

User's Manual

RT-665D

15" All in one POS PC

(M/B: FH-5251)

Version 1.7

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Safety and Warranty

1. Read these safety instructions carefully.

2. Keep this user manual for later reference.

3. Disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.

4. For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.

5. Keep this equipment away from humidity.

6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.

7. The openings on the enclosure are for air convection. Protect the equipment from overheating. DO NOT COVER THE OPENINGS.

8. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.

9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.

10. All cautions and warnings on the equipment should be noted.

11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.

12. Never pour any liquid into an opening. This could cause fire or electrical shock.

13. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.

14. If any of the following situations arises, get the equipment checked by service personnel:

- a. The power cord or plug is damaged.
- b. Liquid has penetrated into the equipment.
- c. The equipment has been exposed to moisture.
- d. The equipment does not work well, or you cannot get it to work according to the user's manual.
- e. The equipment has been dropped and damaged.

f. The equipment has obvious signs of breakage.

15. DO NOT LEAVE THIS EQUIPMENT IN AN UNCONTROLLED ENVIRONMENT WHERE THE STORAGE TEMPERATURE IS BELOW -20°C (-4°F) OR A BOVE 60°C (140°F). IT MAY DAMAGE THE EQUIPMENT.

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Chapter 1

Introduction

Glaive D Introduction

To reach the balance of budget-saving and strong requirement for product quality, Glaive D is designed with quality-oriented and cost-effective concept. Fanless as it is, RT-665D provides a decent choice for noise-free environment applications with optimized product reliability.

Main Features:

- _ Fanless Solution w/ ATOM 1.8GHz CPU & Intel GMA3150 Strong Graphic Performance
- _ Easy Installation for 2nd Display
- _ 12V DC Out for 2nd Display Connection w/o Extra Adaptor Required
- _ Easy Maintenance for HDD



System w/2nd display



System w/VFD

A Quick Tour for RT-665D

Before you start, take a moment to become familiar with **RT-665D**.



RT-665D Dimension



Rear I/O Panel



I/O Port	Connector Type	Description		
Line-Out	Earphone connector	Connect the speakers to this port		
~	USB type A connector	Standard USB connector for external device		
() () () () () () () () () () () () () (DC-in connector	Connect the power adaptor to this port		
DC OUT 12V DC-out connector This DC-out port can sustain the p monitor or any other devices which power input.		This DC-out port can sustain the power of the monitor or any other devices which need 12V DC power input.		
COM1, COM4 and COM5VFD / RJ45 connector		This RJ45 port can be used to attach a VFD customer display or serve as an additional serial port (switching cable provided).		
RJ11 connector		Cash Drawer Connector, 12 V actuation support		
PS2 connector Cor		Connect the keyboard or mouse to this port		
COM 2 D-SUB 9 connector		The serial ports COM1/COM2 can be used to connect devices such as a printer or a fax/modem.		
Parallel 25-pin LPT Connector		The standard LPT (D-SUB 25 pin) connector for connecting POS printers or KeyPro solution		
RJ45 connector Conne		Connect RT-665D to the Ethernet		
MIC in	MIC in Earphone connector This port is used for Microphone			
0	D-Sub 15 Pin Connector	The VGA port is used for connecting LCD or CRT monitors		

Packing List

- Main System x 1
- Power Adaptor x 1 / AC Power Cord x 1

Chapter 2

Hardware Installation and Upgrading



Do not remove the rear cover until you have verified that no power is supplied to the system. Power must be switched off and the power cord must be unplugged. Every time you service the system, you should be aware of this.

2.5" Hard Disk Drive Installation

- 1. Turn off power and remove power cord from the system
- 2. Unscrew the maintenance cover at the top of the unit



3. Open the cover and pull out the HDD tray





- 5. Restore the maintenance cover to the system.
- 6. Fix the cover with the screw.
- 7. Connect the power cord to the system.

2nd Display Installation

- 1. Turn off the power and remove the power cord.
- 2. Remove the cover in the back of unit

- 3. Fix the pole stand with screws with cover and lock them back with two screws
 - CASH DRAWER MIC-IN DC-OUT 12V USB COM4 COM2 LAN USB PRINTER gr p pr hp FIFF -5.**9**.63 DC-IN 12V VGA KB/MS LINE-OUT COM1 COM5
- 4. Connect the VGA and power cable to the system.
- 5. Connect the power cord to the system

Jumper setting adjustment

FLC

- 1. Turn off the system power and remove the power cable
- 2. Unscrew and remove the maintenance door



- 3. Adjust the jumper setting
- 4. Restore the top cover
- 5. Connect the power cord to the system

VFD Customer Display Installation

- 1. Turn off the power and remove the power cord
- 2. Remove the cover in the back of unit



3. Fix the pole stand with screws with cover and lock them back with two screws



MCR Configuration Modification

This option is for users who need to customize the MCR configurations for a particular task. To enter the Configuration Mode, please execute text editor program (such as Microsoft Word, Notepad...etc.) first, and then press [Ctrl] + [Alt] + [F10]. The following menu will appear accordingly.

**** CONFIGURATION MODE ****
1:SET INTERFACE
2:SET MAGNETIC STRING
3:SET STRING EDITING
4:SET BUZZER
5:RESET TO DEFAULT
6:SHOW STATUS
7:SET KEYBOARD CONFIGURATION
0:EXIT SETUP MODE

For detailed instruction, please refer to the MSR212 Programmer's Manual in FEC website.

Cash Drawer Installation

Before connecting the cash drawer to the **RT-665D**, please make sure the drive voltage and cable pin assignment of the cash drawer matches the definition of the cash drawer port of **RT-665D**. Please refer to the jumper setting.

For programmers, please refer to the FEC website for your application.

Plug cash drawer cable into the cash drawer port.



Note: If the cash drawer cannot be detected by the system, please refer to troubleshooting.

Up to two cash drawers may be driven from this port. Driving voltage of the solenoid is DC+12V. I/O port 284 is used for drawer operation. A test program is supplied, for Linux and Windows, source code of which is available on request by software developers.

Value	Description	
0x284	Output address.	
0x284 read 8bit	Bit 2 => 0: low 1: high	
0x200	Sleep 200ms	
0x01	Open cashdrawer1 value.	
0x02	Open cashdrawer2 value.	
0x04	Close cash-drawer value.	
0x04	Cash-drawer status mask.	

Software Installation and Setup

Driver Download from FEC Website Model

A: Please go to FEC website and download the drivers.

Chapter



- B: The installation sequence: Chipset Driver -> VGA Driver -> LAN Driver -> Audio Driver -> Touch Driver -> Other Driver (optional)
- C: Then, you can start to install.

Please follow this installation sequence accordingly.

Chipset Driver Installation

Intel ATOM D525 Chipset Installation Utilities for Windows XP

Step 1. Please download the Intel chipset driver from website.

Step 2. Click Next



Step 3. Read the License Agreement and click Yes.



Step 4. Click Next and the drivers for the Intel Chip set will install.



Step 5. Please wait while the setup program processing.



Step 6. When the 'Setup COMPLETE' message appears click Finish to restart your computer.



VGA Driver Installation

Step 1. Please download the VGA driver from website

Step 2. Click Next and click Yes of License Agreement Page



Note:

When installing the IEGD driver for VGA under POSready 2009, the default setting is 800x600 with Clone mode; if you need to use Extension Mode, please set the 2nd panel as primary as below. (Warning: After you set the panel to Extension Mode, it won't be available to set back to Clone Mode due to the driver issue.)

Step 3. Select Next to continue driver installation.



Step 4. Finally, Finish and Restart the system



LAN Driver Installation

Step 1. Please double confirm the LAN driver from website.

Step 2. Click "Next" to continue

Step 3. Click "Next" to continue



Step 4. Click Next to continue



Step 5. Click Finish to complete the installation procedure.



Audio Driver Installation

Step 1. Please download the Audio driver from website.

Step 2. Click "Next" to continue



Step 3. Click Next to continue.



Step 4. Click Finish and restart the system.



ELO Touch Tools Installation

- **1.** Find the setup file through index(Tools)
- 2. Open SW601854_TETouch_5.4.2.exe (for latest version, please reference to FEC website)

3.



4. Click OK to continue.



5. Click Unzip; Unzip the files successfully and click OK to continue the installation.



6. Click Next to continue.

Elo Touchscreen Setup (5.	2.0.43)	×
BIO TOUCHSYSTEMS	Pick the default language for the Elo Touchscreen Driver package. All Elo touchscreen applications will be displayed in the language selected below.	
aan	Next > Next > Cancel	_1

7. Choose Install Serial Touch Screen Driver and click Next to continue.



8. Read the *"License Agreement"* and click Yes and select Auto Detect ELO touchscreens and click Next



9. Select COM3 and click Next for further installation steps.



10. Setup complete and execute Calibrate Elo Touch Screen Monitors and Click Finish.

Elo Touchscreen Setup (5.2	.0.43)	×
BO TOUCHSYSTEMS	Setup Complete Setup has finished installing the Elo touchscreen drivers and components. You can choose to calibrate your Elo Touchscreen monitors after setup finishes.	
MAU	☞ Calibrate Elo Touchscreen monitors. ■ View Readme.	
ARG	Click Finish to exit Setup.	_
	< Back Finish	

11. Start calibrating the touchscreen by touch the targets showed on the screen.



According to ELO Touch Screen Properties; Confirm the Touch Driver Version is
 5.2.0.43 and Make sure the COM port listed is COM3 for your touch monitor; adjust a proper sound of touch buzzer Press Next to continue.



Elo Touchscreen Properties	Elo Touchscreen Properties
General Mode Sound Properties 1 About Sound	General Mode Sound Properties 1 About Could Be C
Beep on touch Or Motherboard Beeper	C Click on release Mouse emulation
Low I I I I I I I I I I I I I I I I I I I	Options Image: Hide arrow mouse pointer Image: Left-handed mouse
Duration Short Long	✓ Show tool tray utility ✓ Double the size of Windows title bars Image: Second state Image: Second state Image: Second state Image: Second state
Ok Cancel Apply Help	Ok Cancel Apply Help



13. If the cursor is working fine, click **13.** If the setting; if not, click **13.** If the setting; if not, click **13.** If the setting to calibrate the screen again.

IT MAY BE NECESSARY TO RESTART YOUR COMPUTER TO UTILIZE YOUR TOUCHSCREEN FEATURES.



14. Click Restart to reboot your computer again.

ELO Control Panel

This section explains the different options in the ELO control Panel.

General tab

The general tab allows you to:

- Change the COM port your touch screen is set to.
- Calibrate the touch screen with the **Align** button.



Mode tab

The Buttons tab allows you to:

- Adjust all mouse emulation controls.
- Change cursor properties
- Enable or disable right mouse button utility.



Sound tab

The Sound tab allows you to:

• To change sound properties for ELO touch tools.

o Touchscreen Prop	erties		?
General Mode Sound	Properties 1 About		
Sound			1
🔽 Beep on touch			
Low	Tone	High	
¢		iş∎	
Short	Duration	Long	
E		i e	
	, _		
			-12
1	ouch here to test beep soun	d	
Ok	Cancel	Annly 1	Help
Ok	Cancel	Apply	Help

Properties tab

The Diagnostics tab allows you to:

• View Controller Information.



About tab

The About tab displays Information about ELO Touch systems

Elo Touchscreen Properties 🛛 😨 🔯
General Mode Sound Properties 1 About
Readme
Users Manual
Elo Touchscreen Control Panel
Version 4.8.1.0
Copyright © 2008
Elo TouchSystems All rights reserved.
Ok Cancel Apply Help

EETI TouchKit Tools Installation

- Step 1. Please double confirm the EETI driver downloaded from website
- Step 2. Click "OK" to continue unzip the driver
- Step 3. Open Setup.exe



Step 4. Click Next



Step 5. Click Next



Step 6. Click OK to close the pop-up dialog.

TouchK	it - InstallShield Wizard 🛛 🛛 🔀
Ú)	If you are trying to install the USB touch device, please make sure that your touch monitor or touch controller's USB cable is plugged into the computer now. Please close the "Found New Hardware Wizard" dialog when it pop-up.
	OK K

Step 7. Click "Support Multi-Monitor System" and then Next to continue.

TouchKit			TouchKit	
Setup Type Select the setup type that best sui		TouchKit	Choose Destination Location Select folder where setup will insta	Inies. TouchKit
	. If you went to use Mult Monitor, please check: the box. ✓ Support Multi-Monitor System:			Setup will install Touchful in the following folde: To install to this folder, click Next. To install to a different folder, click Browse and select another folder. Destination Folde: C.NFingram Files/Touchful Browse
Daverico	< Back Next >	Cancel	narstra	(Back Next) Cancel

Step 8. Click Next



Step 9. Click OK and turn off the computer to restart your system again.

After the system finish rebooting follow the directions to calibrate the Touch screen.

Seneral About	Turn off computer	.
Installed Touchscreen Controllers	5tand By Tur Dif	Restart
		Cancel
Add Bemove		
OK Cancel Apply		

TouchKit Control Panel

This section explains the different options in the TouchKit control Panel.

General tab

The general tab allows you to:

• Manage the touch screen controller you installed.

Edge Comper	nsation	Hardware	About
General	Setting	Tools	Display
Installed Touc	hscreen Controllers		
Serial Controller			
ų		f	

Tools tab

The tools tab allows you to:

• Calibrate the touch screen with the **4 Points Calibration** button.

General General	n Setting	Hardware Tools	About
inearization Curve			
		ē	
		ŝ.	
4 Points Calibration	Do 4 poir	nts alignment to m	atch display.
Clear and Calibrate	Clear line alignment	arization paramete 	er and do 4 points
Linearization	Do 9 poir linearity.	nts linearization for	better touchscree
Linearization Draw Test	Do 9 poir linearity Do draw	its linearization for test to verify the t	better touchscree ouch accuracy.

Wireless LAN Driver Installation

- Step 1. Please double confirm the Wireless LAN driver from website.
- Step 2. Click "Next" to continue



Step 3. Select Install driver and Ralink WLAN Utility



Step 4. Select "Ralink Configuration Tool" Select "Optimize for WiFi mode"



Step 5. Select Install to continue



Step 6. Select Finish to complete the installation

Ralink Wireless LAN - InstallShield Wizard		
	InstallShield Wizard Complete	
	The InstallShield Wizard has successfully installed Ralink Wireless LAN. Click Finish to exit the wizard.	
Ralink		
InstaliShield	< Back Finish Cancel	

Specifications

Chapter 4

RT-665D Specifications

System Configurat	ion
CPU (On Board)	INTEL ATOM D525 (1.8GHz with 1MB L2 cache)
Chipset	D525+ICH8M
Memory	1 x 204pin DDR3 up to 4GB memory
VGA controller	GMA3150
LCD Panel	15" TFT LCD Panel (1024x768).
Touch Panel	15" with 5-wire Resistive Touch Panel
Storage	Swappable 2.5" 160GB HDD as default
Speaker	Integrated 2W x 2 stereo system speakers
Power	90 watts external power adaptor
I/O Port	
Serial Port	4 x User available COM ports: COM1, COM4 and COM5(RJ45), COM2(DB9).
Parallel Port	1 x Bidirectional port
USB Port	4 x USB 2.0 ports
Cash Drawer Port	RJ11 Cash drawer port,12V
Keyboard/Mouse Port	One PS/2 port.
LAN Port	Giga LAN, Realtek RTL8111E
VGA Port	Standard D-SUB 15 Pin VGA Port
Audio Port	Integrated Sound Blaster compatible (Realtek ALC269)/Built- in stereo speakers
Microphone	1 x Mic-in
Optional Features	
Customer display	Pole-type VFD customer display
Customer display	Pole-type LCD customer display

MSR	External Magnetic Stripe Card Reader track 1/2/3
Wireless	Internal WiFi Module(USB)
Operating temperature	
Operating Temperature	0 °C ~ 40 °C

I/O Pin Definition

A. DC_IN (DC Adapter 12V in)



Pin	Definition
1	12V
2	GND
3	12V
4	GND

B. +12V_OUT (12V OUT)



Pin	Definition
1	12V
2	GND

C. COM4_USB1 (VFD & RS-232 port + USB 2.0/1.1 port)



Pin	Definition
1	RI/ 5V /12V
2	CTS or RI/5V/12
3	GND
4	RTS or GND
5	DTR
6	DSR
7	TXD
8	RXD

The definition of pin1 , pin 2 and pin4 are depending on jumper setting from JCOM4 and VFD_JR1

D. USB 2.0/1.1 Port





Pin	Definition
1	USB 5V
2	D-
3	D+
4	GND

E. COM2



Pin	Definition
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	RI/ 5V /12V

F. VGA



Pin	Definition
1	RED
2	GREEN
3	BLUE
4	NC
5	GND
6	GND
7	GND
8	GND
9	VCC 5V
10	GND
11	NC
12	DDC Data
13	H-SYNC
14	V-SYNC
15	DDC Clock

G. USB_LAN1 (LAN connector RJ45+USB 2.0/1.1 Port) Connection/ Speed LED Activity LED



State	Description	
0range	Speed:1 Gbps	
Green	Speed:1 00 Mbps	

Activity LED:

USB_LAN1

State	Description
On	Transmitting
Off	Not
	Transmitting

Pin	Definition
1	Data 0+
2	Data 0-
3	Data 1+
4	Data 1-
5	Data 2+
6	Data 2-
7	Data 3+
8	Data 3-

H. LPT Port



Pin	Definition	Pin	Definition
1	STB-	14	AFD-
2	PD0	15	ERR-
3	PD1	16	INIT-
4	PD2	17	SLIN-
5	PD3	18	GND
6	PD4	19	GND
7	PD5	20	GND
8	PD6	21	GND
9	PD7	22	GND
10	ACK-	23	GND
11	BUSY	24	GND
12	PE	25	GND
13	SLCT		

I. KB_MS1 (PS/2 Connector)



Pin	Definition
1	Keyboard Data
2	Mouse Data
3	GND
4	Mouse Clock
5	5V
6	Keyboard Clock

J. RJ11 Port



Pin	Definition
1	GND
2	GPIO-0
3	CASH Drawer Switch
4	12V
5	GPIO-1
6	GND

K. AUDIO_JACK (Audio Line Out)



Definition
GND
Line Out (L)
AUDIO_JD
-ACZ_DET
Line Out (R)

Jumper Setting



1. DC_OUT (12V for external/internal use, This connector is reserved for future use)

	DC 12	V OUT:
	Pin	Definition
	1	GND
٦ <u>لــــــــــــــــــــــــــــــــــــ</u>	2	GND
	3	12V
50_001	4	12V

2. CPU_FAN (CPU FAN) 3. SYS_FAN (System FAN)



4

3

CPU_FAN:

Pin	Definition
1	GND
2	+12V/RPM
	control
З	RPM detect
4	RPM control

SYS_FAN:		
Pin	Definition	
1	GND	
2	+12V/RPM control	
3	RPM detect	

4. KB_MS2 (PS/2 Keyboard and PS/2 Mouse)



KB_MS2:		
Pin	Definition	
1	GND	
2	KDAT	
3	F_KDAT	
4	KCLK	
5	F_KCLK	
6	5V	

5. LVDS_PWR1 (LVDS 3V/5V selection)



PinDefinition13.3V2DO input
1 3.3V
3 5V

6. INV_BRIG1 (Inverter with Box-header)



INV_B	RIG1:
Pin	Definition
1	12V DC out
2	12V DC out
3	GND
4	Backlight Controller
5	Backlight Enable

7, LVDS 18 bit Connector



Pin	Definition	Pin	Definition	Pin	Definition
1	GND	12	Backlight Enable	23	LVDS Clock+
2	NC	13	GND	24	Backlight 5V
3	EDID Data	14	Backlight Controller	25	GND
4	GND	15	Data1+	26	GND
5	EDID Clock	16	GND	27	Data2-
6	NC	17	Data1-	28	LVDS Power 3.3V
7	GND	18	GND	29	Data2+
8	NC	19	GND	30	LVDS Power 3.3V
9	Data0+	20	Backlight 5V		

10	NC	21	LVDS Clock-	
11	Data0-	22	Backlight 5V	

8. JRS1, JRS2, JRS3, JRS4, JRS5 (Only COM2 available for RS232,RS422 or RS485 selections)



Defaul	t 1-2
Pin	Definition
1	RS232
2	UART RXD
3	RS422
4	UART RXD
5	RS485
6	UART RXD

JRS2, JRS3, JRS<u>4</u>, JRS5

	\bigcirc	\bigcirc	\bigcirc	\bigcirc
\bigcirc \bigcirc \bigcirc \bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Pin	Definition
1	RS485 D-
2	COM2 Pin 1
3	RS232 DCD

JRS4: Default 2-3		
Pin	Definition	
1	RS422 D-	
2	COM2 Pin 4	
3	RS232 DTR	

JRS3:	Default	2-3shor
-------	---------	---------

Pin	Definition
1	RS485 D+
2	COM2 Pin 2
3	RS232 RXD

JRS5: Default 2-3

Pin	Definition
1	RS422 D+
2	COM2 Pin 3
3	RS232 TXD

9. JCOM1, JCOM2, JCOM3, JCOM4, JCOM5, JCOM6 for D-sub 9's Pin 9 output 5V, 12V or RI (COM4/COM5/COM1 output on RJ-45's Pin1&2)



Default	3-4	Sh	ort
i			1

Pin	Definition
1-2 Short	5V
3-4 Short	RI
5-6 Short	12V

***PS: JCOM4 is pre-set as 5-6 short for 12V customer display JCOM3 is pre-set as 1-2 short for 5V Touch controller

10. COM1, COM3, COM5, COM6 (Serial Port with Box-header)



Pin	Definition	Pin	Definition
1	DCD	2	DSR
3	RXD	4	RTS
5	TXD	6	CTS
7	DTR	8	RI/+5V/+12V
9	GND	10	RI/+5V/+12V

11. VFD_JR1 (VFD & RS232 Mode select)



	0		
Pin	Definition	Pin	Definition
1	CTS4-	2	RTS4-
3	Signal for PIN2 of COM4 port	4	Signal for PIN4 of COM4 port
5	RI4-/1_5V/12V_F	6	GND

***PS: JCOM4 is set to 5-6 short for 12V VFD display as default.

		Pin	Definition
VFD Mode	VFD_JR1[1-2], [3-5], [4-6] Short	1	12V
	JCOM4[5-6] Short	2	12V
	7	3	GND
		4	GND
8 1		5	DTR
		6	DSR
	COM4_USB1 Port	7	TXD
		8	RXD
		Pin	Definition
L	1	1	RI

RS232 Mode	VFD_JR1[1-3], [2-4] Short
	JCOM4 [3-4] Short

Pin	Definition
1	RI
2	CTS
3	GND
4	RTS
5	DTR
6	DSR
7	TXD
8	RXD

12. JFRONT (Front Panel Connector with Box-header)



	2 10		
Pin	Definition	Pin	Definition
1	Stand-by LED	2	Power LED
3	Power Switch#	4	GND
5	LAN Action LED	6	Stand-by 5V
7	HDD LED#	8	VCC 5V
9	System Reset#	10	GND

13. F_USB1, F_USB2, (USB Pin-header)



Pin	Definition	Pin	Definition
1	USB Power 5V	2	USB Power 5V
3	USB Dx-	4	USB Dy-
5	USB Dx+	6	USB Dy+
7	GND	8	GND
9	NC	10	NC

F_USB3, (USB Pin-header)

Pin	Definition	Pin	Definition
1	USB Power 5V	2	USB Power 5V
3	USB Dx-	4	NC
5	USB Dx+	6	NC
7	GND	8	GND
9	NC	10	NC

14. USB_PWR1, USB_PWR2, USB_PWR3 (Jumper for Stand-by ,5V or VCC 5V selections)



1

Default 1-2 short

Pin	Definition
1	VCC 5V
2	USB DC IN
3	Stand-by 5V

15. F_AUDIO (Front Audio Box-header)



	2 12		
Pin	Definition	Pin	Definition
1	Amplifier Out_R+	2	MIC_L
3	Amplifier Out_R-	4	MIC_R
5	GND	6	Line In_R
7	Amplifier Out_L+	8	Line In_L
9	Amplifier Out_L-	10	Line In_JD
11	GND	12	MIC_JD

16. VGA2 (VGA Connector with Box-header)



Pin	Definition	Pin	Definition
1	V-SYNC	2	H-SYNC
3	GND	4	GND
5	RED	6	GND
7	GREEN	8	DDC Clock
9	BULE	10	DDC Data

17. CLR_COMS1 (Clear CMOS Pin-header)



Default 2-3 short

Pin	Definition
1	GND
2	Battery 3V
3	Battery 3V

18. SATAPW_1, SATAPW_2 (SATA HDD Power 5V & 12V)

Pin	Definition
1	+12V
2	GND
3	GND
4	5V

19. LCDPWR_CON (LCD Power ON/OFF)

Default 1-2 OpenONShort 1-2OFFOpen 1-2

20. BKLTEN_CON (Back light Inverter Enable/Disable)

Default 1-2 Open

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Enable	Short 1-2			
Disable	Open 1-2			

Chapter 5

Troubleshooting

Please note that the following troubleshooting guide is designed for people with strong computer hardware knowledge such as System Administrators and Engineers.

Touch Panel Does Not Work

- A) Check CMOS settings, COM3 needs to be "Enabled".
- B) Check if there is no conflict between COM3 and any other devices.
- **C)** Check if the ELO driver or the TouchKit driver has been properly installed. Or try to reinstall again (Please refer to the ELO driver installation or the TouchKit driver).
- D) Check if the ELO controller or the TouchKit driver on COM3 has been detected during the ELO driver or the TouchKit driver installation. If yes, then check if the flat cable from the ELO touch screen or the TOUCHKIT touch screen has been properly connected to the ELO controller or the TouchKit controller (Attention: Pin1 mark should be on the same side as the ELO controller).
- E) Check if the ELO controller Green LED is blinking?

If no, there is no DC+5V support for the ELO controller from the motherboard.

F) Touch screen controller could be defective or the touch panel could be defective.

ELO Touch Panel Cannot Calibrate Correctly

- A) Please replace the ELO controller, and re-calibrate. If this works, change back to the original ELO controller, and re-calibrate.
- **B)** If the ELO touch panel still cannot calibrate correctly after changing to a new ELO controller, the touch panel may be not installed properly or it could be defective.

Cannot Detect HDD

- A) SATA cable is not connected properly to main board or it could be defective.
- B) HDD power cable is not connected properly to the main board or it could be defective.
- C) Check CMOS setup, set SATA HDD to Auto Detect.
- D) On-board SATA port could be defective.

PS/2 Port Is Not Functioning Normally

- A) Make sure the device is properly connected to the PS/2 port before the system is powered up.
- **B)** Check that the LED on the keyboard goes on then off after power on. If yes, the keyboard is getting power correctly.
- **C)** The main board could be defective.

LAN Is Not Functioning Properly

- A) Check if the LAN driver is installed properly.
- **B)** Check if there is any IRQ conflict.
- **C)** Check if the RJ45 cable is properly connected.
- D) The on-board LAN chip could be defective.

COM1, COM2, COM5 Are Not Functioning Properly

- A) Check if the I/O ports are enabled in the CMOS setup.
- B) Check if there are any IRQ conflicts.
- C) The main board or I/O cable could be defective.

Cash Drawer Port Is Not Functioning Properly

- A) Make sure the pin assignment matches between the cash drawer and the RJ11 cash drawer port.
- B) Verify if the digit I/O port address and bit are correct.
- **C)** The main board could be defective.

USB Device Is Not Functioning Properly

- A) Ensure that the USB controller is "enabled" in the CMOS setup.
- B) Ensure that the USB Legacy is "enabled" in the CMOS setup. (Window XP Professional)
- C) Ensure that the USB Legacy is "Disabled" in the CMOS setup. (Embedded OS: Windows XP Embedded \cdot Window CE. NET \ Linux RedHat 9)