ePOS

ATLAS 350

ALL-IN-ONE (MONOBLOCK)

USER MANUAL

www.eposcom.ru

General Information

ABOUT THIS MANUAL

The purpose of this user's manual is to provide general information on ePOS ATLAS-350 Series POS terminal and to show the users how to configure the hardware-related configurations. The information in this manual is subject to change without notice due to rapid improvement on IT technology. The users can get the most up to date information from our web site www.eposcom.ru

DISCLAIMER

This manual has been examined for accuracy. While precaution has been taken in the preparation of this manual, neither the manufacturer takes no liability for errors or omissions nor assume any responsibility for damage(s) incurred directly or indirectly from errors, omissions, or discrepancies of this manual. IN NO EVENT WILL THE VENDOR BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THIS PRODUCT OR DOCUMENTATION, EVEN IF THE POSSIBILITY OF SUCH DAMAGES HAS BEEN ADVISED. IN PARTICULAR, THE VENDOR SHALL NOT HAVE LIABILITY FOR ANY HARDWARE, SOFTWARE, OR DATA STORED OR USED WITH THE PRODUCT, INCLUDING THE COSTS OF REPAIRING, REPLACING, OR RECOVERING SUCH HARDWARE, SOFTWARE OR DATA.

WARNING

The terminal has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interface in a residential installation. This equipment can generate and radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interface will not occur under particular installation. If this equipment does cause harmful interference to radio or television reception, which is found by turning the equipment off and on, the user is encouraged to try to correct the interface by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the distance between the equipment or device
- Connect the equipment to an outlet other than the receiver's
- Consult a dealer or an experienced radio/TV technician for assistance

CAUTION

The system is provided with a battery-powered Real-Time Clock circuit. There is a danger of exposing and personal injury if the battery is incorrectly replaced or mistreated. Do not attempt to disassemble the battery, immerse it in the water or expose it to fire.

WARRANTY LIMITS

If the ATLAS-350 series machine is disassem bled by any person other than the authorized technicians, the warranty will be terminated. The users should consult his/her dealer for any technical problems. Warranty does not cover any damage caused by improper use.

IMPORTANT SAFETY INFORMATION

- Read following instructions carefully.
- Use only parts, especially power adapter, recommended by the manufacturer; unapproved parts may be hazardous.
- Before plugging the power cord into the AC inlet of the power supply unit, make sure the voltage (either 110V or 220V) is properly applied to the power switch. Improper voltage will cause damage to the power supply unit.
- Power off the system and remove the power adapter while cleaning the system.
- Before powering on the system, make sure all the peripherals are firmly installed.
- Do not use the system near water, such as a bathtub, a washbowl, a kitchen sink, a laundry tub, and a swimming pool. Do not expose the machine under direct sunlight, and keep it away from any heat source.
- Do not place the system on an unstable cart, stand or table. If the machine falls, it may injure a person or cause serious damage to the appliance.
- The system is equipped with a three-wire grounded plug with a third (grounding) pin. This is a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install a correct outlet, or use an adapter to ground the appliance safely. Do not leave out the safety purpose of the grounded plug.
- Do not allow anything to rest on the power cord. Do not locate the system where people may walk on the cord.
- Do not make the power outlet and extension cords overload. Overload can result in fire or electric shock.
- Do not push any object into the computer cabinet. Dangerous voltage points may be touched and the parts may be shorted out resulting in fire or electric shock.
- Do not attempt to service the system on your own. Opening or removing cover can expose you to dangerous voltage or other hazards.
- Power off the system before installing or removing non-PNP (plug and play) devices.
- If any of the following situations occurs, unplug the systems from the power outlet immediately and consult with a qualified service person:
  1. The power cord or plug is damaged or frayed.
  2. Liquid is spilled into the system.
  3. The system is dropped or the cabinet is damaged.
- When the system is not in use, cover the system and store it with care.

Contents

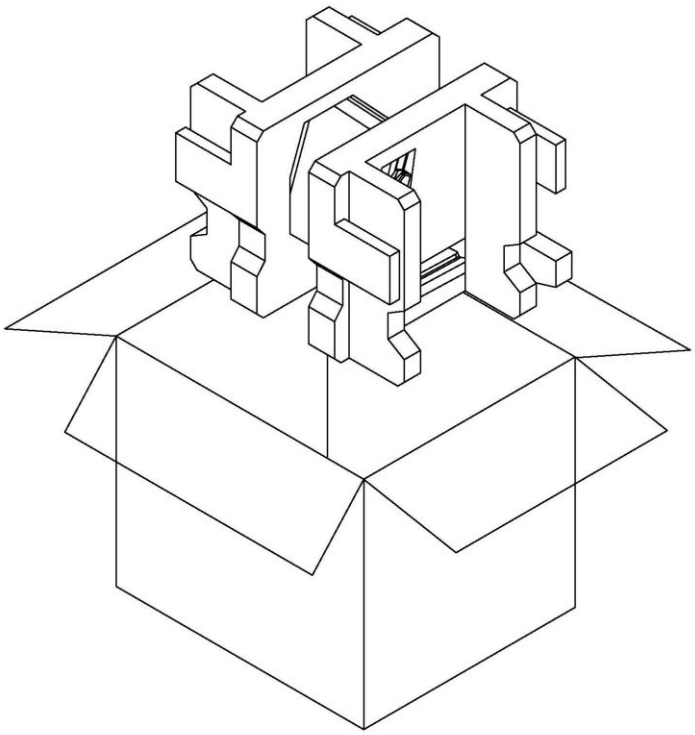
1. Introduction

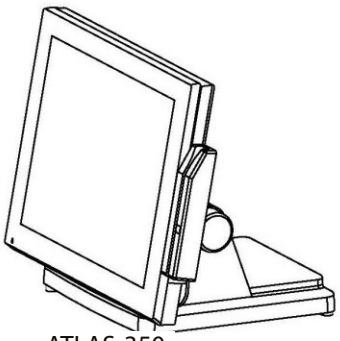
1.1 Unpacking

The contents may vary with different options. If there's any physical damage or missing parts, please contact your supplier immediately. Please keep all packing materials in case you need to ship back the device for service.

Unpacking ATLAS-350

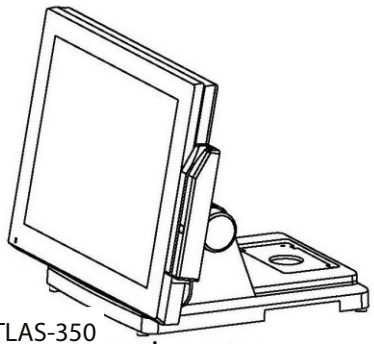
The ATLAS-350 and accessories are packed in a paperboard carton. And it is wrapped by foam padding for protection during shipping.



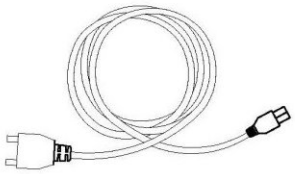


The POS-8000 main system
(Cutebase)

OR



POS-8000 main system
(Standard)



AC power cord/Power Adapter

Driver CD

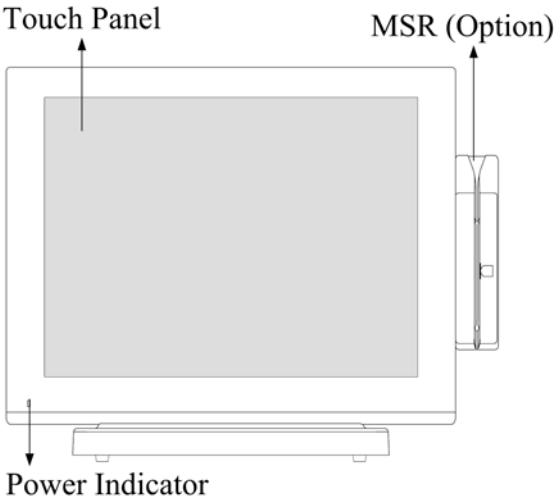
ATLAS-350 main system

HDD（2.5″ SATA） / Compact Flash (Option) / Disk on Module (Option)
SODIMM DDR2（1 ~ 4GB)
CPU： Intel Core Duo T2500 2GHz or Core 2 Duo T7400 2.16GHz

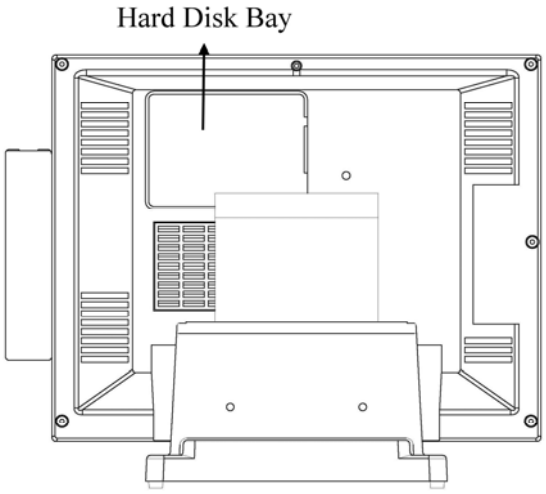
Power adapter (Hidden on Base)
AC power cord
Driver CD
Magnetic stripe card reader (Option)
Customer display (Option)
WiFi module (Option)

1.2 System Overview

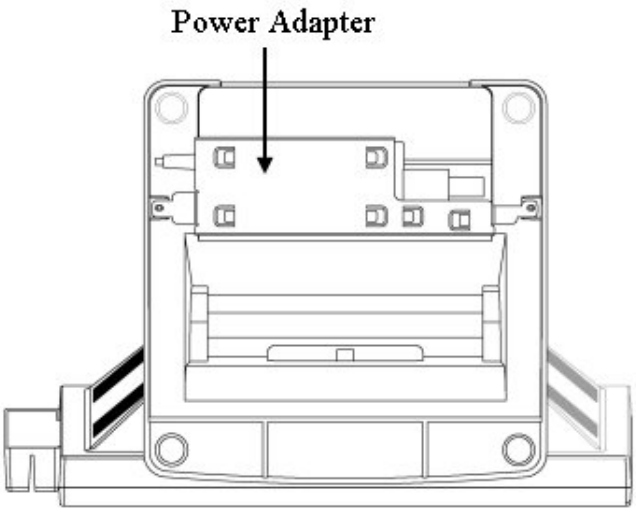
- **Front View**



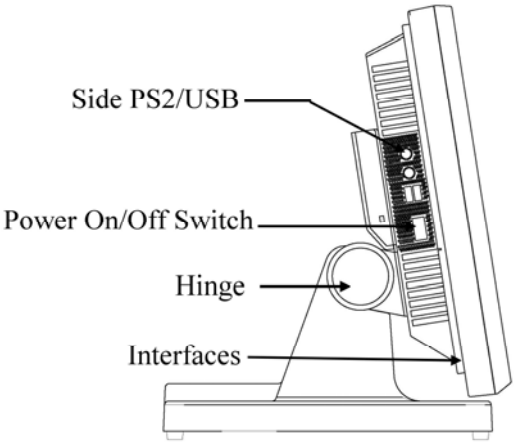
- **Rear View**



- **Bottom View**

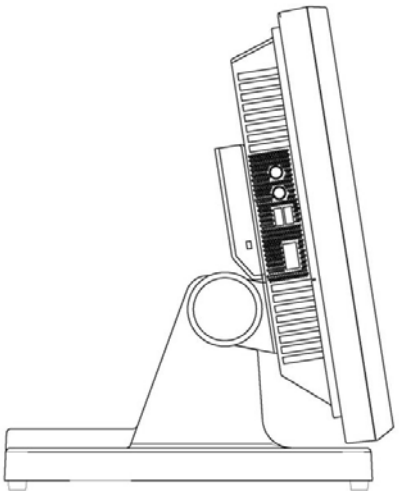


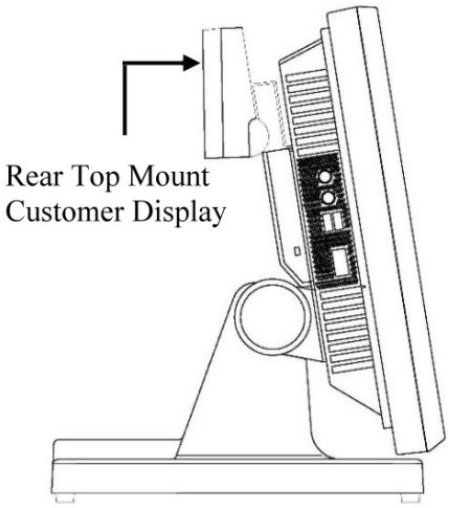
- **Side View**



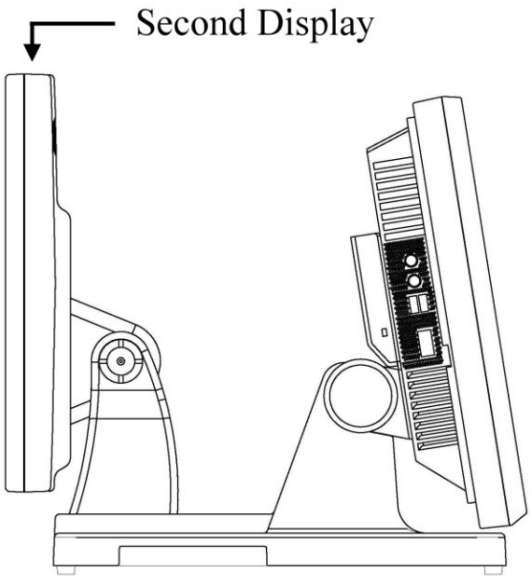
Options:

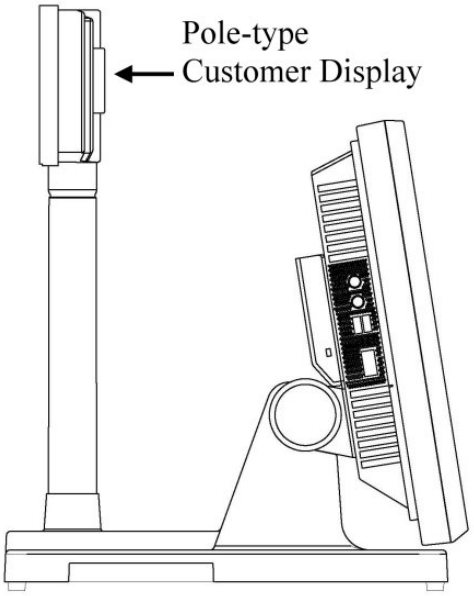
Cutebase



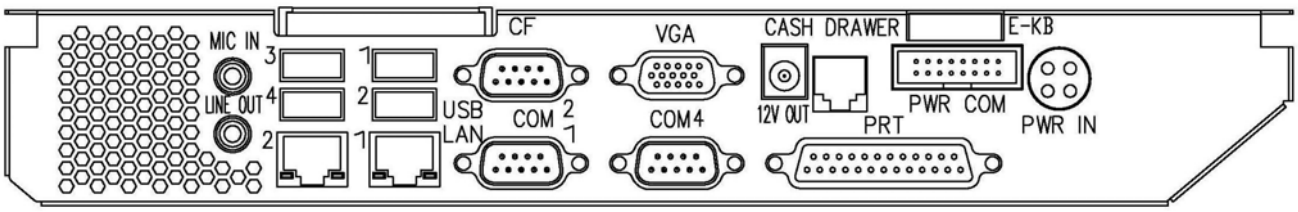


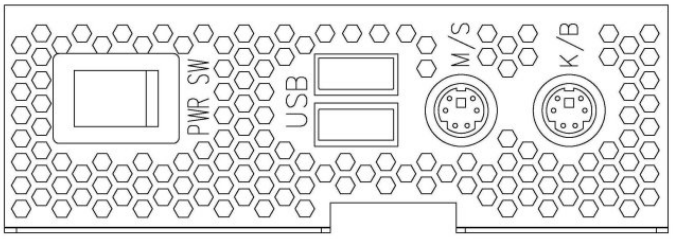
Standard





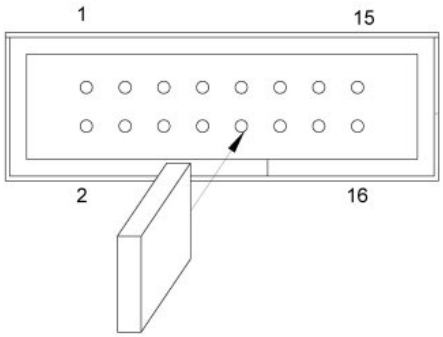
1.3 I/O Ports





Port	Description
USB	Connect devices with USB connectors. There are 4 external USB ports reserved and two additional left side ports.
Mouse	PS/2 Mouse Connector
KB	PS/2 Keyboard Connector
PWR IN	A 4 din rounded-power-jack for connecting an AC to DC +12V power adapter.
PWR COM	COM 1/2 support power RI/5/12V ,refer to the PWR COM Jumper Setting figure in page 8.
Extend KB	8-pin pitch 2.0 for keyboard.
AUDIO OUT	Earphone or speaker connector with 2 internal speakers.
DC12V OUT	12VDC jack for customer display (VFD).
Serial	3 x COM with Power Selected 5/12V on pin9 1 x COM for Touch Option, 1 x COM Reserved 4 x DB9 RS-232. COM 1/2/4: pin 9 RI/5V/12V selected by jumper.
CASH DRAWER	RJ11 connector with selected 12/24V
LAN	RJ-45 connector with link/ack integrates speed LED and supports wake-from-LAN function.
CF	A slot for inserting CF card
VGA	A 15 pin D-type connector serves to transmit VGA data to the monitor.

PWR COM Jumper Setting



COM / Voltage	1	2
RI(Defult)	pin5-6	Pin11-12
5V	pin3-4	pin9-10
12V	pin1-2	pin7-8

Voltage	Cash Drawer
12V	Pin13-14
24V	Pin15-16

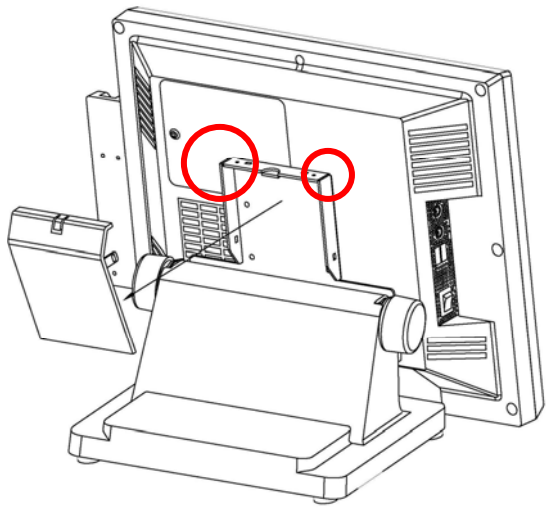
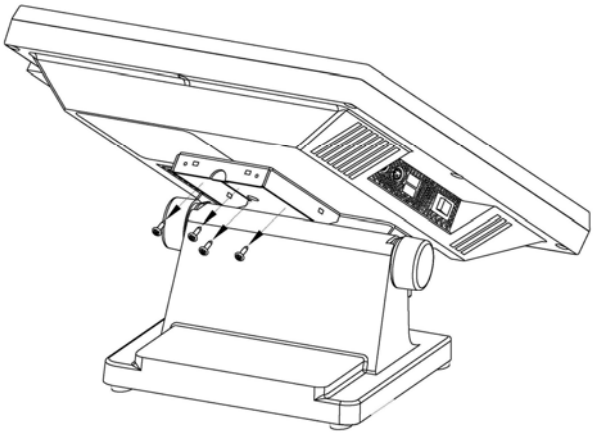
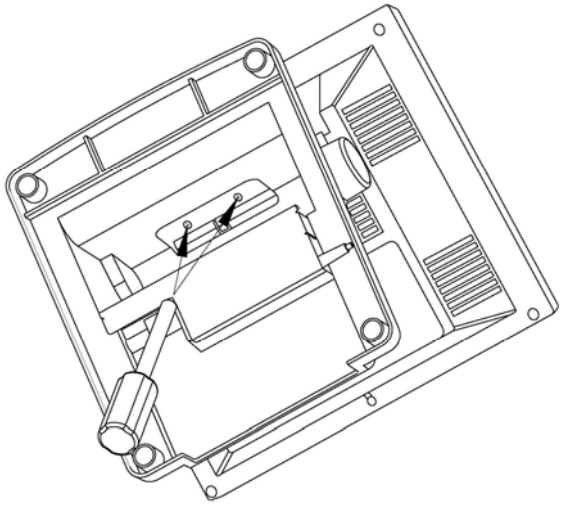
1.4 Specifications

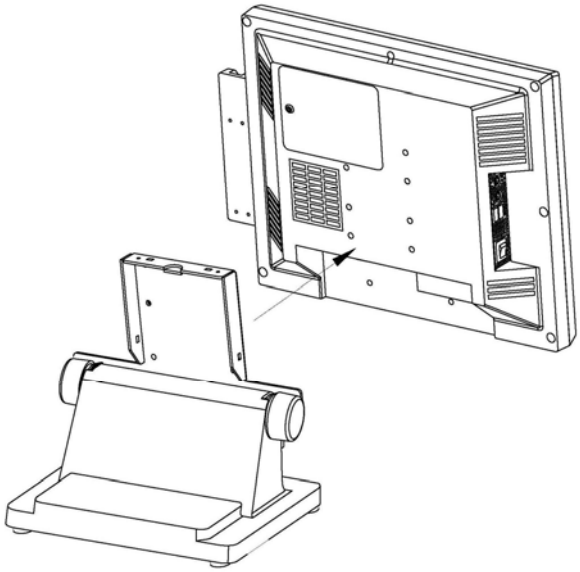
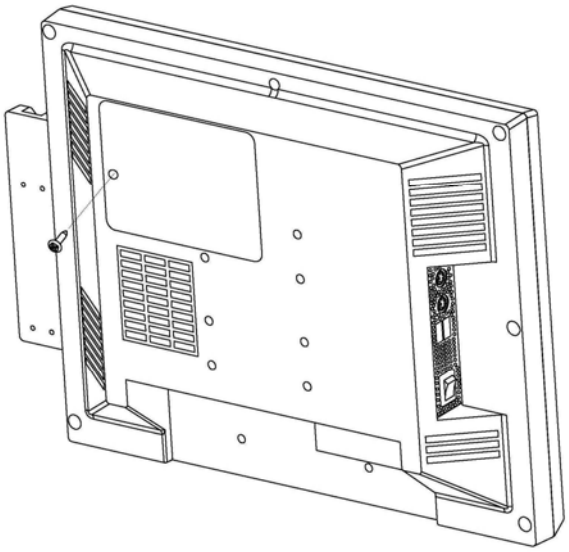
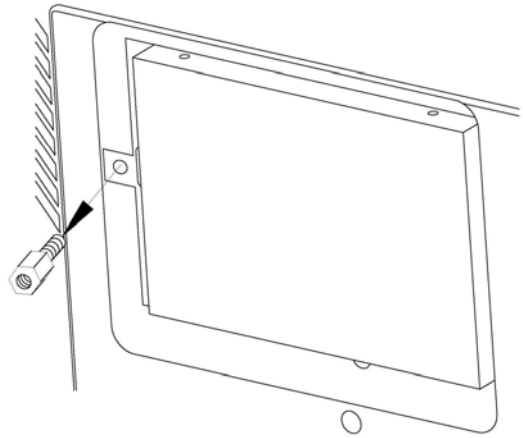
Model	ATLAS-350		
Main Board			
CPU Support	Intel Celeron M 440 (1.86GHz , 1M Cache, 533M FSB)		
	Intel Core Duo T2500 (2GHz , 2M Cache , 667M FSB)		
	Intel Core 2 Duo T7400 (2.16GHz , 4M Cache, 667M FSB)		
Chipset	Intel 82945GME + 82801GBM(ICH7)		
System Memory	2 x 200pin DDR2 533/667MHz SODIMM Socket , up to 4GB		
Graphic Memory	Share System Memory 64~224MB		
BIOS	Award		
LCD Touch Panel			
LCD Size	12.1”	**15”**	17”
Brightness	400nits	**250nits**	300nits
Resolution	1024 x 768	**1024 x 768**	1280 x 1024
Touch Screen	5 wire Resistive or SAW		
Tile Angle	15~80 Degree		
Storage			
HDD	1 x 2.5” SATA HDD Bay		
Flash Memory	1 x Compact Flash Slot (Type 1 & 2)		
Internal Expansion			
USB 2.0	1 x Touch , 1 x WI-FI		
Serial	1 x COM for Touch Option, 1 x COM Reserved		
I/O Ports			
USB 2.0	4 x External I/O, 2 x Left Side I/O		
Serial	3 x COM with Power Selected 5/12V on pin9		
Parallel	1 x DB25		
PS2	1 x KB , 1 x MS on Left Side I/O		
LAN	2 x Giga LAN (Realtek 8111C)		
2nd Display	1 x VGA, DB15		
Cash Drawer	1 x RJ11, Selected 12/24V		
DC In	1 x 4pin 12V , 7.5A		
DC Out	1 x 12V for Customer or 2nd Display		
Audio	1 x Line Out, 1 x Mic In, 2 x Internal Speaker 2W		
Power			
Power Adapter	Hidden on Base, 12V , 90W ,w/ Cable Head Lock		
Indicator	1 x Power LED in Blue		
Optional Peripheral			

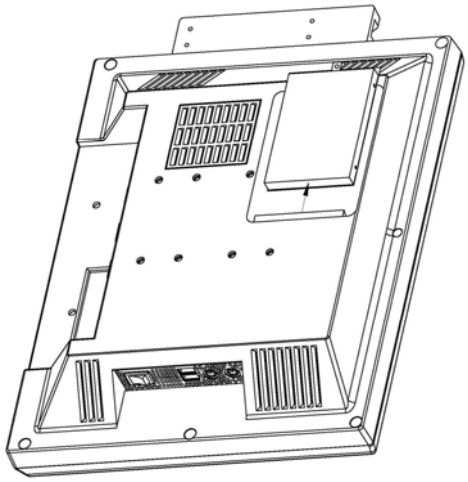
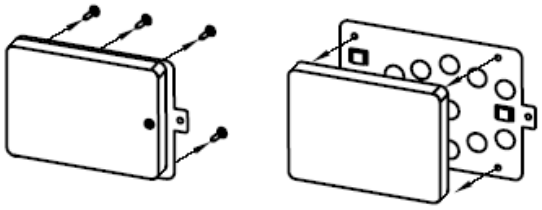
MSR	3 Track, PS2 or USB or COM		
Customer Display	VFD / LCD, Rear Mount or Pole Type		
2nd Display	12.1”, 15” with or without Touch		
Environment			
EMC & Safety	FCC & CE		
Operating Temp.	0 ~ 40℃		
Storage Temp.	-20 ~ 55℃		
Operating Humidity	20% ~ 80% RH non-condensing		
Storage Humidity	20% ~ 85% RH non-condensing		
Dimension(WxDxH)	310x260x290mm	369x260x340mm	396x260x377mm
Weight (Kgs)	5.7	6.3	7.3
OS Support	POS Ready, XP Pro, Vista, Linux		

2. Components & Peripherals Installation

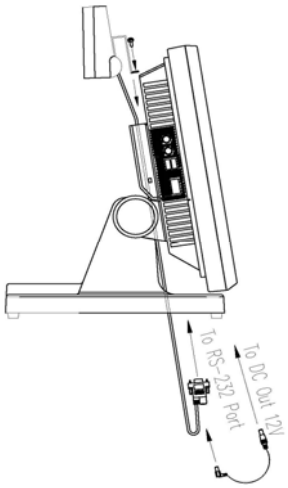
2.1 Replace Hard Disk

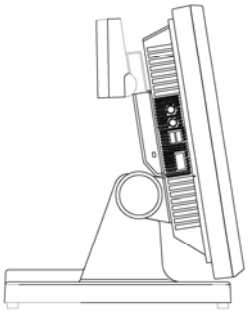
	a. Lift the cover from the upper side edges as marked by the circles and push it down to remove it.
	b. Lossen the screw x 4 on the VESA bracket.
	c. Turn over the system to loosen the screw x 2 on the back of the panel.

	d. Remove the panel from the VESA bracket.
	e. Loosen the screw on the cover of the hard disk bay to remove the cover.
	f. Loosen the spacer.

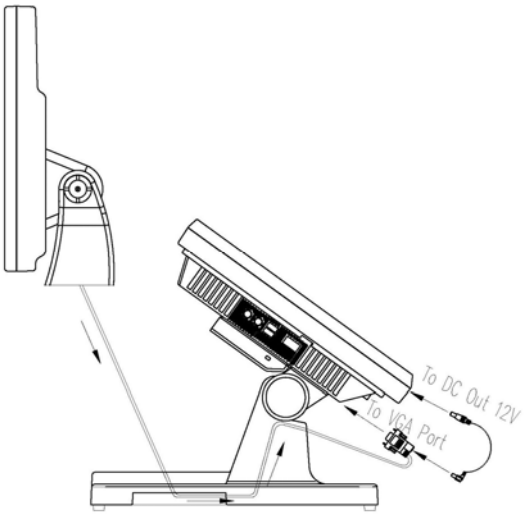
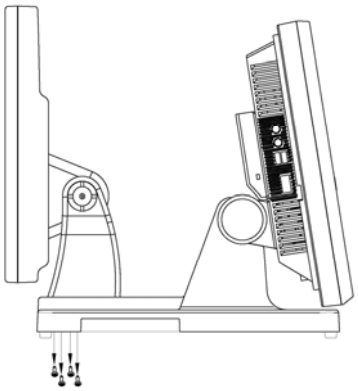
	g. Hold the hard disk and take it out in the direction. Then unplug it from the connector.
	h. Loosen the 4 screws to remove the hard disk from the bracket. Then install the new hard disk following the above steps with the order reversed.

2.2 Install Rear Top Mount Customer Display (Cutebase only)

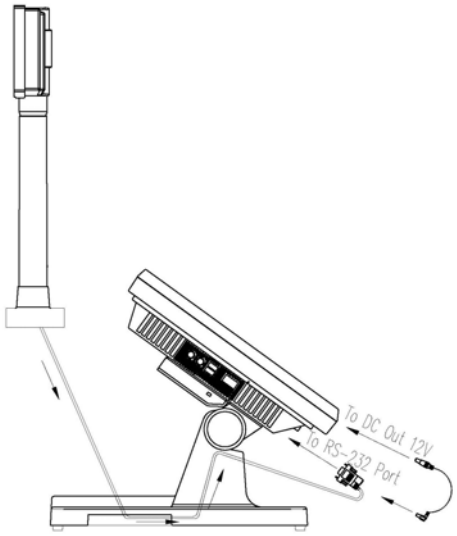
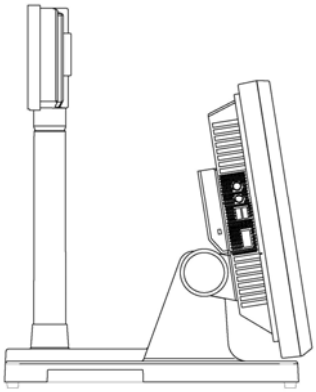
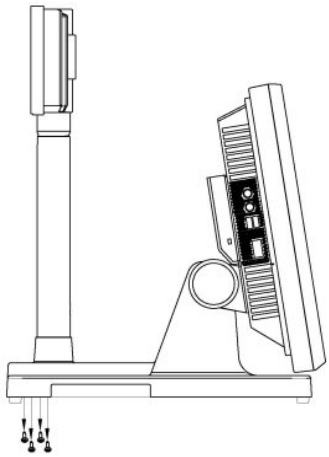
	a. Pass cord of the rear top mount display through the holes in the direction af arrows carefully. Plug the cable to a free COM port and connect the extension power cable.

	b. Press the stand of the customer display into place.

2.3 Install Second Display (Standard-base only)

	Hold the second display and turn the system over carefully. Pass the cord through the holes in the directions of the arrows. Plug the cable into the VGA port and connect the extension power cable.
	**Tighten the bundled screws specified for the stand of the second display to fix it to place.**

2.4 Install Pole-type Customer Display (Standard-base only)

	**a. Pass the cord of the customer display through the holes in the directions of the arrows. Plug the cable to a free COM port and connect the extension power cable.**
	**b. Press the stand of the customer display into place.**
	**c. Tighten the bundled screws specified for the stand of the second display to fix it to place.**

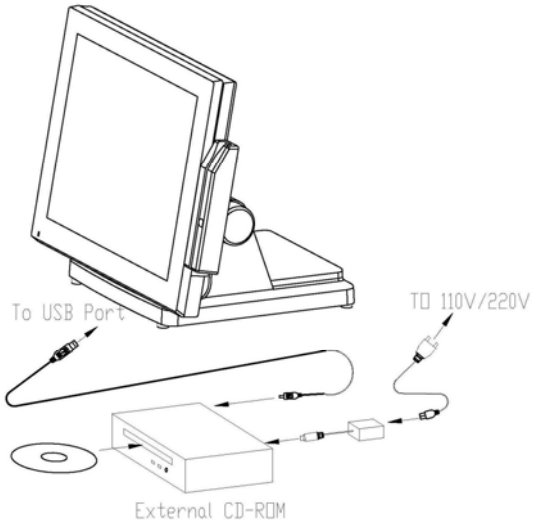
Note

- For the Cutebase type, there is no Second Disply/Pole-type Display option.
- The rear top mount customer display has been pre-installed in factory.

3. BIOS Setup Information

The ATLAS-350 main board is compatible with Windows 95/98/2000/XP and Red Hat Linux 9.0. If the drivers are required, find the necessary files in the support CD. The storage media can be HDD, Compact Flash (CF), or Disk on Module (DOM) depending on different options.

a. Plug the AC power cord of the power adapter to the PWR IN port. Connect an external CD-ROM to the POS system as the figure shown below and insert the installation CD for the Operating System.



b. Turn on the system, press DEL to enter the BIOS main menu, select “Advanced BIOS Features” and click Enter.

c.

Phoenix- AwardBIOS CMOS Setup Utility

▶ Standard CMOS Features ▶ Advanced BIOS Features ▶ Advanced Chipset Features ▶ Integrated Peripherals ▶ Power Management Setup ▶ PnP/PCI Configurations ▶ PC Health Status	▶Frequency/Voltage Control Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password Set User Password Save & Exit Setup Exit Without Saving
ESC : Quit F10 : Save & Exit Setup	↑↓→← : Select Item
Time, Date, Hard Disk Type …	

d. Select “USB-CDROM” at Fitst Boot Device. Press F10 to save and exit setup, then restart the system. It will enter the “Setup from CD-ROM” mode. Insert the setup CD to start the Operation System installation.

Phoenix- AwardBIOS CMOS Setup Utility

Advanced BIOS Features

		Item Help
▶CPU Feature	[Press Enter]	
▶Hard Disk Boot Priority	[Press Enter]	
Virus Warning	[Disabled]	Menu Level ▶
CPU L1 & L2 Cache	[Enabled]	
CPU L3 Cache	[Enabled]	
Hyper-Threading Technology	[Enabled]	
Quick Power On Self Test	[Enabled]	
First Boot Device	[USB-CDROM]	
Second Boot Device	[Hard Disk]	
Third Boot Device	[USB-FDD]	
Boot Other Device	[Enabled]	
Boot Up NumLock Status	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
x Typematic Rate (Chars/Sec)	6	
x Typematic Delay (Msec)	250	
Security Option	[Setup]	
MPS Version Control For OS	[1.4]	
OS Select For DRAM > 64M	[Non-OS2]	
Report No FDD For WIN 95	[No]	
Small Logo(EPA) Show	[Disabled]	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help

F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

AEB-945GME0 is equipped with the AWARD BIOS stored in SPI Flash ROM. These BIOS has a built-in Setup program that allows users to modify the basic system configuration easily. This type of information is stored in CMOS RAM so that it is retained during power-off periods. When system is turned on, AEB-945GME0 communicates with peripheral devices and checks its hardware resources against the configuration information stored in the CMOS memory. If any error is detected, or the CMOS parameters need to be initially defined, the diagnostic program will prompt the user to enter the SETUP program. Some errors are significant enough to

abort the start-up.

Entering Setup

Turn on or reboot the computer. When the message “Hit <DEL> if you want to run SETUP” appears, press <Del> key immediately to enter BIOS setup program.

If the message disappears before you respond, but you still wish to enter Setup, please restart the system to try “COLD START” again by turning it OFF and then ON, or touch the "RESET" button. You may also restart from “WARM START” by pressing <Ctrl>, <Alt>, and <Delete> keys simultaneously. If you do not press the keys at the right time and the system will not boot, an error message will be displayed and you will again be asked to,

Press <F1> to Run SETUP or Resume

In HIFLEX BIOS setup, you can use the keyboard to choose among options or modify the system parameters to match the options with your system. The table below will show you all of keystroke functions in BIOS setup.

General Help	
↑ ↓→ ←	: Move
Enter	: Select
+ / - /PU /PD	: Value
ESC	: Exit
F1	: General Help
F2	: Item Help
F5	: Previous Values
F6	: Fail-Safe Defaults
F7	: Optimized Defaults
F9	: Menu in BIOS
F10	: Save

Main Menu

If you enter AEB-945GME0 AWARD BIOS CMOS Setup Utility, you should start with the Main Menu. The Main Menu allows you to select from fourteen setup functions and two exit choices. Use arrow keys to switch among items and press <Enter> key to accept or bring up the sub-menu.

Phoenix- AwardBIOS CMOS Setup Utility

▶ Standard CMOS Features ▶ Advanced BIOS Features ▶ Advanced Chipset Features ▶ Integrated Peripherals ▶ Power Management Setup ▶ PnP/PCI Configurations ▶ PC Health Status	▶Frequency/Voltage Control Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password Set User Password Save & Exit Setup Exit Without Saving
ESC : Quit F10 : Save & Exit Setup	↑↓→← : Select Item
Time, Date, Hard Disk Type …	

Note:

It is strongly recommended to reload Optimal Setting if CMOS is lost or BIOS is updated.

▲Standard CMOS Features

This setup includes SBC parameter as Time , Date , Hard Disk Type ……

▲Advanced BIOS Features

For choice special enhance feature .

▲Advanced Chipset Features

This setup include display and onboard device setup.

▲ Integrated Peripherals

This setup include on board peripheral setup.

▲Power Management Setup

This setup can be set SBC power management.

▲PnP/PCI Configurations

This setup can be set PCI configuration & resource.

▲PC Health Status

This setup can display SBC health state as voltage , board temperature … etc.

▲Frequency/Voltage Control

This setup can control CPU clock and frequency ratio.

▲Load Fail-Safe Defaults

This setup contain BIOS all item default setup in safe mode.

▲Load Optimized Default

This setup contain BIOS all item default setup in best performance mode.

▲Set Supervisor Password

Set password to allow access into the BIOS setup for supervisor.

▲Set User Password

This setup can set password to allow access into the BIOS limit setup.

▲Save & Exit Setup

Save BIOS setup value to CMOS and exit setup.

▲Exit Without Saving

Exit setup and keep last time setup value.

Standard CMOS Setup Menu

This setup page includes all the items in a standard compatible BIOS. Use the arrow keys to highlight the item and then use the <PgUp>/<PgDn> or <+>/<-> keys to select the value or number you want in each item and press <Enter> key to certify it.

Follow command keys in CMOS Setup table to change **Date**, **Time**, and IDE item**.**

Phoenix- AwardBIOS CMOS Setup Utility

Standard CMOS Features

Date (mm:dd:yy)	Thu, Jul 6 2007	Item Help
Time (hh:mm:ss)	21 : 29 : 50	
		Menu Level ▶
▶ IDE Primary 0 Master	[HDS728080PLAT20]	
▶ IDE Primary 0 Slave	[None]	Change the day, month, year and century
▶ IDE Secondary 1 Master	[None]	
▶ IDE Secondary 1 Slave	[None]	
Video	[EVG/VGA]	
Halt On	[All, But Keyboard]	
Base Memory	640K	
Extended Memory	1038336K	
Total Memory	1038336K	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help

F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲Date

The data format : [week],[month],[day],[year].

▲Time

The time format : [hour],[minute],[second].

▲IDE Primary 0 Master

Auto detect IDE device on channel 0,

Press “Enter” for automatic device detection.

▲IDE Primary 0 Slave

Auto detect IDE device on channel 0,

Press “Enter” for automatic device detection.

▲IDE Primary 1 Master

Auto detect IDE device on channel 1,

Press “Enter” for automatic device detection.

▲IDE Primary 1 Master

Auto detect IDE device on channel 1,

Press “Enter” for automatic device detection.

▲Video

Select the type of primary video subsystem in your computer. The BIOS usually detects the correct video type automatically.

EGA/VGA	Enhance Graphics Adapter/Video Graphics Array. For EGA, VGA, SEGA, SVGA or PGA monitor adapters.
CGA40	Color Graphics Adapter, power up in 40 column mode.
CGA80	Color Graphics Adapter, power up in 80 column mode.
MONO	Monochrome adapter, includes high resolution monochrome adapters.

▲Halt On

During the power-on self-test(POST), the computer stops if the BIOS detects a hardware error. You can tell the BIOS to ignore certain errors during POST and continue the boot-up process. These are the selections:

No errors	POST does not stop for any errors.
All errors	If the BIOS detects any non-fatal error, POST stops and prompts you to take corrective action.
All, But keyboard	POST does not stop for a keyboard error, but stops for all other errors.

▲Base Memory

Typically 640 KB. Also called conventional memory. The DOS operating system and conventional applications use this area.

▲Extended Memory

Above the 1-MB boundary. Early IBM personal computers could not use memory above 1MB, but current PCs and their software can use extended memory.

▲Total Memory

Total system memory available area.

Advanced BIOS Features

This section allows you to configure your system for basic operation. You have the opportunity to select the system's default speed, boot-up sequence, keyboard operation, shadowing and security.

Phoenix- AwardBIOS CMOS Setup Utility

Advanced BIOS Features

		Item Help
►CPU Feature	[Press Enter]	
►Hard Disk Boot Priority	[Press Enter]	
Virus Warning	[Disabled]	Menu Level ►
CPU L1 & L2 Cache	[Enabled]	
CPU L3 Cache	[Enabled]	
Hyper-Threading Technology	[Enabled]	
Quick Power On Self Test	[Enabled]	
First Boot Device	[USB-CDROM]	
Second Boot Device	[Hard Disk]	
Third Boot Device	[USB-FDD]	
Boot Other Device	[Enabled]	
Boot Up NumLock Status	[On]	
Gate A20 Option	[Fast]	
Typematic Rate Setting	[Disabled]	
x Typematic Rate (Chars/Sec)	6	
x Typematic Delay (Msec)	250	
Security Option	[Setup]	
MPS Version Control For OS	[1.4]	
OS Select For DRAM > 64M	[Non-OS2]	
Report No FDD For WIN 95	[No]	
Small Logo(EPA) Show	[Disabled]	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help

F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲CPU Feature

Display CPU parameter information.

▲Hard Disk Boot Priority

Select boot sequence for HDD type device.

▲CPU L1 & L2 Cache

CPU L1 & L2 function Enabled/Disabled.

▲CPU L3 Cache

CPU L3 function Enabled/Disabled.

▲First Boot Device

Select boot device1. Ex : HDD , CDROM ….

▲Second Boot Device2

Select boot device. Ex : HDD , CDROM …

▲Third Boot Device

Select boot device3. Ex : HDD , CDROM …

Note : If boot device 1-3 setup as CD-ROM,HDD,USBFDD ,
System will follow setup to boot system.

▲Gate A20 Option

Fast-lets chipsets control Gate A20 and Normal – a pin in the keyboard controller controls Gate A20. Default is Fast.

The choice: Normal, Fast.

▲Typematic Rate Setting

Keystrokes repeat at a rate determined by the keyboard controller – When enabled, the typematic rate and typematic delay can be select.

The choice: Enabled, Disabled.

▲Typematic Rate (Chars/sec)

The rate at which character repeats when you hold down a key.

The choice: 6, 8, 10, 12, 15, 20, 24, and 30.

▲Typematic delay (Msec)

The delay before key strokes begin to repeat.

The choice: 250, 500, 750, and 1000.

▲Security Option

You can setup Setup/System when setup password.

Setup : In boot picture will show “Enter Password” message.

System : Into BIOS setup figure will show “Enter Password” message.

▲MPS Version Control For OS

The choice: 1.1, 1.4.

▲Report No FDD For WIN 95

The choice: No, Yes

▲OS Select For DRAM > 64M

Select OS/2 only if you are running OS/2 operating system with greater than 64MB of RAM on the system.

The choice: Non-OS2, OS2.

▲Small Logo(EPA) Show

Enabled/Disabled Small Logo.

Advanced Chipset Features

This section allows you to configure the system based on the specific features of the Intel 945GME Chipset. This Chipset manages bus speeds and access to system memory resources.VGA display port and onboard device control. It also coordinates communications between the conventional ISA bus and the PCI bus. It must be stated that these items should never need to be altered. The default settings have been chosen because they provide the best operating conditions for your system. The only time you might consider making any changes would be if you discovered that data was being lost while using your system.

Phoenix- AwardBIOS CMOS Setup Utility

Advanced Chipset Features

		Item Help
DRAM Timing Selectable	[By SPD]	
x CAS Latency Time	Auto	Menu Level ►
x DRAM RAS# to CAS# Delay	Auto	
x DRAM RAS# Precharge	Auto	
x Precharge delay (tRAS)	Auto	
x System Memory Frequency	Auto	
SLP_S4# Assertion Width	[1 to 2 sec.]	
System BIOS Cacheable	[Enabled]	
Video BIOS Cacheable	[Disabled]	
Memory Hole At 15M-16M	[Disabled]	
►PCI Express Root Port Function	[Press Enter]	
** VGA Setting **		
PEG/Onchip VGA Control	[Auto]	
On-Chip Frame Buffer Size	[8MB]	
DVMT Mode	[DVMT]	
DVMT/FIXED Memory Size	[128 MB]	
Boot Display	[Auto]	
Panel Type by Hardware	[Enabled]	
x Panel Number	1024x768 24Bit	
Onboard LAN1	[Enabled]	
Onboard LAN2	[Enabled]	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲CAS Latency Time

This option controls the number of SCLKs between the time a read command is sampled by the SDRAMs and the time the GMCH samples correspondent data from the SDRAMs.

Default : Auto.

▲Active to Precharge Delay

This is to DDR standard accordingly

Default : Auto.

▲DRAM RAS# to CAS# Delay

This option controls the number of SCLKs (SDRAM Clock) from a row activate command to a read or write command. If your system installs good quality of SDRAM, Normally, the option will be set to Auto.

▲DRAM RAS# Precharge

This option controls the number of SCLKs for RAS# precharge. If your system installs good quality of SDRAM,

It is set to auto normally.

▲System Memory Frequency

This option controls the number of System Memory Frequency.

It is set to auto normally.

▲SLP_S4# Assertion Width

This option controls SLP_S4# Assertion Width

Default : [1 to 2 sec.]

▲System BIOS Cacheable

Selecting Enabled allows caching of the system BIOS ROM at F0000h-FFFFFh, resulting in better system performance. However, if any program writes to this memory area, a system error may result.

▲System BIOS Cacheable

Select “Enabled” to enable caching VGA BIOS into L2 cache to get higher display performance. “Disabled” to ignore this BIOS caching function.

▲Memory Hole At 15M-16M

This setting allows users to enable or disable the 1MB of memory required by some ISA expansion cards.

▲PCI Express Root Port Function

This setting allows users to setup for some PCI Express chip function.

**** VGA Setting ****

▲PEG/Onchip VGA Control

Setup Onchip VGA Control. Default : Auto.

▲On-Chip Frame Buffer Size

Setup On-Chip Frame Buffer Size: 8MB.

▲DVMT Mode

DVMT Mode select : Enabled DVMT.

▲DVMT/FIXED Memory Size

Setup DVMT/FIXED Memory Siz: 128MB.

▲Boot Display

To setup boot display port as [Auto] , [CRT] , [LFP] ,[CRT+LFP].

▲Panel Type by Hardware

[Enabled]

Select Panel type by onboard jump : JLCD_SEL

Please refer hardware jump setting.

[Disabled]

Depend on BIOS setup for panel resolution.

▲Panel Number

These fields allow you to select the LCD Panel type. The default values for these ports are :

800x600 18Bit

1024x768 18Bit

1024x768 24Bit

1280x1024 24Bit

▲On chip LAN1

Enabled or Disable LAN1 function.

▲On chip LAN2

Enabled or Disable LAN2 function.

Integrated Peripherals

Phoenix- AwardBIOS CMOS Setup Utility
Integrated Peripherals

▶ OnChip IDE Device	[Press Enter]	Item Help
▶ Onboard Device	[Press Enter]	
▶ Super IO Device	[Press Enter]	Menu Level ▶
Onboard Lan Boot ROM	[Disabled]	
Watch Dog Timer Select	[Disabled]	
Onboard Serial Port 3	[3E8]	
Serial Port 3 Use IRQ	[IRQ10]	
Onboard Serial Port 4	[2E8]	
Serial Port 4 Use IRQ	[IRQ11]	
Onboard Serial Port 5	[4F8]	
Serial Port 5 Use IRQ	[IRQ5]	
Onboard Serial Port 6	[4E8]	
Serial Port 6 Use IRQ	[IRQ11]	
▶ USB Device Setting	[Press Enter]	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲OnChip IDE Device

Display IDE device mode setting.

▲Onboard Device

Display On board device content.

▲Super IO Device

Display Super IO device item.

▲Onboard Serial Port 3

Serial IO Port 3 address value [3E8].

▲Serial Port 3 Use IRQ

Serial IO Port 3 IRQ value [10].

▲Onboard Serial Port 4

Serial IO Port 4 address value [2E8].

▲Serial Port 4 Use IRQ

Serial IO Port 4 IRQ value [11].

▲Onboard Serial Port 5

Serial IO Port 5 address value [4F8].

▲Serial Port 5 Use IRQ

Serial IO Port 5 IRQ value [5].

▲Onboard Serial Port 6

Serial IO Port 6 address value [4E8].

▲Serial Port 6 Use IRQ

Serial IO Port 6 IRQ value [11].

▲USB Device Setting

Display USB device advance item.

Phoenix- AwardBIOS CMOS Setup Utility
OnChip IDE Device

IDE HDD Block Mode	[Enabled]	Item Help
IDE DMA transfer access	[Enabled]	
On-Chip Primary PCI IDE	[Enabled]	Menu Level ▶
IDE Primary Master PIO	[Auto]	
IDE Primary Slave PIO	[Auto]	If your IDE hard drive
IDE Primary Master UDMA	[Auto]	Supports block mode
IDE Primary Slave UDMA	[Auto]	Select Enabled for
On-Chip Secondary PCI IDE	[Enabled]	Automatic detection of
IDE Secondary Master PIO	[Auto]	The optimal number of
IDE Secondary Slave PIO	[Auto]	block read/writes per
IDE Secondary Master UDMA	[Auto]	sector the drive can
IDE Secondary Slave UDMA	[Auto]	support
** On-Chip Serial ATA Setting **		
On chip Serial ATA	[Auto]	
X SATA PORT Speed Settings	Disabled	
X PATA IDE Mode	Primary	
SATA Port	P1,P3 is secondary	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲IDE HDD Block Mode

Block mode is also called block transfer, multiple commands, or multiple sector read/write.

▲IDE DMA transfer access

UDMA (Ultra DMA) is a DMA data transfer protocol that utilizes ATA commands and the ATA bus to allow DMA commands to transfer data at a maximum burst rate of 33 MB/s.

▲On-Chip Primary PCI IDE
▲On-Chip Secondary PCI IDE

The chipset contains a PCI IDE interface with support for two IDE channels. Select Enabled to activate the IDE interface. Select Disabled to deactivate this interface, if you install a primary and/or secondary add-in IDE interface.

▲IDE Primary Master PIO
▲IDE Primary Slave PIO
▲Secondary Master PIO
▲Secondary Slave PIO

The four IDE PIO (Programmed Input/Output) fields let you set a PIOmode (0-4) for each of the four IDE devices that the onboard IDE interface supports. Modes 0 through 4 provide successively increased performance. In Auto mode, the system automatically determines the best mode for each device.

▲IDE Primary Master UDMA
▲IDE Primary Slave UDMA
▲IDE Secondary Master UDMA
▲IDE Secondary Slave UDMA

UDMA (Ultra DMA) is a DMA data transfer protocol that utilizes ATA commands and the ATA bus to allow DMA commands to transfer data at a maximum burst rate of 33 MB/s. When you select Auto in the four IDE UDMA fields (for each of up to four IDE devices that the internal PCI IDE interface supports), the system automatically determines the optimal data transfer rate for each IDE device.

▲On-Chip Serial ATA Setting

The fields under the SATA setting include On-chip Serial ATA(Auto),
PATA IDE Mode(Primary) and SATA Port(P1,P3 is Secondary).
AHCI function is setup at Enhance mode.

Phoenix- AwardBIOS CMOS Setup Utility
Onboard Device

Azalia/AC97 Audio Select	[Auto]	Menu Level ▶

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲Azalia/AC97 Audio Select

Onboard Audio chip Auto/disabled select.

Phoenix- AwardBIOS CMOS Setup Utility
Super IO Device

Onboard Serial Port 1	[3F8/IRQ4]	Menu Level ▶
Onboard Serial Port 2	[2F8/IRQ3]	
UART Mode Select	[Normal]	
X RxD, TxD Active	Hi, Lo	
X IR Transmission Delay	Enabled	
X UR2 Duplex Mode	Half	
X Use IR Pins	IR-Rx2Tx2	
Onboard Parallel Port	[378/IRQ7]	
Parallel Port Mode	[SPP]	
X EPP Mode Select	EPP1.7	
X ECP Mode Use DMA	3	
PWRON After PWR-Fail	[Off]	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲Onboard Serial Port 1

Serial IO Port 1 address/IRQ value [3F8/IRQ4].

▲Onboard Serial Port 2

Serial IO Port 2 address/IRQ value [2F8/IRQ3].

▲Onboard Parallel Port

Parallel Port address/IRQ value [378/IRQ7].

▲UART Mode select

This field determines the UART mode in your computer. The default value is Normal. Other options include ASKIR and IrDA.

▲Parallel Port Mode

Select an operating mode for the onboard parallel (printer) port. Select Normal, Compatible, or SPP unless you are certain your hardware and software both support one of the other available modes.

▲PWRON After PWR-Fail

This item allows user to configure the power status of using ATX power supply after a serious power loss occurs.

On	System automatically restores power back
Off	System stays at power –off

Phoenix- AwardBIOS CMOS Setup Utility

USB Device Setting

USB 1.0 Controller	[Enabled]	Menu Level ▶
USB 2.0 Controller	[Enabled]	
USB Operation Mode	[High Speed]	[Enabled] or [Disabled] Universal Host Controller Interface for Universal Serial Bus.
USB Keyboard Function	[Enabled]	
USB Mouse Function	[Enabled]	
USB Storage Function	[Enabled]	
*** USB Mass Storage Device Boot Setting ***		
GENERIC USB Disk 2.0 U204	[Auto mode]	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help

F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲USB 1.0 Controller

This setting is used to enable/disable the USB 1.0 Controller.

▲USB 2.0 Controller

This setting is used to enable/disable the USB 2.0 Controller.

▲USB Operation Mode

This setting is used USB device operation in high or low speed.

▲USB Keyboard Function

This setting is used to enable/disable the USB Keyboard Function.

▲USB Mouse Function

This setting is used to enable/disable the USB Mouse Function.

▲USB Storage Function

This setting is used to enable/disable the USB Storage Function.

Power Management Setup

The Power Management Setup allows you to configure you system to most effectively save energy while operating in a manner consistent with your own style of computer use.

Phoenix- AwardBIOS CMOS Setup Utility
Power Management Setup

► PCI Express PM Function	[Press Enter]	Item Help
ACPI Function	[Enabled]	
ACPI Suspend Type	[S1(POS)]	Menu Level ►
x Run VGABIOS if S3 Resume	Auto	
Soft-Off by PWR-BTTN	[Instant-Off]	
Power On by Ring	[Disabled]	
Resume by Alarm	[Disabled]	
X Date(of Month) Alarm	0	
X Time(hh:mm:ss) Alarm	0 : 0 :0	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲PCI Express PM Function

The field is for onboard PCI Express device PM function.

▲ACPI Function

This item allows you to enable/disable the Advanced Configuration and Power Management (ACPI).

▲ACPI Suspend Type

The default setting of the ACPI mode is S1(POS).

▲Soft-Off by PWR-BTTN

This field defines the power-off mode when using an ATX power supply. The “Instant –off” mode allows powering off immediately upon pressing the power button. In the “Delay 4 sec” mode. The system power off when the power button is pressed for more than four seconds or enters the suspend mode when press for less than 4 seconds.

▲Power On by Ring

When select “Enabled”, a system that is at soft-off mode will be alert to Wake-On-Modem.

▲Resume by Alarm

This field enables or disables the resumption of the system operation.

When enabled, the user is allowed to set the Date and Time.

Phoenix- AwardBIOS CMOS Setup Utility

PCI Express PM Function

Wake-up by LAN	[Disabled]	Menu Level ▶ [Enabled] or [Disabled] Universal Host Controller Interface for Universal Serial Bus.
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

▲Wake-up by LAN

This field allow Enabled or Disabled WOL function.

PnP/PCI Configurations

This section describes configuring the PCI bus system.
PCI, or **P**ersonal **C**omputer **I**nterconnect, is a system that allows I/O devices to operate at speeds nearing the speed the CPU itself uses when communicating with its own special components.

This section covers some very technical items and it is strongly recommended that only experienced users should make any changes to the default settings.

Phoenix- AwardBIOS CMOS Setup Utility
PnP/PCI Configurations

Reset Configuration Data	[Disabled]	Item Help
Resources Controlled By	[Auto(ESCD)]	
X IRQ Resources	Press Enter	Menu Level ▶
PCI/VGA Palette Snoop	[Disabled]	
** PCI Express relative items **		
Maximum Payload Size	[128]	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲Reset Configuration Data

Default is disabled. Select Enabled to reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the OS cannot boot.

▲Resources Controlled By

BIOS can automatically configure all the boot and plug and play compatible devices. If you choose Auto, you cannot select IRQ DMA and memory base address fields, since BIOS automatically assigns them.

▲PCI/VGA Palette Snoop

Some non-standard VGA display cards may not show colors properly.

This field allows you to set whether or not MPEG ISA/VESA VGA cards can work with PCI/VGA. When this field is enabled, a PCI/VGA can work with a MPEG ISA/VESA VGA card. When this field is disabled, a PCI/VGA can not work with an MPEG/VESA card.

▲Maximum Payload Size

The default setting of the PCI Express Maximum Payload Size is 128.

PC Health Status

Phoenix- AwardBIOS CMOS Setup Utility
PC Health Status

		Item Help
Shutdown Temperature	[Disabled]	
CPU Warning Temperature	[Disabled]	Menu Level ▶
Current System Temperature	48℃/118℉	
Current CPU Temperature	64℃/147℉	
CPU Fan Speed	6337 RPM	
System Fan Speed	0 RPM	
Vcore	0.94 V	
+12 V	11.93 V	
+1.5 V	1.51 V	
+1.8 V	1.82V	
+5 V	4.97 V	
+3.3 V	3.36 V	
VBAT(V)	3.28 V	
+3.3 VSB (V)	3.36 V	
** Smart Fan Setting **		
CPU Smart Fan Temp.	[55℃/131℉]	
System Smart Fan Temp.	[Disabled]	
Backlight Control	[Disabled]	

↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help
F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults

▲Shutdown Temperature

This field allows the user to set the temperature by which the system automatically shuts down once the threshold temperature is reached. This function can help prevent damage to the system that is caused by overheating.

▲CPU Warning Temperature

This item allows you to set a temperature above which the system will start the beeping warning.

▲Temperatures / Voltages

Hardware monitor PC health state.

Include temperatures and voltages.

** Smart Fan Setting **

▲CPU Smart Fan Temp.

This is smart fan control feature of CPU temperature.

4 pin header for select PWM or DC type fan.

If temperature over setting range , increase fan speed until temperature down.

Then decrease fan speed.

▲System Smart Fan Temp.

This is smart fan control feature of System temperature.

3 pin header for select DC type fan.

If temperature over setting range , increase fan speed until temperature down.

Then decrease fan speed.

▲Backlight Control

Backlight Control level ,0~5V DC level for select.

Header pin is inverter pin4.

Default is disabled.

Frequency/Voltage Control

Phoenix- AwardBIOS CMOS Setup Utility
Frequency/Voltage Control

Auto Detect PCI CLK	[Enabled]	Item Help
Spread Spectrum	[Disabled]	Menu Level ▶
↑↓→←: Move Enter: Select +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F6: Fail-Safe Defaults F7: Optimized Defaults		

▲Auto Detect PCI CLK

The “Auto Detect PCI CLK” function is enabled PCICLK for PCI card plug in. If have no PCI card in, PCICLK signal will be cut off.

▲Spread Spectrum

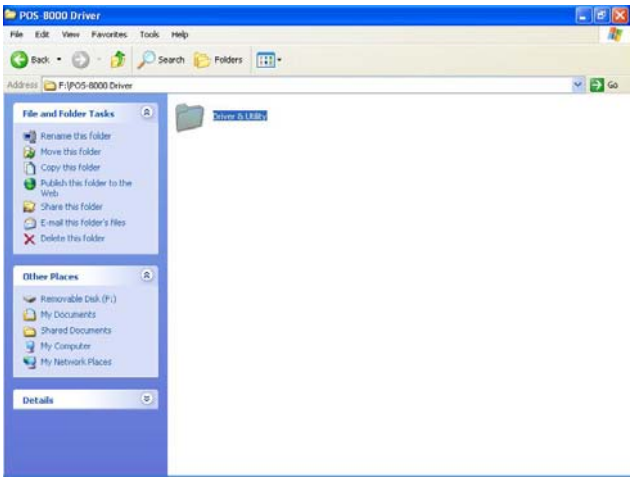
The Spread spectrum function reduces the EMI generated by modulating the pulses so that the spikes of the pulses are reduced to flatter curve.

Note : You can get more detail information at www.phoenix.com.

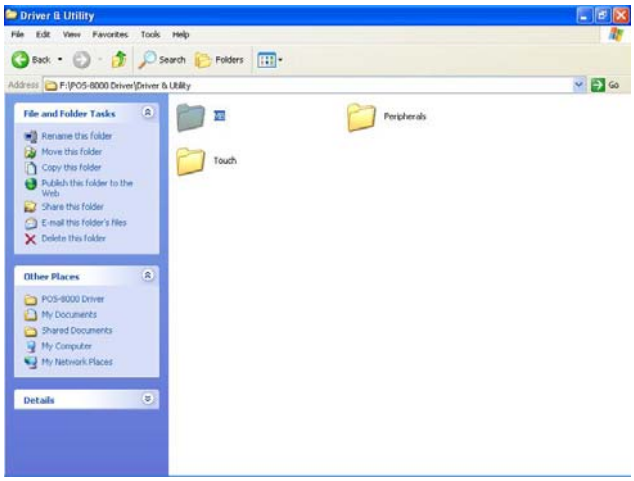
4. Drivers Installation

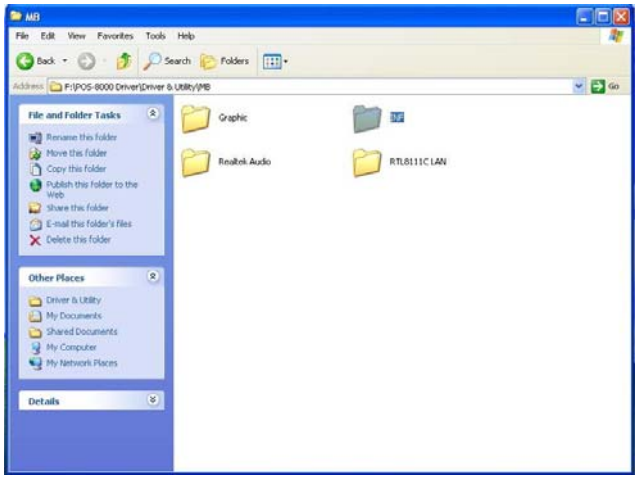
4.1 Install Chipset driver

a. Double click the folder “Driver & Utility”

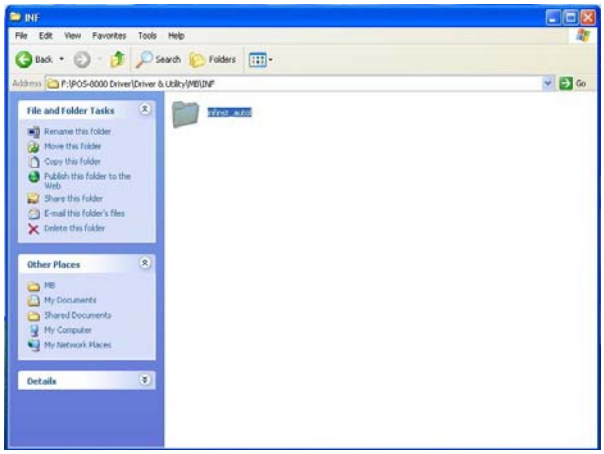


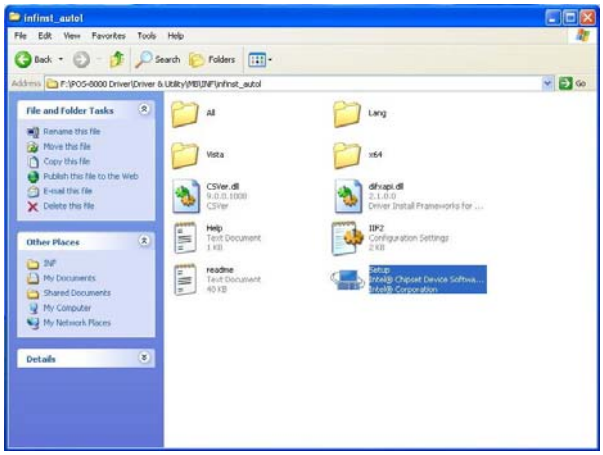
b. Double click the folder ““MB” and “INF”





c. Double click the folder “infinst_autol”, and then the file “Setup”





d. Click “Next” as the window pop up

e. Click “Yes” on the License Agreement window to accept the terms

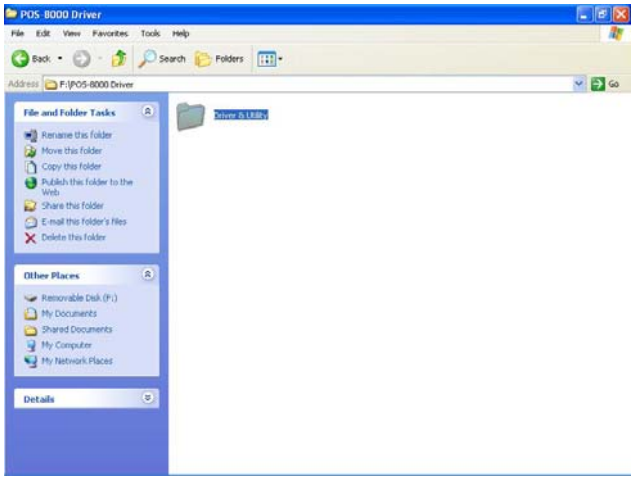
f. Click “Next” to continue the setting process

g. Click “Next” after the setup process finished

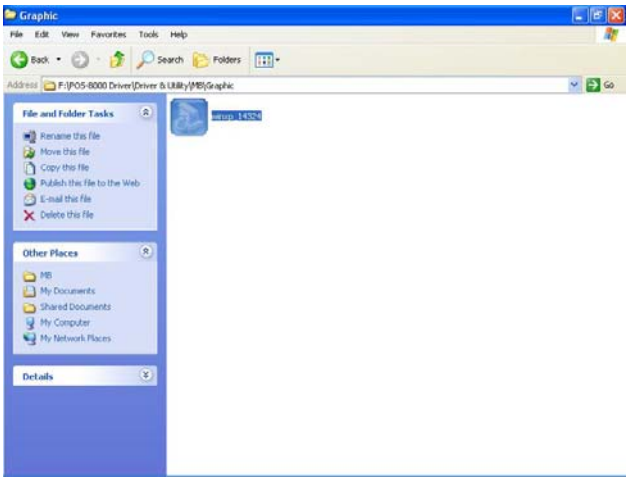
h. Select “Yes” and click “Finish”, and then restart the system

4.2 Install Graphic

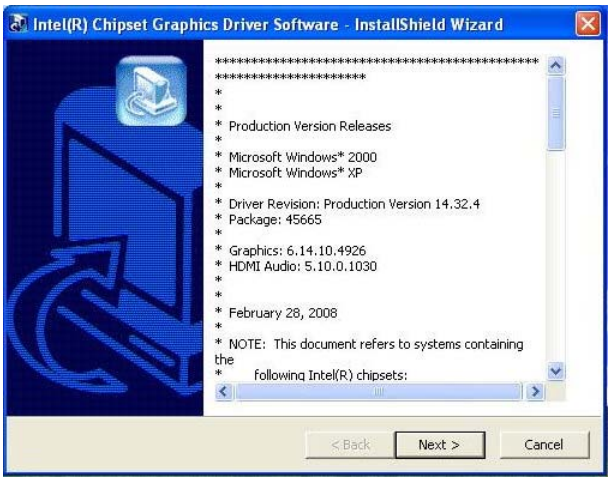
a. Double click the folder “Driver & Utility”



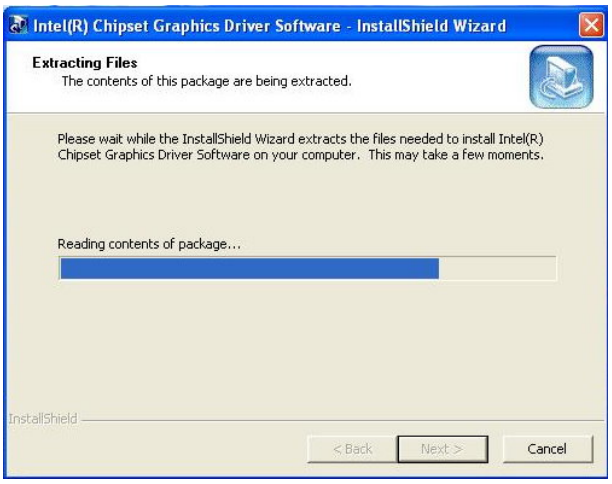
b. Double click the folder “MB” “Graphic”and then the file “win2k_xp14324.exe” to start the installation.



c. Click “Next” as the window pop up.

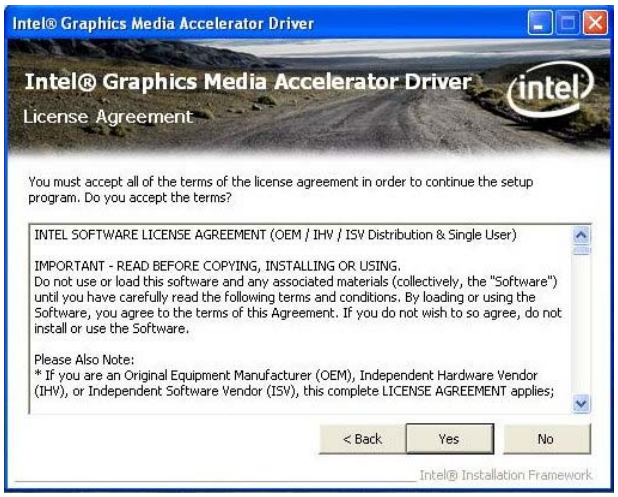


d. Then the software will start extracting files. Click “Next” when the progress finished.



e. Click “Next” to continue the setting

f. Click “Yes” on the License Agreement window to accept the terms



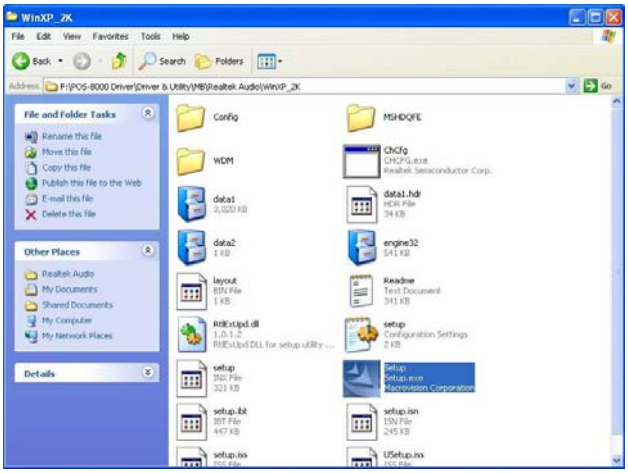
g. Click “Next”

h. Click “Next” to continue

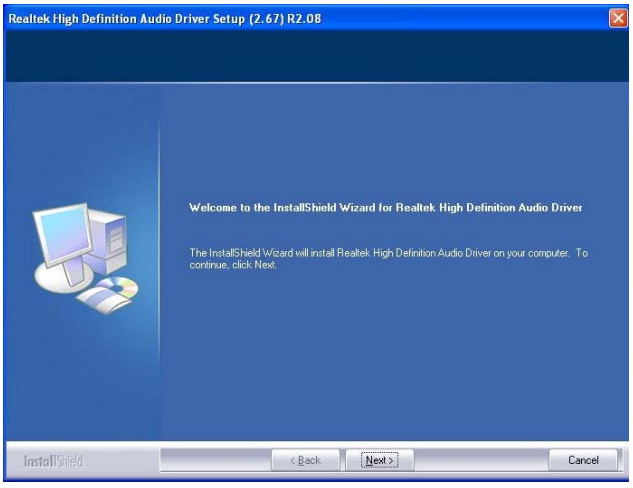
i. Click “Finish” and restart the system

4.3 Install Audio Driver

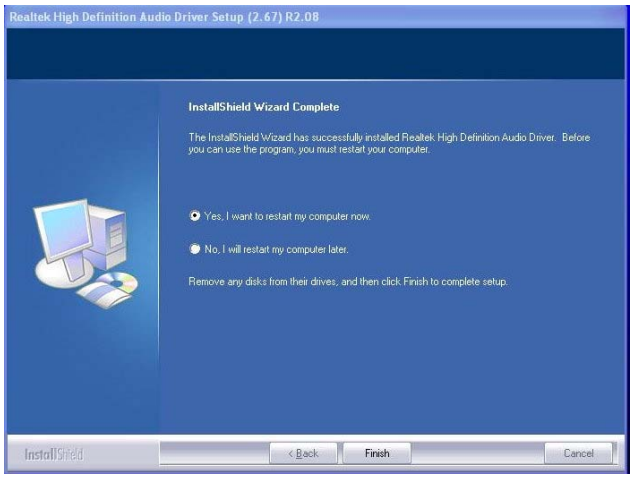
a. Double click the folder ”Driver & Utility” “MB” “ “Realtek Audio” and the file “Setup.exe” to start the installation.



b. Click “Next” on the Audio Setup window.

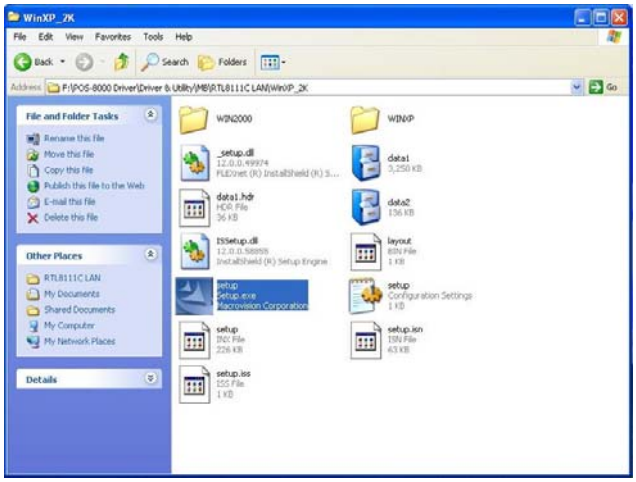


c. Click “Finish” and restart the system.

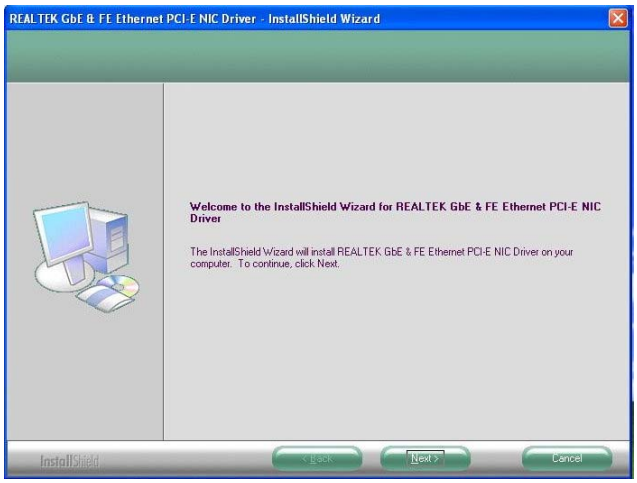


4.4 Install LAN Driver

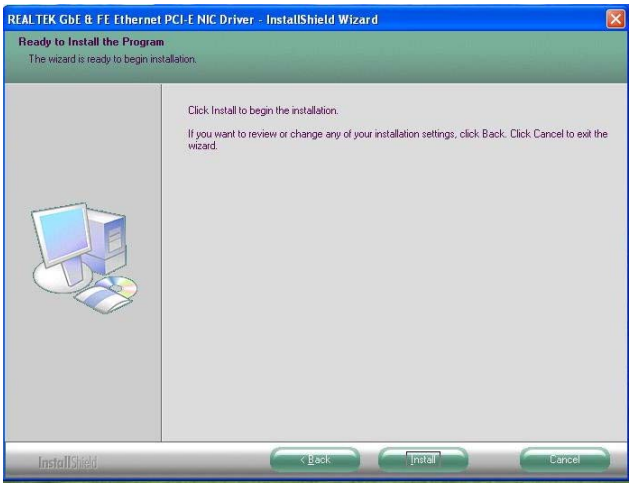
a. Double click the folder “MB” “RTL8111CLAN””WINXP_2K” and then the file “Setup.exe” to start the installation.



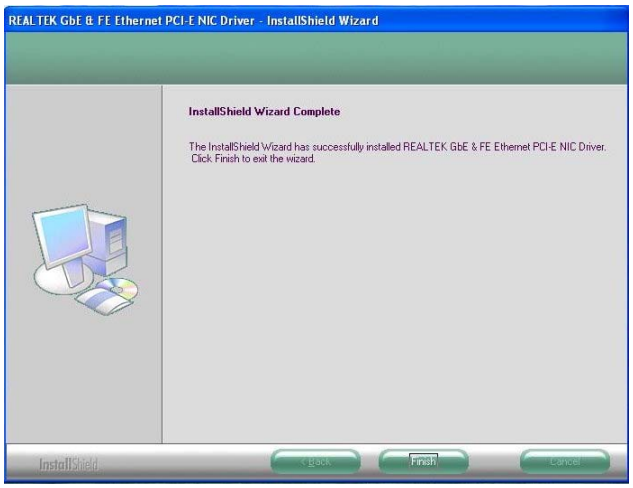
b. Click “Next” on the welcome window.



c. Click “Install” to continue the setting process

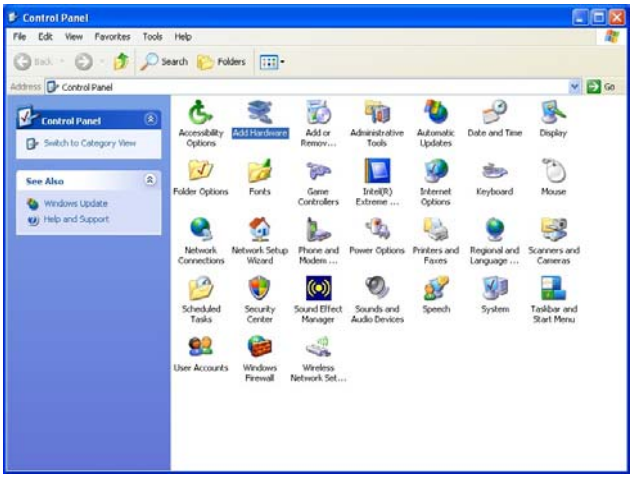


d. Click “Finish” to finish the installation.



4.5 Install Wi-Fi

a. Execute All Programs >> Control Panel >> Add Hardware.

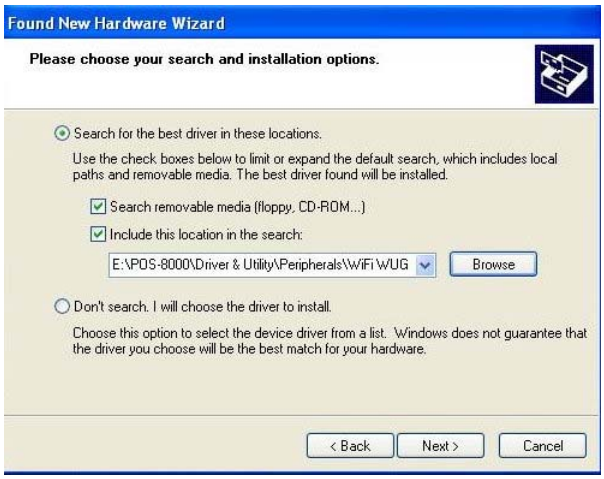


b. Click “Next” on the welcome window.

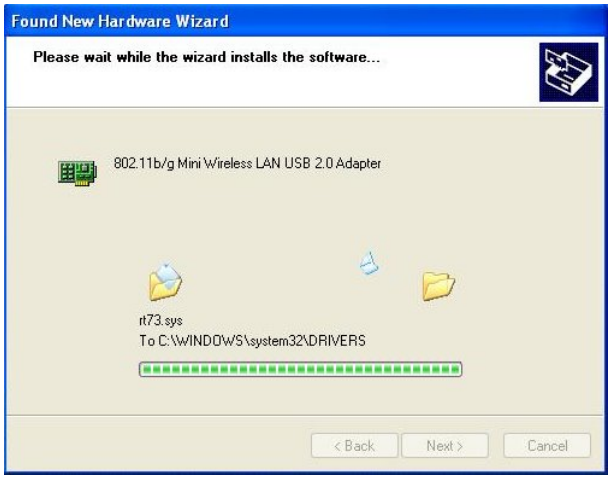
c. Click “Install from a list or specific location [Advanced]” on the Hardware Update Wizard window.

d. Select “Search for the best driver” and tick the boxes below. Click “Next” and select “WINXP” from the “Driver” folder accordingly.

e. Click “Next”

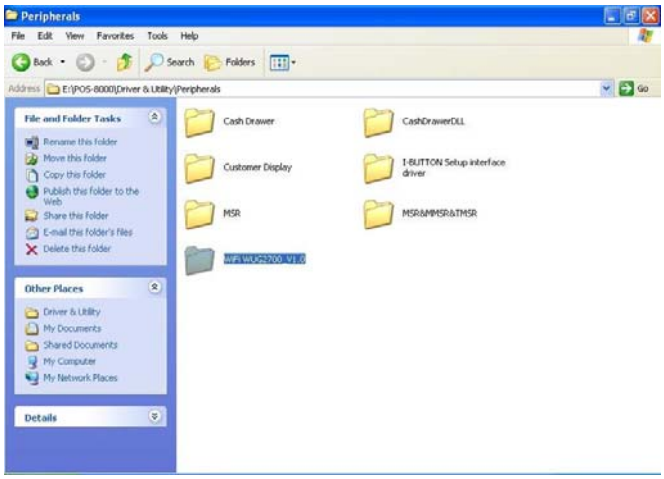


f. Wait for the installation complete and click “Next”

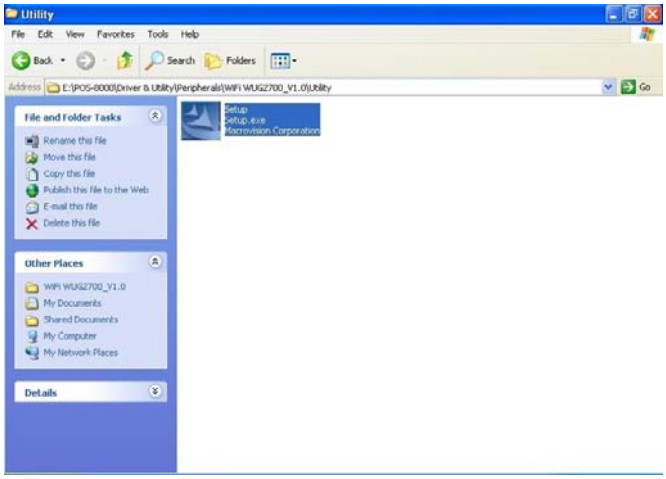


g. Click “Finish” to complete the Found New Hardware Wizard

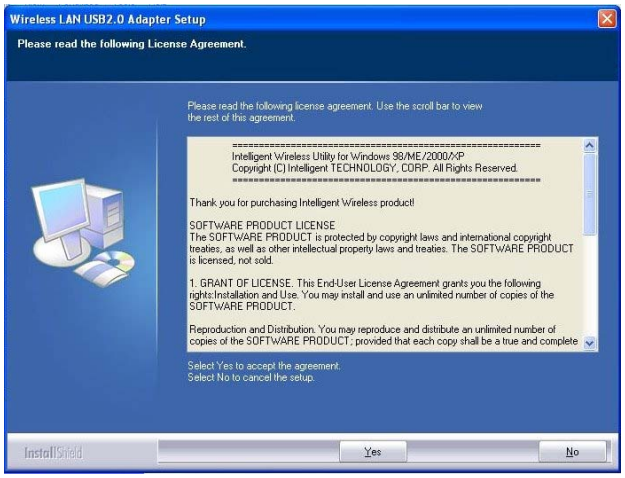
h. Double click the folder “POS-8000””Driver & Utility” “Peripherals” and “WiFi WUG2700_V1.0”



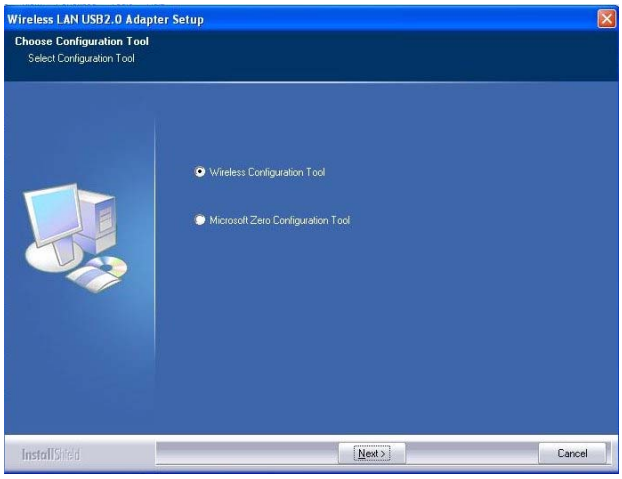
i. Click the “Setup.exe” file to start the installation



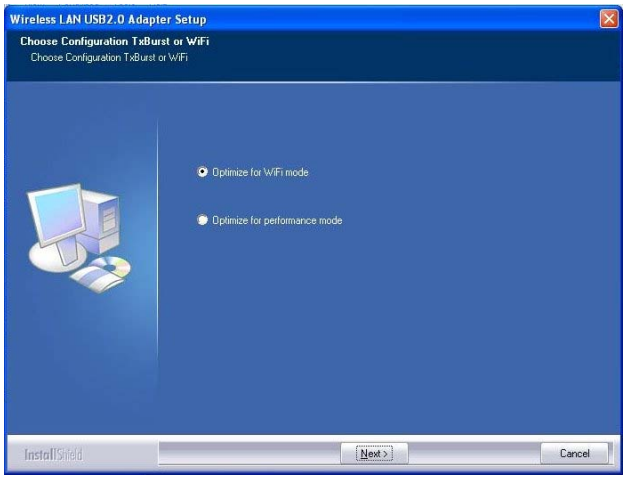
j. Click “Yes” to accept the terms on the agreement license window



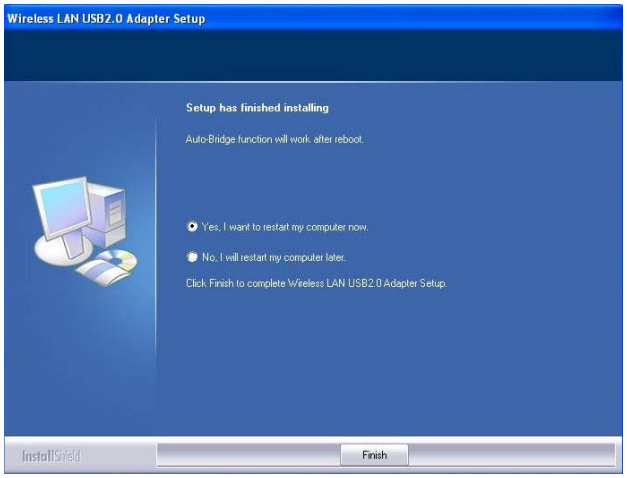
k. Select the “Wireless Configuration Tool” and click “Next”



l. Select “Optimize for WiFi mode and click “Next”

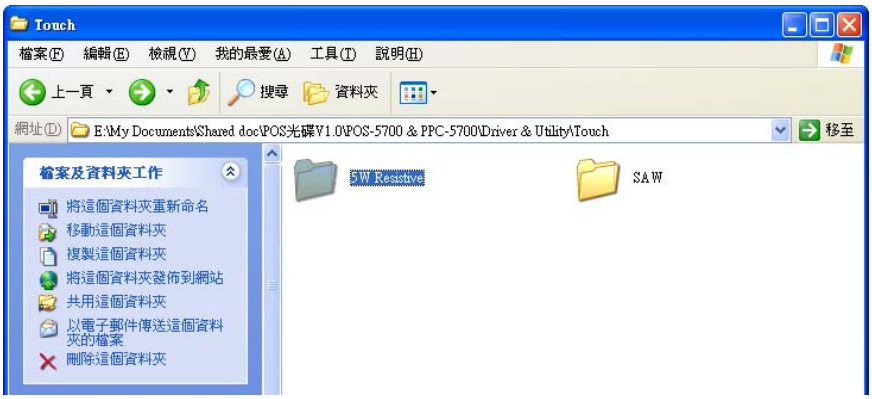


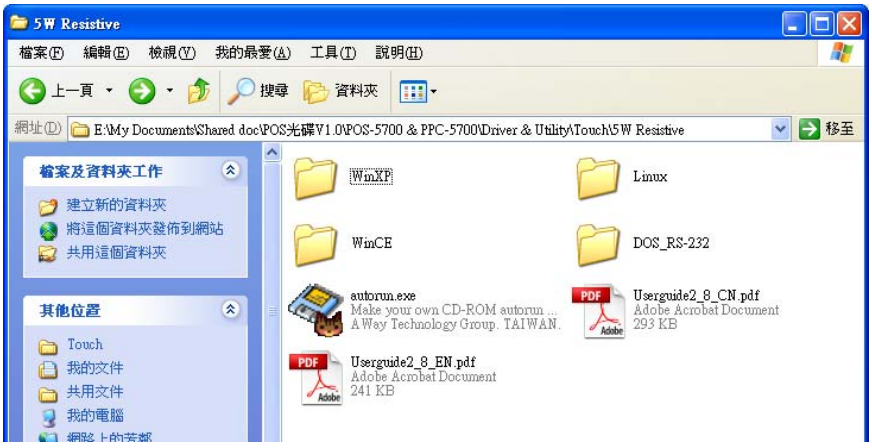
m.Select “Yes” and click “Finish” to restart the system and complete the WiFi setting



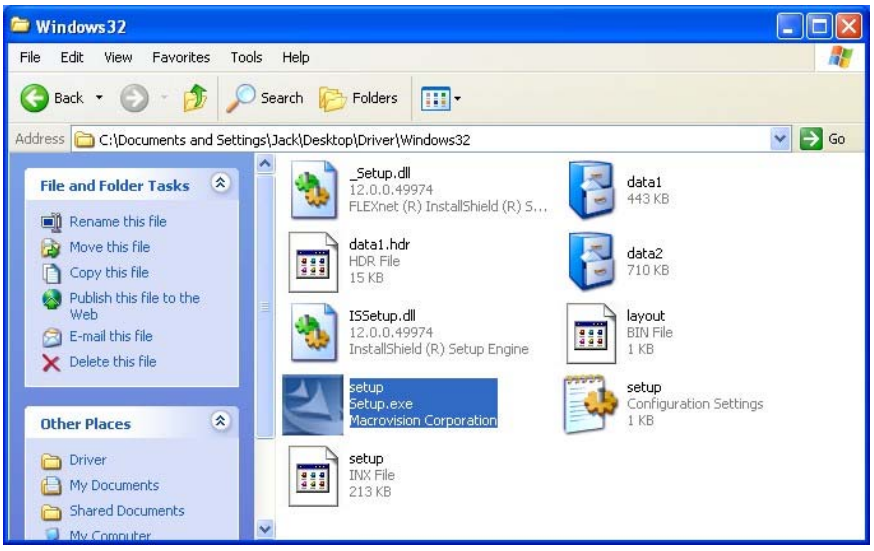
4.6 Install Touch Screen Driver

a. Double click the folder “Touch” and then double click the subfolder according to the touch type and operating system.

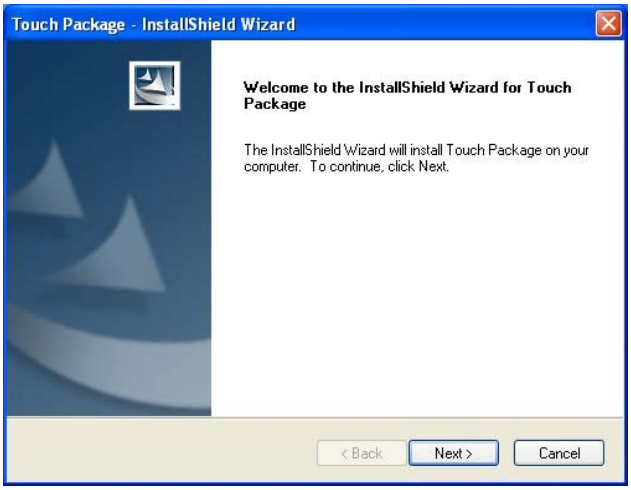




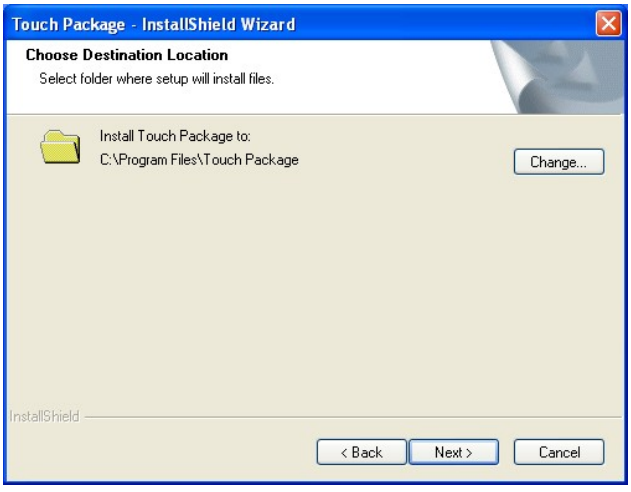
b. Double click the file “setup” to start the installation.



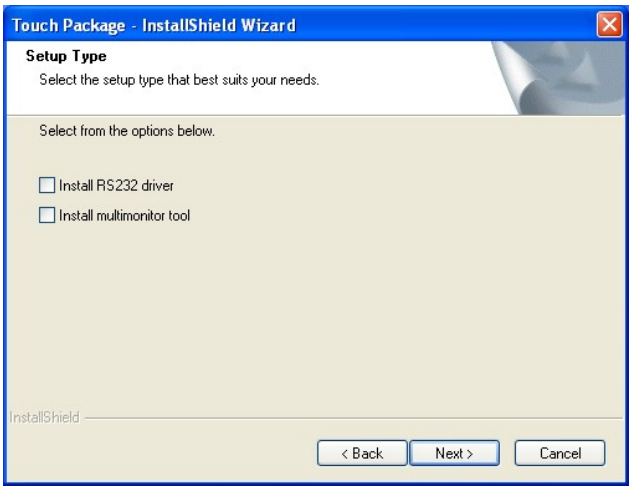
c. Click “Next” on the welcome window.



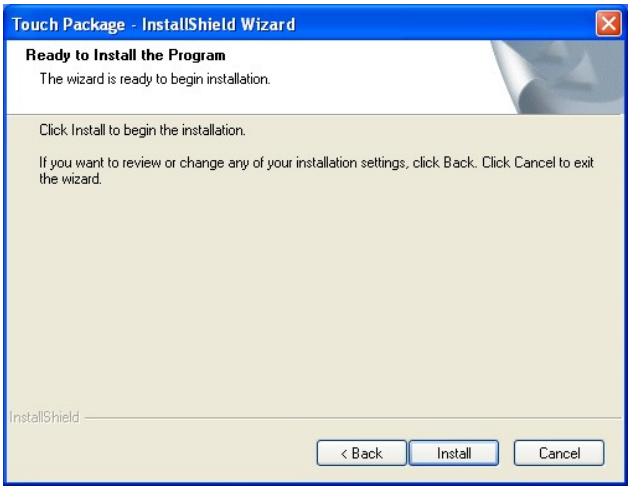
d. Select the destination folder and click “Next”.



e. Select the Setup type from “Install RS232 driver” or “multimonitor tool” and click “Next”.

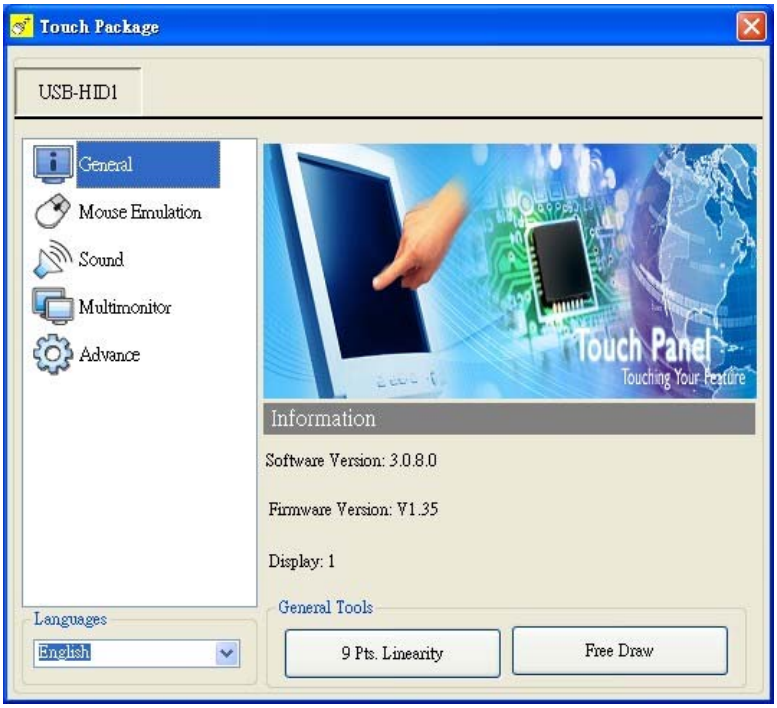


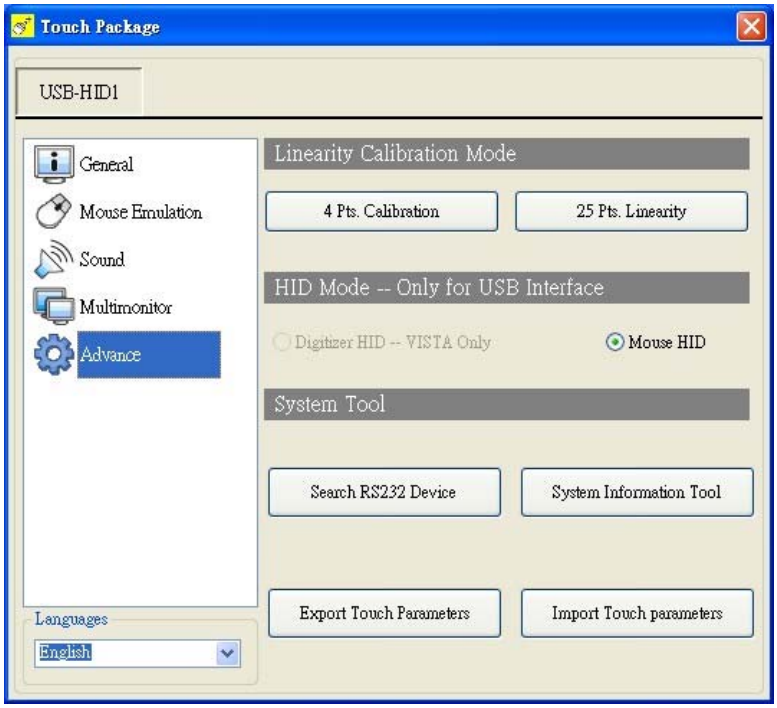
f. Click “Install” to start the installation.



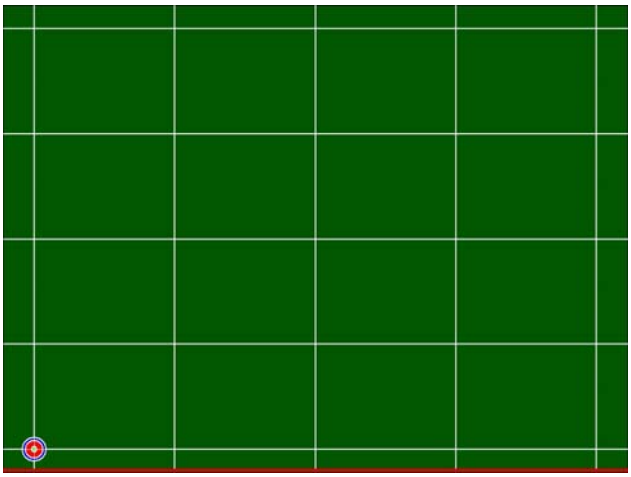
g. Click “Finish” to exit the setup and restart the system.

h. Execute All Programs >> Touch Package >> Touch Tool. Select “General” and then click “9 Pts. Linearity” to start the 9-point-calibration. Or select “Advance” to select “4 Pts. calibration” or “25 Pts. Linearity”. The more points are calibrated, the more accurate the calibration will be.

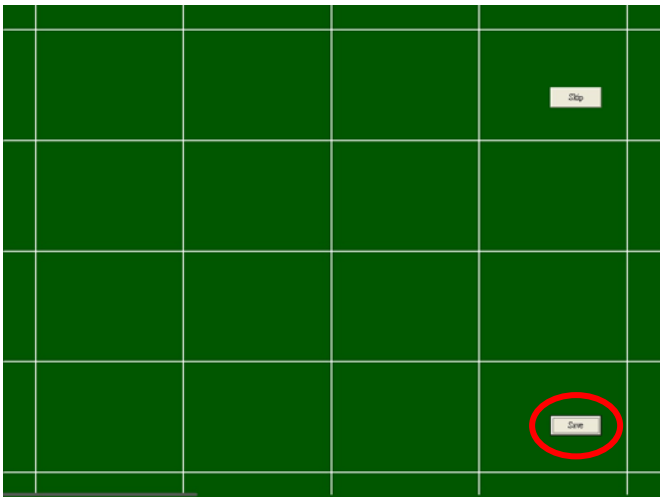




i. Touch the center of the red dot on the screen with a finger till it disappears. The dot will appear 4/9/25 times in turn on the screen.



j. After the calibration is done, press the “save” button to save.



Note.

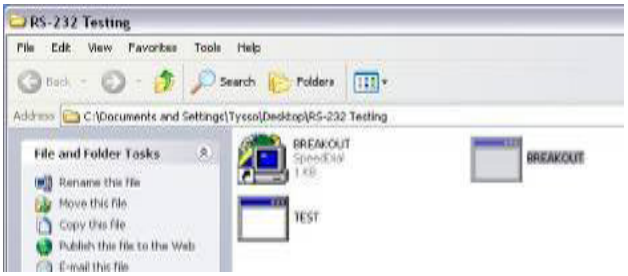
Refer to the file “Userguide2_8” for more information on the setting of the touch package.

5. Peripherals Testing

If the ATLAS-350 is equipped with magnetic stripe card reader,customer display, or second display connected to a cash drawer, follow the steps below to test the function.

5.1 Magnetic Stripe Card Reader

a. Open the folder “Peripherals” “MSR” and double click the file “BREAKOUT.EXE”.

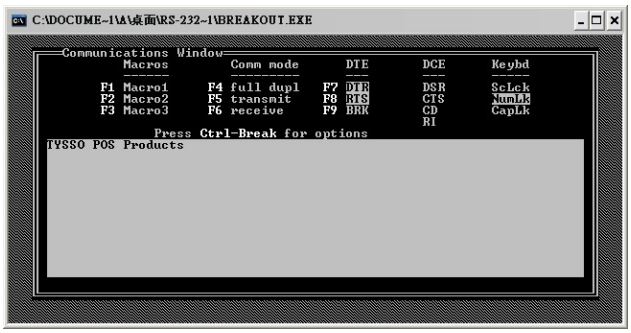


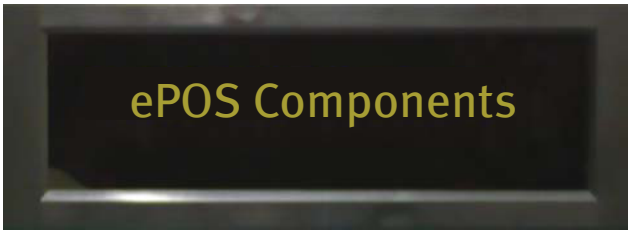
b. After the testing window pops up, slide a magnetic stripe card and its information will show on the window.

5.2 Customer Display

a. Open the folder “Peripherals” “Customer Display” and double click the file “BREAKOUT.”

b. Enter any keys on the window and the typed words will appear on the customer display.





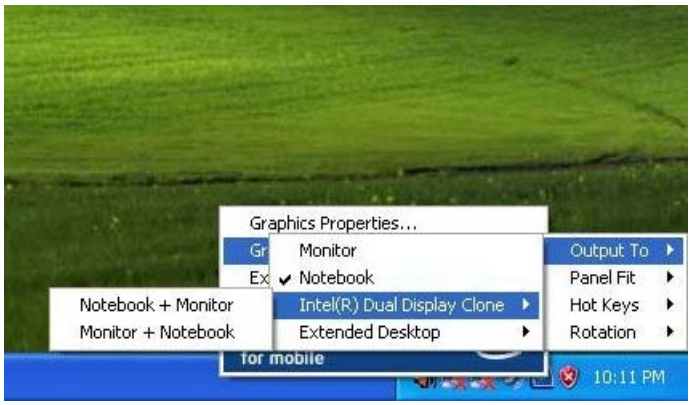
5.3 Second Display

a. Select “Intel ® Graphics Media Accelerator Driver for mobile” from the toolbar

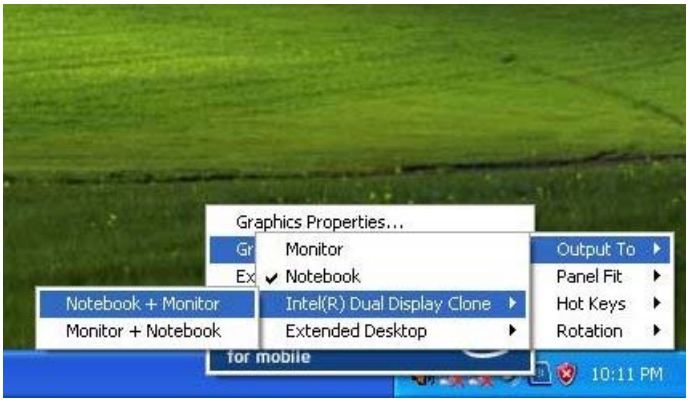
b. Select “Graphic Options”

c. Select “Output TO” and tick “Notebook”

d. Select “Intel® Dual Display Clone and 2 options will appear

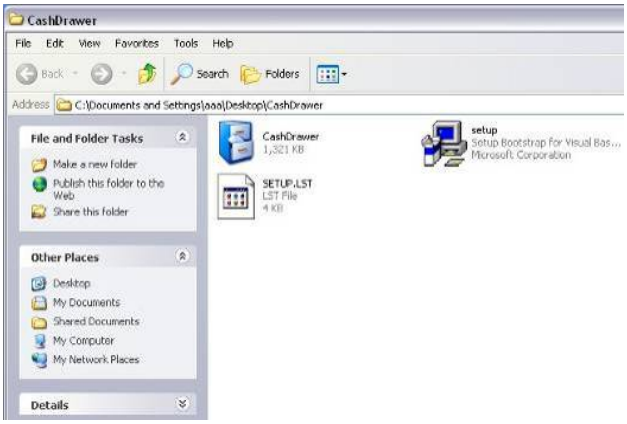


e. Select “Note+ Monitor”, and both of the main and the second display will be turned on



5.4 Cash Drawer

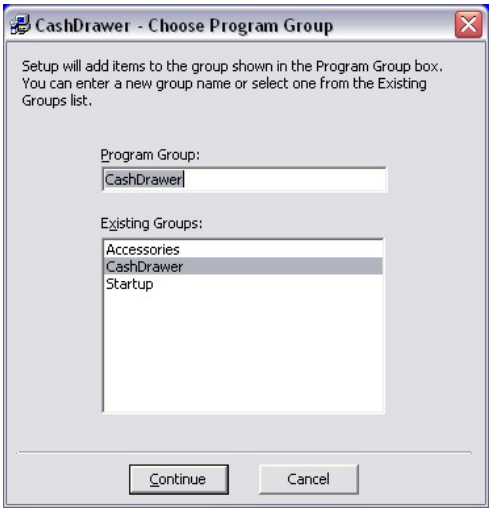
a. Open the folder “Peripherals” “Cash Drawer” and double click the file “setup.exe”



b. Click “OK” on the welcome window.

c. Select the destination folder and click the icon to start the installation.

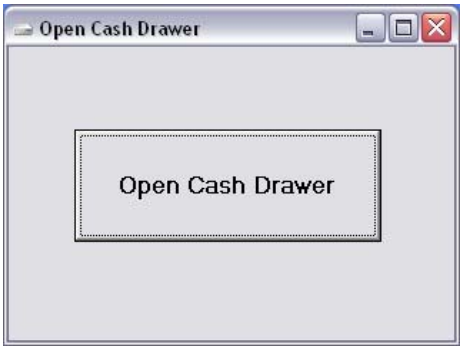
d. Select an existed group name or enter a new one. Click “Continue.”



e. Click “OK” to finish the installation.

f. Execute **Start** >> **All Programs** >> **Cash Drawer** >> **CashDrawer** to open the program.

g. Click “Open Cash Drawer” on the window, and the connected cash drawer will open.



Note.

The above cash drawer driver is for testing only. If editing AP Open drawer is required, please refer to the following command set.

Cash Drawer Controller Register

Register Location: I/O port 280h

Attribute: Read/Write

Size: 8 bit

Bit 0~3, 5~7: Reserved

Bit 4: Cash Drawer “DIO OUTPUT”, pin output control.

= 1: Open the Cash Drawer

= 0: Close the Cash Drawer

Control Command Example

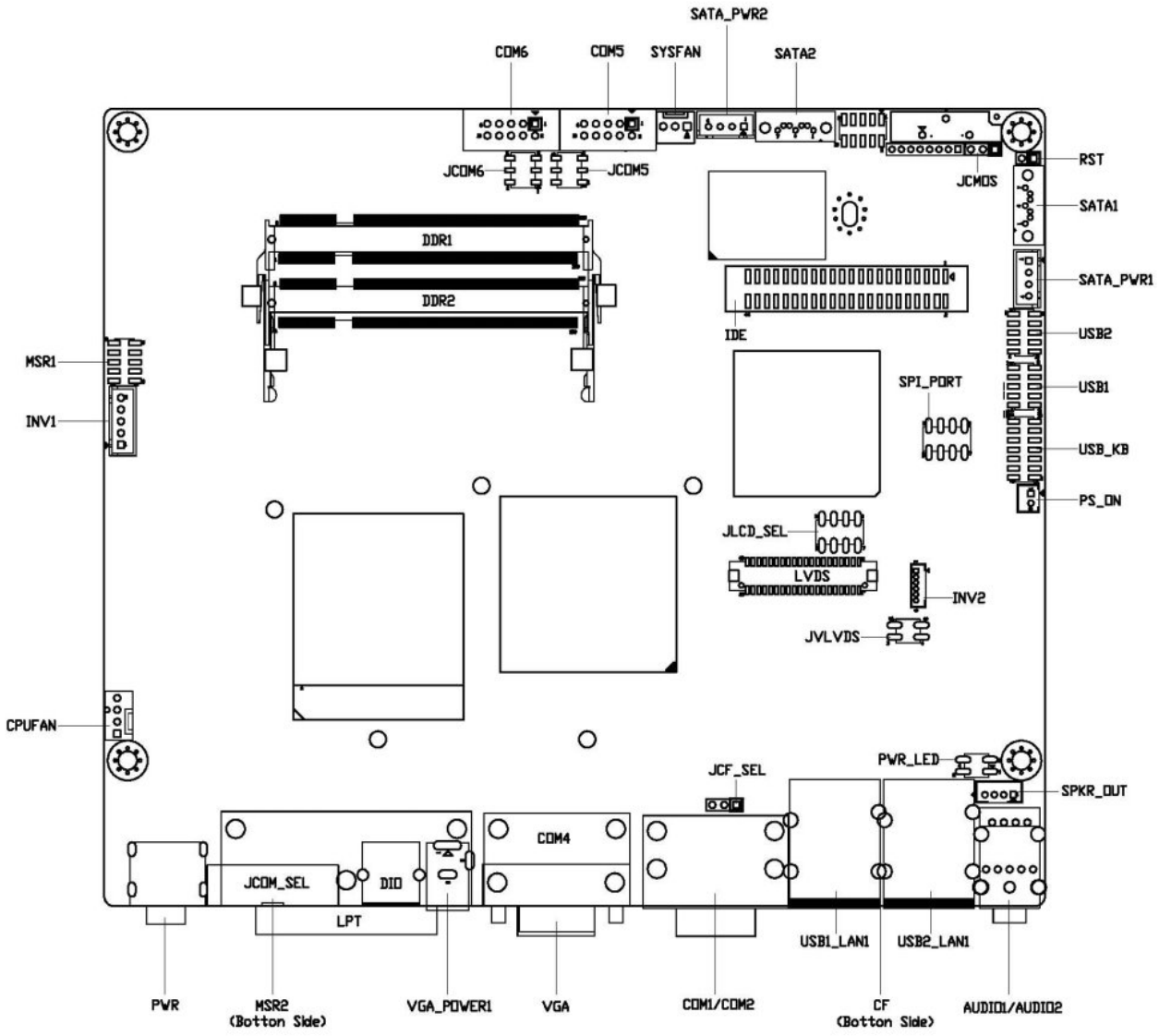
Run “Debug.EXE” under DOS or Windows98

Command	Description
O 280 10	Openning cash drawer
O 280 00	Allow to close cash drawer

- Set the I/O address 280 bit 4 = 1 to open the cash drawer by “DIO OUTPUT” pin control.
- Set the I/O address 280 bit 4 = 0 to close the cash drawer.

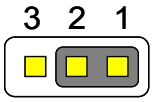
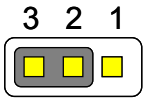
6. Jumper Settings & Connectors

6.1 The Main Board Jumper Location

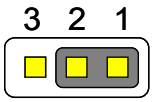
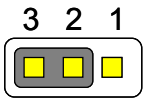


6.2 Jumper Settings

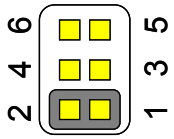
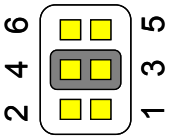
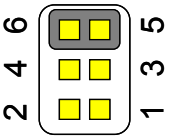
JCMOS：CMOS Clear

Pin No.	1-2	2-3
Function	Normal Operation (Default)	Clear CMOS Contents
Jumper Setting		

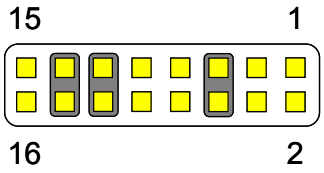
JCF_SEL：Compact Flash (Master / Slave) Select

Pin No.	1-2	2-3
Function	Master Mode	Slave Mode (Default)
Jumper Setting		

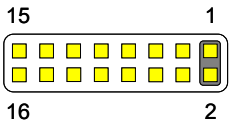
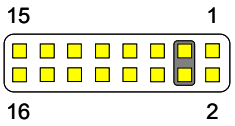
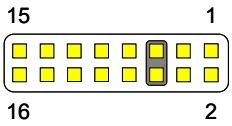
JCOM5 / JCOM6：COM5 / COM6 (5V/12V/RI) Select

Pin No.	1-2	3-4	5-6
Function	+5V	Modem Ring In (Default)	+12V
Jumper Setting			

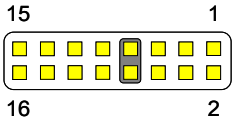
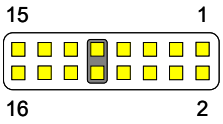
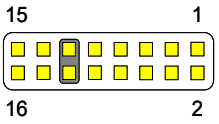
JCOM_SEL：COM1 / COM2 (5V/12V/RI) Select (1/4)

Pin No.	5-6, 11-12, 13-14
Function	COM1 (Ring In) ,COM2 (Ring In), DIO(+12V) (Default)
Jumper Setting	

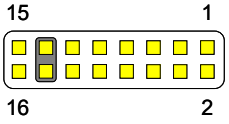
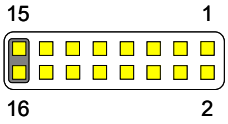
JCOM_SEL：COM1 (5V/12V/RI) Select (2/4)

Pin No.	1-2	3-4	5-6
Function	COM1 (+12V)	COM1 (+5V)	Modem Ring In (Default)
Jumper Setting			

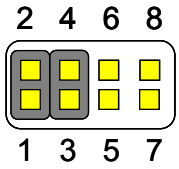
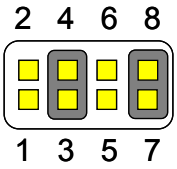
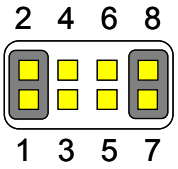
JCOM_SEL：COM2 (5V/12V/RI) Select (3/4)

Pin No.	7-8	9-10	11-12
Function	COM2 (+12V)	COM2 (+5V)	Modem Ring In (Default)
Jumper Setting			

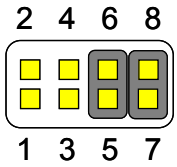
JCOM_SEL：DIO (12V/24V) Select (4/4)

Pin No.	13-14	15-16
Function	DIO (+12V) (Default)	DIO (+24V)
Jumper Setting		

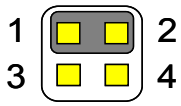
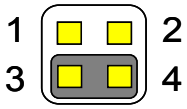
JLCD_SEL：LCD Panel Select (1/2)

Pin No.	1-2, 3-4	3-4, 7-8	1-2, 7-8
Function	800x600x18bit	1024x768x18bit	1024x768x24bit (Default)
Jumper Setting			

JLCD_SEL：LCD Panel Select (2/2)

Pin No.	5-6,7-8		
Function	1280x1024x24bit		
Jumper Setting			

JVLVDS：LCD Power (+3.3V / +5V) Select

Pin No.	1-2	3-4
Function	LCD Power +3.3V (Default)	LCD Power +5V
Jumper Setting		

6.3 Connectors

Connector	Function	Note
AUDIO1	Line-in, Line-out, MIC-InConnector	
SPKR_OUT	6W amplifier Line-out Connector	
CPUFAN	CPUFAN 4-pin Connector	
CF	Cimpat Flash Connector	
COM1,COM4	Serial port Connector	
COM5,COM6	Serial port Connector with Box-header	
DDR1,DDR2	DDR SO-DIMM	
IDE	IDE Connector(Supply +5V)	
INV1, INV2	LCD inverter Connector	
KB	PS2 Keyboard MINI DIN Connector	
LPT	Printer Connector	
LVDS	LVDS Connector	
MSR1, MSR2	MSR Connector	
PS_ON	Power Button	
PWR	DC Jack Power Connector	
RST	System Reset Connector	
SATA1,SATA2	SATA connector	
SATA_PWR1, SATA_PWR2	SATA Power Connector	
SYSFAN	System FAN connector	
USB1,USB2	USB Connector with Pin-header	
USB_KB	USB with PS2 Mouse Pin-header	
USB1_LAN1, USB2_LAN1	USBx2 and RJ45 Connector	
VGA	VGA Connector	
USB_KB	USBx2 and PS2 KB/MS Connector	

6.4 Internal pin define

COM5, COM6：Serial Port with Pin-header (2.0 mm)

Pin No.	Signal	Pin No.	Signal
1	DCD	2	DSR
3	RXD	4	RTS
5	TXD	6	CTS
7	DTR	8	RI/+5V/+12V
9	Ground	10	NC

CPUFAN：4Pin FAN Connector

Pin No.	Signal
1	Ground
2	Fan Power (+12V)
3	Speed Sense
4	Control

IDE：HDD IDE Connector with Box-header (2.0mm)

Pin No.	Signal	Pin No.	Signal
1	RESET#	2	Ground
3	Data 7	4	Data 8
5	Data 6	6	Data 9
7	Data 5	8	Data 10
9	Data 4	10	Data 11
11	Data 3	12	Data 12
13	Data 2	14	Data 13
15	Data 1	16	Data 14
17	Data 0	18	Data 15
19	Ground	20	NC
21	DMA REQ	22	Ground
23	IOW#	24	Ground
25	IOR#	26	Ground
27	IOCHRDY	28	Pull-down
29	DMA ACK#	30	Ground
31	INT REQ	32	NC
33	SA1	34	P66DETECT
35	SA0	36	SA2

37	HDC CS1#	38	HDC CS3#
39	HDD Active#	40	Ground
41	+5V	42	+5V
43	Ground	44	NC

INV1：Inverter Connector with Box header (2.50 mm)

Pin No.	Signal
1	+12V
2	Ground
3	Inverter Enable
4	Inverter Brightness Control
5	Ground

INV2：Inverter Connector with Box header (1.25 mm)

Pin No.	Signal
1	+12V
2	+12V
3	Ground
4	Inverter Enable
5	Inverter Brightness Control
6	SW_PWR#

LVDS：LVDS Panel Signal with Wafer Connector (1.25 mm)

Pin No.	Signal	Pin No.	Signal
1	LVDS Power	2	LVDS Power
3	LVDS Power	4	LVDS Power
5	Ground	6	Ground
7	Ground	8	Ground
9	LA_DATA0P	10	LB_DATA0P
11	LA_DATA0N	12	LB_DATA0N
13	Ground	14	Ground
15	LA_DATA1P	16	LB_DATA1P
17	LA_DATA1N	18	LB_DATA1N
19	Ground	20	Ground
21	LA_DATA2P	22	LB_DATA2P
23	LA_DATA2N	24	LB_DATA2N
25	Ground	26	Ground
27	LA_CLKP	28	LB_CLKP

29	LA_CLKN	30	LB_CLKN
31	Ground	32	Ground
33	LA_DATA3P	34	LB_DATA3P
35	LA_DATA3N	36	LB_DATA3N
37	Ground	38	Ground
39	NC	40	NC

Note：LVDS Power = +5V or +3.3V (Default)

MSR1：External Keyboard Connector with Pin-header (2.0 mm)

Pin No.	Signal	Pin No.	Signal
1	+5V	2	Ground
3	KDAT_CON	4	KCLK_CON
5	KDAT_KBC	6	KCLK_KBC
7	COM3_TX	8	COM3_RX
9	KB_EN	10	Ground

MSR2：External Keyboard Connector with Pin-header (2.0 mm)

Pin No.	Signal	Pin No.	Signal
1	Ground	2	KDAT_KBC
3	KDAT_CON	4	KCLK_KBC
5	KCLK_CON	6	+5V
7	KB_EN	8	Ground

PS_ON：Power Button with Pin-header (2.0 mm)

Pin No.	Signal
1	SW_PWR#
2	Ground

PWR：DC Jack

Pin No.	Signal
1	Ground
2	Ground
3	+12V
4	+12V

PWR_LED：LED Indicator with Pin-header

Pin No.	Signal
1	Power LED- (Ground)
2	Power LED+ (+5V, 470 Ohm)
3	HDD LED-
4	HDD LED+ (+5V, 470 Ohm)

RST：System Reset with Pin-header

Pin No.	Signal
1	Ground
2	Reset

SATA_PWR1 / SATA_PWR2：SATA Power Connector with Box-header 2.0 mm)

Pin No.	Signal
1	+12V
2	Ground
3	Ground
4	+5V

SPKR_OUT：Audio Amplifier Output with Pin-header (2.0 mm)

Pin No.	Signal
1	Amplifier-Out Left
2	Ground
3	Ground
4	Amplifier-Out Right

SYSFAN：System FAN 3 Pin Connector

Pin No.	Signal
1	Ground
2	Fan Power (+12V)
3	Speed Sense

USB1：USB6 Port Connector with Pin-header (2.0mm)

Pin No.	Signal	Pin No.	Signal
1	NC	2	NC
3	USB Ground	4	NC
5	USB DATA6+	6	NC
7	USB DATA6-	8	USB Ground
9	USB Power (+5V)	10	NC

USB2：USB7 Port Connector with Pin-header (2.0mm)

Pin No.	Signal	Pin No.	Signal
1	NC	2	NC
3	USB Ground	4	NC
5	USB DATA7+	6	NC
7	USB DATA7-	8	USB Ground
9	USB Power (+5V)	10	NC

USB_KB：USB4/5 Port and PS2 KB/MS Connector with Pin-header (2.0mm)

Pin No.	Signal	Pin No.	Signal
1	USB Power (+5V)	2	Ground
3	USB DATA4-	4	USB DATA5+
5	USB DATA4+	6	USB DATA5-
7	Ground	8	USB Power (+5V)
9	PS2 Power (+5V)	10	MDAT_CON
11	KDAT_CON	12	MCLK_CON
13	KCLK_CON	14	Ground