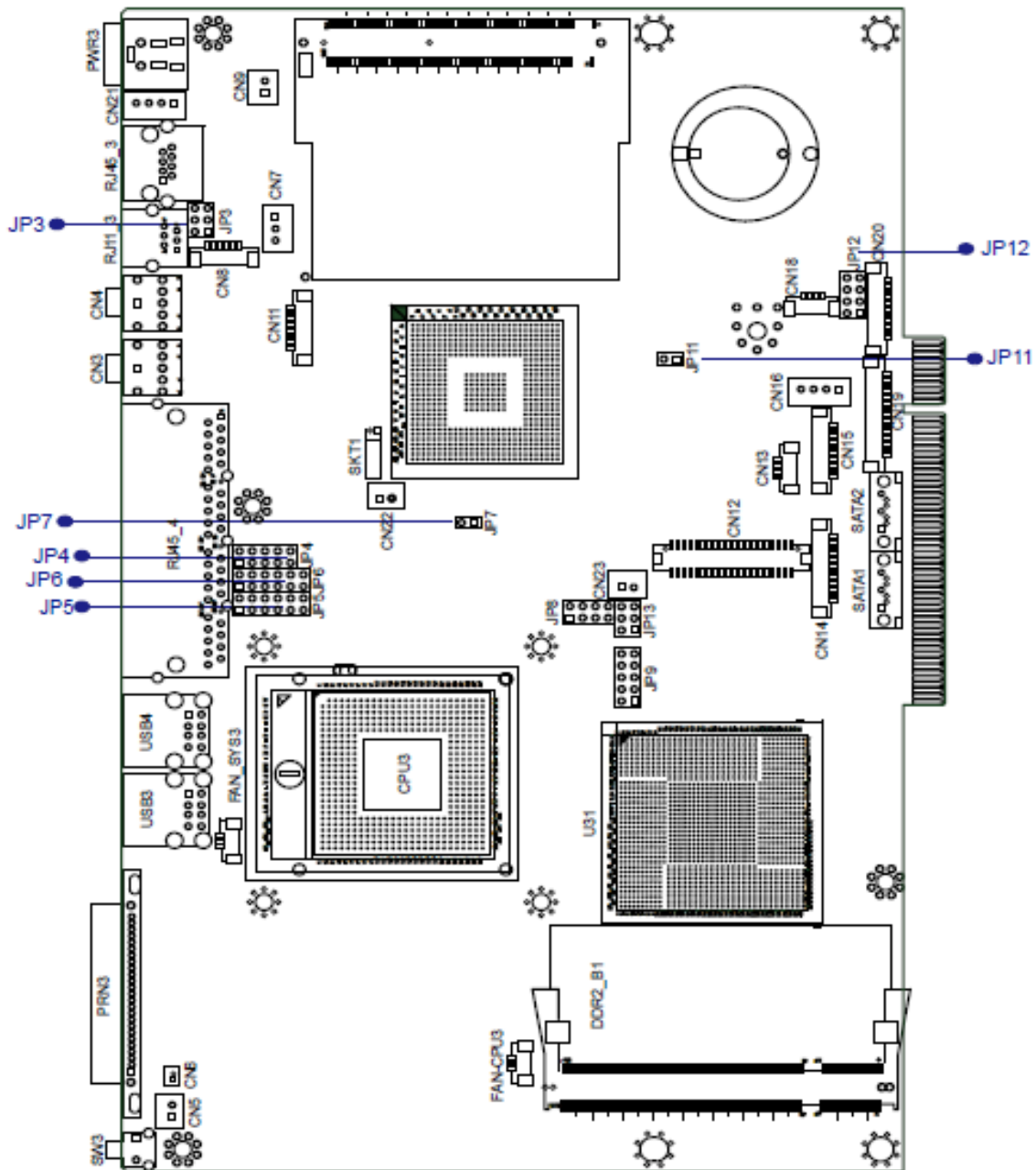
Model Name	K938		
Motherboard	B98	B68	C48
CPU Supports	Intel Core Duo(L2400) 1.66G/2MB/667MHz 65nm Micro-FCBGA	Intel Atom N270 1.6G	Intel Pineview dual core D525 1.8G
Chipset	Intel 945GME + ICH7M	Intel 945GSE + ICH7M	Intel Pineview CPU processor + ICH8M
System Memory	2 x DDR2 SO-DIMM slot, up to 4 GB	2 x DDR2 SO-DIMM slot, up to 2 GB	2 x DDR3 SO-DIMM slot, up to 4GB
LCD / Touch Panel			
Display Size	18.5" TFT LCD		
Brightness	300nits		
Resolution	1366x 768		
Touch Screen Type	Resistive touch		
Storage			
HDD	2.5" Slim HDD bay, SATA HDD		
Expansion			
mini-PCI	1		
Bottom I / O			
USB 2.0	3		
Audio Jack	1 x Mic-in, 1 x Line-out		
Handset Jack	1 x RJ-11		
Remote control	1 x SCSI 26pin		
Video/ Audio in	1x Composite Video in + 2 x left & right audio in		
Reset button	1 x Reset button		
Vertical I / O			
Nurse call system	1		
LAN	1		
USB 2.0	2		
Power	90W DC Jack		
Membrane			
Power button	1xPower button		
Channel adjustment	1xChannel up, 1xChannge down		
Volume	1xVolume up, 1xVolume down		

Motherboard	B98	B68	C48
Certificate			
EMC & Safety	FCC Class B, CE, LVD		
UL	UL 60601	UL 60950	-
Dust & Water Proof	IP 54 (including front bezel / web cam)		
Environment			
Operating Temperature	0°C ~ 35°C (32°F ~ 104°F)		
Storage Temperature	-20° ~ 60°C (-4°F ~ 140°F)		
Operating Humidity	5% - 95% RH non-condensing		
Storage Humidity	5% - 95% RH non-condensing		
Communication & peripherals			
Speaker	2 x 3W Speaker		
Handset & Cradle	1		
Magnetic stripe card reader(Optional)	optional		
Camera (Built-in)	optional		
Smart card reader in front bezel (Build-in)	optional		
Video/ Audio in	optional		
RFID	-	optional	
Scanner	optional		
Dimension (W x D x H)	462 .5x 336 x 75 (mm) (Without handset)		
Mounting	75mm x 75mm Standard VESA Mounting		
Weight	6.8 kg including telephone cradle and handset (max)		
OS Support	Windows-XP / Linux		

5 Jumper Settings

5-1 B98 Motherboard

5-1-1 Motherboard Layout



Version: B98 v1.1

5-1-2 Connectors & Functions

Connector	Function
CN3	Audio Line Out
CN4	MIC In
CN5 / SW3	Power On Button
CN6	Power LED
CN7	+24V/+19V
CN8	Speaker & MIC Connector
CN9	LAN LED
CN11	CD-IN Connector
CN12	LVDS
CN13	IrDA
CN14	Inverter
CN15	COM5 Touch
CN16	SATA Power
CN18	USB
CN19	Card Reader
CN20	FT Status
CN21 / PWR3	DJ-Jack
CN22	Hardware Reset
CN23	for Beside (+12V_CRT)
DDR_B1	DDR2 DIMM
PRN3	Printer Port
RJ11_3	Cash Drawer
RJ45_3	LAN
RJ45_4	COM Port
U31	NB
JP3	Cash Drawer Power Setting
JP4 / JP6	COM2 RS232/422/485 Setting
JP5	COM Port Power
JP7	CMOS Operation Mode
JP8	LCD ID
JP9	2nd Display
JP11	AT/ ATX Setting
JP12	FT System Indicator
JP13	VGA Power

5-1-3 Jumper Setting

COM2 RS232/485/422 Setting

Function	JP6	JP4
	(1-2) (3-4) (5-6) (7-8) (9-10) (11-12)	(1-2) (3-4) (4-6) (5-7) (7-8) (9-10)
▲RS232	1 3 5 7 9 11 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2 4 6 8 10 12	1 3 5 7 9 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2 4 6 8 10
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Cash Drawer Power Setting

Function	JP3
	(1-2) (3-4) 5-6)
+12V	1 3 5 <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2 4 6
▲+19V	1 3 5 <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> 2 4 6

Power Mode Setting

Function	JP11 (1-2)
▲ATX Power	<input type="checkbox"/> <input type="checkbox"/>
AT Power	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

COM3 & COM4 Power Setting

Function		JP5 (1-2) (3-4) (5-6) (7-8) (9-10) (11-12)																												
COM3 Pin10	▲RI	<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td>1</td><td>3</td><td>5</td><td>7</td><td>9</td><td>11</td></tr> <tr><td>■</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td><td>□</td></tr> <tr><td></td><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td><td>12</td></tr> </table>		1	3	5	7	9	11	■	□	□	□	□	□	□	■	□	□	□	□	□	□		2	4	6	8	10	12
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COM4 Pin10	▲RI	<table style="border-collapse: collapse; margin: auto;"> <tr><td></td><td>1</td><td>3</td><td>5</td><td>7</td><td>9</td><td>11</td></tr> <tr><td>□</td><td>□</td><td>□</td><td>■</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>□</td><td>□</td><td>□</td><td>■</td><td>□</td><td>□</td><td>□</td></tr> <tr><td></td><td>2</td><td>4</td><td>6</td><td>8</td><td>10</td><td>12</td></tr> </table>		1	3	5	7	9	11	□	□	□	■	□	□	□	□	□	□	■	□	□	□		2	4	6	8	10	12
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CMOS Operation Mode

Function	JP7 (1-2)		
▲ CMOS Normal	<table style="border-collapse: collapse; margin: auto;"> <tr><td>□</td></tr> <tr><td>□</td></tr> </table>	□	□
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CMOS Reset	<table style="border-collapse: collapse; margin: auto;"> <tr><td>■</td></tr> <tr><td>■</td></tr> </table>	■	■
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System Indicator

Function	JP12 (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>

LCD ID Setting

Panel #	Resolution	LVDS		Output Interface	JP8 (1-2) (3-4) (5-6) (7-8)
		Bits	Channel		
1	1366 x 768	24	Single	LVDS	<pre> 1 3 5 7 □ □ ■ ■ □ □ ■ ■ 2 4 6 8 </pre>
2	1440 x 900	24	Dual	LVDS	<pre> 1 3 5 7 □ □ ■ □ □ □ ■ □ 2 4 6 8 </pre>
4	1920 x 1080	24	Dual	LVDS	<pre> 1 3 5 7 □ □ □ □ □ □ □ □ 2 4 6 8 </pre>
5	1024 x 768	24	Single	LVDS	<pre> 1 3 5 7 □ ■ ■ ■ □ ■ ■ ■ 2 4 6 8 </pre>
6	1280 x 1024	24	Dual	LVDS	<pre> 1 3 5 7 □ ■ ■ □ □ ■ ■ □ 2 4 6 8 </pre>
7	800 x 600	24	Single	LVDS	<pre> 1 3 5 7 □ ■ □ ■ □ ■ □ ■ 2 4 6 8 </pre>
9	1024 x 768	18	Single	LVDS	<pre> 1 3 5 7 ■ ■ ■ ■ ■ ■ ■ ■ 2 4 6 8 </pre>
11	800 x 600	18	Single	LVDS	<pre> 1 3 5 7 ■ ■ □ ■ ■ ■ □ ■ 2 4 6 8 </pre>

12	800 x 600	18	Single	LVDS	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>□</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	■	■	□	□	■	■	□	□	2	4	6	8
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				CRT	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>■</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	■	□	□	□	■	□	□	□	2	4	6	8
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Remark: Panel ID #12 is only applied for Sharp 12" LQ121S1LG41 / LQ121S1LG42 panel.

Note:



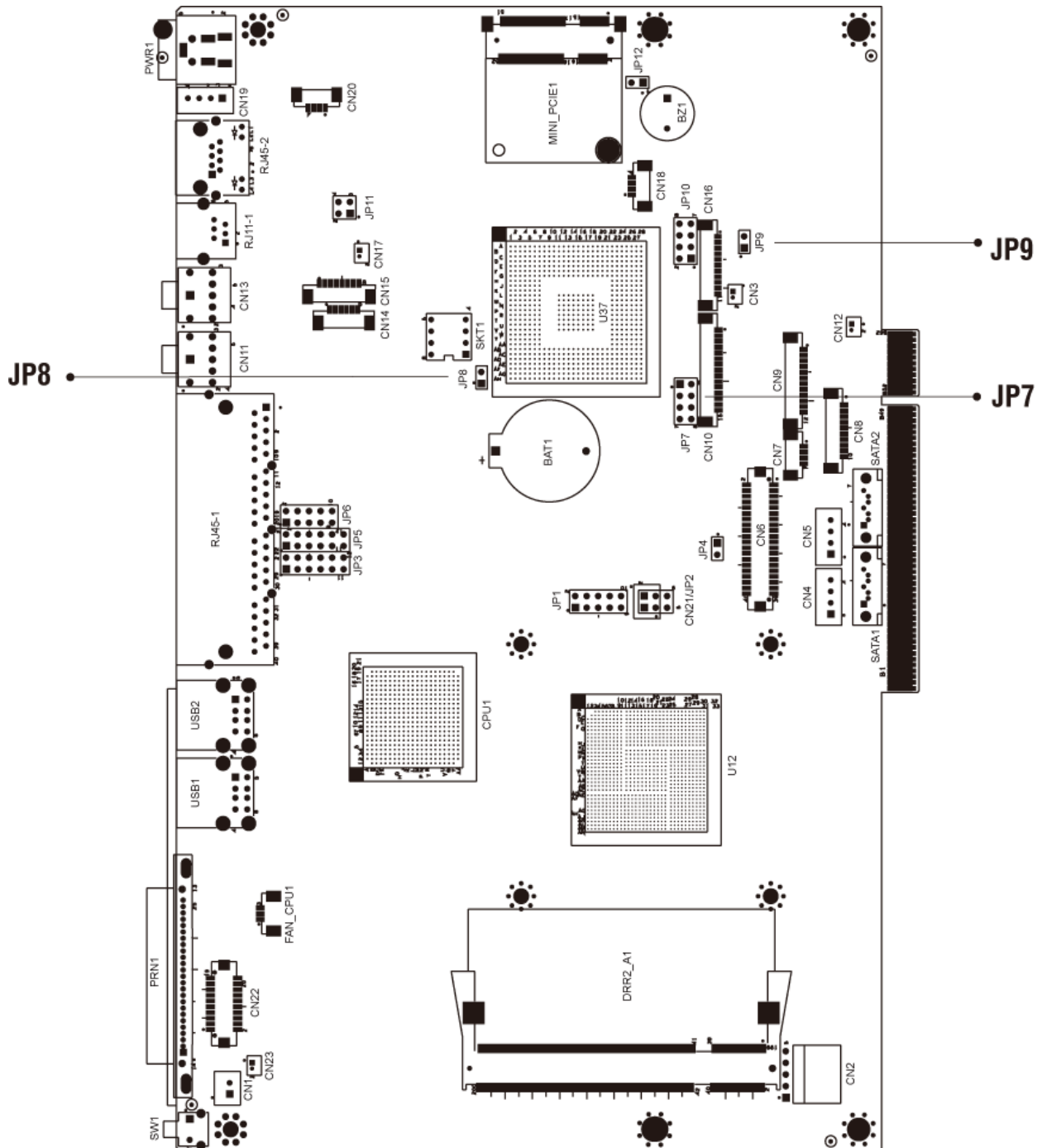
OPEN



SHORT

5-2 B68 Motherboard

5-2-1 Motherboard Layout





Version: B68 v1.0

5-2-2 Connectors & Functions



Connector	Function
BAT1	CMOS Battery Base (Use CR2023)
CN1	Power On Button
CN2	Touch Sensor
CN3	Power LED
CN4	SATA1 HDD Power Connector
CN5	SATA2 HDD Power Connector
CN6	LCD Interface Connector
CN7	IrDA Connector
CN8	For External Touch Connector
CN9	Inverter Connector
CN10	Card Reader Connector
CN11	Line Out
CN12	LED Power
CN13	MIC In
CN14	Speaker & MIC CONN
CN15	CD-IN CONN
CN17	LAN LED
CN18	USB5
CN19	DC-JACK
CN20	PS2 KEYBOARD
CN21	For Beside Terminal
CN22	LPT Interface for Touch
CN23	For LPT Touch Reset
DDR2_A1	DDR2 SO-DIMM1
DDR2_A2	DDR2 SO-DIMM2
PRN1	Parallel Port
PWR1	+19V Power Adaptor
RJ11_1	Cash Drawer Connector
RJ45_1	COM1, COM2, COM3, COM4
SATA1	SATA Connector
SATA2	SATA Connector
USB1	USB1, USB2
USB2	USB3, USB4
SW1	Power On Bottom
JP1	CRT Connector
JP2	CRT Power/I2C Connector
JP7	LCD ID Setting
JP8	RTC Reset
JP9	AT Function
JP12	Hardware Reset

5-2-3 Jumper Setting

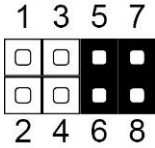
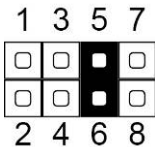
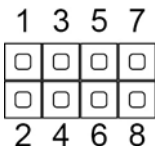
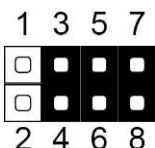
Power Mode Setting

Function	JP9 (1-2)
ATX Power	
▲AT Power	

CMOS Operation Mode

Function	JP8 (1-2)
▲CMOS Normal	
CMOS Reset	

LCD ID Setting

Panel #	Resolution	LVDS		Output Interface	JP7 (1-2) (3-4) (5-6) (7-8)
		Bits	Channel		
▲ 1	1366 x 768	24	Single	LVDS Panel	
2	1440 x 900	24	Dual	LVDS Panel	
4	1920 x 1080	24	Dual	LVDS Panel	
5	1024 x 768	24	Single	LVDS Panel	

6	1280 x 1024	24	Dual	LVDS Panel	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>□</td><td>■</td><td>■</td><td>□</td></tr> <tr><td>□</td><td>■</td><td>■</td><td>□</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	□	■	■	□	□	■	■	□	2	4	6	8
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2	4	6	8																		
7	800 x 600	24	Single	LVDS Panel	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>□</td><td>■</td><td>□</td><td>■</td></tr> <tr><td>□</td><td>■</td><td>□</td><td>■</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	□	■	□	■	□	■	□	■	2	4	6	8
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9	1024 x 768	18	Single	LVDS Panel	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>■</td><td>■</td><td>■</td><td>■</td></tr> <tr><td>■</td><td>■</td><td>■</td><td>■</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	■	■	■	■	■	■	■	■	2	4	6	8
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11	800 x 600	18	Single	LVDS Panel	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>■</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>■</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	■	■	□	■	■	■	□	■	2	4	6	8
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12	800 x 600	18	Single	LVDS Panel	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>□</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	■	■	□	□	■	■	□	□	2	4	6	8
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■	□	□	□																		
2	4	6	8																		

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

▲ = Manufacturer Default Setting



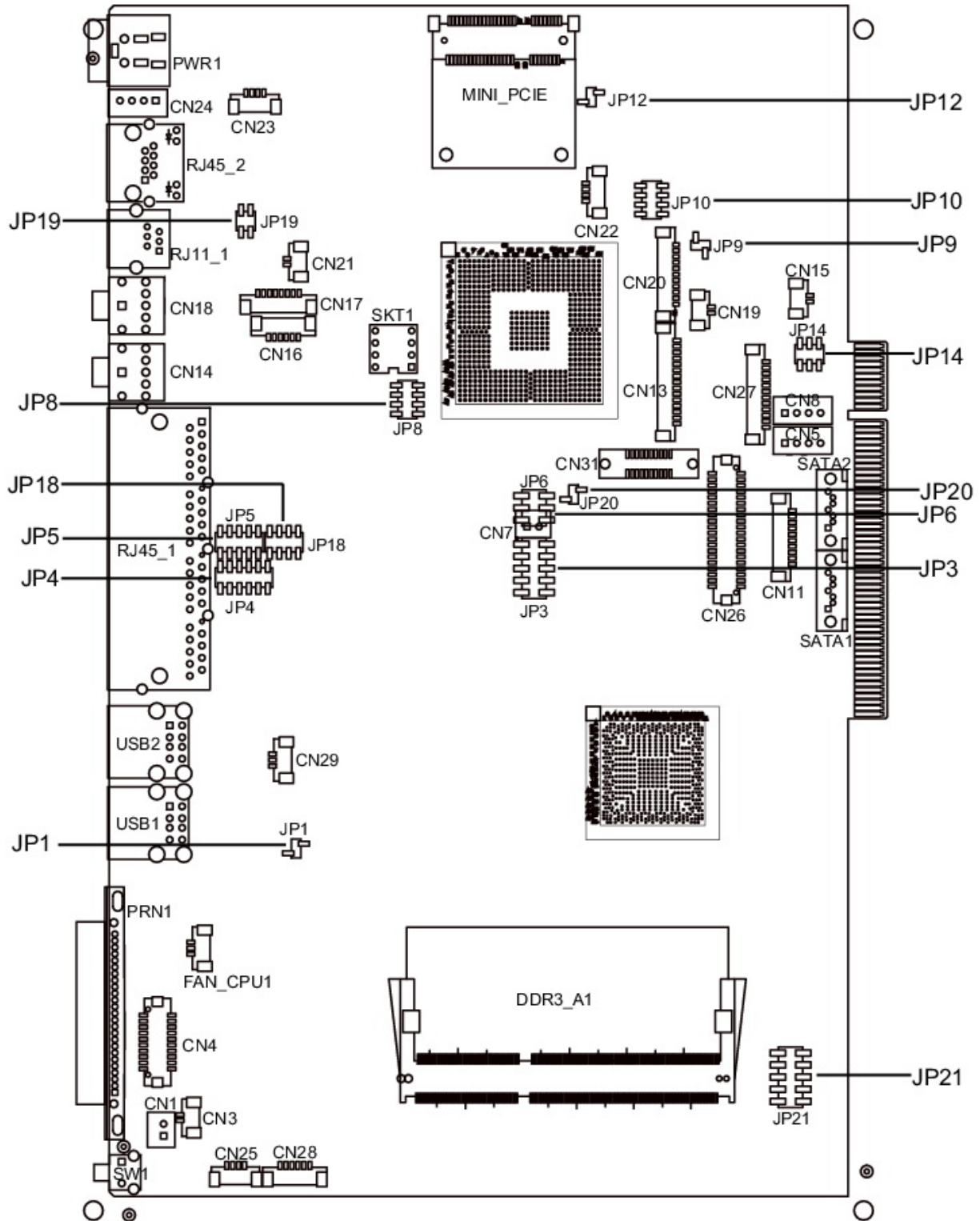
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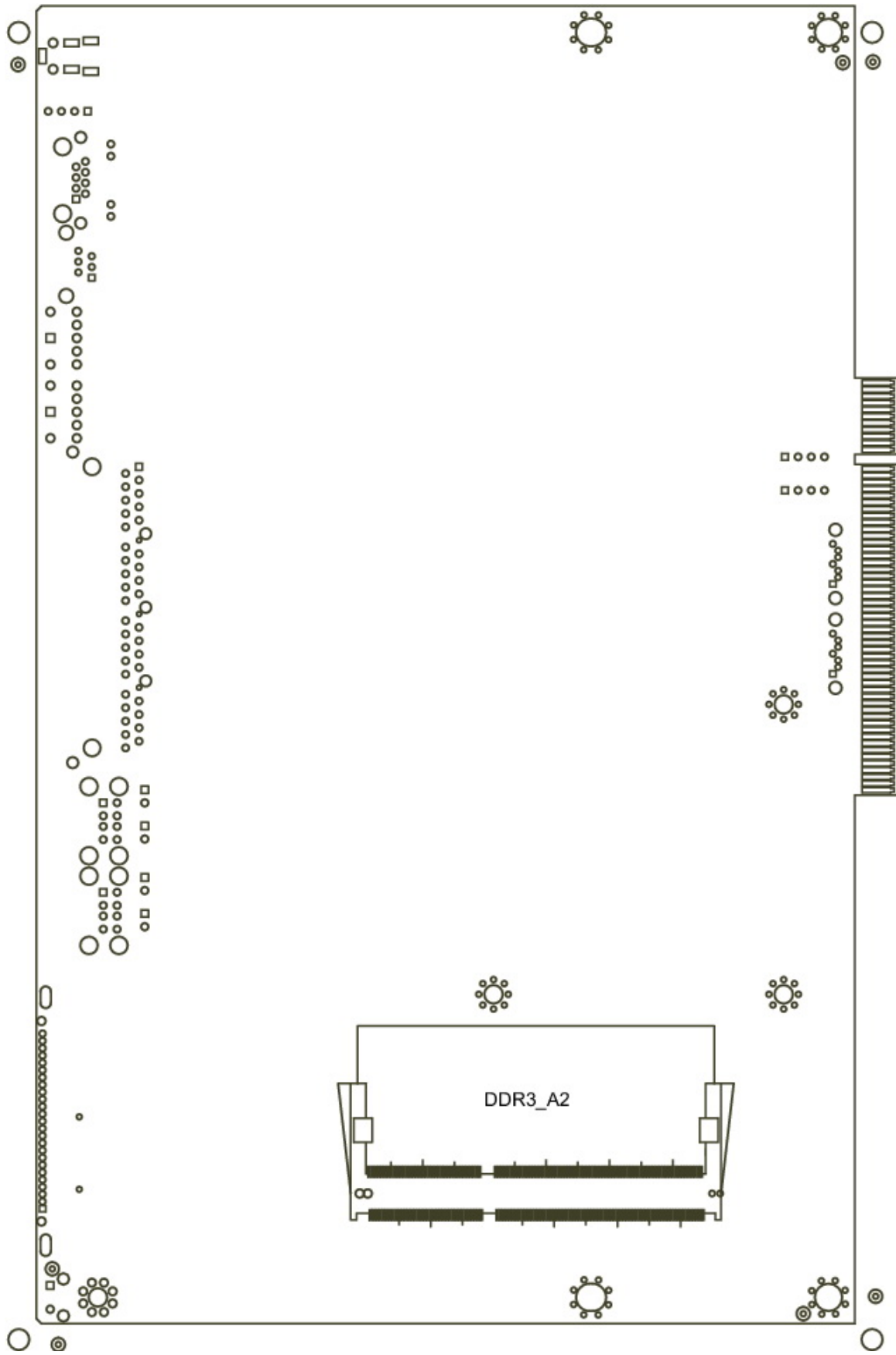


SHORT

5-3 C48 Motherboard

5-3-1 Motherboard Layout








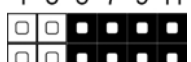


5-3-2 Connectors & Functions



Connector	Function
CN1	Power Button Connector
CN3	Printer Port Reset
CN4	Printer Port
CN5/8	HDD Power
CN11	COM5 For Touch
CN13	Card Reader Connector
CN14	Line out
CN15	HDD LED
CN16	Speaker & MIC
CN18	MIC IN
CN20/JP10	System Indicator
CN22	USB Port
CN23	PS2 KEYBOARD
CN26	LVDS
CN27	Inverter Connector
CN29	System Fan
DDR3_A1	DDR3 SO-DIMM1
DDR3_A2	DDR3 SO-DIMM2
PRN1	Parallel Port
PWR1	+19V DC Jack
RJ11_1	Cash Drawer Connector
RJ45_1	COM1, COM2, COM3, COM4
RJ45_2	LAN
SATA1	SATA Connector
SATA2	SATA Connector
USB1	USB1, USB2
USB2	USB3, USB4
SW1	Power Button
JP1	CMOS Operation Mode
JP3/6	VGA Port
JP4/5	COM2 RS232/485/422 Setting
JP8	LCD ID Setting
JP9	Power Mode Setting
JP12	System Reset
JP14	Inverter Selection
JP18	COM3/4 Power Setting
JP19	Cash Drawer Power Setting

5-3-3 Jumper Setting



COM2 RS232/485/422 Setting

Function	JP5	JP4
▲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	JP19
+19V	1 3  2 4
▲+12V	1 3  2 4

















Power Mode Setting

Function	JP9
▲ATX Power	1  2
AT Power	1  2













System Reset

Function	JP12
▲ System Normal	1   2
System Reset	1   2

System Indicator

Function	JP10
▲ Disable	1 3 5 7         2 4 6 8
Enable	1 3 5 7         2 4 6 8

Inverter Selection

Function	JP14
▲ CCFL	1 3 5       2 4 6
LED	1 3 5       2 4 6



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.

CMOS Operation Mode

Function	JP1
▲ CMOS Normal	
CMOS Reset	

▲ = Manufacturer Default Setting



OPEN



SHORT

COM3 & COM4 Power Setting

COM3 and COM4 can be set to provide power to your serial device. The voltage can be set to +5V or 12V by setting jumper JP18 on the motherboard.

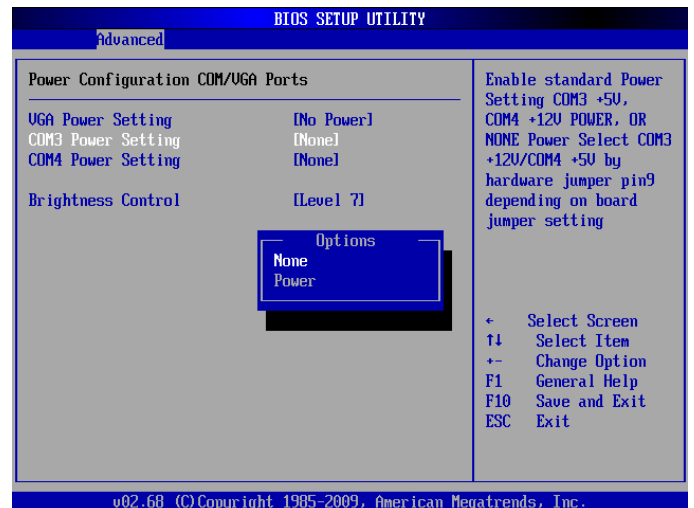
When enabled, the power is available on pin 10 of the RJ45 serial connector.

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.

Enable COM3/COM4 power in BIOS

1. Power on the system, and press the key when the system is booting up to enter the BIOS Setup utility.
2. Select the Advanced tab
3. Select **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.



COM3/COM4 Power Setting

Function		JP18																
COM3	▲+5V	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>■</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>□</td><td>□</td><td>□</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	■	□	□	□	■	□	□	□	2	4	6	8
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+12V	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>□</td><td>■</td><td>□</td><td>□</td></tr> <tr><td>□</td><td>■</td><td>□</td><td>□</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	□	■	□	□	□	■	□	□	2	4	6	8	
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COM4	+5V	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>□</td><td>□</td><td>■</td><td>□</td></tr> <tr><td>□</td><td>□</td><td>■</td><td>□</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	□	□	■	□	□	□	■	□	2	4	6	8
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▲+12V	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>□</td><td>□</td><td>□</td><td>■</td></tr> <tr><td>□</td><td>□</td><td>□</td><td>■</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	□	□	□	■	□	□	□	■	2	4	6	8	
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2	4	6	8															

LCD ID Setting

Several configurations are applied to different sizes of panel. Please refer to the followings to complete relevant settings.

Resolution			LVDS		Output Interface	JP8																
			Bits	Channel																		
800	X	600	24	Single	1 st : LCD Panel 2 nd : VGA Port	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>□</td><td>■</td><td>□</td><td>■</td></tr> <tr><td>□</td><td>■</td><td>□</td><td>■</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	□	■	□	■	□	■	□	■	2	4	6	8
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□	■	□	■																			
2	4	6	8																			
1024	x	768	24	Single	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>□</td><td>■</td><td>■</td><td>■</td></tr> <tr><td>□</td><td>■</td><td>■</td><td>■</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	□	■	■	■	□	■	■	■	2	4	6	8	
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2	4	6	8																			
1366	x	768	24	Single	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>□</td><td>□</td><td>■</td><td>■</td></tr> <tr><td>□</td><td>□</td><td>■</td><td>■</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	□	□	■	■	□	□	■	■	2	4	6	8	
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□	□	■	■																			
□	□	■	■																			
2	4	6	8																			
800	x	600	18	Single	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>■</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>■</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	■	■	□	■	■	■	□	■	2	4	6	8	
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■	■	□	■																			
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*800	x	600	18	Single	<table border="1"> <tr><td>1</td><td>3</td><td>5</td><td>7</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>□</td></tr> <tr><td>■</td><td>■</td><td>□</td><td>□</td></tr> <tr><td>2</td><td>4</td><td>6</td><td>8</td></tr> </table>	1	3	5	7	■	■	□	□	■	■	□	□	2	4	6	8	
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■	■	□	□																			
2	4	6	8																			

1024	x	768	18	Single	
1280	X	1024	24	Dual	

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

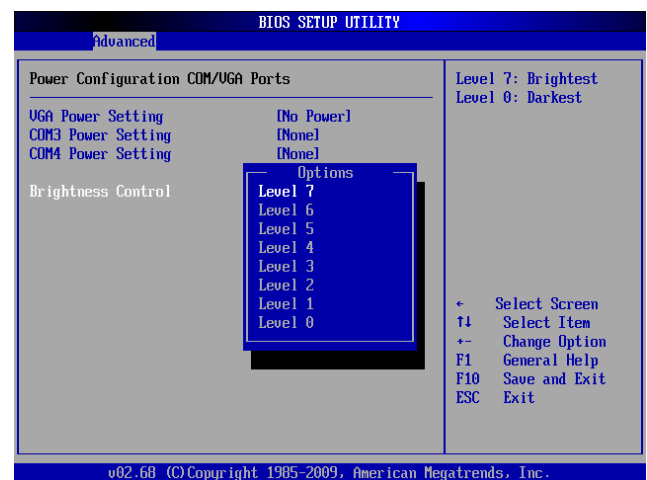
LCD Brightness Control Setting

Please note Brightness Control can only be set by setting jumper JP14 for CCFL on the motherboard C48 V2.1. By default, the inverter is CCFL on the motherboard jumper setting.

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



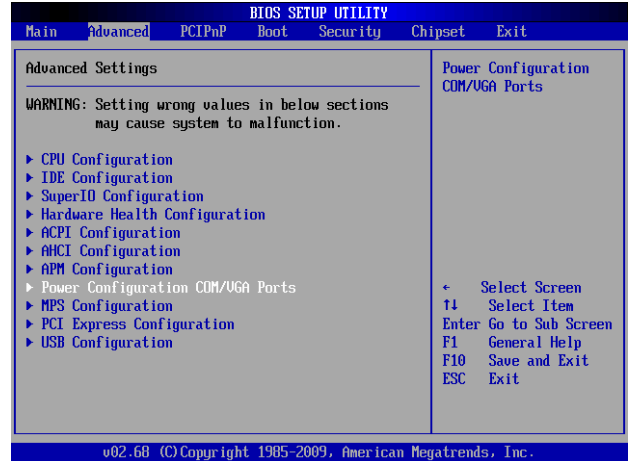
4. To change the brightness, select "Brightness Control" and press <Enter>. Choose the desired brightness level (0~7) press <Enter>. Save the change by pressing F10. **NOTE:** the new brightness will take effect after the system has restarted.



2nd VGA Power Setting

VGA port power must be on through BIOS/Utility for default is "No Power"

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



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



6 Appendix

Drivers 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 up the models. You can refer to the drivers installation guide for each driver in the "Driver/Manual List".