

POS PDF e-Manual

Thank you for purchasing a product of SAM4S.

(The contents of this manual is subject to change without prior notice.)

- The copyright of this e-Manual is in SAM4S.
- Some equipment nomenclature and abbreviations used here may differ from that contained in other SAM4S publications.
- The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This device complies with part 15 of the FCC Rules. (Class A digital device)





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<Main body>



<Mouse(Optional)>



<Keyboard(Optional)>



<Quick manual>



<Magnetic Dallas(Optional)>



<Power Cable / Adaptor>



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● General Specification

Dimension(mm)	387mm(W) × 278mm(L) × 340mm(H)
Weight	5.8 Kg
Processor	CPU : Intel Atom Processor N270 1.6GHz(Onboard) Without FAN FSB : 533MHz
Chip Sets	Northbridge : Intel 945GSE Southbridge : Intel ICH7M
HDD	2.5" SATA Type
I/O Interface	Serial(RS-232) Connector : D-SUB 9Pin x 3(COM1,3,4) + RJ45 Port x 1(COM5) COM1,3,4,5 --> 5V or 12V Output(Main Board DIP Switch Setting) Serial(RS-422/485) Connector : D-SUB 9Pin x 1(COM1 Common Use : BIOS Setting) Parallel Connector : D-SUB 25Pin x 1 USB 2.0 Connector : Left Side x 1, Rear Side x 4 LAN Connector : RJ45 Port x 1(8Pin) Cash Drawer Connector : RJ11 Port x 1(6Pin) VGA Connector : VGA Port x 1(15pin) Audio Connector : Line out x 1, MIC x 1
OS (Operating System)	Windows XP / 2000 / WEPOS / ...
Main Memory	DDR2 533/667/800 SO-DIMM Slot, (Up to 2GB)
Booting Device	HDD, External CD/DVD-ROM Drive, USB Memory



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BIOS	AMI(Amerian Megatrends, Inc.) BIOS
Display	15" TFT LCD, LVDS Interface Resolution & Colors : 1024x768(XGA), 16.2M(RGB) Color Contrast Ratio : 450 : 1 Viewing Angle(H-V) : 150° / 130° (Left : 75°, Right : 75°, Up : 70°, Down : 60°) Backlight Type : 2-CCFL BacklightBrightness : 250 cd/m² Backlight MTBF : 50,000hrs
Touch Panel	15" 5-Wire Resistive Type Type : Serial COM6 Transparency : 80% Surface Hardness : 3H Hitting Life : 35million times
Power Supply	100W Adapter AC INPUT : AC 100~240V / 50~60Hz DC OUTPUT : 12V /8.33A

● Optional Specification

Customer Display	20Char × 2Line, 5 × 7 Dot VFD or 256 × 32 Graphic Dot, 15" TFT LCD, XGA(1024 ×768)
MSR (Magnetic Stripe Reader)	Read Track : ISO Track 2&3 or ISO Track 1&2 Interface : USB Performance : 10~150CM/Sec Head Reliability : 500,000 times Error Rate : Less than 0.5%
Wall Mount	Wall Mountable
Dallas Key	Magnet Type
Cash Drawer	RJ11 Port(6pin) x 1, 12V or 24V (selection is possible)



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Features names of Functions and each part

Front View



MSR(Magnetic Stripe Reader)

Card (Credit Card, Loyalty Card and so on) can be recognized for transaction.

Card Recognition Light

When the card is swiped correctly, the light will be lit.

Hard Drive Light

When the Hard Drive is in operation, the light will be lit.

Power Light

When the system is on, the light will be lit.

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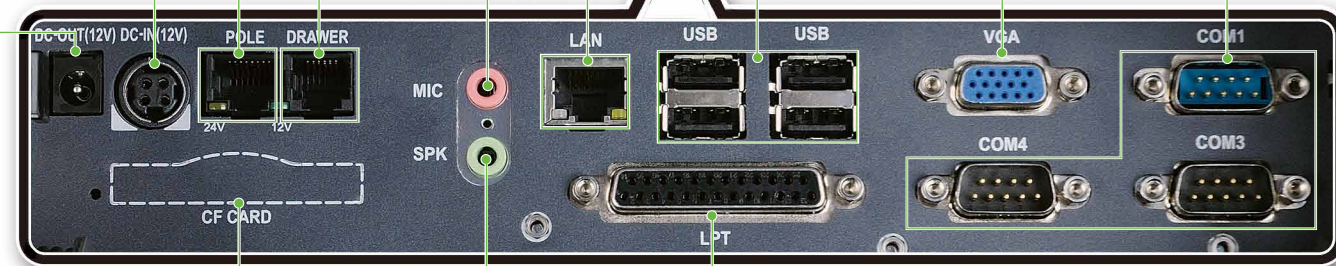
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Bottom View

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Microphone Port
RJ11 Cash Drawer Port
Customer Display Port
DC Power Supply Port
DC Power Output Port

CF CARD
Audio Port



RJ45 LAN Port
USB Port
Dual Monitor Port
Serial Port
Parallel Port



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Rear View

CUSTOMER DISPLAY(CDP)

This shows the amount which Customers have to pay

USB

USB Devices can be used through this port, i.e. USB scanner, USB Keyboard, USB Printer, etc.

SD CARD SLOT

SD Card, MMC Card can be used. (Option)

POWER BUTTON

Turns On-Off your system

LCD BRTGHTNESS

Screen Brightness can be altered.

ANGLE ADJUSTMENT LEVER

Angle can be altered between 20 ~ 90 degree.

DUAL MONTITOR EXPANSION COVER

DUMMY



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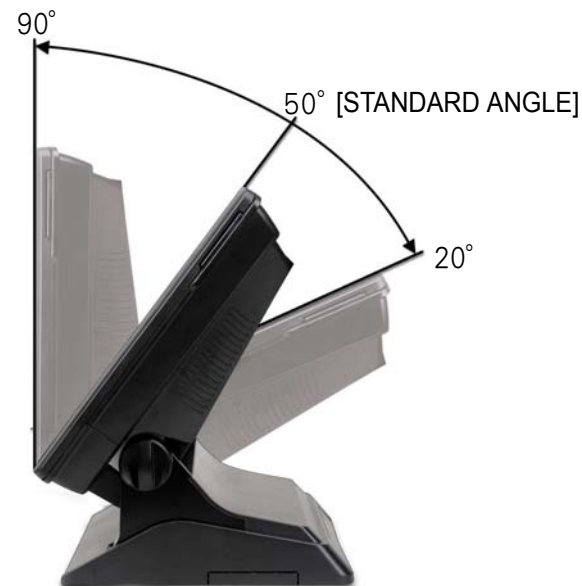
Safety Instructions

- Read the safety instructions carefully and thoroughly. All cautions and warnings on the equipment or user's manual should be noted.
- Lay this equipment on a stable surface before setting it up.
- Keep this equipment away from humidity and high temperature.
- Make sure the power voltage is within safety range and has been adjusted properly to the value of 100~240V before connecting the equipment to the power outlet.
- Always keep the strong magnetic or electrical objects away from the equipment.
- Always unplug the power cord before connecting any External Devices. Never pour liquid into the opening that could damage the equipment or cause an electrical shock.
- The openings on the enclosure are used for air convection and to prevent the equipment from overheating. Do not cover the openings.

Note!

► Adjust the angle of Display.

Screen angle can be adjusted for best viewing.





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Before connecting Peripherals

Connecting Peripherals

Remove Cover Cable

① In case the screws of Cover Cable are fixed, remove them first.



Hook of Cover Cable

② After removing screws, press hook of Cover Cable and remove.



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● Remove Cable Tidy Dummy

Remove Cable Tidy Dummy by using (-) shaped driver. Depending upon the places, the system can be used while Cable Tidy Dummy is removed.



Cable Tidy Dummy

● Dual Monitor Expansion Cover

In case there is not enough space for connecting Dual Monitor or Customer Display (Pole), Dual Monitor Expansion Cover can be removed.



Dual Monitor Expansion
Cover



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Connecting Peripherals

The I/O ports on the POS-System allow you to connect peripheral devices. All device listed here are for reference only.

1

Connecting keyboard & mouse

Connect PS/2 type keyboard & mouse.



2

Connecting Printer

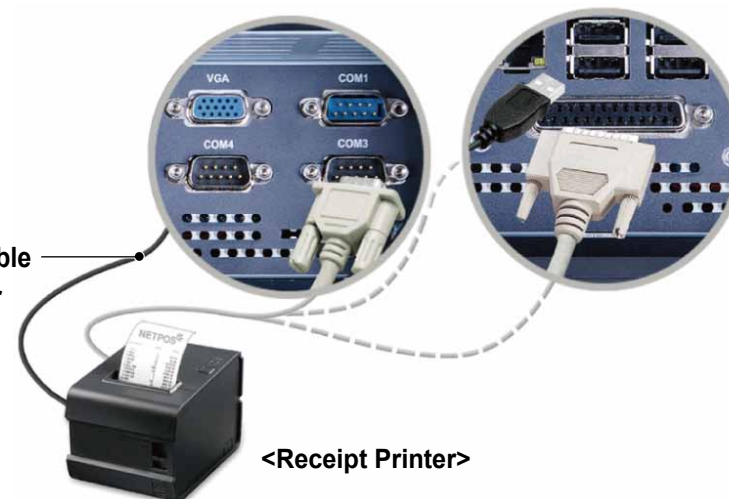
QBIG PC POS supports parallel, serial & USB typed printers.
Connect desired type of printer cable.



Note!

System supplies upto 24V & 2.3A. In case the printer requires
above mentioned voltage & current, the power adapter should
be used.

Power Cable
for Printer



<Receipt Printer>



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Connecting devices which uses the serial port

Connect barcode scanner etc. to the serial port.

PORT	5V	12V	(RS422/RS485)
COM1	○	○	
COM3	○	○	X
COM4	○	○	X

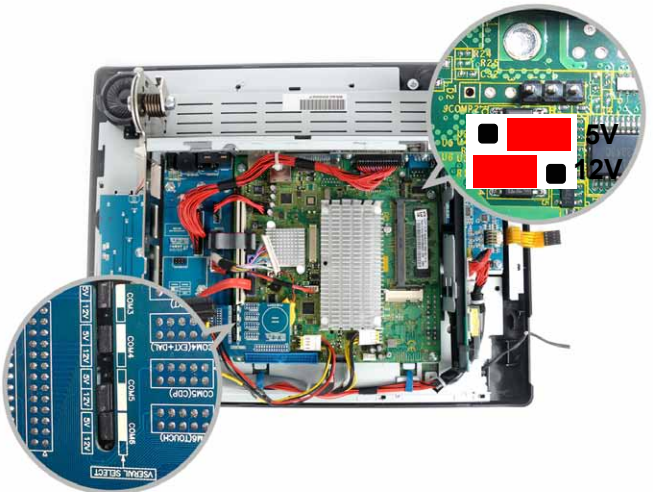


<Barcode Scanner>

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Connecting RJ-11 Cash Drawer

Use RJ-11 port when Cash Drawer is desired & used
(Use SAM4S Cash Drawer).



<Cash Drawer>



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Connecting RJ-45 LAN cable

RJ-45 LAN or Internet enabled cable can be connected.
It supports 10Mbps/100Mbps.



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Connecting USB Device

USB connector is located both the side of LCD panel and the back of the system so USB devices can be connected at both locations. USB hub can be used to connect various USB devices which includes keyboard, mouse, CCD camera and printer etc. (separate device drivers may be required).





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Connecting DC power supply cable.

Connecting DC power supply cable to the bottom of system.
(Free Voltage system adapter is used. Both 100V and 220V can be used.)



Note!

► QBig Adapter from SAM4S should only be used. Never
use the adapter with similar specification or shaped.





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System On/Off

System On

After installation of system, proceed to power on the system with following steps.

- 1 Power up the peripherals which are connected with the system.
- 2 Press the power button placed at the left side of system LCD (Open the power button cover and press).
- 3 PWR light is to be lit at the right bottom of the LCD front.



- 4 Windows initial screen can be seen after a while.

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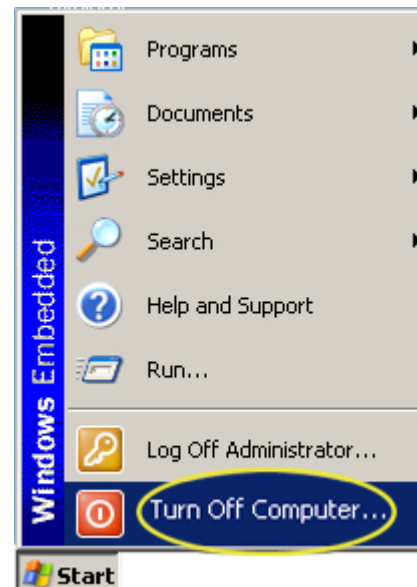
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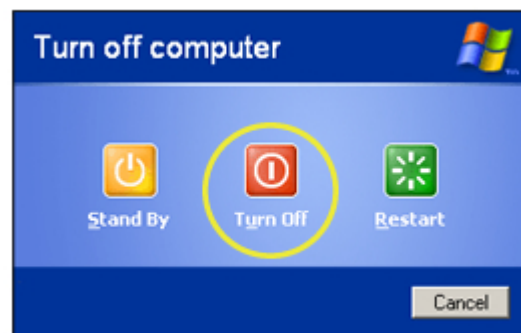
System Off

1 All applications should be off after saving files in the designated place.

2 Press <Start> button and select 'Turn off Computer' on popup menu.



3 System will be shut down when <Turn Off> button is clicked.





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Touch Screen

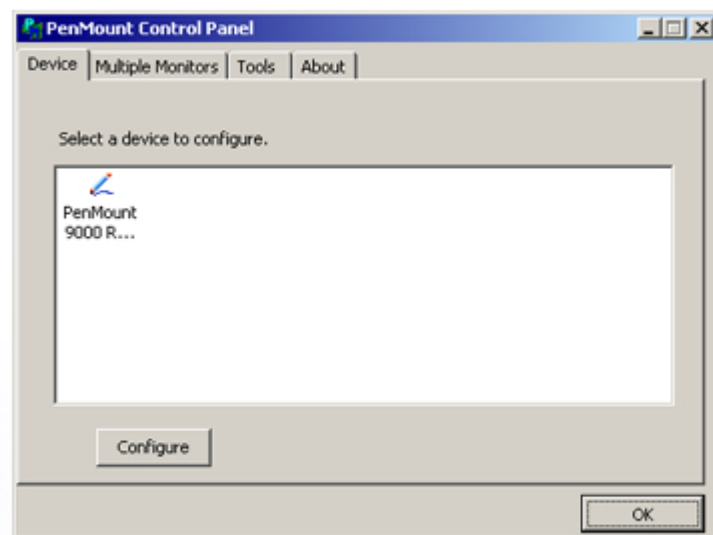
Recalibrate if it is not accurate on touch points.

Click the right button of mouse on 'PM' icon of Windows tray icons.
And select 'Control Panel' on popup menu.

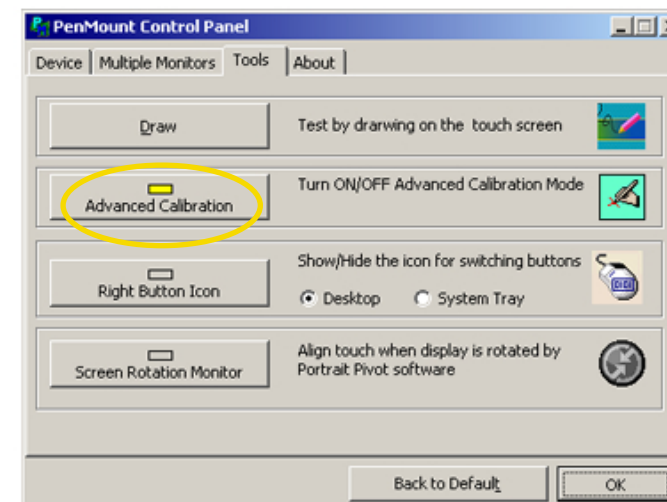


Check Out Touch Screen

1 'PenMount Control Panel' dialog appears.



2 Click the 'Tools' tab and check out whether or not 'Advanced Calibration' option box is yellow-marked. If it is not yellow, click the 'Advanced Calibration' button and return to 'Device' tab.



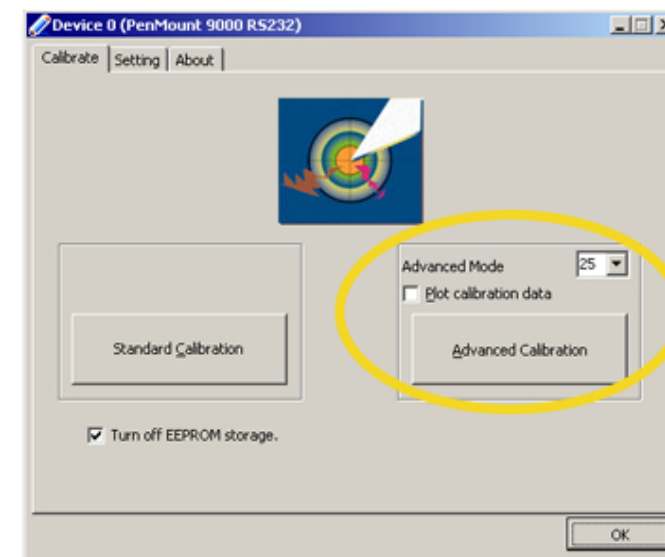
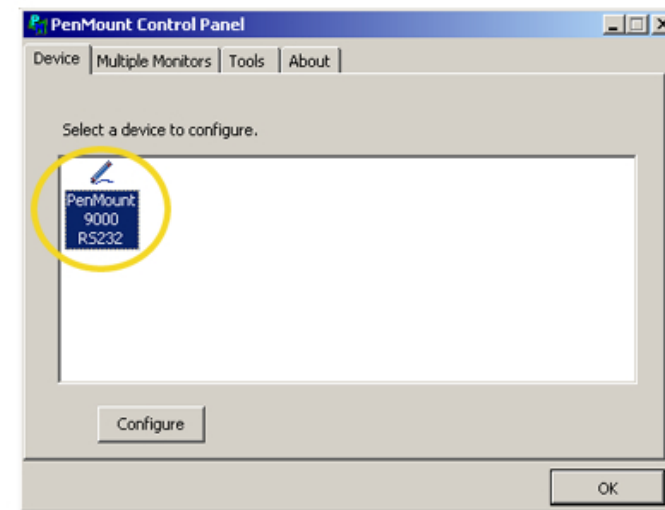


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Touch Screen Calibration

- 1 Double-click 'PenMount 9000 RS232' on 'Device' Tab.
- 2 On 'Calibrate' tab, select the number '25' of Advanced Mode combo-box list if it is possible. And then click the 'Advanced Calibration' button.
(The number of box is higher and higher, calibration will be more accurate.)





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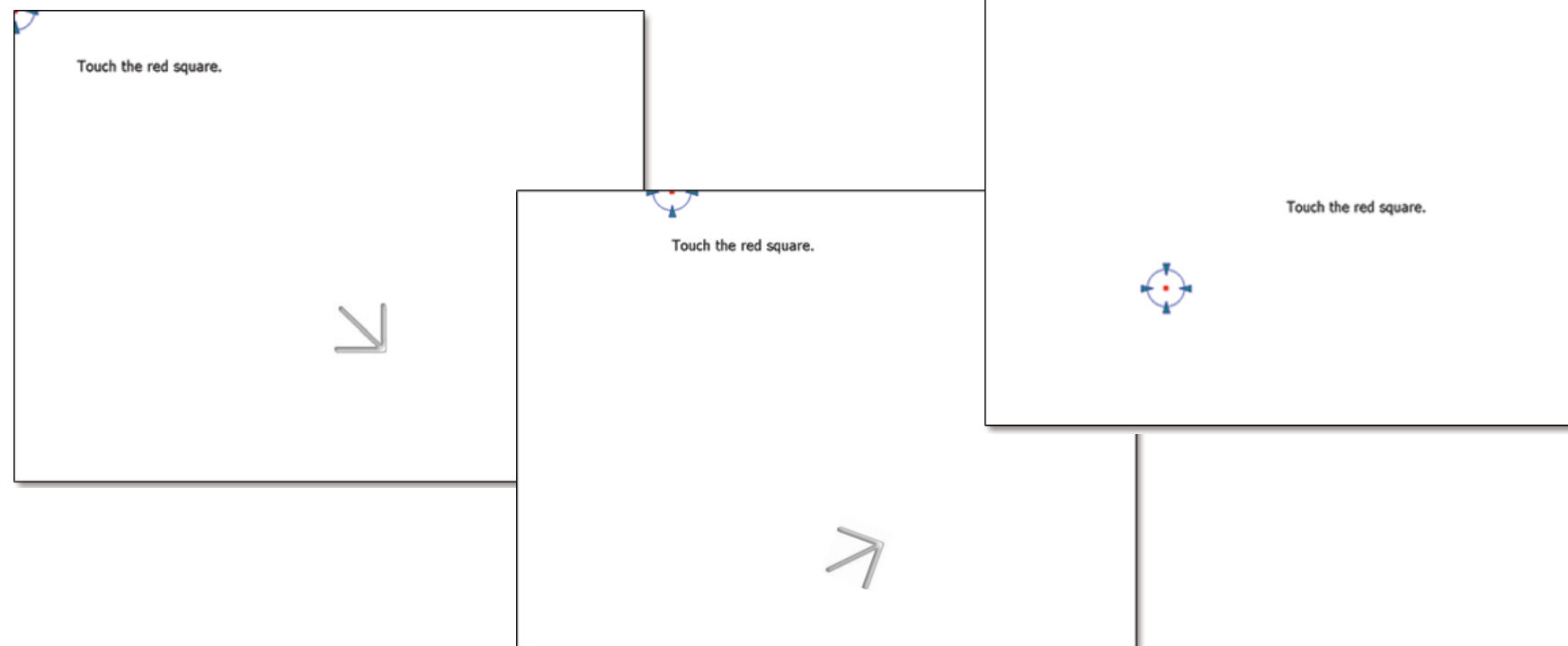
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-
- 3 Click the red point about 2 seconds on a calibration screen. Calibration procedure will be proceeded with following messages.



Caution

Ball point pen or sharpness tools may damage to surface of touch screen.





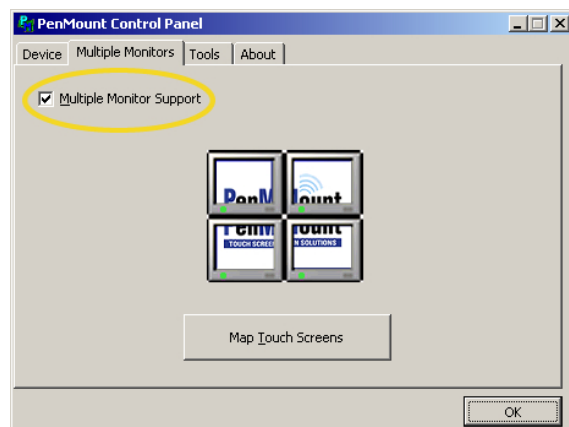
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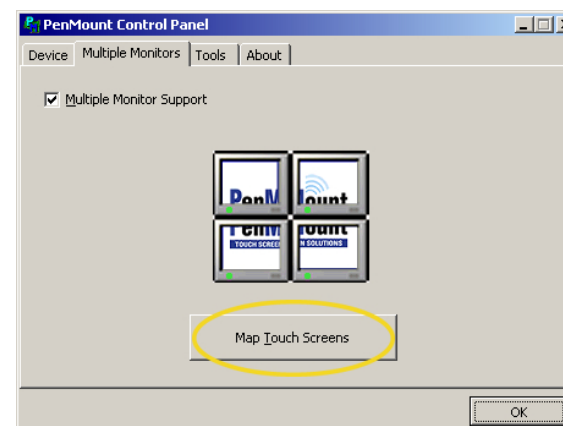
Note!

For using the Touch Screen on Multi-monitor.

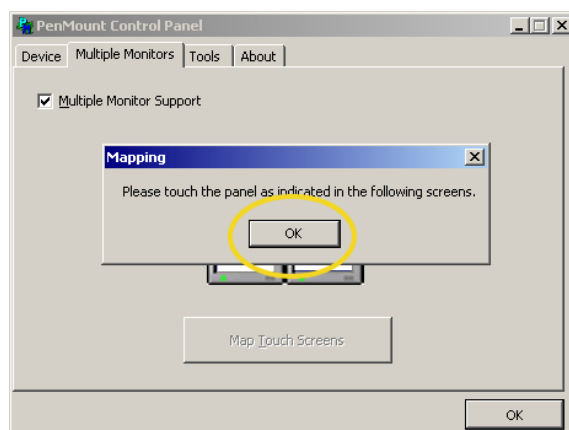
❶ Check 'Multiple Monitor Support' box on 'Multiple Monitors' tab.



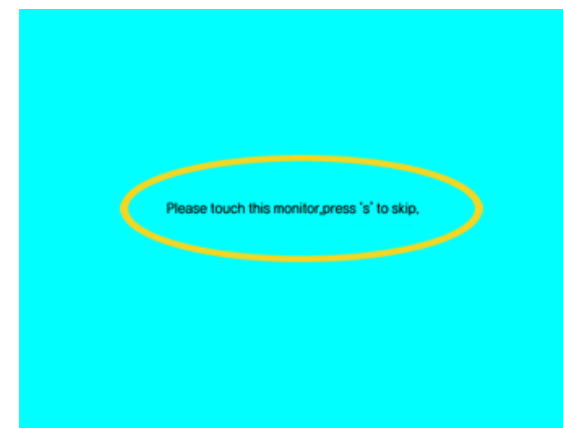
❷ Click <Map Touch Screens> button.



❸ Click <OK> button on 'Mapping' message box.



❹ If you want to use touchable screen of current monitors, you should touch the screen. If or not, press 'S' to skip.



For more detailed information about using dual monitor, refer to 'Dual Monitor' pages.



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WinClon (Backup & Recovery)

WinClon make the system backup or restored. User can restore the system to 'the manufactured state' with WinClon's initial state image. And user can backup the system with its current state (Create WinClon's recent state image).



Caution

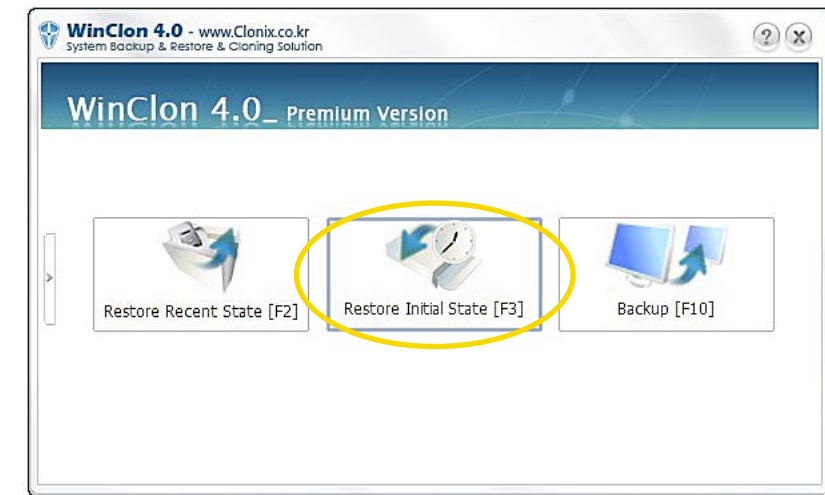
Recovery proceeds with system partition (C Drive). Please backup the data in the system (C Drive) before the recovery. User should prepare the system connected with a keyboard, because touch screen does not work during Backup & Recovery.

System Recovery

- 1 Press keyboard's <F11> key when 'F11 to WinClon' appears on the screen.



- 2 When a below screen appears, press keyboard's <F3> key.

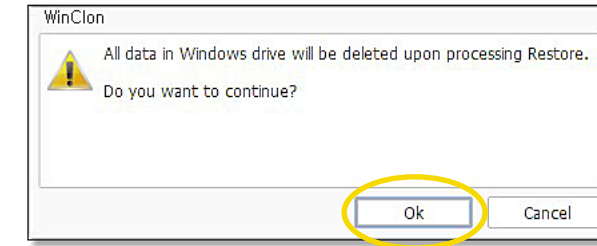




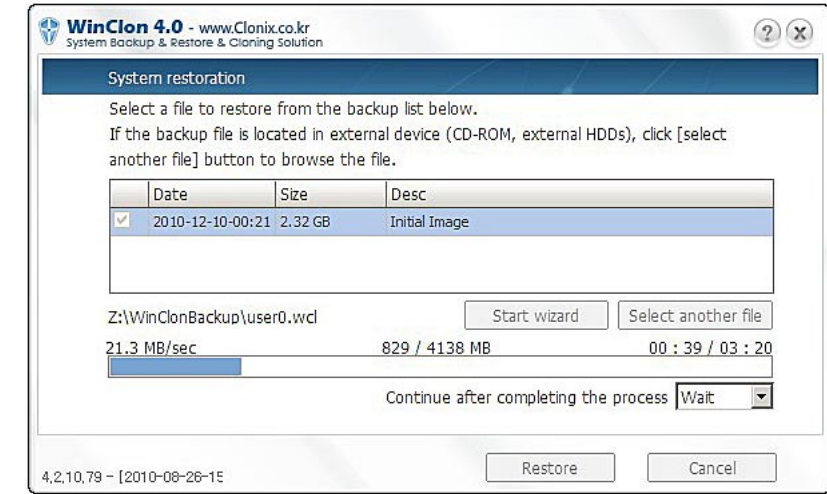
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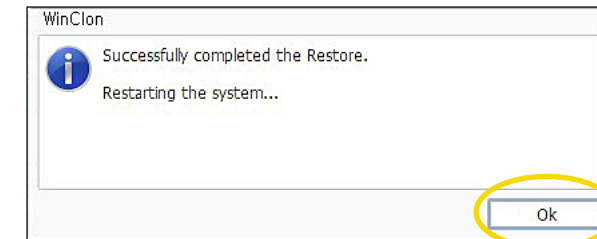
3 Click 'OK' button.



4 User can check the progress.



5 Check the message and click 'Ok' button, after the restore is successfully completed. The system will be restarted automatically.





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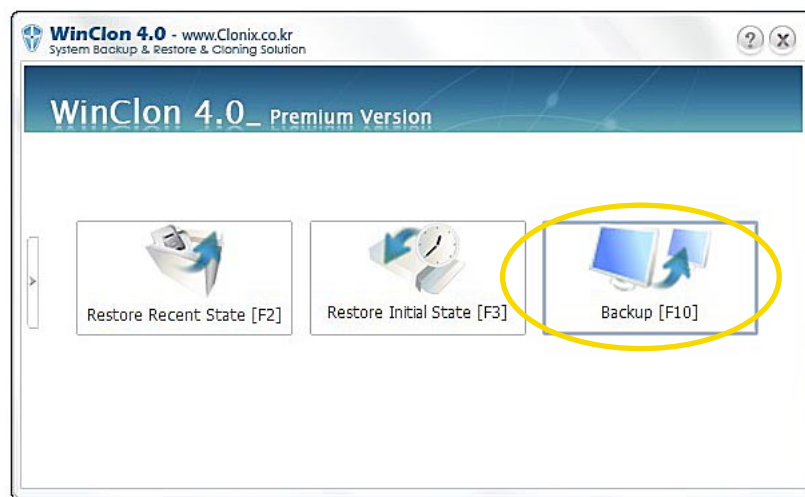
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System Backup

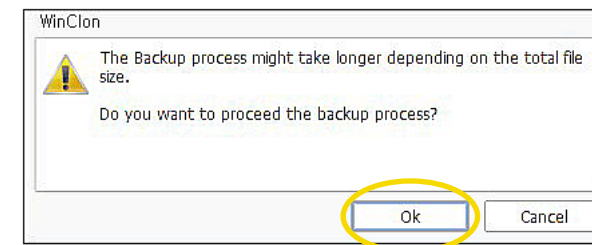
- 1 Press keyboard's <F11> key when 'F11 to WinClon' appears on the screen.



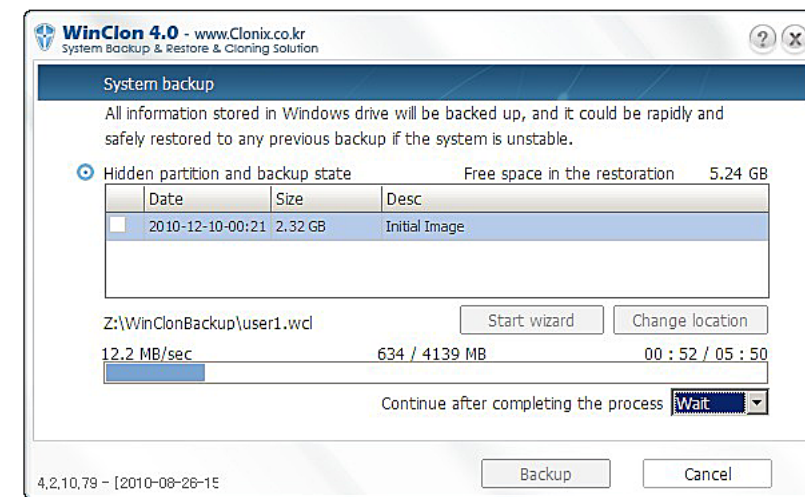
- 2 When a below screen appears, press keyboard's <F10> key.



- 3 Click 'OK' button.



- 4 User can check the progress.

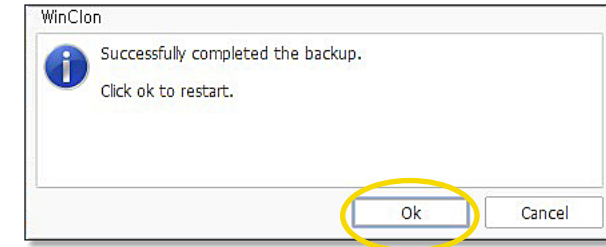




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- 5 Check the message and click 'Ok' button, after the backup is successfully completed.
The system will be restarted automatically.



Note!

- **Restore Recent State [F2]**
User can restore the system to 'the latest backup state' with 'WinClon's recent state' image
- **Restore Initial State [F3]**
User can restore the system to 'the manufactured state' with 'WinClon's initial state' image

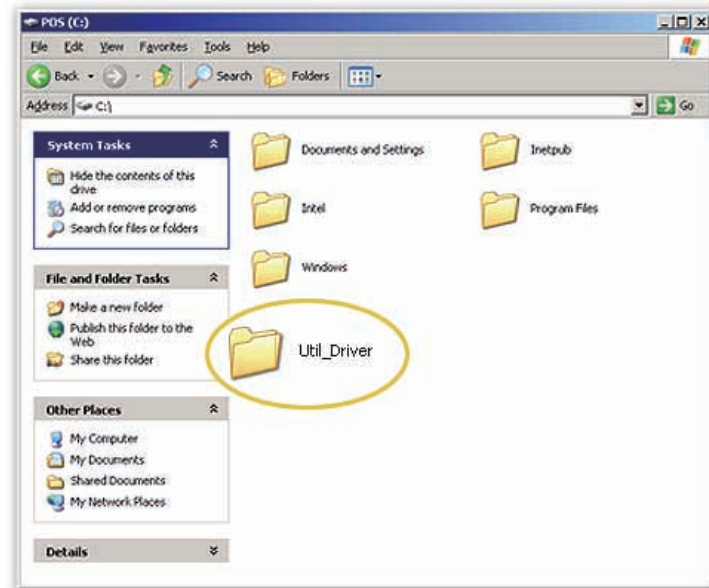




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POS Driver and Utility

Drivers and utilities are in the folder that the directory is 'C:\Util_Driver'.



Drivers

Driver installation files Audio, Video LAN, Chipset and Touch screen.

Mother Board Manual

System Manual

Utility

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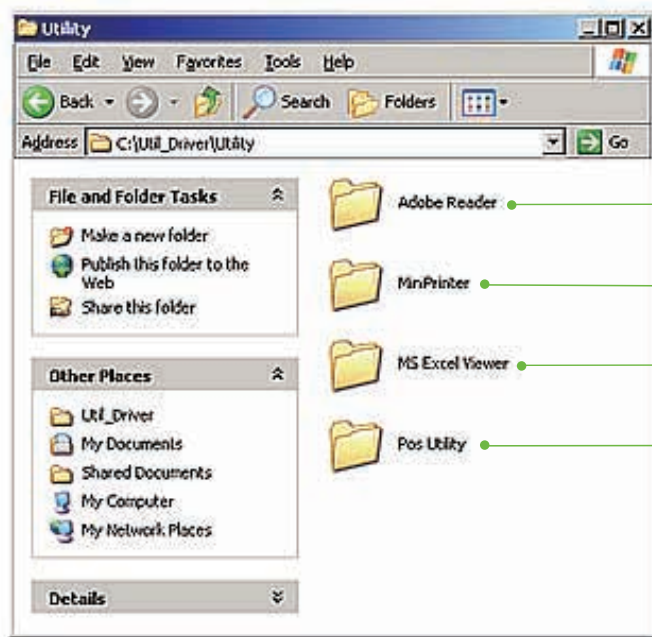


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POS Utility

C:\Util_Driver\Utility



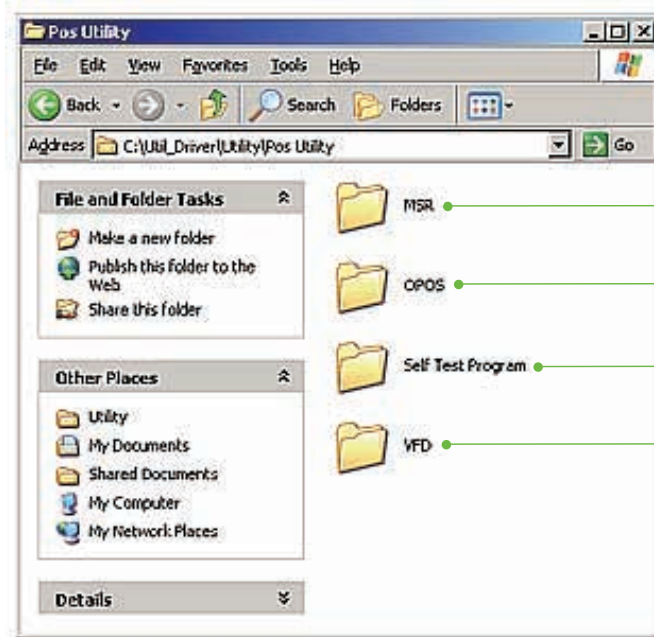
Adobe Reader

MiniPrinter

Ellix20 installation file

MS Excel Viewerv

Pos Utility



MSR

MSR setup utility

OPOS

OPOS driver file

Self Test Program

Test utility for peripherals of POS

VFD

DII, Test utility for using VFD



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OPOS Driver

OPOS or OLE for Retail POS consists of an architecture for win32-based POS device access.

The current OPOS driver has been developed in accordance with OPOS Specification Version 1.10. and continues to support the OPOS version.

- Supporting OS: Windows 2000, Windows XP, WEPOS

Available Pheripherals

LineDisplay : QLD202C

POSPrinter : ELLIX Series

The location of installation file

The file is shipped on the hard disk.

(C:\Util_Driver\Utility\Pos Utility\OPOS)

The way of installation

- 1 Run 'SAM4S OPOS Installer.exe'.
- 2 During OPOS Driver installation, all of components are automatically registered and set up properly for system composition.



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Dual Monitor

Additional monitor can be connected to the VGA port at the bottom of QBIG.

The system supports 'dual monitors' that is using two monitors for one system. Sub-monitor can be displayed a screen copied a main-monitor's Windows desktop or can be displayed a screen extended Windows desktop. If you set 'dual monitors', you should calibrate touch screen again.

1

Connect to external monitor when the system is turned off.
(If 'connector protecting cover' is separated from the bottom of system, VGA connector is shown.)

❶ Connect to external monitor when the system is turned off.

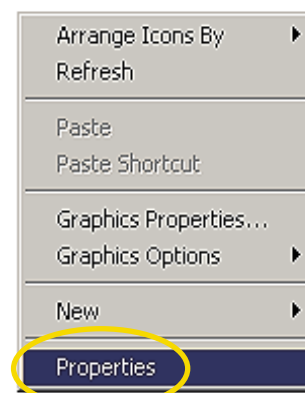
❷ Connect a power cable to external monitor.

2

Press a power button of the system and the external monitor.

3

Click the right button of mouse on Windows desktop screen, and select 'properties' from a popup menu.



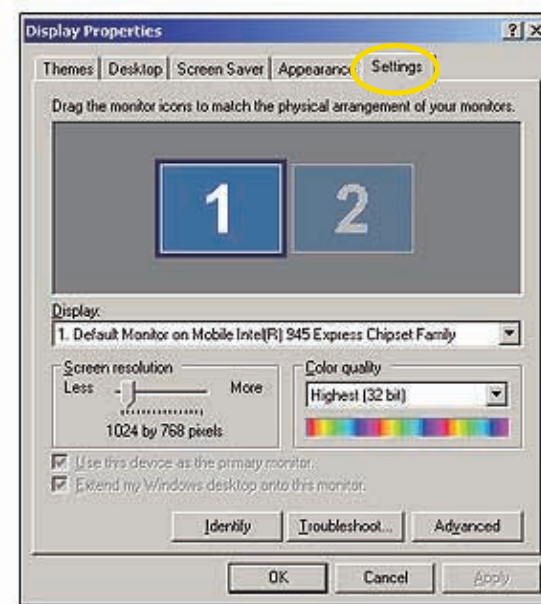


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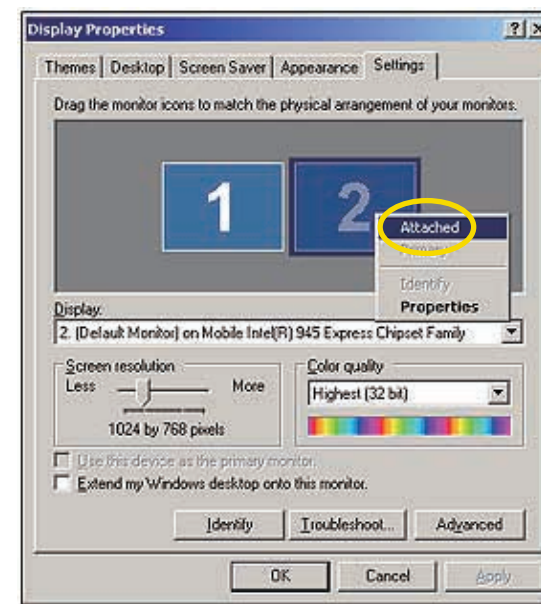
4

Select 'Settings' tab on 'Display Properties' dialog.



5

Click the right button of mouse on the second monitor's indicator and select 'Attached'.





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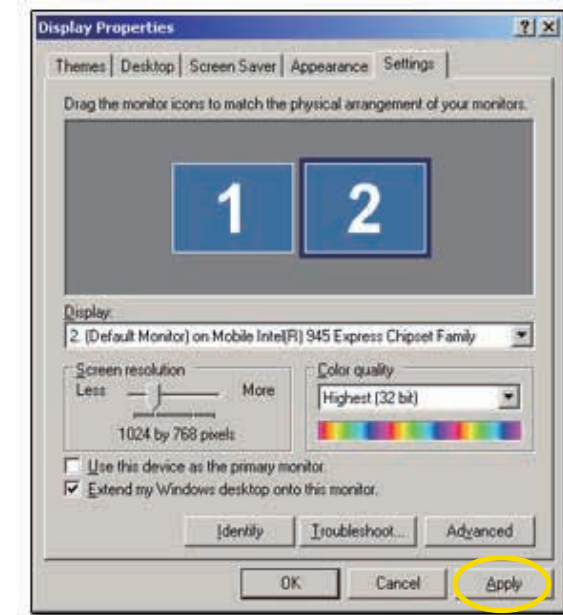
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6

Check an 'Extend my Windows desktop onto this monitor' and click <Apply> button. Then you can see the extended screen. (If this option is unchecked, the additional monitor displays a screen copied with primary monitor.)





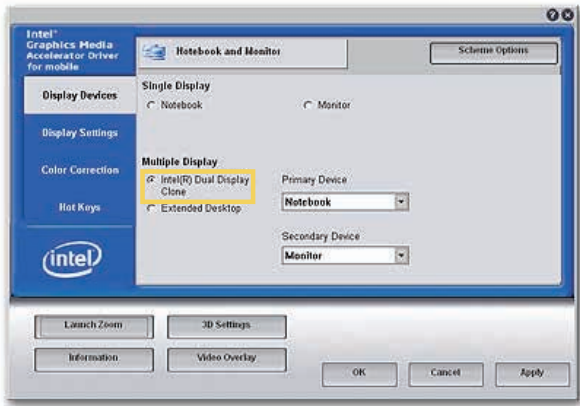
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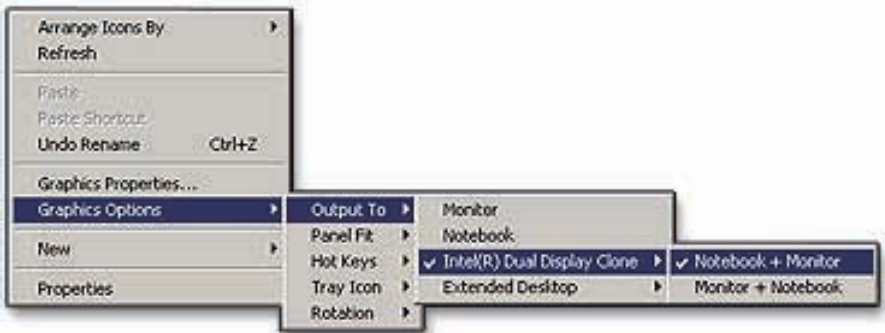
Note!

How to check dual monitor's setting
If 'dual monitors' doesn't work properly, refer to the following procedure.

- method1 Check the BIOS Setup**
Make sure that 'Chipset > North Bridge Chipset Configuration ► Video Function Configuration ► Boot Display Device' menu is selected as 'CRT+LVDS'.
- method2**
- ❶ Click the right button of mouse on Windows desktop screen and select 'Graphic Properties' menu.
 - ❷ Select 'Intel(R) Dual Display Clone' at 'Multiple Display' menu.



- method3**
- ❶ Click the right button of mouse on Windows desktop screen and select 'Graphic Options' menu.
 - ❷ Select 'Graphic Options > Output To > Intel(R) Dual Display Clone > Notebook + Monitor'.





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System Dismantle & Reassemble

System Dismantle

- 1 Make sure the system & peripherals power are off.
- 2 Take off the connector cab from the bottom of system in case it is fixed with screws.
- 3 Disconnect cables for peripherals & DC power input jack from the system.

Please note!

When disconnecting DC power supply jack, the neck point should gently be pulled out.





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- 4** CDP should be rotated as the direction shown in the figure and press 'PUSH' area with hands.



- 6** Lay the system while preventing LCD panel is being damaged.



- 5** CDP should be separated as the arrow shown and its connector should be disconnected.



- 7** Dismantle the stand, which is fixed with levers and it can be rotated.





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8 Stand can be dismantled as the figure shown.



10 System dummy back panel can be dismantled with the aid of figure.



9 Refer to the figure, unscrew, release lock lever and the system back panel should be taken apart.



System Reassemble

It can be done going backwards of dismantling, and peripherals cable & DC power input jack is connected to the mains power.



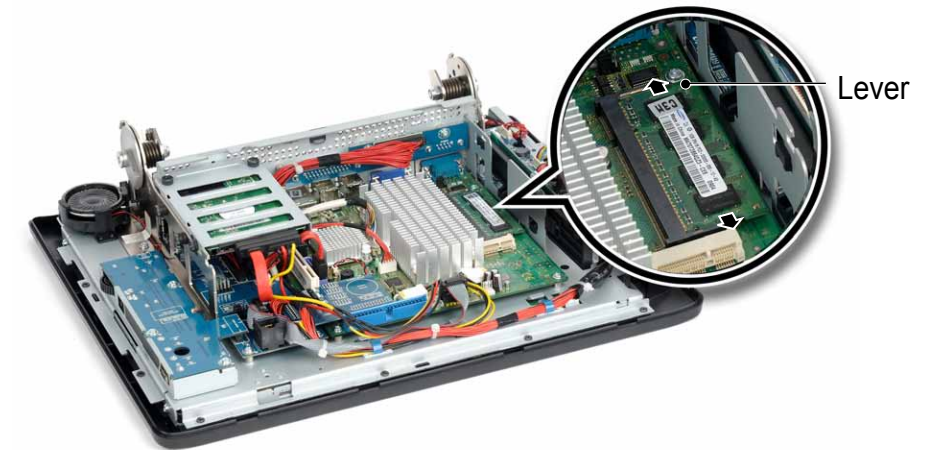
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Upgrading Memory Module

In case, the user requires to expand the capacity of system memory, the specification of memory should first be checked. Memory size can be decided a maximum of 2GB, depending upon the specification of its main board. Once the memory is installed, BIOS automatically recognizes the memory type, capacity and speed.

- 1** System should be turned off for expanding memory.
※Cables for power & peripherals should be disconnected prior to system disassemble.
- 2** System back cover should be taken off, referring System Dismantle.
- 3** Install new memory as shown in the figure and tighten them with levers at both ends.





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Replacing Hard Disk Drive

2.5 inch SATA type can only be installed, hence the hard drive type should be checked before purchase.

- 1** Before system dismantle, save data, turn off the system and all cables & mains power should be disconnected.
- 2** Disconnect system back cover, refer to the system dismantle contents.
- 3** Disconnect power & data cable of hard disk drive.
- 4** Remove 3 screws which hold HDD bracket.





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5 Remove bracket from the hard disk drive as shown in the figure.

6 Remove screws from the hard disk drive as shown in the figure.



7 Assemble it in the opposite way of dismantling and connect peripheral cables & DC power input jack.

8 Press power button and check system setup menu for making sure the hard disk drive is correctly connected.



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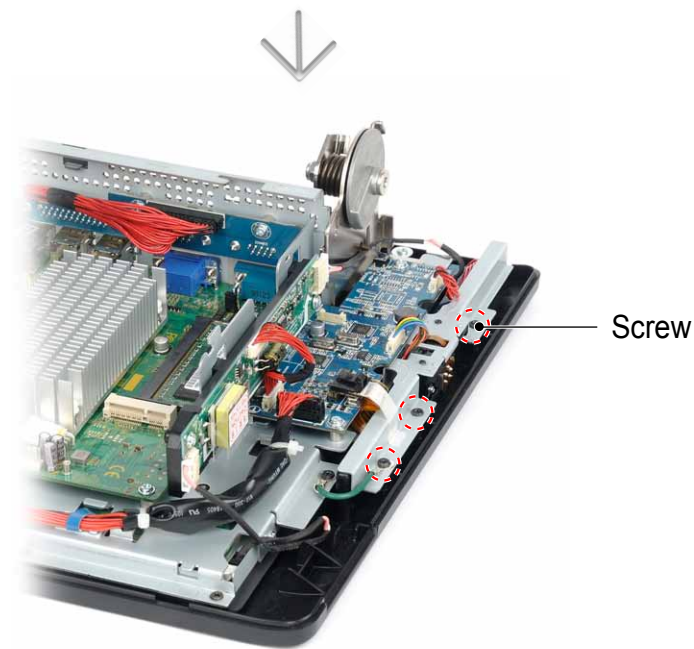
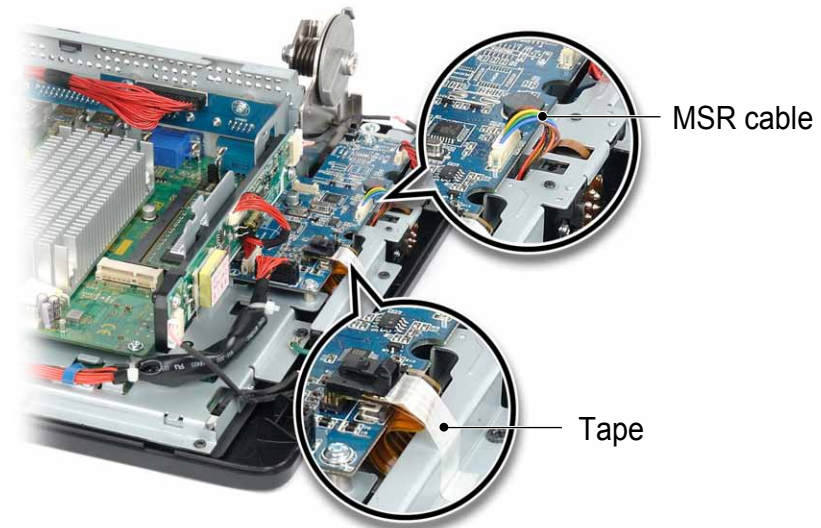
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Magnetic Stripe Reader(MSR) Removal

- 1** Remove system back cover (refer to System Dismantle).
- 2** Disconnect MSR (Magnetic Stripe Reader) cable.
- 3** Remove 3 screws which hold MSR bracket.
- 4** Remove tape which hold MSR bracket.
- 5** Remove MSR bracket while referring to the figure.





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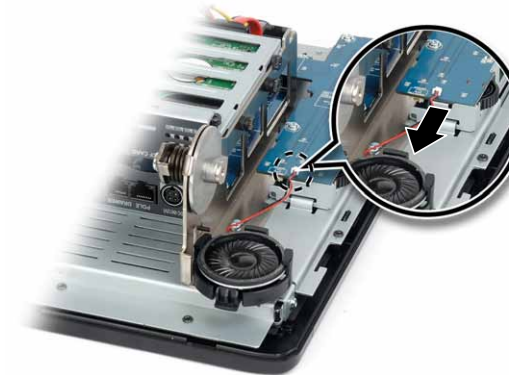
Other Main Components Removal

Internal Speaker Removal

- 1 Remove system back cover (refer to System Dismantle).
- 2 Disconnect speaker cable.
- 3 Remove speaker while pressing the hook which holds the speaker.

Note!

When external speaker is connected to be in use, the internal speaker cable should be disconnected in case the internal speaker does not wish to be in operation.





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Remove SD card USB board

- 1 Remove system back cover (refer to System Dismantle).
- 2 Remove screws which hold the bracket.



- 3 Remove SD card USB board while lifting up the bracket.

Note !

Please take extra care that the position of cable should be correct when reassemble it.





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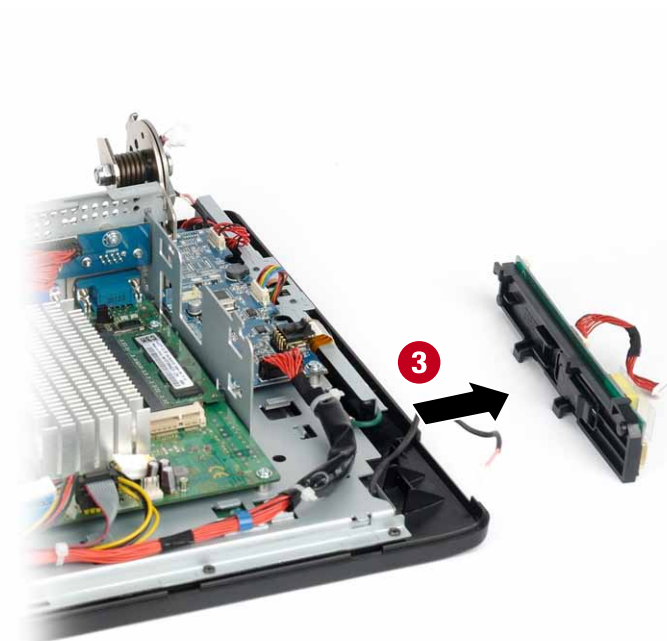
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Remove Inverter

- 1 Remove system back cover (refer to System Dismantle).
- 2 Remove inverter while pressing hook inside the inverter and push forward gently (refer to the figure).





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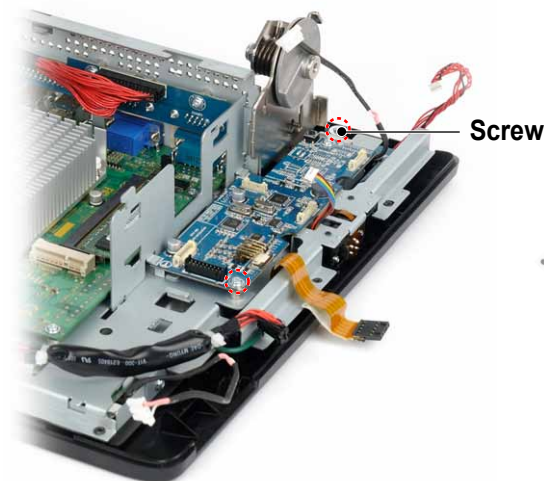
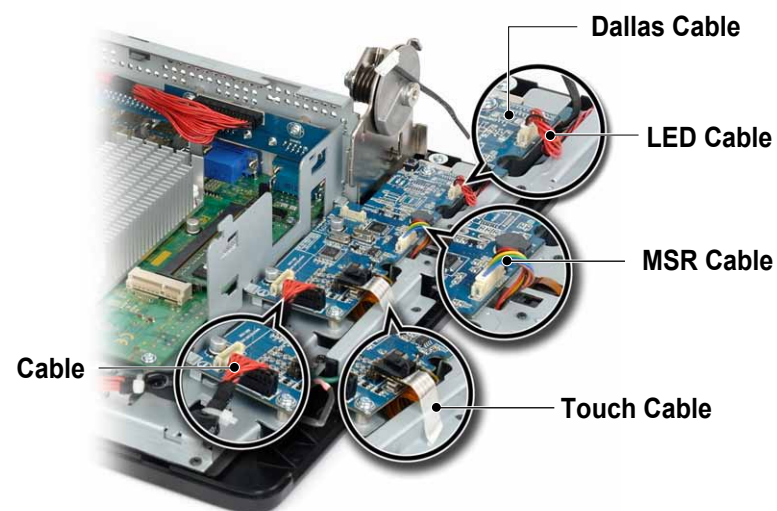
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Remove Touch MSR board

- 1 Remove system back cover (refer to System Dismantle).
- 2 Remove inverter while referring to Remove Inverter.
- 3 Disconnect all cables to Touch MSR board.(Touch, MSR, LED, ETC)
- 4 Remove Touch MSR board after undoing screws (2EA) which connect to the display bracket.





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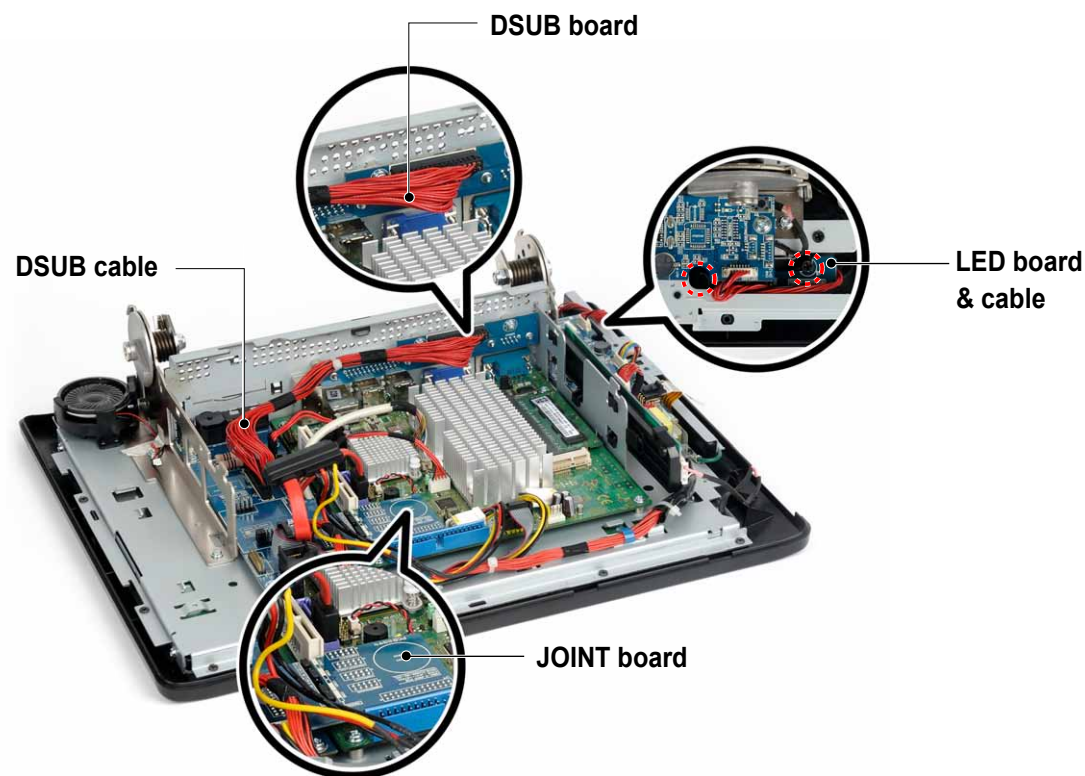
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Remove LED board

- 1 Remove system back cover (refer to System Dismantle).
- 2 Disconnect cables which connect LED board.
- 3 Remove LED board after undoing screws (2EA) which hold LED board.



Remove DSUB board

- 1 Remove system back cover (refer to System Dismantle).
- 2 Disconnect cables which connect DSUB board.
- 3 Remove DSUB board.

Remove JOINT board

- 1 Remove system back cover (refer to System Dismantle).
- 2 Remove JOINT board.



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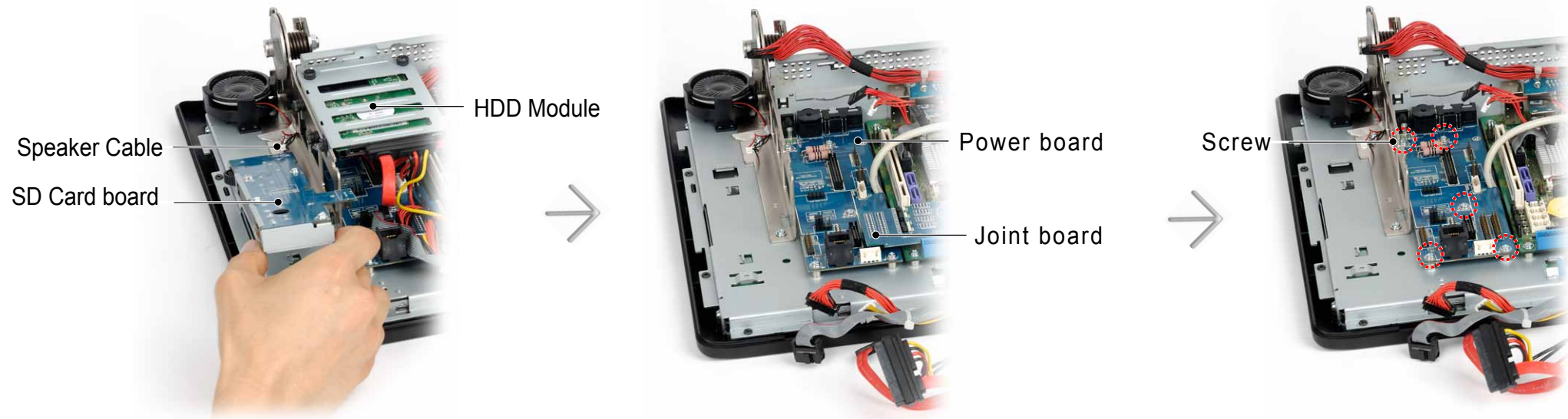
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Remove Power board

- 1 Remove system back cover (refer to System Dismantle).
- 2 Disconnect cables for HDD and remove HDD module (refer to System Dismantle).
- 3 Disconnect cables for speaker and remove SD board (refer to System Dismantle).
- 4 Disconnect all cables to Power board.
- 5 Remove Power board after undoing screws (6EA) which hold Power board.





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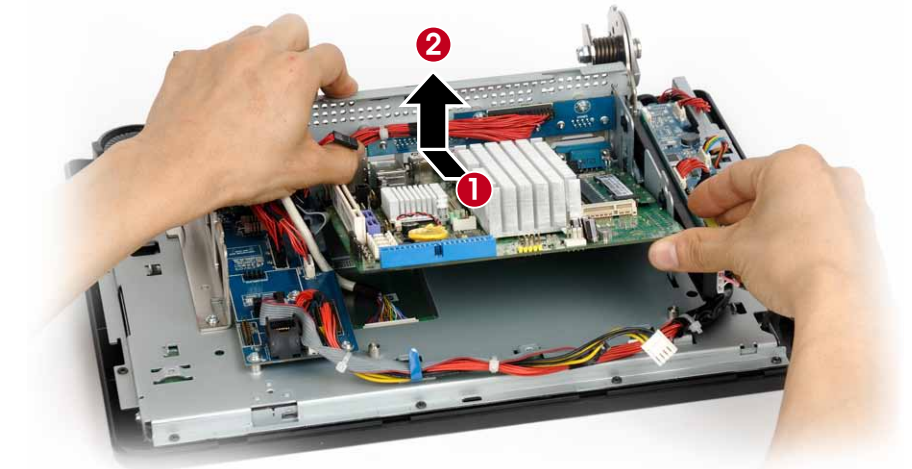
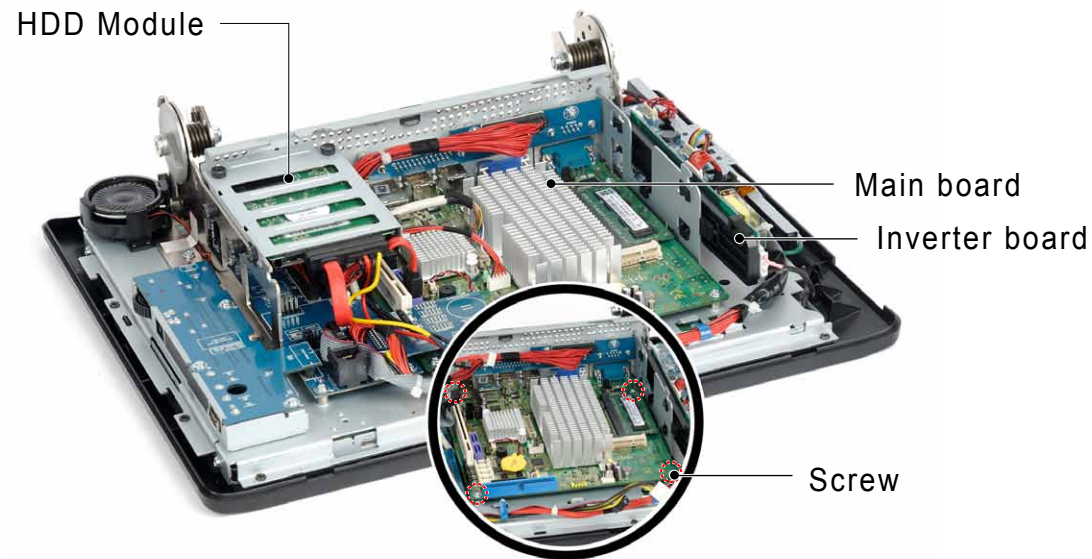
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Remove Main board

- 1 Remove system back cover (refer to System Dismantle).
- 2 Remove inverter while referring to Remove Inverter.
- 3 Disconnect all cables to main board.
- 4 Remove main board after undoing screws to main board and pushing the direction of arrow.





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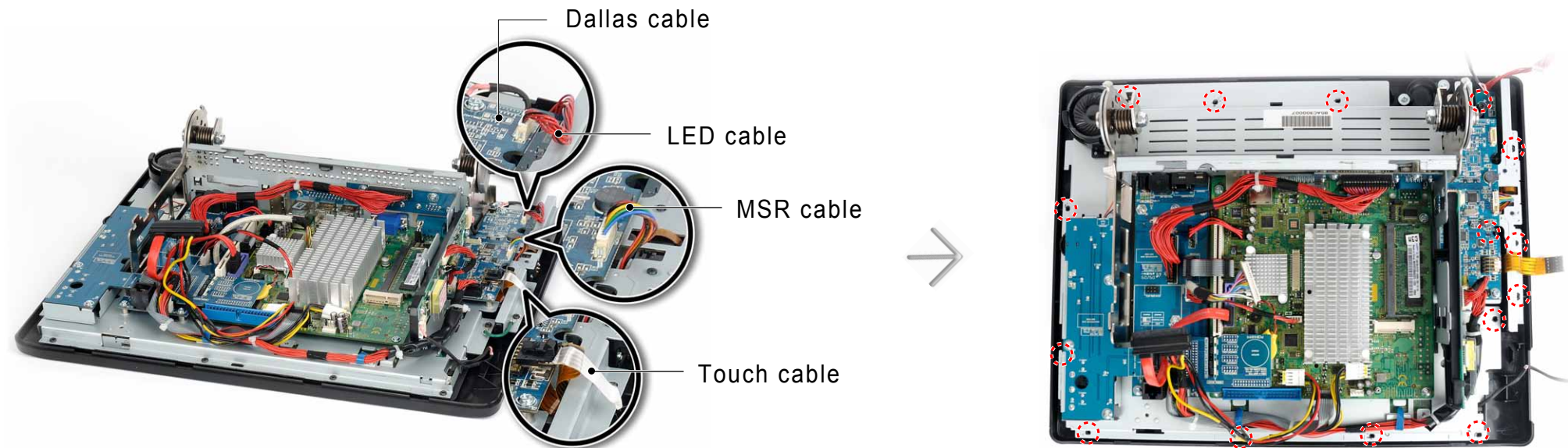
Remove Touch panel



Warning!

※ It appears to happen defectives while disconnecting LCD and touch panel due to dust or mis-handling. Please get correct service from approved service center.

- 1 Remove system back cover (refer to System Dismantle).
- 2 Disconnect cables as shown in the figure and undo screws.





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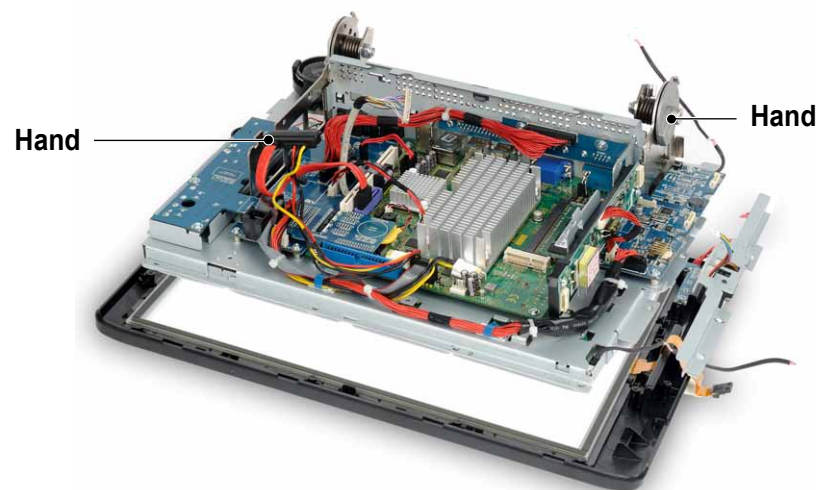
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-
-
- 3 Remove touch panel while holding bracket and lift up the display assembly.



Warning!

- ▶ Be careful in case of any damage occurred to cables.
- ▶ Touch panel may separate from LCD panel all of a sudden due to vacuum condition in between touch panel and LCD.
- ▶ Be careful in case of any breakage and injury.
- ▶ Be careful in case of any dust being stuck into the surface of LCD or touch panel and scratch to them.





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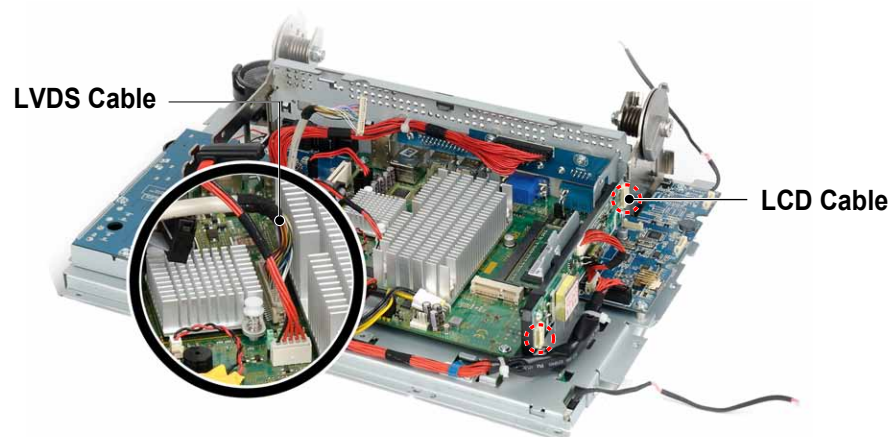
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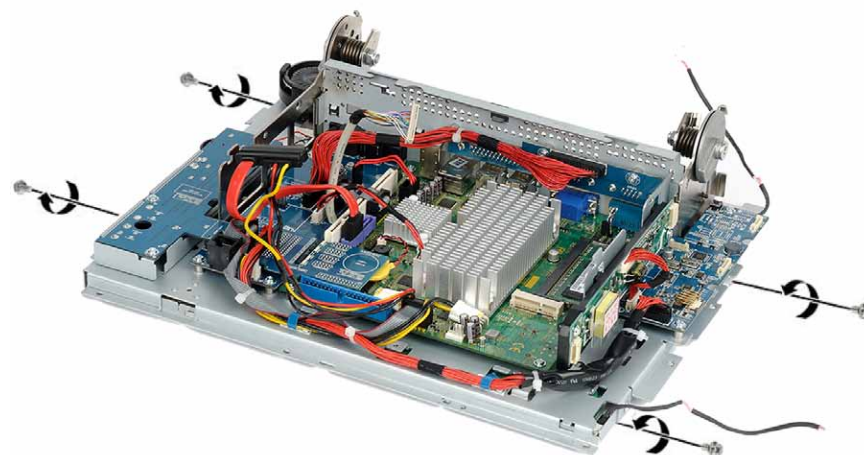
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- 4 Disconnect LVDS cable and LCD cable. Unfold disconnected cables, avoid interferences with other cables.



- 5 Undo screws (4EA) on the side of display bracket.

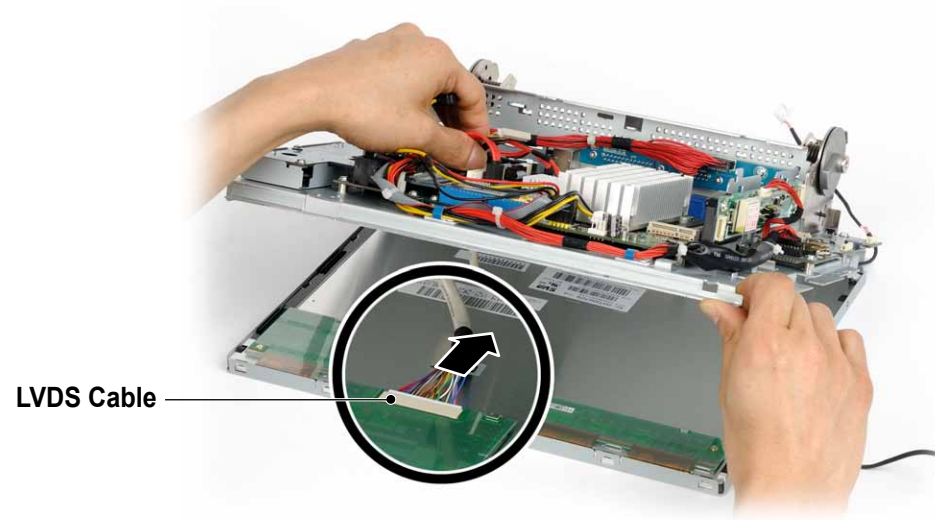




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6 Remove LVDS cable which is connected to LCD after the bracket is lifted while preventing LVDS cable is not put in between.



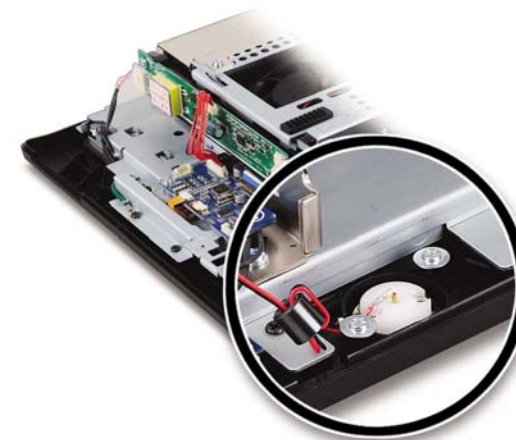
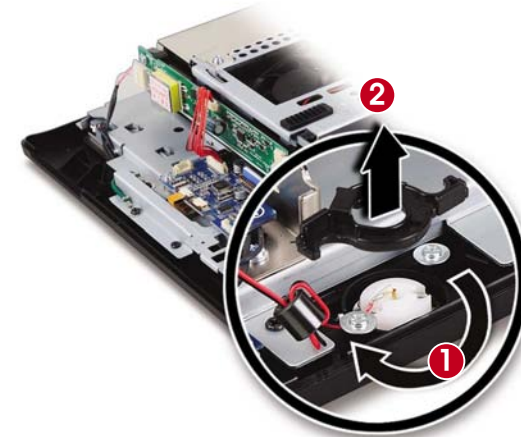


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Remove Dallas (Option)

- 1 Remove system back cover (refer to System Dismantle).
- 2 Disconnect cables which connect to its board.
- 3 Remove Dallas holder while rotating it in clock-wise.
- 4 Remove Dallas holder while rotating it in clock-wise.





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System Set up

System setup means that the system configuration information is memorized on BIOS Setup Utility. It is also saved in a special area of memory called CMOS ROM.

Entering the Setup Program

Turn on the system and the system will show 'Press to enter SETUP' message. Press or <Delete> to enter SETUP when this message shows up.

Cases of 'BIOS Setup' settings

- Check the HDD type and capacity after HDD replacement.
- Change booting sequence
- Reflect user's needs on the setup
- Set or change a password

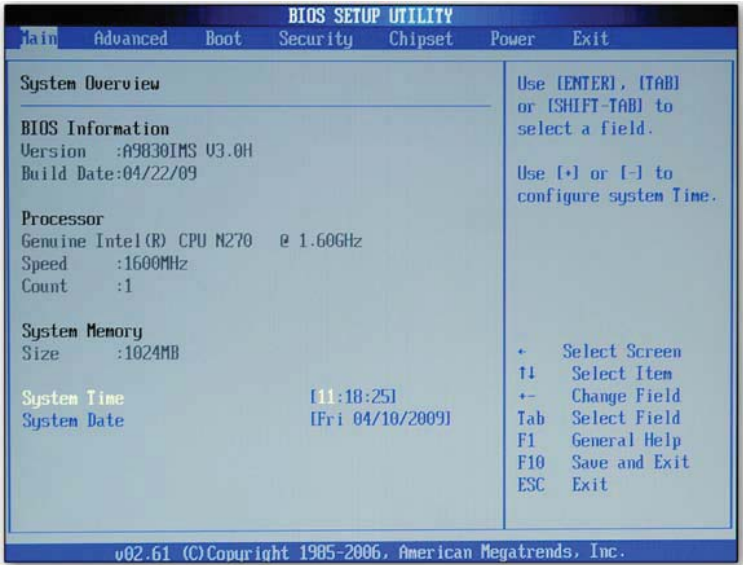


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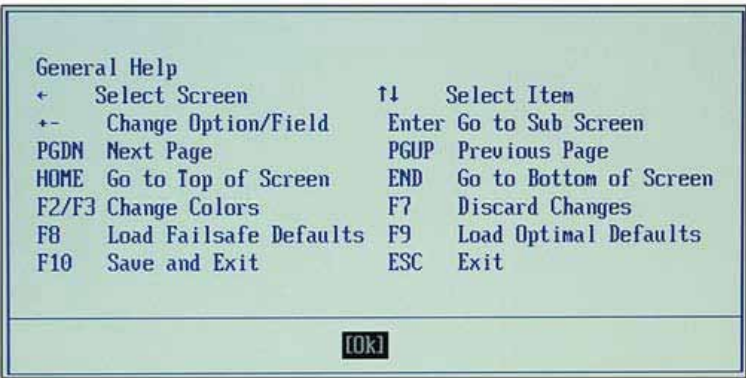
Initial Setup Screen

Initial Setup Screens has menus as Main, Advanced, Boot, Security, Chipset, Power, Exit.



Using Keys

If you press 'F1' key, you can see the simple explanation of keys.





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← : **Select Screen**

Select menus you want.

↑, ↓ : **Select Item**

Move the cursor to select menu or option tab. On focused menu will be changed color to white.

+ , - : **Change Option / Field**

Use them for setting value.

Enter : **Go to Sub Screen**

Some of menus include sub-menu. You can select sub-menu as clicking <Enter> key.

PGDN : **Next Page**

Move to the next page.

PGUP : **Previous Page**

Move to the previous page.

HOME : **Go to Top of Screen**

END : **Go to Bottom of Screen**

F2/F3 : **Change Colors**

Change the BIOS font color with background color.



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● **F7 : Discard Changes**

Abandon all changes.

● **F8 : Load Failsafe Defaults**

In case of improper value input or system error caused by improper configuration setting, you can load default configuration value using this menu.

● **F9 : Load Optimal Defaults**

Use this menu to load the BIOS default values for the minimal/stable performance for your system to operate.

● **F10 : Save and Exit**

Save changed value and exit setup program.

● **ESC : Exit**

Use for 'Exit' current page and return to its super-menu but 'Quit without saving' changes on Main Screen.

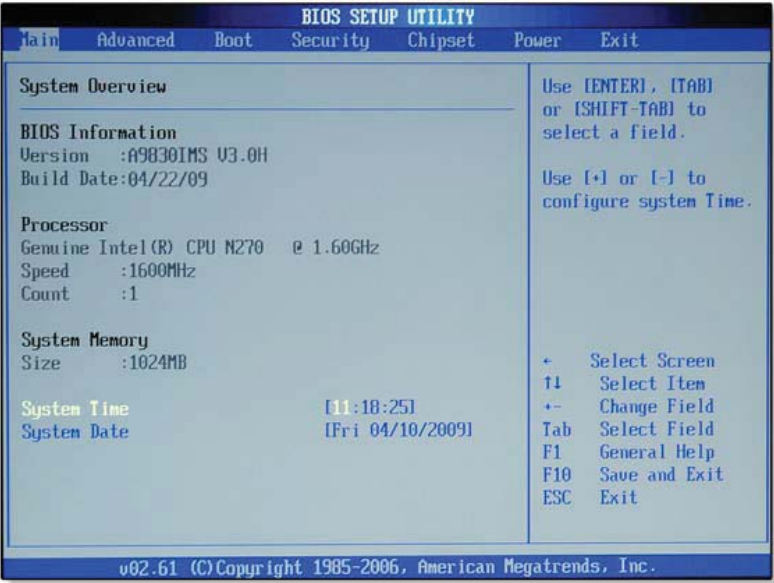


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Main Menu

Use this menu for basic system configuration, such as time, date etc.



BIOS Information, Processor, System MemoryDate(mm:dd:yy)

These items show the firmware and hardware specifications of your system. Read only.

System Time

The time format is <Hour> <Minute> <Second>.

System Date

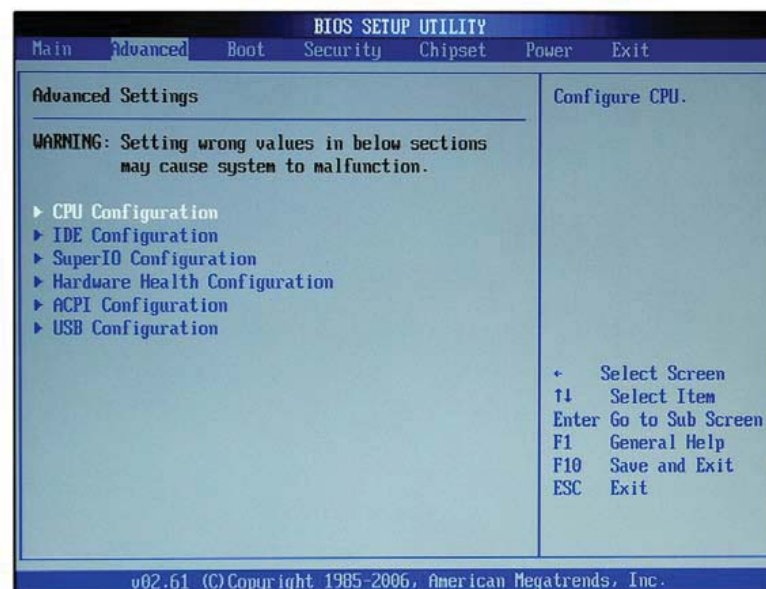
The date formate is <Day>, <Month>, <Date>, <Year>.



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Advanced Menu

Use this menu to set up the items of special enhanced features.



CPU Configuration

These items show the advanced specifications of your CPU. Read only.

IDE Configuration

This setting specifies the operation mode of the onboard IDE controller.

Super IO Configuration

Configure SuperIO Chipset F71882F.



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Hardware Health Configuration

Configure or monitor the hardware health.

ACPI Configuration

Selects power on state for NumLock

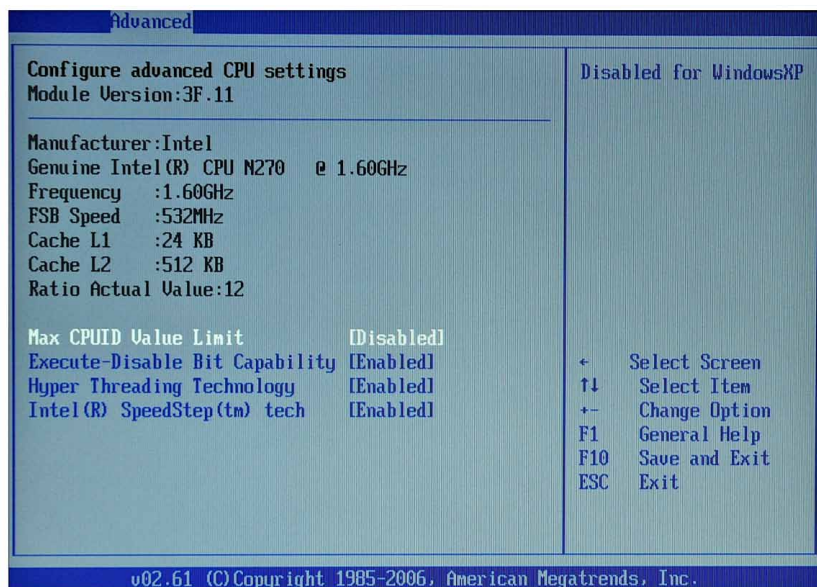
USB Configuration

Configure the USB support.



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CPU Configuration



MAX CPUID Valve Limit

The Max CPUID Value Limit BIOS feature allows you to circumvent problems with older OS that don't support the Pentium 4 processor with Hyper-Threading Technology. When enable, the processor will limit the maximum CPUID input value to 03h when queried, even if the processor supports a higher CPUID input value. When disabled, the processor will return the actual value.

Execute-Disable Bit Capability

Execute Disable Bit functionality can prevent certain classes of malicious "buffer overflow" attacks when combined with a supporting OS. This functionality allows the processor to classify areas in memory by where application code can execute and where it can't. When a malicious worm attempts to insert code in the buffer, the processor disables code execution, preventing damage or worm propagation.

Hyper Threading Technology

The processor uses HT technology to increase transaction rates and reduces end-user response times. The technology treats the two cores inside the processor as two logical processors that can execute instructions simultaneously. In this way, the system performance is highly improved. If you disable the function, the processor will use only one core to execute the instructions. Please disable this item if your OS doesn't support HT Function, or unreliability and instability may occur.

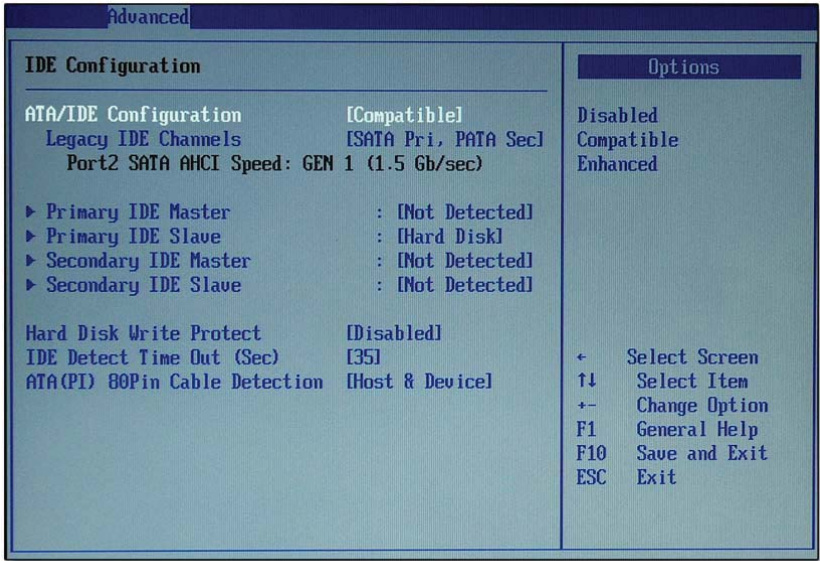
Intel(R) Speedstep(tm) Tech

EIST (Enhanced Intel SpeedStep Technology) allows the system to dynamically adjust processor voltage and core frequency, which can result in decreased average power consumption and decreased average heat production.



HOME

IDE Configuration



ATA/DE Configuration

This setting specifies the operation mode of the onboard ATA/IDE controller.

Legacy IDE Channels

This setting specifies the IDE channels.

Hard Disk Write Protect

This option allows users to write protect boot sector on hard disk to protect against viruses.

IDE Detect Time Out(Sec)

This setting allows you to set the time out value for the BIOS to delay the initialization of IDE devices.

ATA(PI) 80Pin Cable Detection

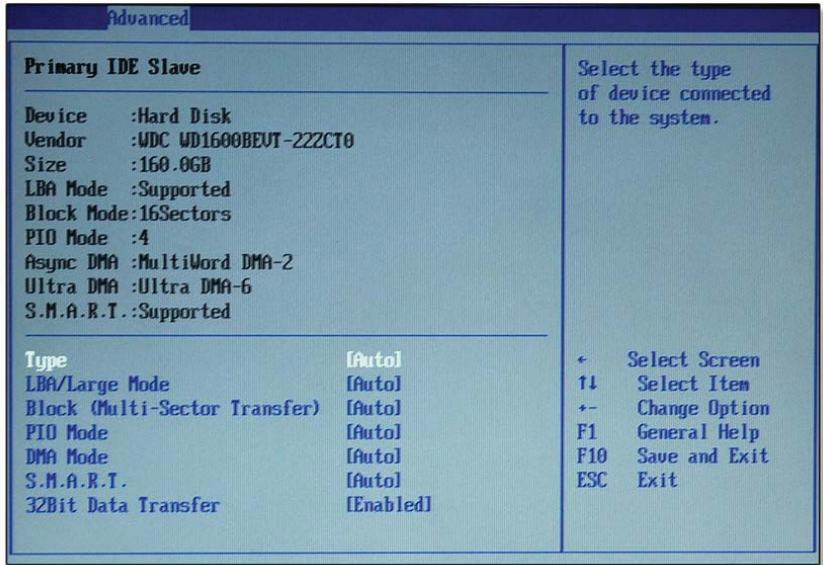
This BIOS feature allows you to control whether both IDE controller and IDE device should be allowed to detect the type of IDE cable used.

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Primary IDE Slave



Type

Press PgUp/<+> or PgDn/<-> to select [Manual], [None] or [Auto] type.

Note that the specifications of your drive must match with the drive table.

The hard disk will not work properly if you enter improper information for this category. If your hard disk drive type is not matched or listed, you can use [Manual] to define your own drive type manually.

LBA/Large Mode

Enabling LBA causes Logical Block Addressing to be used in place of Cylinders, Heads and Sectors

Block(Multi-Sector Transfer)

Any selection except Disabled determines the number of sectors transferred per block.

PIO Mode

Indicates the type of PIO (Programmed Input/Output)

DMA Mode

Indicates the type of Ultra DMA

S.M.A.R.T

This allows you to activate the S.M.A.R.T.(Self-Monitoring Analysis & Reporting Technology) capability for the hard disks. S.M.A.R.T is a utility that monitors your disk status to predict hard disk failure.

32 Bit Date Transfer

Enables 32-bit communication between CPU and IDE device

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Super IO Configuration

Advanced	
Configure F71862F Super IO Chipset	
Serial Port5 Address	[3F8/IRQ4]
Serial Port5 Mode	[RS232]
Parallel Port Address	[378]
Parallel Port Mode	[Normal]
Parallel Port IRQ	[IRQ7]
Watch Dog	[Disabled]
Serial Port1 Address	[3E8]
Serial Port1 IRQ	[11]
Serial Port2 Address	[2E8]
Serial Port2 IRQ	[10]
Serial Port3 Address	[2F0]
Serial Port3 IRQ	[11]
Serial Port4 Address	[2E0]
Serial Port4 IRQ	[10]

Allows BIOS to Select Serial Port1 Base Addresses.

<

Select Screen

↑↓

Select Item

+<

Change Option

F1

General Help

F10

Save and Exit

ESC

Exit

Serial Port

(1/2/3/4/5/6 Address, Serial Port 1/2/3/4 IRQ)
Select an address and a corresponding interrupt for the serial port.

Serial Port5 Mode

This setting specifies the serial port5 mode.

Parallel Port Address

Select an address for the parallel port.

Watch Dog

You can enable the system watch-dog timer, a hardware timer that generates either an NMI or a reset when the software that it monitors does not respond as expected each time the watch dog polls it.

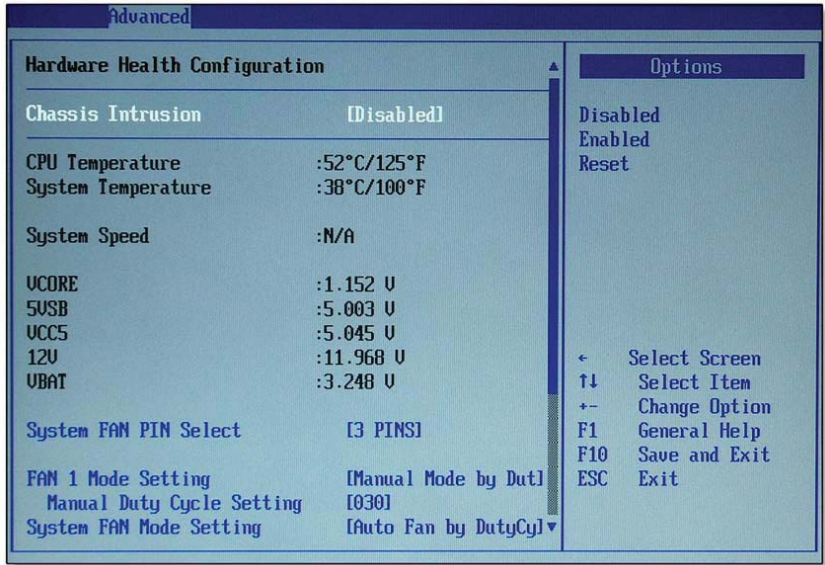
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Hardware Health Configuration



Chassic Intrusion

The field enables or disables the feature of recording the chassis intrusion status and issuing a warning message if the chassis is once opened. To clear the warning message, set the field to [Reset]. The setting of the field will automatically return to [Enabled] later.

CPU Temperature, System Temperature, System Speed, VCORE, 5VSB, VCC5, 12V, VBAT

These items display the current status of all of the monitored hardware devices /components such as CPU voltage, temperatures and all fans' speeds.

System FAN PIN Select

This setting specifies the pin numbers of the system fan power connector.

FIN 1Mode Setting

Select the operation mode of FAN 1.

System FAN Mode Setting

This setting controls the Smart Fan feature. Smart Fan is an excellent feature which will adjust the CPU/system fan speed automatically depending on the current CPU temperature to prevent your CPU from overheating.

Temperature Limit of Highest, Temperature, Limit of Second

You can select a temperature tolerance value here for the specific range of the Smart Fan function.



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ACPI Configuration

Advanced	
ACPI Settings	General ACPI Configuration settings
▶ General ACPI Configuration	
▶ Advanced ACPI Configuration	

Advanced	
General ACPI Configuration	
Suspend mode	[S3 (STR)]
USB Device Wakeup From S3	[Disabled]
Select the ACPI state used for System Suspend.	

Advanced	
Advanced ACPI Configuration	
ACPI Version Features	[ACPI v1.0]
ACPI APIC support	[Enabled]
Enable RSDP pointers to 64-bit Fixed System Description Tables. Di ACPI version has some	

General ACPI Configuration

▶ Suspend mode

This item specifies the power saving modes for ACPI function. If your OS system supports ACPI, you can choose to enter the Standby mode in S1 (POS) or S3 (STR) fashion through the setting of this field.

▶ USB Device Wakeup From S3

The item allows the activity of the USB device to wake up the system from S3 (Suspend to RAM) sleep state.

Advanced ACPI Configuration

▶ ACPI Version Features

This setting allows you to select the ACPI version.

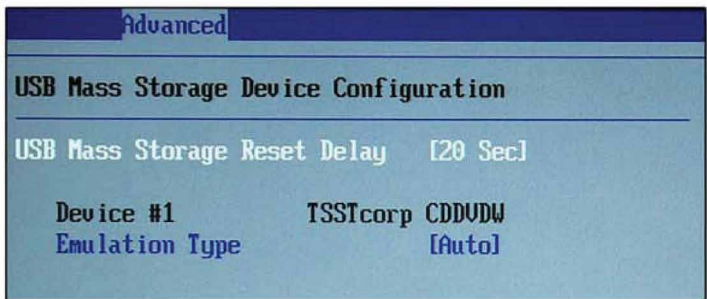
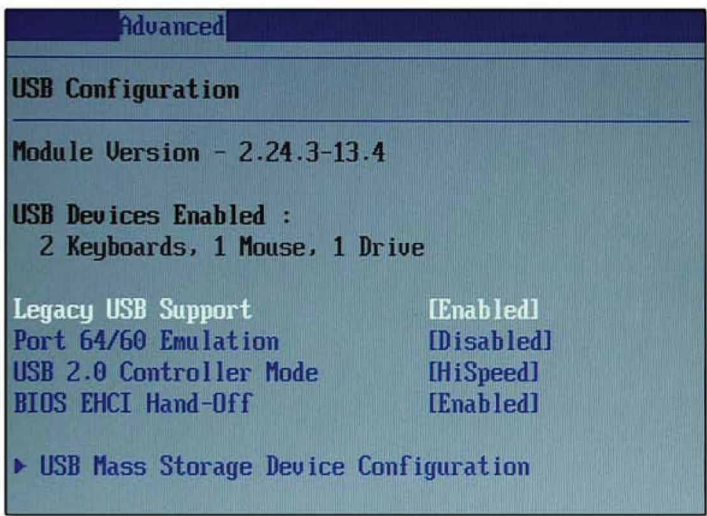
▶ ACPI APIC support

This BIOS feature is used to enable or disable the motherboard's APIC (Advanced Programmable Interrupt Controller). The APIC provides multiprocessor support, more IRQs and faster interrupt handling.



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USB Configuration

► LegacyUSB Support

Set to [Enabled] if your need to use any USB device in the OS that does not support or have any USB driver installed, such as DOS and SCO Unix.

Set to [Disabled] only if you want to use any USB device other than the USB

► Port 64/60 Emulation

Enable I/O port 60h/64h emulation support. This should be enabled for the complete USB keyboard legacy support for the non-USB aware OS.

► USB 2.0 Controller Mode

Configure the USB 2.0 controller in HighSpeed(480Mbps) or FullSpeed(12Mbps).

► BIOS EHCI Hand-Off

Enable or disable a workaround for OS without EHCI (Enhanced Host Controller Interface) hand-off support. The EHCI specification describes the register-level interface for a Host Controller for the USB Revision 2.0.

USB Mass Storage Device Configuration

► USB Mass Storage Reset Delay

This setting controls the number of seconds the POST waits for the USB mass storage device after the start unit command is sent.

► Emulation Type

This setting enables you to set the type of device you want the USB mass storage device to emulate.

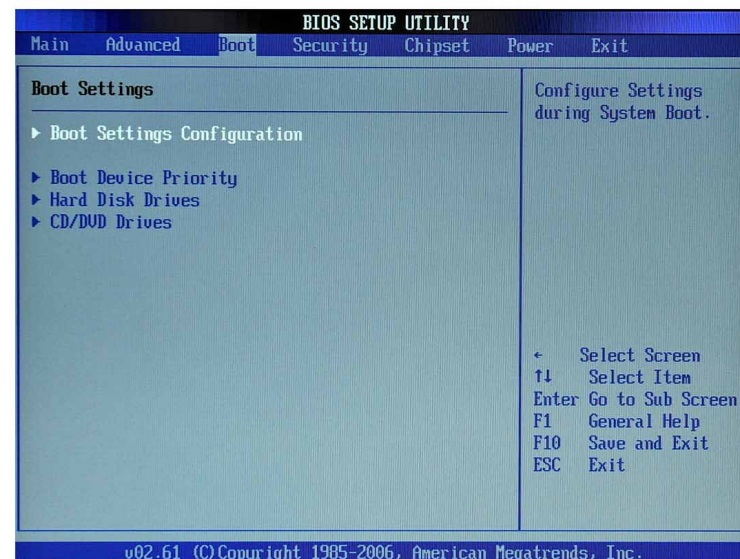


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Boot Menu

Use this menu to specify the priority of boot devices.



Boot Settings Configuration

Configure settings during system boot.

Boot Device Priority

Specifies the boot device priority sequence.

Hard Disk Drives

Specifies the boot device priority sequence from available hard drives.

CD/DVD Drives

Specifies the boot device priority sequence from available CD/DVD drives.



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Boot Settings Configuration

Boot	
Boot Settings Configuration	
Quick Boot	[Enabled]
Quiet Boot	[Disabled]
Bootup Num-Lock	[On]
Wait For 'F1' If Error	[Enabled]
Flash Write Protection	[Enabled]

Quick Boot

Enabling this setting will cause the BIOS power-on self test routine to skip some of its tests during bootup for faster system boot.

Quiet Boot

This BIOS feature determines if the BIOS should hide the normal POST messages with the motherboard or system manufacturer's full-screen logo.

Bootup Num-Lock

This setting is to set the Num Lock status when the system is powered on.

Wait For 'F1' If Error

When this setting is set to [Enabled] and the boot sequence encounters an error, it asks you to press F1.

Flash Write Protection

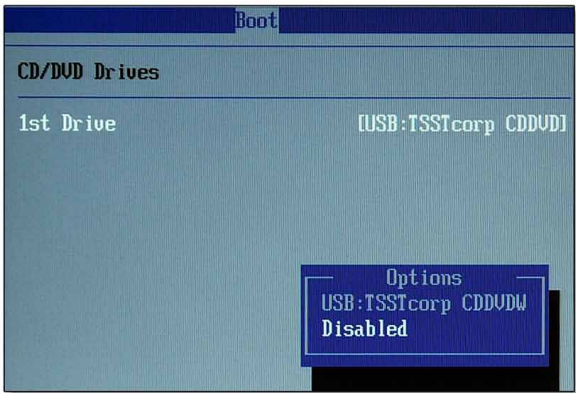
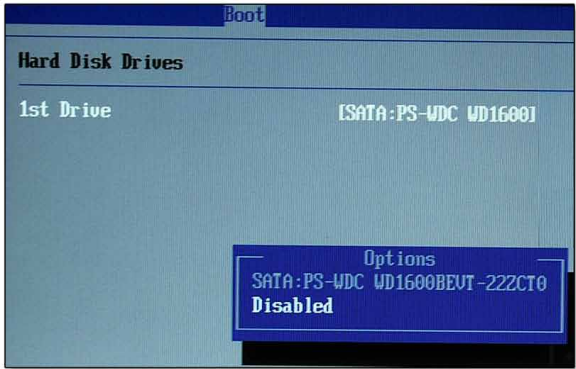
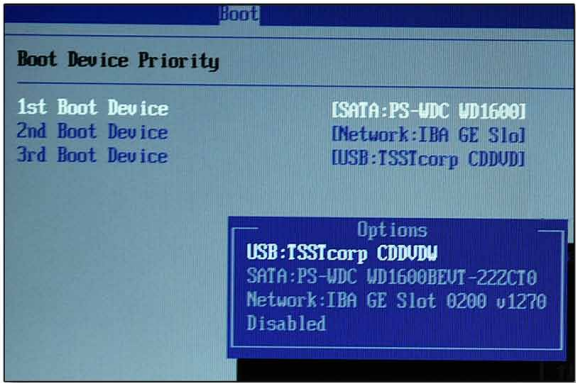
This function protects the BIOS from accidental corruption by unauthorized users or computer viruses.

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Boot Device Priority

The items allow you to set the sequence of boot devices/removable drives.

Hard Disk Drives

Specifies the boot device priority sequence from available hard drives.

CD/DVD Drives

Specifies the boot device priority sequence from available CD/DVD drives.



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Security Menu

Use this menu to set supervisor and user passwords.



Supervisor Password / Change Supervisor Password

Supervisor Password controls access to the BIOS Setup utility. These settings allow you to set or change the supervisor password.

User Password / Change User Password

User Password controls access to the system at boot. These settings allow you to set or change the user password.

Boot Sector Virus Protection

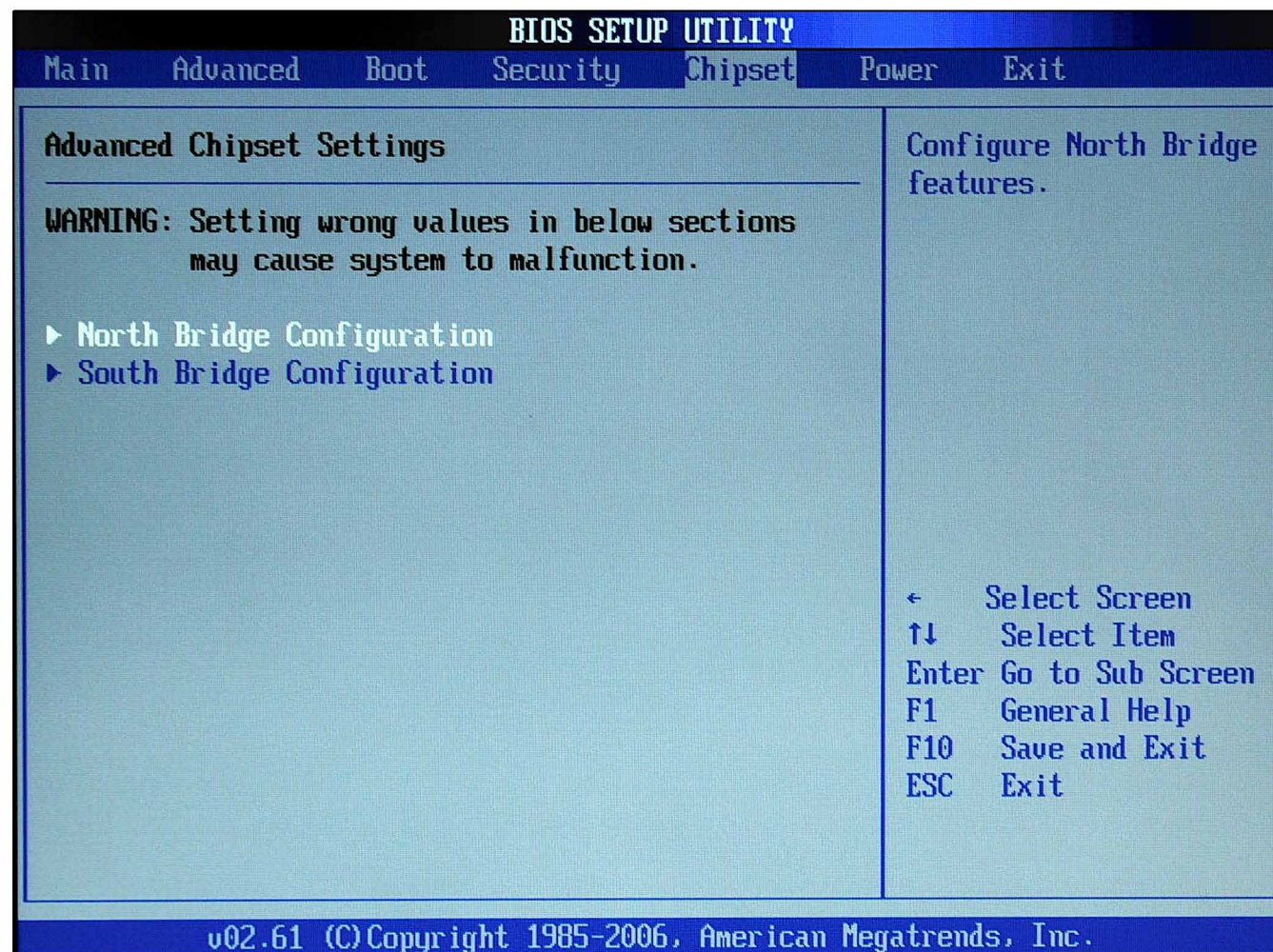
This function protects the BIOS from accidental corruption by unauthorized users or computer viruses.



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Chipset Menu

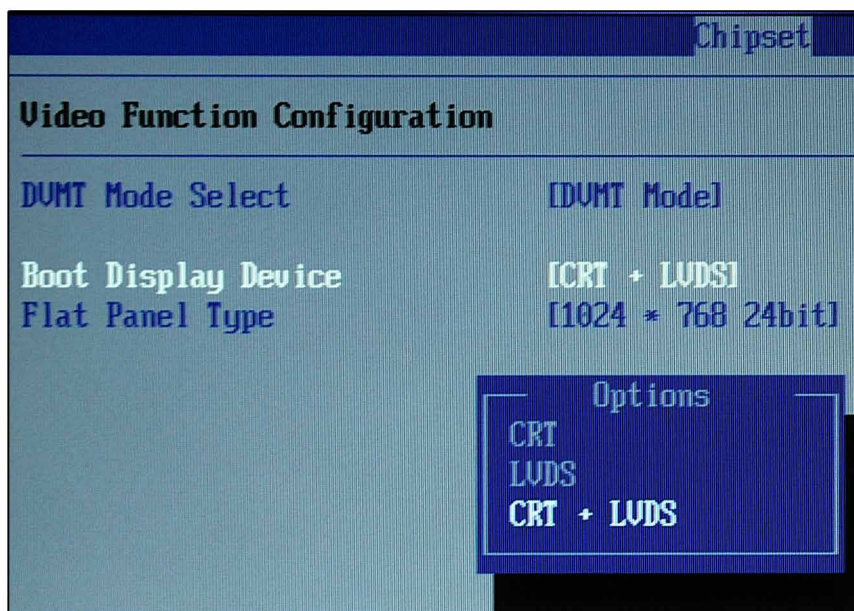
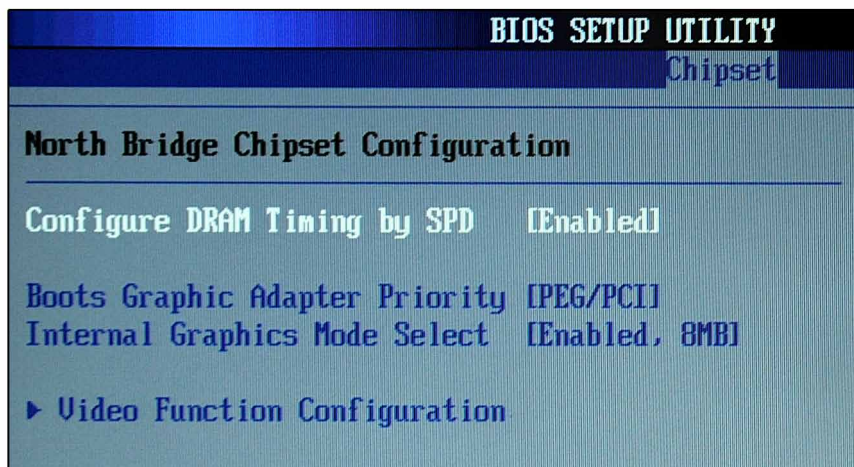
This menu controls the advanced features of the onboard Northbridge and Southbridge.





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North Bridge Chipset Configuration

Configure DRAM Timing by SPD

Selects whether DRAM timing is controlled by the SPD (Serial Presence Detect) EEPROM on the DRAM module.

Boots Graphic Adapter Priority

This item specifies which VGA card is your primary graphics adapter.

Internal Graphics Mode Select

The field specifies the size of system memory allocated for video memory.

Video Function Configuration

DVMT Mode Select

It is recommended that you set this BIOS feature to DVMT (Dynamic Video Memory Technology) Mode for maximum performance.

Boots Display Device

Use the field to select the type of device you want to use as the display(s) of the system.

Flat Panel Type

Use the field to select the resolution of the flat panel display.



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BIOS SETUP UTILITY	
Chipset	
South Bridge Chipset Configuration	
USB Functions	[8 USB Ports]
USB 2.0 Controller	[Enabled]
Audio Controller	[Auto]
PRO-NIC Controller	[Enabled]
SMBUS Controller	[Enabled]

South Bridge Chipset Configuration

USB Functions

This setting specifies the function of the onboard USB controller.

USB 2.0 Controller, Audio Controller, PRO-NIC Controller, SMBUS Controller

These settings enable/disable the specified onboard controllers.

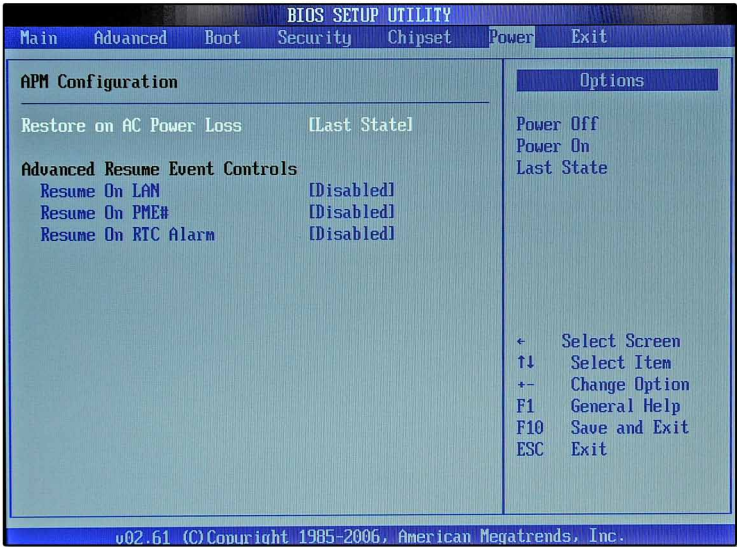


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Power Menu

Use this menu to specify your settings for power management.



Restore on AC Power Loss

This setting specifies whether your system will reboot after a power failure or interrupt occurs.

Available settings are:

- [Power Off] Leaves the computer in the power off state.
- [Power On] Leaves the computer in the power on state.
- [Last State] Restores the system to the previous status before powerfailure or interrupt occurred.

Resume On LAN

This field specifies whether the system will be awakened from power saving modeswhen activity or input signal of onboard LAN is detected.

Resume On PME#

When setting to [Enabled], this setting allows your system to be awakened from the power saving modes through any event on PME (Power Management Event).

Resume On RTC Alarm

When [Enabled], you can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode.

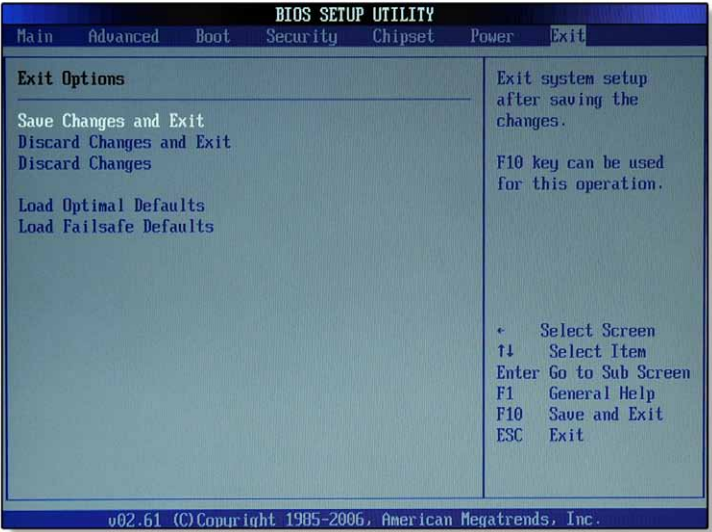


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Exit Menu

When [Enabled], you can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode.



Save Changes and Exit

Save changes to CMOS and exit the Setup Utility.

Discard Changes and Exit

Abandon all changes and exit the Setup Utility.

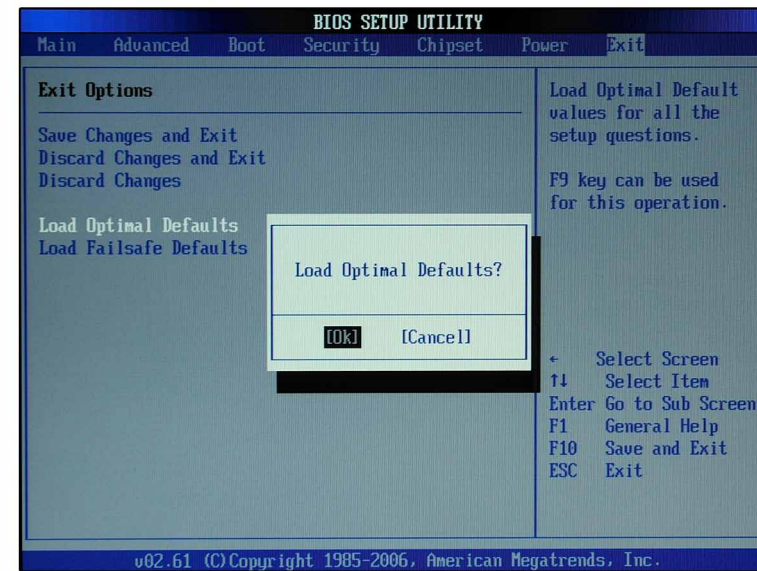
Discard Changes

Abandon all changes and continue with the Setup Utility.



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Load Optimal Defaults

Use this menu to load the BIOS default values for the minimal/stable performance for your system to operate.

Load Failsafe Defaults

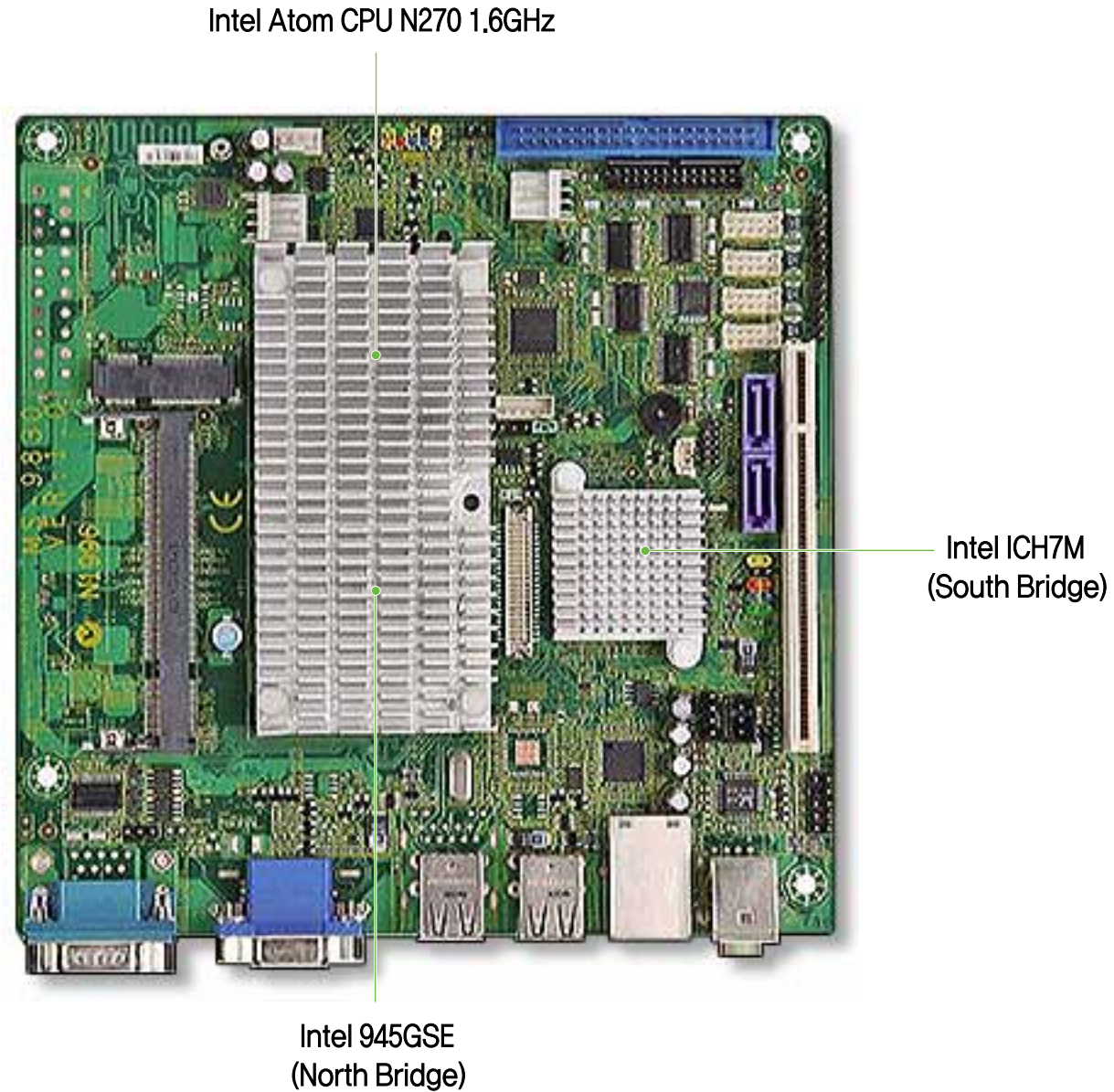
In case of improper value input or system error caused by improper configuration setting, you can load default configuration value using this menu.



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Main Board configuration

Major Chipset



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Main Board Configuration

SUB Board Configuration & Pin Connection

Major Interface Connector

Pin Assignments

Exploded Views and Parts List

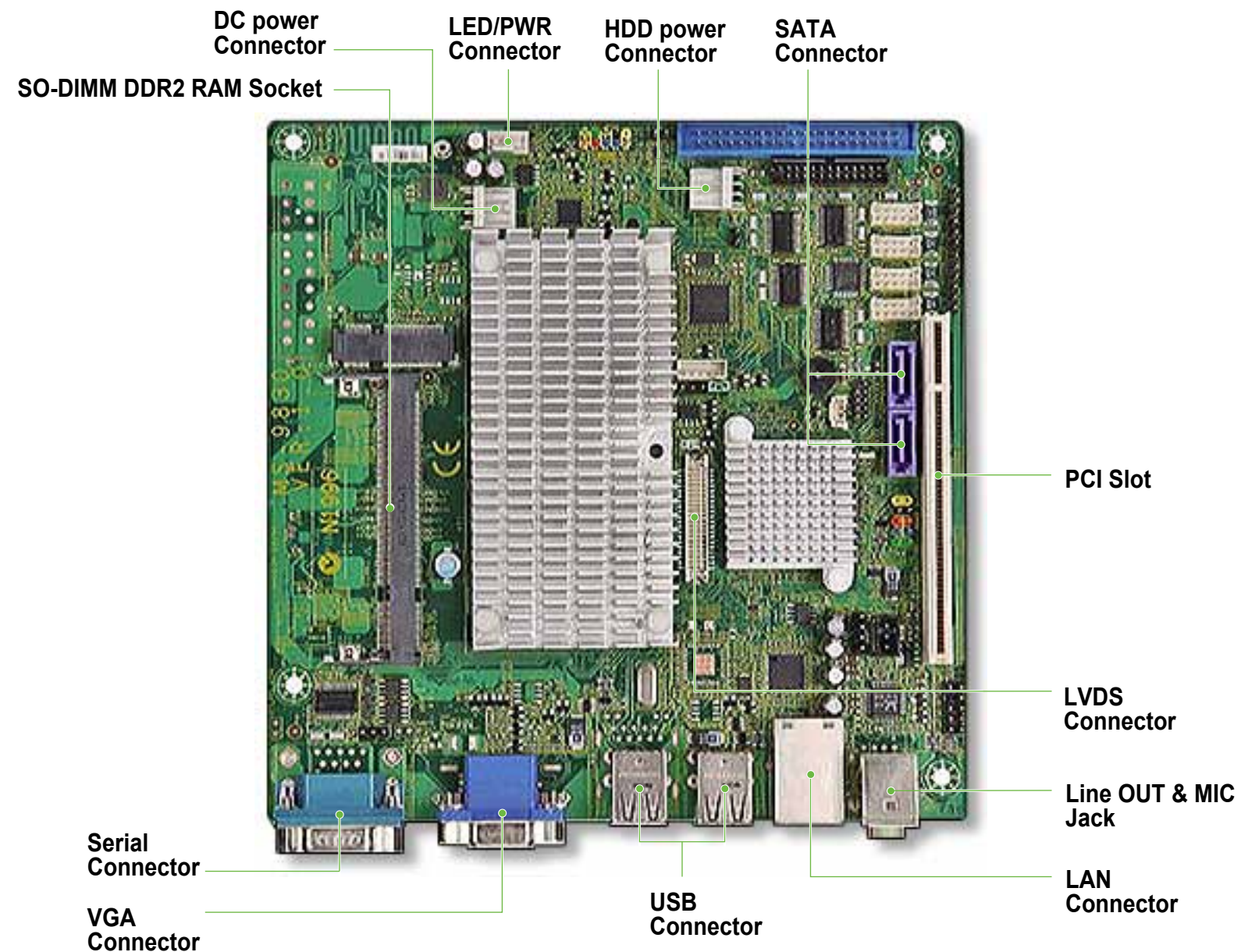
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Main Board Connector & Socket



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SUB Board Configuration & Pin Connection

POWER B' D

POLE(RJ45), [CN1]

Pin Num	Description
1	COM#5_VSERIAL
2	COM#5_DSR
3	COM#5_TXD
4	COM#5_RXD
5	COM#5_RTS
6	COM#5_CTS
7	GND
8	COM#5_DTR

DRAWER & POLE(RJ11 & RJ45), [CN15]

Pin Num	Description	Pin Num	Description
1	COM#5_VSERIAL	10	DWR#1
2	COM#5_DSR	11	DWR_COMP
3	COM#5_TXD	12	VDRW
4	COM#5_RXD	13	DWR#2
5	COM#5_RTS	14	GND
6	COM#5_CTS	15	GND
7	GND	16	LED 24V
8	COM#5_DTR	17	GND
9	GND	18	LED 12

M/B PWR(2.5mm), [CN2]

Pin Num	Description
1	+12V
2	+12V
3	GND
4	GND

DC-IN +12V, [CN14]

Pin Num	Description
1	+12V
2	+12V
3	GND
4	GND

DC-OUT +12V, [CN16]

DC-OUT +12V, [CN16]	
Pin Num	Description
1	VREARLCD12V
2	GND
3	GND

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JOINT B' D

M/B I/F(COM3/4/5/6), [CN1/2/3/4]

Pin Num	Description
1	COM #3/4/5/6_DCD
2	COM#3/4/5/6_RXD
3	COM#3/4/5/6_TXD
4	COM#3/4/5/6_DTR
5	GND
6	COM#3/4/5/6_DSR
7	COM#3/4/5/6_RTS
8	COM #3/4/5/6_CTS
9	COM#3/4/5/6_VSERIAL
10	N.C

M/B I/F(LPT), [CN5]

Pin Num	Description	Pin Num	Description
1	LPT_/STB	2	LPT_/AFD
3	LPT_/D0	4	LPT_/ERR
5	LPT_/D1	6	LPT_/INIT
7	LPT_/D2	8	LPT_/SLIN
9	LPT_/D3	10	GND
11	LPT_/D4	12	GND
13	LPT_/D5	14	GND
15	LPT_/D6	16	GND
17	LPT_/D7Y	18	GND
19	LPT_/ACK	20	GND
21	LPT_/BUSY	22	GND
23	LPT_/PE	24	GND
25	LPT_/SLCT	26	N.C



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TOUCH B'D

● POWER B' D I/F(2.0mm), [CN1]

Pin Num	Description	Pin Num	Description
1	COM#6_TXD	2	+5V
3	COM#6_RTS	4	COM#6_RXD
5	COM#4_TXD	6	COM#4_RXD
7	INVT_ON/OFF	8	BACKLIT_ADJ
9	USB#5_D(+)	10	USB#5_D(-)
11	GND	12	GND
13	GND	14	+12V(INVERTER)
15	PWRLED(-)	16	HDDLED(-)
17	PWRLED(+)	18	HDDLED(+)

● INVERTER(12505WS), [CN2]

Pin Num	Description
1	BACKLIT_ADJ
2	N.C
3	GND
4	GND
5	INVT_ON/OFF
6	N.C
7	GND
8	GND
9	+12V(INVERTER)
10	+12V(INVERTER)



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TOUCH B'D

5Wire TOUCH(1.0mm), [CN3/CN4]

Pin Num	Description
1	TOUCH_X(-)
2	TOUCH_X(+)
3	TOUCH_SENSE
4	TOUCH_Y(+)
5	TOUCH_Y(-)

DALLAS I/F(12505WS), [CN8]

Pin Num	Description
1	DALLAS_SIGNAL
2	N.C
3	GND

MSR I/F(12505WS), [CN5]

Pin Num	Description
1	N.C
2	MSR_RCP#3
3	MSR_RDD#3
4	MSR_RCP#2
5	MSR_RDD#2
6	MSR_CPD
7	GND
8	+5V

LED I/F(12505WS), [CN7]

Pin Num	Description
1	MSR_LED(G)
2	GND
3	MSR_LED(R)
4	PWRLED(+)
5	PWRLED(-)
6	HDDLED(+)
7	HDDLED(-)



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LED B'D

LED(12505WR), [CN8]

Pin Num	Description
1	MSR LED(G)
2	MSR LED(GND)
3	MSR LED(R)
4	PWR LED(+)
5	PWR LED(-)
6	HDD LED(+)
7	HDD LED(-)

DSUB B'D

COM#3(DSUB 9P) [CN10]

Pin Num	Description
1	COM#3/4_DCD
2	COM#3/4_RXD
3	COM#3/4_TXD
4	COM#3/4_DTR
5	GND
6	COM#3/4_DSR
7	COM#3/4_RTS
8	COM#3/4_CTS
9	COM#3/4_VSERIAL

PARALLEL(DSUB 25P), [CN11]

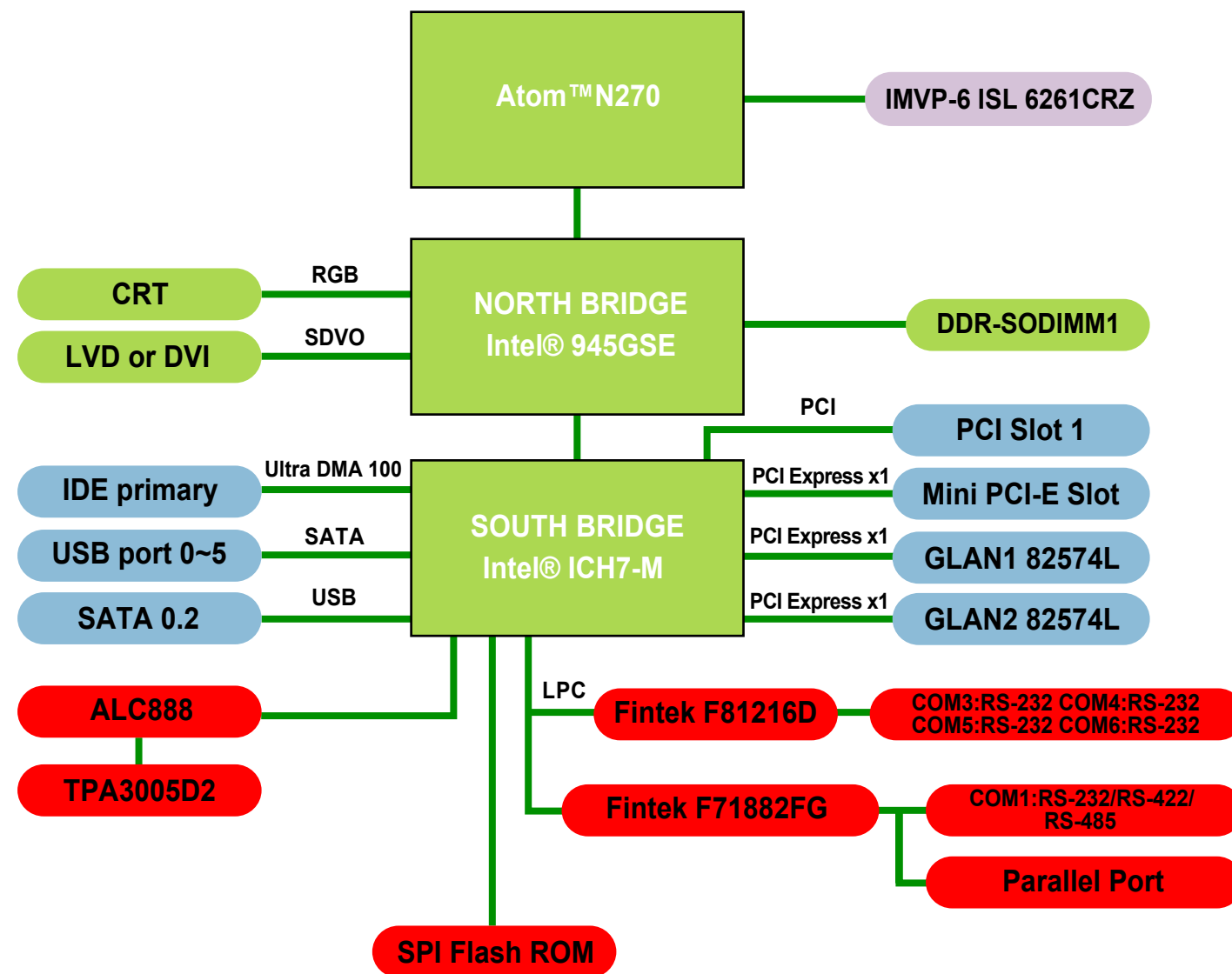
Pin Num	Description	Pin Num	Description
1	LPT_/STB	14	LPT_/AFD
2	LPT_/D0	15	LPT_/ERR
3	LPT_/D1	16	LPT_/ERR
4	LPT_/D2	17	LPT_/INIT
5	LPT_/D3	18	LPT_/SLIN
6	LPT_/D4	19	GND
7	LPT_/D5	20	GND
8	LPT_/D6	21	GND
9	LPT_/D7Y	22	GND
10	LPT_/ACK	23	GND
11	LPT_/BUSY	24	GND
12	LPT_/PE	25	GND
13	LPT_/SLCT		



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Major Interface Connector Pin Assignments

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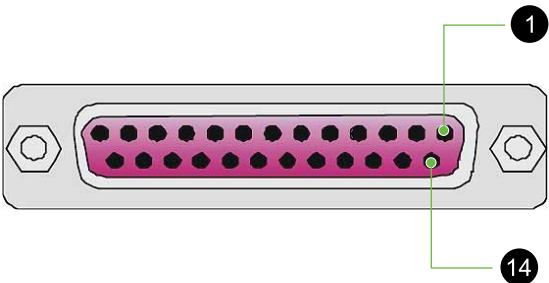
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Parallel Communication Port



PARALLEL PORT (DSUB25 FEMALE)

Pin Num	SPP	ECP	EPP	In/Out
1	/STROBE	/STROBE	/WRITE	I/O
2	PD0	PD0	PD0	I/O
3	PD1	PD1	PD1	I/O
4	PD2	PD2	PD2	I/O
5	PD3	PD3	PD3	I/O
6	PD4	PD4	PD4	I/O
7	PD5	PD5	PD5	I/O
8	PD6	PD6	PD6	I/O
9	PD7	PD7	PD7	I/O
10	/ACK	/ACK	NTR	I
11	BUSY	/BUSY,PERIPHACK	/WAIT	I
12	PERROR	PE./ACKREVERSE	PE	I
13	SELECT	SELECT	SELECT	I
14	/AUTOFD	/AUTOFD,HOSTACK	/DATASTB	O
15	/FAULT	/FAULT,/PERIPHREQST	/FAULT	I
16	/INIT	/FAULT,/REVERSEQST	/RESET	O
17	/SLCTIN	/SLCTIN	/ADDRSTB	O
18-25	GND	GND	GND	-



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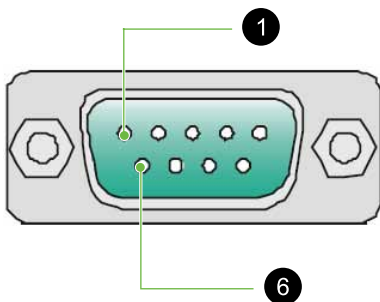
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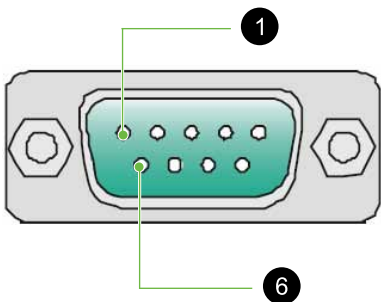
Serial Communication(D-SUB9 FEMALE / RJ45)



COM1/3/4(DSUB9 MALE)

Pin Num	Description
1	DCD
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	+5V

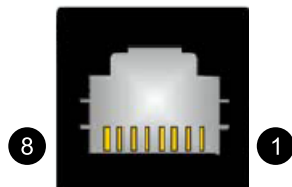
[RS-232 Communication]



COM1/3/4(DSUB9 MALE)

Pin Num	Description
1	TXD-
2	RXD-
3	TXD+
4	RXD+
5	N.C
6	N.C
7	N.C
8	N.C
9	N.C

[RS-422 Communication]



COM5(RJ45)

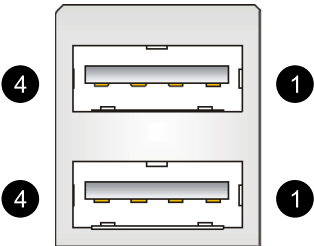
Pin Num	Description
1	VSERIAL
2	DSR
3	TXD
4	RXD
5	RTS
6	CTS
7	GND
8	DTR



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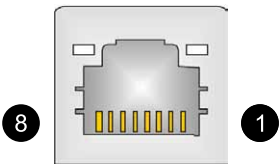
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USB & LAN Port



● USB PORT(TYPE A)

Pin Num	Description
1	VSUB(+5V)
2	D-
3	D+
4	GND



● LAN PORT(RJ45)

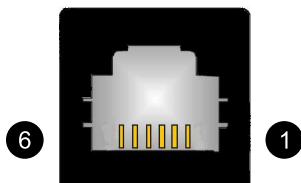
Pin Num	Description
1	TX+
2	TX-
3	RX+
4	MDx2+
5	MDx2-
6	RX-
7	MDx3+
8	MDx3-



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DRAWER / DC Power



● DRAWER PORT(RJ11)

Pin Num	Description
1	GND
2	DRAWER#1
3	DRW_COMP
4	VDRW(+12V/+24V)
5	DRAWER#2
6	GND



● Adapter Input +12V

Pin Num	Description
1	+12V
2	+12V
3	GND
4	GND

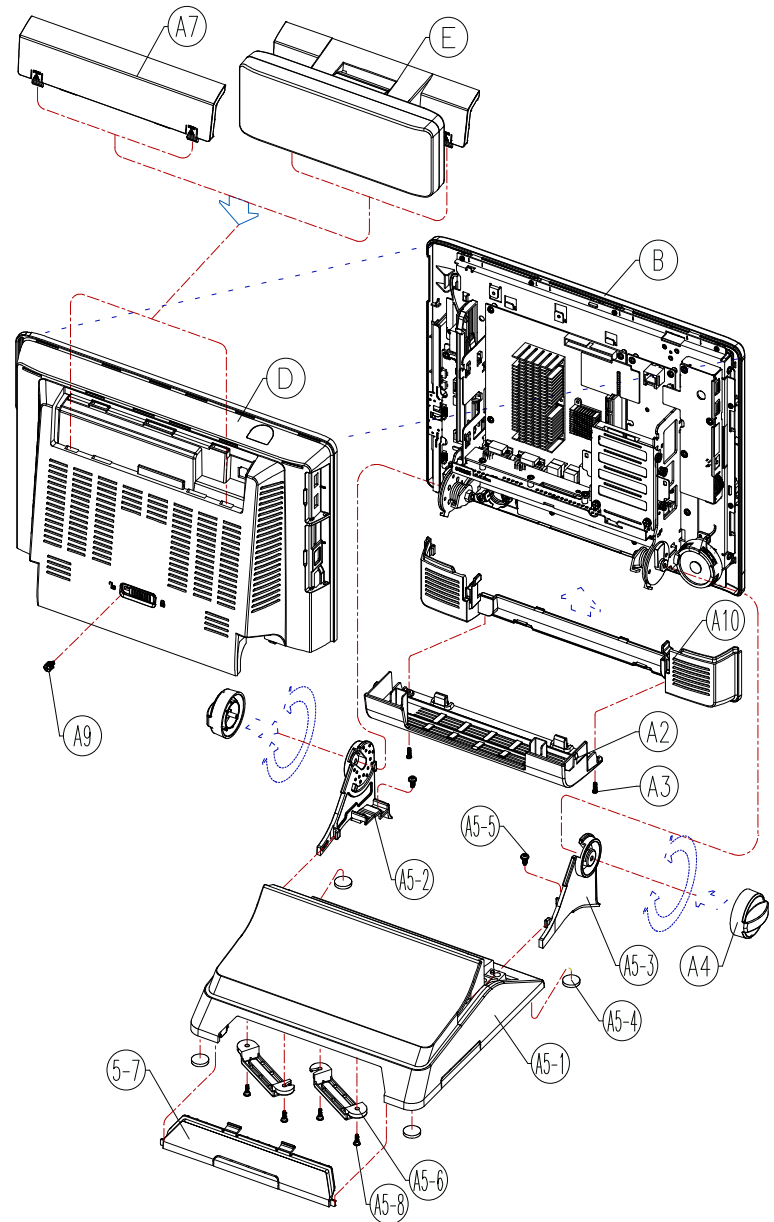


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Exploded Views and Parts List

Exploded Views



Part List

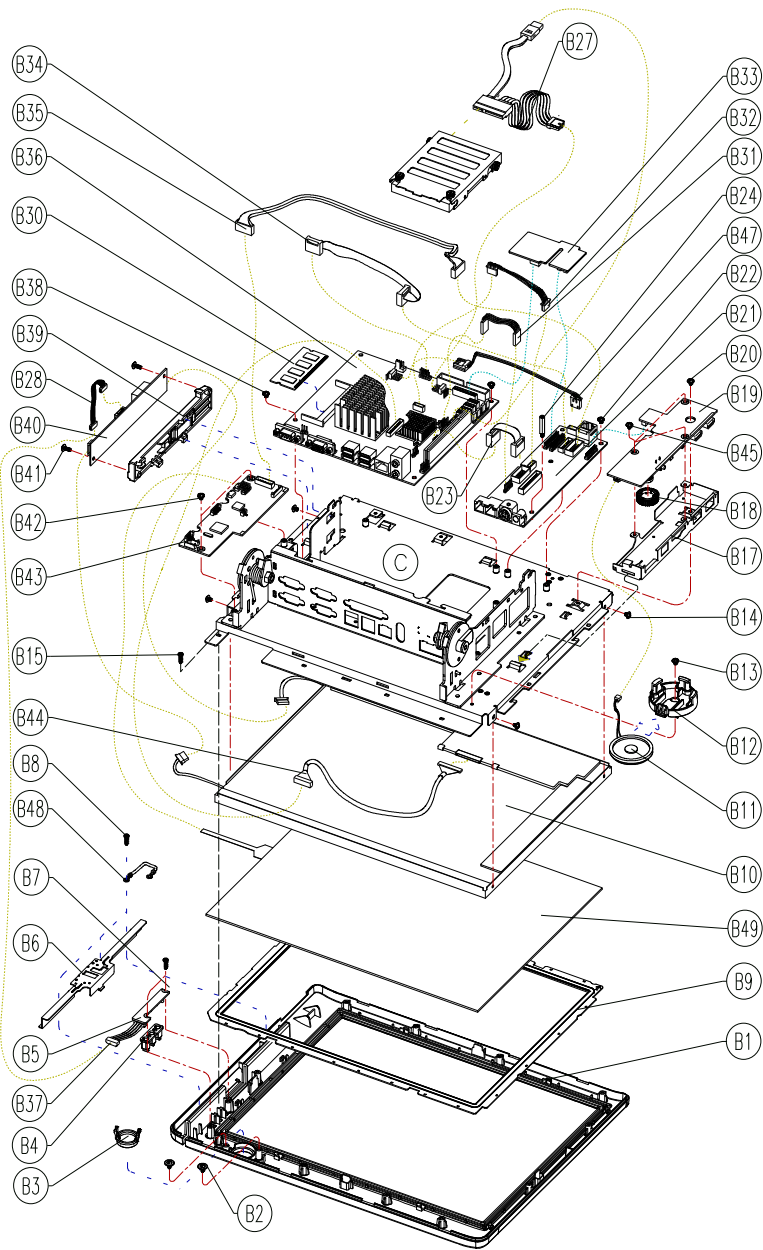
No.	PARTS CODE	PARTS NAME	Q'TY	Serviceable	REMARK
B	-	ASS'Y-MAIN DISPLAY	1	N	
A2	JK72-20283A	PMO-COVER CABLE	1	Y	
A3	JK70-50072A	SCREW-TAPTITE	2	Y	
A4	JK97-20081A	MEA-LEVER HINGE	2	Y	
A5	JK93-00002A	PHA-MAIN STAND	1	Y	
A5-1	JK72-20304A	PMO-STAND	1	Y	
A5-2	JK70-20101B	IPR-HINGE SUPPORT(R)	1	Y	
A5-3	JK70-20101A	IPR-HINGE SUPPORT(L)	1	Y	
A5-4	JK70-60036A	RMO-FOOT RUBBER	4	Y	
A5-5	6003-001149	SCREW-TAPTITE	2	Y	
A5-6	JK72-20303A	PMO-HOLDER WIRE	2	Y	
A5-7	JK72-20302A	PMO-COVER DUMMY STAND	1	Y	
A5-8	JK70-50083A	SCREW-TAPTITE	4	Y	
E	QCD-V202	OPTION-CDP(CHARACTER)	1	Y	OPTION
	QCD-G256	OPTION-CDP(GRAPHIC)		Y	OPTION
A7	JK72-20286	PMO-COVER REAR DUMMY	1	Y	Buyer SPEC (Silk)
D	JK94-01524B	PRA-COVER REAR(T)	1	Y	
A9	JK70-50081A	SCREW-MACHINE COIN	1	Y	
A10	JK72-20295A	PMO-REAR DISP BOTTOM	1	Y	



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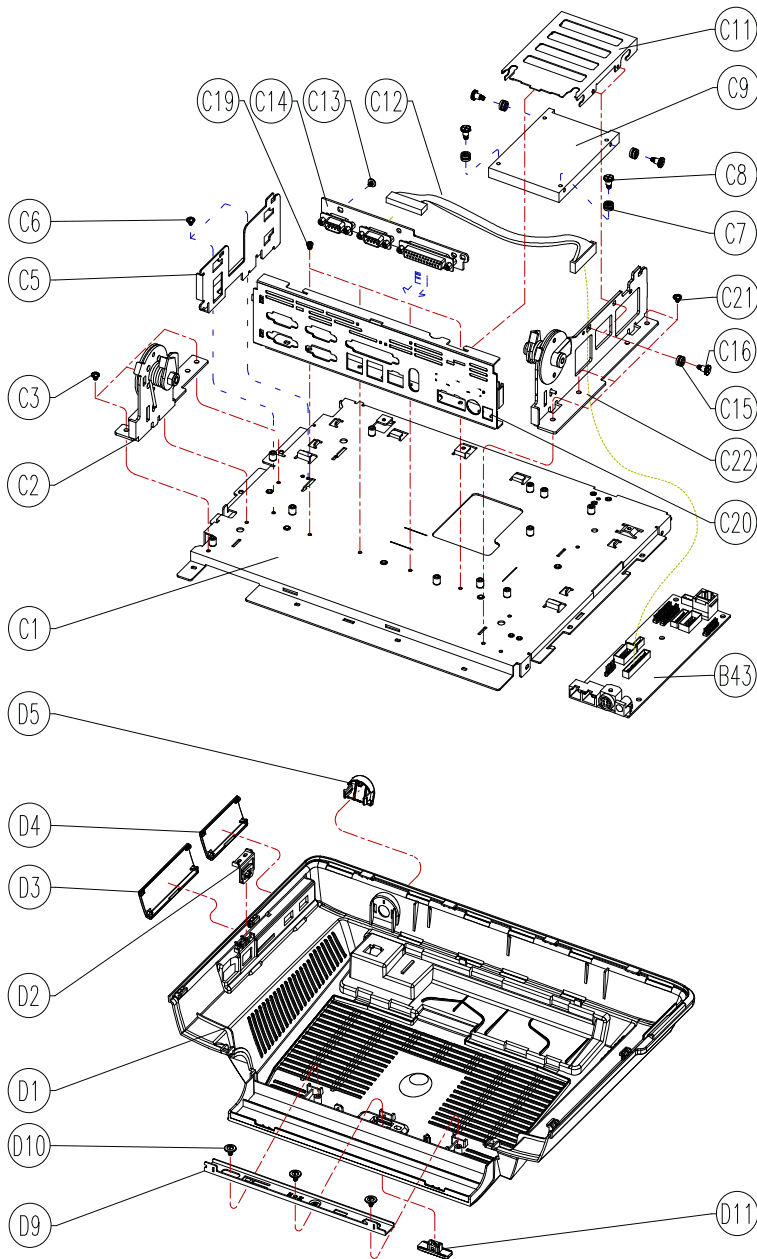
No.	PARTS CODE	PARTS NAME	Q'TY	Serviceable	REMARK
B1	JK72-20288	PMO-FRONT DISPLAY	1	Y	Buyer SPEC (Silk)
B2	JK70-50029A	SCREW-TAPPING	2	Y	
B3	JK72-20284A	PMO-COVER DECO	1	Y	
B4	JK72-20294A	PMO-LENS LED	1	Y	
B5	JK92-01515F	PBA-SUB LED B'D	1	Y	
B6	JK70-20097A	IPR-BRKT MSR	1	Y	
B7	JK70-50072A	SCREW-TAPTITE	2	Y	
B8	JK70-50072A	SCREW-TAPTITE	3	Y	
B9	JK70-60028A	RMO-WATER PROOF	1	Y	
B10	JK07-00012A	LCD-TFT	1	Y	
B11	3004-000001	UNIT-SPEAKER	1	Y	
B12	JK72-20291A	PMO-HOLDER SPEAKER	1	Y	
B13	6001-000665	SCREW-MACHINE	1	Y	
B14	6001-000665	SCREW-MACHINE	4	Y	
B15	JK70-50072A	SCREW-TAPTITE	11	Y	
B16	6001-000665	SCREW-MACHINE	3	Y	
B17	JK70-20098A	IPR-BRKT SD CARD	1	Y	
B18	JK72-20292A	PMO-KNOB BRIGHT	1	Y	
B19	JK92-01515C	PBA-SUB USB B'D	1	Y	
B20	6001-000665	SCREW-MACHINE	1	Y	
B21	JK92-01515B	PBA-SUB POWER B'D	1	Y	
B22	6001-000665	SCREW-MACHINE	5	Y	
B23	JK39-40781A	HARNESS-USB	1	Y	
B24	JK70-70046A	ICT-MACHINE HEXA	2	Y	OPTION
B26	6001-000665	SCREW-MACHINE	1	Y	
B27	JK39-40786A	HARNESS-SATA	1	Y	
B28	JK39-40720A	HARNESS-INVERTER	1	Y	
B30	JK97-00003A	UNIT-RAM	1	Y	DDR2,2GB,SODIMM
	JK97-00004A				DDR2,1GB,SODIMM
B31	JK39-40782A	HARNESS-AUDIO	1	Y	
B32	JK39-40788A	HARNESS-MAIN INVERTER	1	Y	
B33	JK92-01515E	PBA-SUB JOINT B'D	1	Y	
B34	JK39-40780A	HARNESS-F/PANEL	1	Y	
B35	JK39-40785A	HARNESS-TOUCH B'D	1	Y	
B36	JK97-00002A	UNIT-MOTHER B'D	1	Y	
B37	JK39-40721A	HARNESS-LED	1	Y	
B38	6001-000665	SCREW-MACHINE	4	Y	
B39	JK72-20289A	PMO-HOLDER INVERTER	1	Y	
B40	4401-001169	UNIT-INVERTER MODULE	1	Y	
B41	6002-000175	SCREW-TAPPING	2	Y	
B42	6001-000665	SCREW-MACHINE	2	Y	
B43	JK92-01515D	PBA-SUB TOUCH(W/O DALLAS)	1	Y	
	JK92-01516B	PBA-SUB TOUCH(WITH DALLAS)	1	Y	OPTION-DALLAS
B44	JK39-40787A	HARNESS-LVDS	1	Y	
B45	6001-000665	SCREW-MACHINE	3	Y	
B47	JK39-40783A	HARNESS-POWER	1	Y	
B48	JK39-40661A	HARNESS-GND	1	Y	
B49	JK96-10343B	ELA-TOUCH PANEL 5W	1	Y	
C	-	ASS'Y-FRAME MAIN	1	N	



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C1	JK97-20077A	MEA-BRKT DISPLAY(M)	1	Y	
C2	JK97-20092C	MEA-BRKT HINGE(L)	1	Y	
C3	6001-000665	SCREW-MACHINE	3	Y	
C5	JK70-20100A	IPR-BRKT SIDE(M)	1	Y	
C6	6001-000665	SCREW-MACHINE	2	Y	
C7	JK70-60029A	RMO-RUBBER INSULATOR	4	Y	
C8	JK70-50080A	SCREW-MACHINE HAND	4	Y	
C9	JK97-00001A	UNIT-HDD	1	Y	
C11	JK70-20090B	IPR-BRKT HDD	1	Y	
C12	JK39-40784A	HARNESS-DSUB B'D	1	Y	
C13	6001-000665	SCREW-MACHINE	2	Y	
C14	JK92-01515G	PBA-SUB DSUB B'D	1	Y	
C15	JK70-60029A	RMO-RUBBER INSULATOR	2	Y	
C16	JK70-50080A	SCREW-MACHINE HAND	2	Y	
C19	JK70-50049A	SCREW-MACHINE	4	Y	
C20	JK97-20078B	MEA-BRKT IO SHIELD(V)	1	Y	
C21	6001-000665	SCREW-MACHINE	3	Y	
C22	JK97-20092D	MEA-BRKT HINGE(R)	1	Y	

No.	PARTS CODE	PARTS NAME	Q'TY	Serviceable	REMARK
D	JK94-01524B	PRA-COVER REAR(T)	1	Y	
D1	JK72-20296A	PMO-REAR DISP TOP	1	Y	
D2	JK72-20281A	PMO-BUTTON POWER	1	Y	
D3	JK72-20285A	PMO-COVER POWER	1	Y	
D4	JK72-20287A	PMO-COVER USB	1	Y	
D5	JK72-20282A	PMO-COVER ANTENNA	1	Y	
D9	JK70-20096A	IPR-BRKT LOCK(R)	1	Y	
D10	JK70-50029A	SCREW-TAPPING	3	Y	
D11	JK72-20293A	PMO-KNOB LOCK	1	Y	



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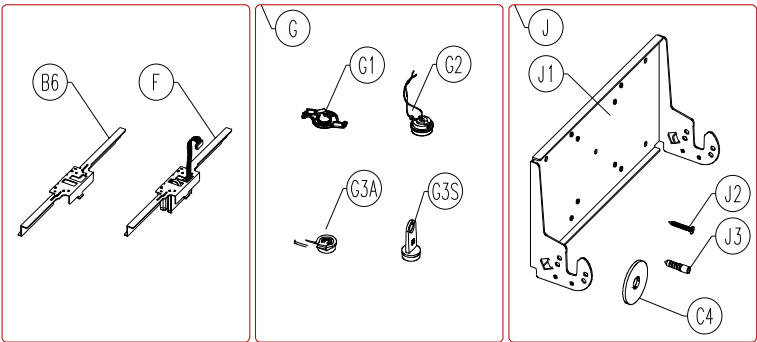
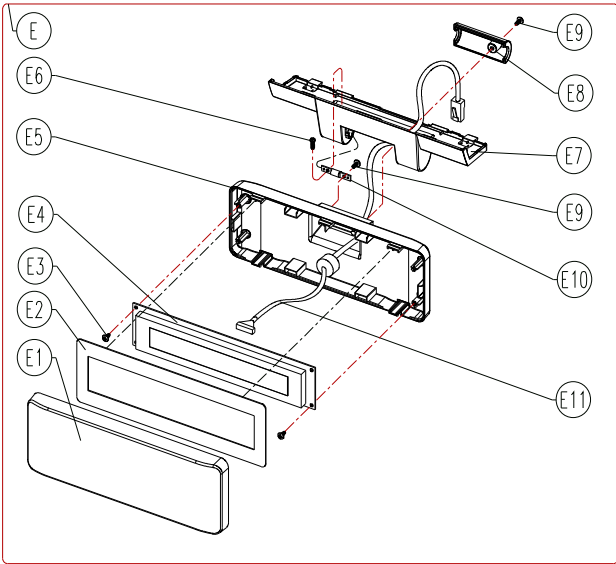
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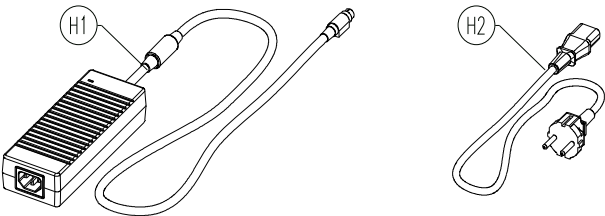
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Exploded views(Optional)



Part Drawing(Power)



Part List

No.	PARTS CODE	PARTS NAME	Q'TY	Serviceable	REMARK
E	QCD-V202	OPTION-CDP(CHARACTER)	1	Y	OPTION
	QCD-G256	OPTION-CDP(GRAPHIC)			
E1	JK72-20299A	PMO-WINDOW VFD	1	Y	
E2	JK68-40120A	LABEL(R)-VFD SHEET	1	Y	
E3	JK70-50072A	SCREW-TAPTITE	2	Y	
E4	JK46-00006A	UNIT-VFD MODULE(CHARACTER)	1	Y	
	JK46-00007A	UNIT-VFD MODULE(GRAPHIC)	1	Y	
E5	JK72-20298A	PMO-REAR VFD(M)	1	Y	
E6	JK70-50072A	SCREW-TAPTITE	1	Y	
E7	JK72-20297A	PMO-HOLDER VFD(M)	1	Y	
E8	JK72-20300A	PMO-REAR VFD DUMMY	1	Y	
E9	JK70-50072A	SCREW-TAPTITE	1	Y	
E10	JK75-20063A	MEC-HINGE ASS'Y	1	Y	
E11	JK39-40727A	HARNESS-POLE	1	Y	

No.	PARTS CODE	PARTS NAME	Q'TY	Serviceable	REMARK
B6	JK70-20097A	IPR-BRKT MSR	1	Y	NONE MSR
F	QMR-T300	OPTION-MSR(TRACK 2-3)	1	Y	OPTION
	QMR-T310	OPTION-MSR(TRACK 1-2)			
G	QDK-T305	OPTION-DALLAS(M)	1	Y	PROBE + HOLDER(5EA)
	QDK-T310	OPTION-DALLAS(M)			PROBE + HOLDER(10EA)
G1	JK72-20290A	PMO-HOLDER PROBE	1	Y	
G2	JK96-10155C	ELA UNIT-IBUTTON PROBE	1	Y	
G3A	JK96-10146B	ELA UNIT-HOLDER DALLAS	1	Y	ANGLE TYPE
G3S	JK96-20090A	ELA UNIT-HOLDER DALLAS	1	Y	STRAIGHT TYPE
J	EWM-Q300	OPTION-WALL MOUNT	1	Y	
J1	JK70-20134A	IPR-BRKT WALL	1	N	
J2	-	SCREW	4	N	
J3	-	ANCHOR	4	N	
C4	JK70-60035A	RMO-RUBBER HINGE	2	Y	

No.	PARTS CODE	PARTS NAME	Q'TY	Serviceable	REMARK
H1	JK44-40006A	POWER-SMPS	1	Y	
H2	JK39-20004A	CBF POWER CORD	1	Y	EUROPE,BLK
	JK39-20004B				USA,SVT
	JK39-20004C				UK,ASTA
	JK39-20004D				AUSTRALIA
	JK39-20004E				KOREA
	JK39-20004F				SOUTH AFRICA
	JK39-20004G				ISRAEL
	JK39-20004H				INDIA



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Features names and Functions of each part

Front View



STAND

MSR(Magnetic Stripe Reader)

Card (Credit Card, Loyalty Card and so on) can be recognized for transaction.

Card Recognition Light

When the card is swiped correctly, the light will be lit.

Hard Drive Light

When the Hard Drive is in operation, the light will be lit.

Power Light

When the system is on, the light will be lit.

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