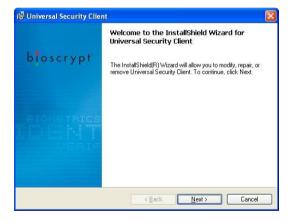
About Fingerprint Identification (Optional, for 87-Key Series Only)

You can logon your computer with a touch of your finger. The fingerprint sensor can determine if the impressions are from the same finger as you completed fingerprint enrollment. It is a break-through in security and convenience for the users. Before using this tool, please follow the ways below to install the utility (Universal Security Client) firstly.

Installing Universal Security Client

Insert the Driver CD into your CD/DVD-ROM drive and install Aimgene FingerPrint Driver/Utility firstly, please follow the following installing steps:

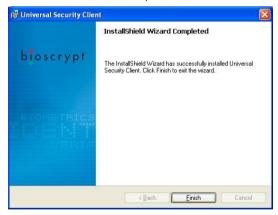
1. USC installing screen appears, press "Next" to continue installation.



2. Click "Install" to install USC program.



3. Click "Finish" as the installation is completed.



4. Click "Yes" to restart your system for the configuration changes.



Configurating Universal Security Client

1. Re-boot you computer and the following USC (Universal Security Client) will show on the taskbar (The icon means you are not login to USC yet).



2. Click this USC icon and it will bring a list as below, please select "Log On" this option.



3. Then the following screen appears, click "Next" to continue USC configuration.



4. Please enter your user name and credentials in the following field, then select the left fingerprint identification icon to use additional logon methods. Click "Next" to continue the configuration process.



5. Enter the password to the empty field and click "Finish".



6. Then Authentication Methods screen appears, click "Next" to register credentials for fingerprint authentication method.



7. To start enrollment, swipe your finger over the fingerprint sensor four times. (The default setting is forefinger.)



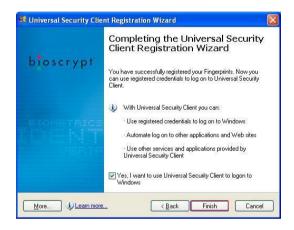
8. Then the color of the forefinger will change to green as you completed the previous fingerprint enrollment. Then click "Next".



9. It is recommended that you register at least two fingerprints, if you want to proceed without additional fingerprint registration, click "Yes" to continue.



10. Click "Finish" as USC registration is completed.



How to Use Fingerprint Identification

As the previous fingerprint registration steps are completed, let's restart the computer and try this function. After turning on your computer, you can see Window XP desktop; then the following screen will appears to ask you to enter your user name and credentials. There is one dialogue pop up below to advise you that the fingerprint sensor is ready, and you need to swipe your finger over the fingerprint sensor to logon. Click "Next" to continue the process.



You must present your fingerprints to gain access to a file, application, or computer system. So you need to verify your finger. Clink "Next" to continue and follow the steps to finish the process.



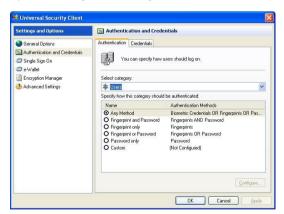
After the process are completed, the screen will return back to the Window XP desktop, we can see USC icon has been changed as below. This means your fingerprint registration is completed



As you click this USC icon, you will bring up one list of options for My Identity. You can select any option and change its setting.



For example, if you select "Settings and Options", the following screen will appears and you can change each setting in the left column.



About Hard Disk Drive

Your Notebook is equipped with a 2.5-inch hard disk drive. The hard disk drive is a storage device with much higher speed and larger capacity than other storage devices, such as the floppy disk drive and optical storage devices. Therefore, it is usually used to install the operating system and software applications.



- To avoid unexpected data loss in your system, please backup your critical files regularly.
- Do not turn off the Notebook when the Hard Disk In-use LED is on.
- Do not remove or install the hard disk drive when the Notebook is turned on. The replacement of hard disk drive should be done by an authorized retailer or service representative.

Using the Optical Storage

Your Notebook is equipped with an optical storage device, which is known as the DVD Combo/DVD dual/Super Multi/DVD Dual Layer/Light Scripe Drive. The actual device installed in your Notebook depends on the model you purchased.

- n DVD Combo Drive: A cost-effective solution that can work both as a DVD-ROM drive and a CD-RW drive.
- n DVD Dual Drive: A dual format recorder, allows you to record both the -R/RW and +R/RW formats.
- n Super Multi Drive: A multi format recorder, allows you to record the -R/RW, +R/RW, -RAM, CDR and CD-RW formats.
- n DVD Dual Layer: It provides two individual recordable layers on a single sided DVD disc. To take advantage of dual layer technology when recording DVDs, you must use a dual layer enabled DVD burner and dual layer DVD media.
- n Light Scripe Drive: Allows users to have brief texts curved on the obverse side of the disks with the laser read/write head of the Optical Device Drive.

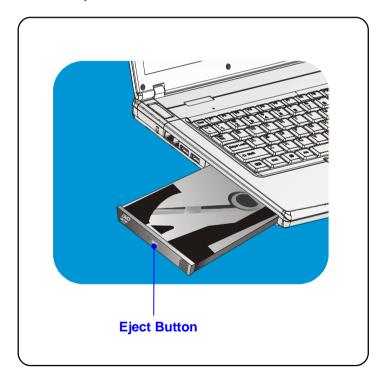


- The optical storage devices are classified as a Class 1 Laser products. Use of controls or adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.
- 2. Do not touch the lens inside the drive.

Inserting the CD

The following instruction describes the general procedure when operating the optical storage device, including the DVD-ROM drive.

- 1. Confirm that the Notebook is turned on.
- Press the Eject Button on the drive's panel and the CD tray will slide out partially. Then, gently pull the tray out until fully extended.
- Place your CD in the tray with its label facing up. Slightly press the center of the CD to secure it into place.
- 4. Push the tray back into the drive.

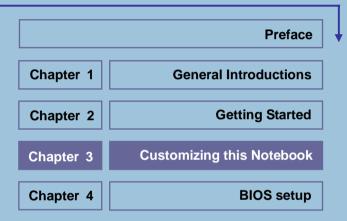


Removing the CD

- Press the Eject Button on the drive's panel and the CD tray will slide out partially. Then, gently pull the tray out until fully extended.
- 2. Hold the CD by its edge with your fingers and lift it up from the tray.
- 3. Push the tray back into the drive.



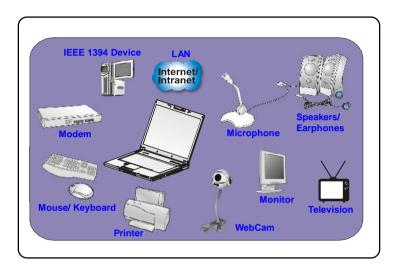
- Confirm that the CD is placed correctly and securely in the tray before closing the tray.
- 2. Do not leave the CD tray open.





Connecting the External Devices

The I/O (input/output) ports on the Notebook allow you to connect peripheral devices.



Connecting the Peripheral Devices

Connecting the Mouse

You can connect a mouse to your Notebook through the PS/2 port or USB port. If there is no PS/2 port available on your Notebook, but you only have mouse of PS/2 connector, please purchase a PS/2-USB connector first. To connect the mouse:

- 1. Turn on the Notebook and install the mouse driver.
- 2. Connect your mouse to the Notebook.
- 3. The Notebook may auto detect your mouse driver and enable the mouse function. If there is no detection of you mouse you can manually enable the mouse by going to Start Menu à Control Panel à Add Hardware to add the new device.

Connecting the Keyboard

You can connect a keyboard to your Notebook through the PS/2 port or USB port. If there is no PS/2 port available on your Notebook, but you only have mouse of PS/2 connector, please purchase a PS/2-USB connector first. To connect the keyboard:

- 1. Turn on the Notebook and install the keyboard driver.
- 2. Connect your keyboard to the Notebook.
- 3. The Notebook may auto detect your keyboard driver and enable the keyboard function. If there is no detection of you keyboard you can manually enable the keyboard by going to Start Menu à Control Panel à Add Hardware to add the new device.

Connecting the WebCam

You can connect a WebCam to your Notebook through the USB port to connect the WebCam:

- 1. Turn on the Notebook and install the WebCam driver.
- 2. Connect your WebCam to the Notebook.
- 3. The Notebook may auto detect your WebCam driver and enable the WebCam function. If there is no detection of you WebCam you can manually enable the WebCam by going to Start Menu à Control Panel à Add Hardware to add the new device.

Connecting the Printer

If your printer has a USB interface, you can then use the USB port on the Notebook to connect the printer. The following instruction describes the general procedure to connect a printer:

- 1. Turn off the Notebook.
- Connect one end of the printer cable to the Notebook's USB port and the other end to the printer.
- 3. Connect the power cord and turn on the printer.
- Turn on the Notebook and the system will detect a new device. Install the required driver.

For further instructions, please refer to your printer's manual.

Connecting the External Monitor or TV

You can connect an external monitor to your Notebook through the DVI-I port for a larger view with higher resolution. To connect the monitor:

- 1. Make sure that the Notebook is turned off.
- 2. Plug the monitor's D-type connector into the Notebook's VGA port.
- 3. Connect the monitor's power cord and turn on the monitor.
- 4. Turn on the Notebook and the monitor should respond by default. If not, you can switch the display mode by pressing [Fn]+[F2]. Alternately, you can change the display mode by configuring the settings in Display Properties of Windows operating system.

Connecting the IEEE 1394 devices

The IEEE 1394 port of your Notebook is a next-generation serial bus that features a high-speed transfer rate and the connection of up to 63 devices, allowing you to connect many high-end peripheral devices and consumer electronic appliances, such as the DV (digital video camera). The IEEE 1394 standard interface supports "plug-and-play" technology, so that you can connect and remove the IEEE 1394 devices without turning off the Notebook.

To connect the IEEE 1394 device, simply connect the cable of the device to the IEEE 1394 port of your Notebook.

Connecting the Communication Devices

Using the LAN

The RJ-45 connector of the Notebook allows you to connect the LAN (local area network) devices, such as a hub, switch and gateway, to build a network connection.

For more instructions or detailed steps on connecting to the LAN, please ask your MIS staff or network manager for help.

Using the Modem

The built-in 56Kbps fax/data modem allows you to use a telephone line to communicate with others or to dial-up to connect the Internet.

For more instructions or detailed steps on dialing-up through the modem, please consult your MIS staff or Internet service provider (ISP) for help.



- To reduce the risk of fire, use only No. 26 AWG or larger telecommunication lone cord
- You are strongly recommended to install the modem driver included in the software CD of your Notebook to take full advantage of the modem feature.

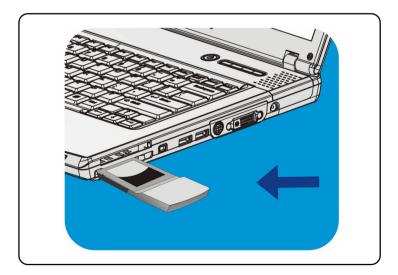
PC Card Installation

The PC card slot of your Notebook allows you to install comprehensive Type-II PC cards that support various functions for your necessary, including the LAN/WLAN card, modem card and memory card.

The following instruction provides you with a basic installation for the PC card, including how to install and remove it. For more information, please refer to the manual of your PC card.

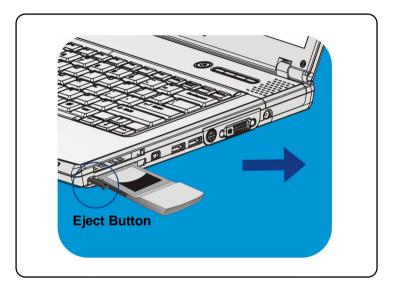
Installing the PC card

- Locate the PC card slot on your notebook Notebook. If there is the dummy card in the slot, remove it first.
- Insert the PC card into the slot (usually with its label facing up) and push it until it is firmly seated.



Removing the PC card

- 1. Press the Eject Button to make it stretch out.
- 2. Push the Eject Button and the PC card will slide out. Pull it out of the slot.
- 3. Reattach the dummy card back to the slot.





- Do not hold the "golden finger" when installing the PC card; otherwise, it may cause interference or damage to the PC card.
- Before removing the PC card, you should stop the device in Windows operating system.

Express Card Installation

This computer provides an Express Card slot. The new Express Card interface is smaller and faster than PC Card interface. The Express Card technology takes advantage of the scalable, high-bandwidth serial PCI Express and USB 2.0 interfaces.

The following instruction provides you with a basic installation for the Express Card, including how to install and remove it. For more information, please refer to the manual of your Express Card.

Installing the Express Card

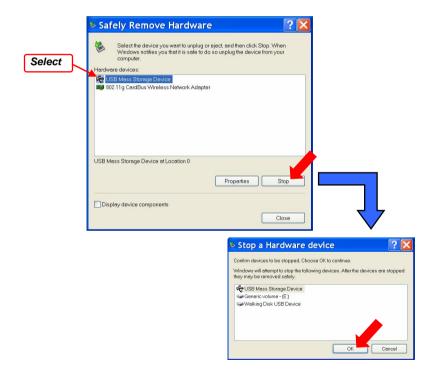
- Locate the Express Card slot on your notebook. If there is the dummy card in the slot, remove it first.
- Insert the Express Card into the slot (usually with its label facing up) and push it until it is firmly seated.

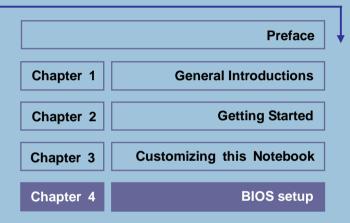
Removing the Express Card

- 1. Press the edge of the Express card to make the card stretch out a bit.
- 2. Pull the Express card out of the slot.
- 3. Reattach the dummy card back to the slot.

Safely Remove Hardware

If you connect any peripheral device to your system, the **Safely Remove** Hardware icon () will appear on the taskbar. Double-click the icon to bring up the Safely Remove Hardware dialog box. You can see all connected peripheral devices here. If you want to remove any of the devices, move the cursor to the device and click **Stop**.







About BIOS Setup

When to Use BIOS Setup?

You may need to run the BIOS Setup when:

- w An error message appears on the screen during the system booting up and requests you to run SETUP.
- w You want to change the default settings for customized features.
- w You want to reload the default BIOS settings.

How to Run BIOS Setup?

To run the BIOS Setup Utility, turn on the Notebook and press the [Del] key during the POST procedure.

If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and ON, or simultaneously pressing [Ctrl]+[Alt]+[Delete] keys to restart.



The screen snaps and setting options in this chapter are for your references only. The actual setting screens and options on your Notebook may be different because of BIOS update.

Control Keys

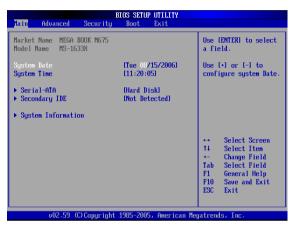
You can use only the keyboard to control the cursor in the BIOS Setup Utility.

+	Press left arrow to select one menu title.
-	Press right arrow to select one menu title.
T .	Press up arrow to select one item under the menu title.
1	Press down arrow to select one item under the menu title.
♦ Shift =	Increase the setting value or make changes.
	Decrease the setting value or make changes.
← J Enter	 Open the selected item to change setting options. Bring up a sub-menu when available.
Tab Tab	In some items, press this key to change setting field.
FI	Bring up help screen providing the information of control keys.
Esc	 Exit the BIOS Setup Utility. Return to the previous screen in a sub-menu.

BIOS Setup Menu

Once you enter the BIOS Setup Utility, the Main menu will appear on the screen.

The Main menu displays the system information, including the basic configuration.



Main menu

Show System Overview information about BIOS version, CPU features, Memory size and setting of System Time and Date.

Advanced menu

Configure IDE and USB settings.

Boot menu

Set up Boot Type and Boot Sequence.

Security menu

Install or clear Supervisor's and User's Password settings.

Exit menu

Choose decided status before leaving the BIOS menu.

Main menu



System Overview

System Overview will show you BIOS version and other information about its build date and update notes. Following is CPU's information about its Type and Speed.

System Time

This item allows you to set the system time. The system clock will go on no matter you shut down the PC or get into sleep mode. The set format is [hour:minute:second].

System Date

This item allows you to set the system date. The date format is [day:month:date:year].

Day Day of the week, from Sun to Sat, which is determined by

BIOS (read-only).

Month The month from 01 (January) to 12 (December).

Date The date from 01 to 31.

Year The year can be adjusted by users.

Secondary IDE

The item displays the types of the secondary IDE devices installed in the Notebook. Press [Enter] to bring up a window showing the detailed information of the device, including the device name, vendor, LBA mode, PIO mode and more.

System Information

This item indicates the information of firmware, processor, and system memory.

Advanced menu



Advanced Settings

PowerNow

This item allows you to enable or disable AMD PowerNow technology. When set to Enabled, the system always operates in a conserve power mode. If you want optimize the processor, set this item to Disabled, so that the processor's speed will vary depending on the use of your operating system and applications. Default setting is set to **Enabled**.

PCI Latency Timer

Value in units of PCI clocks for PCI device latency timer register.

Legacy USB Support

If you want to use USB device, like mouse, keyboard, portable disk, in DOS system or boot your system by USB device, you should enable this function by selecting *Enabled*.

Boot menu



Boot Settings Configuration

Configure settings during system boot.

Boot Device Priority --1st, 2nd, and 3rd Boot Device

The three items allow you to set the sequence of boot devices where BIOS attempts to load the disk operating system.

Security menu



Security Settings

Change Supervisor/User Password

When you select the function, a message box will appear on the screen as below:

Enter New Password

Type the password *you* want, up to six characters in length and press [Enter]. The password typed now will replace any previously set password from CMOS memory. You may also press [ESC] to abort the selection and not enter a password.

When the Supervisor Password is set, the new item **User Access Level** and **Password Check** will be added in the menu. You can make further settings of access right in the **User Access Level** item. Setting options: **No Access, View Only, Limited** and **Full Access**. The Password Check item is used to specify the type of BIOS password protection that is implemented. Settings are described below:

Setup	The password prompt appears only when end users try	
	to run Setup.	
Always	A password prompt appears every time when the	
	Notebook is powered on or when end users try to run	
	Setup.	

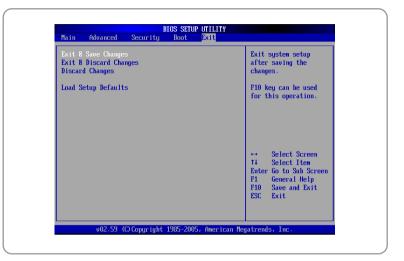
To clear a set password, just press [Enter] when you are prompted to enter the password. A message box will show up confirming the password will be disabled. Once the password is disabled, the system will boot and you can enter Setup without entering any password.

info

About Supervisor Password and User Password

Supervisor Password allows the user to enter and change the settings of the setup menu; User Password only allows the user to enter the setup menu, but do not have the right to make changes.

Exit menu



Exit & Save Changes

Save the changes you have made and exit the utility.

Exit & Discard Changes

Exit the utility without saving the changes you have made.

Discard Changes

Abandon your changes and reload the previous configuration before running the utility.

Load Setup Defaults

Select this item to load the default settings for optimal system performance.



FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

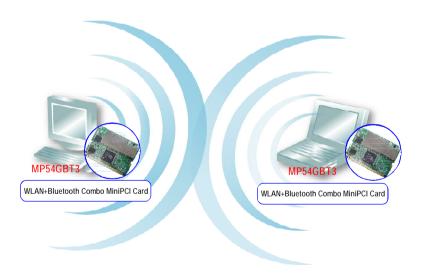
FCC RF Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment must not be co-located or operating in conjunction with any other antenna or transmitter.

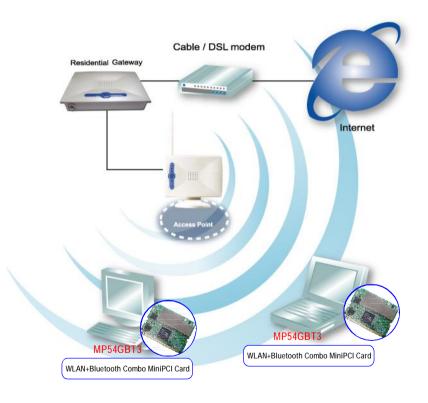
>>> 1.2 How MP54GBT3 Works

1.2.1 In WLAN Environment

Ad-hoc Mode: An Ad-hoc network is a local area network or other small network, especially one with wireless or temporary plug-in connections, in which some of the network devices are part of the network only for the duration of a communications session. Users in the network can share files, print to a shared printer, and access the Internet with a shared modem. In this kind of network, new devices can be quickly added; however, users can only communicate with other wireless LAN computers that are in this wireless LAN workgroup, and are within range.



■ Infrastructure Mode: The difference between Infrastructure network and Ad-hoc network is that the former one includes an Access Point. In an Infrastructure network, the Access Point can manage the bandwidth to maximize bandwidth utilization. Additionally, the Access Point enables users on a wireless LAN to access an existing wired network, allowing wireless users to take advantage of the wired networks resources, such as Internet, email, file transfer, and printer sharing. The scale and range of the Infrastructure networking are larger and wider than that of the Ad-hoc networking.



1.2.2 In Bluetooth Connection

The term "Bluetooth" refers to a worldwide standard for the wireless exchange of data between two devices. In order to exchange data, two Bluetooth devices must establish a connection. Before a connection is established, one device must request a connection with another. The second device accepts (or rejects) the connection. The originator of the request is known as the client. The device that accepts (or rejects) the request is known as the server. Many Bluetooth devices can act as both client and server. Every Bluetooth device that provides a service must be prepared to respond to a connection request. Bluetooth software is always running in the background on the server, ready to respond to connection requests.



Bluetooth-enabled Devices

>>> 1.3 Specifications

Hardware Specification	Form Factor	32-bit Type IIIB
	Operation voltage	3.3V
	Antenna Connector	Two antenna connectors
	Operating System	Microsoft® Windows® 98SE/ME/2000 /XP/XP-64bit
	Environmental	- Operating Temperature: $0 \sim 55^{\circ}\text{C}$ - Operating Humidity: $10 \sim 90\%$, non-condensing
	Dimensions (WxDxH)	59.75 x 44.6 x 3.5mm
WLAN Specification	Network Standard	IEEE 802.11; IEEE 802.11b/g
	Frequency Band	2.412-2.484 GHz
	Data Rate	IEEE 802.11g (auto-fallback): - OFDM: 54, 48, 36, 24, 18, 12, 9 and 6Mbps IEEE 802.11b (auto-fallback): - CCK: 11, 5.5 Mbps - DQPSK: 2 Mbps - DBPSK: 1 Mbps
	Media Access Control	CSMA/CA with ACK
	Transmission	DSSS (direct sequential spread spectrum)
	Network Architecture	Ad-Hoc Mode (Peer-to-Peer); Infrastructure Mode
	Antenna Type	Two antenna connectors support
	Power Consumption	TX peak: 310mA RX peak: 250mA Standby mode: 150mA

Channel	IEEE 802.11g: Ch. 1-11 – N. America Ch. 1-13 – Japan Ch. 1-13 – Europe ETSI Ch. 10-11 – Spain Ch. 10-13 – France IEEE 802.11b: Ch. 1-11 – N. America Ch. 1-13 – Japan Ch. 1-13 – Europe ETSI Ch. 10-11 – Spain Ch. 10-13 – France
Output Power	Output Power(Before Antenna) 11b: 17dBm+/-2 Max 11g: 14.5dBm+/-1 Max
Receiver Sensitivity (Average Value)	54 Mbps OFDM @ 10% PER = -65 dBm 48 Mbps OFDM @ 10% PER = -66 dBm 36 Mbps OFDM @ 10% PER = -70 dBm 24 Mbps OFDM @ 10% PER = -74 dBm 18 Mbps OFDM @ 10% PER = -77 dBm 12 Mbps OFDM @ 10% PER = -79 dBm 11 Mbps CCK @ 8% PER = -80 dBm 9 Mbps OFDM @ 10% PER = -81 dBm 6 Mbps OFDM @ 10% PER = -81 dBm 5.5 Mbps CCK @ 8% PER = -82 dBm 5.5 Mbps CCK @ 8% PER = -82 dBm 1 Mbps OPSK @ 8% PER = -83 dBm 1 Mbps BPSK @ 8% PER = -83 dBm

Bluetooth Specification	Network Standard	Bluetooth v2.0 (Class II) +EDR
	Frequency Band	2.4-2.483 GHz
	Data Rate	Up to 2.1Mbps
	Channel	79 sub-channels
	Transmission	FHSS (Frequency Hopping Spread Spectrum)
	Modulation	GFSK
	Antenna Type	One antenna connector support
	Power Consumption	66 mA (maximum, continuous TX)
	Max. Output Power	Up to 2dBm
	Max. Input Level	0dBm
	Receiver Sensitivity	-70dBm @ BER<0.1%
	Range	Up to 10 m
	Physical Links	Support ACL link
	Network Capabilities	Support piconet point-to-point and point-to multipoint connections
	Link Manager	3-slot Packets: Yes 5-slot Packets: Yes Slot Offset: Yes Timing Accuracy: Yes Switch: Yes Hold Mode: Yes Sniff Mode: Yes Test Mode: Yes Park Mode: Yes RSSI: Yes Power Control: Yes
		Authentication: Yes

Encryption: Yes

>>> 1.4 System Requirements



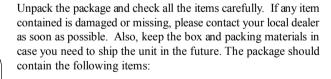




Before installing MP54GBT3, your PC should meet the following items:

- One desktop/notebook PC with an available MiniPCI slot.
- Windows® 98SE/ME/2000/XP/XP 64bit operating system.
- Minimum 5MB free disk space for installing the driver and utilities
- One CD-ROM drive, double speed or higher.

>>> 1.5 Package Contents

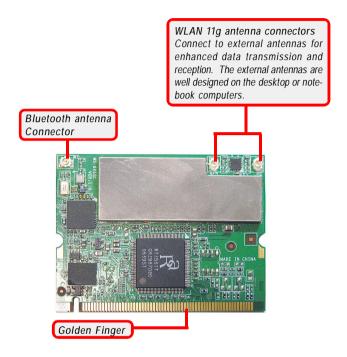






- One Wireless 11g + Bluetooth Combo MiniPCI Card.
- One Installation CD-ROM including drivers, utilities, and the manual files.

>>> 1.6 Product View



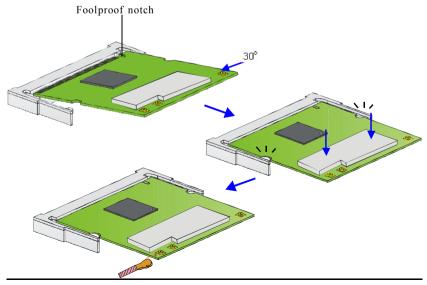


Hardware Installation

The following diagrams provide you a basic installation for your MP54GBT3. The instruction below is suitable for most computers with MiniPCI slot. For more information about the MiniPCI module, please refer to your computer's manual.

Q Installing MP54GBT3:

- Locate the MiniPCI slot on the mainboard.Place your MP54GBT3 over the MiniPCI slot (at an angle of 30 degrees). Then, gently insert it into the slot until the golden finger of the card gets fully inserted.
- Press down the card, and the retaining clips (on two sides of the slot) will lock onto the notches of the card.
- 3. Connect the attenna's cable to the connector on the card.





Software Installation

This chapter describes the procedures of installing the driver and utility. Follow the instruction step by step to finish the installation. If you use Windows® 98SE/ME, please prepare the Windows® Setup CD at hand before installing the driver; because the system will ask you to insert the Setup CD to copy files during the installation.

Please **NOTE** that the MP54GBT3 should be installed into your computer before installing the driver and utility. Then, the operating system will detect a new device and start to configure the new device. Click *Cancel* here to start installation from the InstallShield Wizard.



Click

Tip: The MP54GBT3 adapter should be installed into your PC before installing the driver and utility.



Insert the software CD into your CD-ROM drive, and the Setup program should launch automatically.

If the Autorun program doesn't launch automatically, click **Start** at the taskbar and select **Run...**. Type *E:\setup.exe* (where *E* is your CD-drive) in the Open box and click *OK* to launch the Setup program manually.

The main screen of Setup program will appear as below.





- Click the Install WLAN Driver button.
- 2. The welcome screen of InstallShield Wizard appears. Click Next
- 3. Read and accept the License Agreement; then, click Next.
- Click *Install* and the program will copy the necessary files to the system. The progress indicator shows the installing status.
- Click Finish when the WLAN driver installation is completed.



- Click the Install Bluetooth Driver button.
- The welcome screen of InstallShield Wizard appears. Click Next
- 3. Read and accept the License Agreement; then, click Next.
- Click Next to install the driver in the default destination folder.
- Click *Install* and the program will copy the necessary files to the system. The progress indicator shows the installing status.
- Click Finish when the bluetooth driver installation is completed.



Click the Exit button

The Wireless LAN icon and Bluetooth icon will appear in the status bar.

