2.1 Overview

This chapter provides guidelines on installing the device drivers for the built-in features of the M785. Most of the driver installation procedures mentioned here are only for Windows XP Windows 2000, and Windows Me. This chapter also includes procedures on how to upgrade major internal system components like CPU, memory, hard disk, and feature card modules.

2.2 Notebook Drivers and Utilities

The notebook requires several device drivers that you need to install and setup before you can fully operate the notebook. These are:

- SiS 650 VGA Driver Windows XP, Windows 2000, Windows Me
- Realtek PCI Audio controller Driver Windows XP, Windows 2000, Windows Me
- Alps Touch Pad Driver Windows XP, Windows 2000, Windows Me
- Askey MDC Modem Driver Windows XP, Windows 2000, Windows Me
- SIS LAN Driver
 — Windows XP , Windows 2000 , Windows Me
- EzButton Driver Windows XP, Windows 2000, Windows Me
- SMSC FIR Driver Windows XP, Windows 2000, Windows Me
- EzMail Driver Windows XP, Windows 2000, Windows Me
- Ezbuttom Driver Windows XP, Windows 2000, Windows Me

Visit FIC Support website <u>FTP://FTP.PCG.FIC.COM.TW/NBTECH</u> latest driver updates.

2.2.1 Installing Windows XP from Optical Devices

This section provides Windows XP installation guide from the Optical Devices (Such as CD-ROM or DVD-ROM device.)

Installing Windows XP from Optical Devices

To install Windows XP directly from your CD-ROM or DVD-ROM, please go to **Boot** menu of **BIOS** setup menu. Use arrow key to select "CD-ROM Drive", then use "+" or "-" to move it to the top. Go to **Exit** menu and select "**Exit Saving Changes**".

To install Windows XP directly from your CD-ROM or DVD-ROM, insert Windows XP installation CD into CD-ROM drive and boot on the notebook. Follows the screen instructions on the screen.

2.2.2 Installing the VGA Device Driver

Your notebook computer uses the high-performance SiS 650 VGA controller, which is an AGP 4X video local bus, 2D/3D Graphic Engine. Following is the procedure for installing the VGA Driver for Windows XP:

Installing VGA Driver for Windows XP

Following is the procedure for installing the Video Accelerator 3D Adapter (English) VGA driver to your computer:

- 1. Click the **Start** button, and then point to **Run**. The Run dialog box appears.
- 2. Click the **Browse** button and specify the directory as. "E:\Drivers\WinXP\VGA\Setup.exe"
- 3. Implement the setup program to install this driver. The Welcome dialog box appears.
- 4. Click **Next** to process the further step continuously when screen displays this command.
- 5. Press **Finish** to restart your system.

2.2.3 Installing the Audio Device Driver for Windows XP

Your notebook computer uses Realtek Audio Controller.

- 1. Click the **Start** button, and then point to **Run**. The Run dialog box appears.
- 2. Click the **Browse** button and specify the directory as. "E:\Drivers\WinXP\Audio\Setup.exe" where the audio driver is located
- 3. Implement the setup program to install this driver. The Welcome dialog box appears.
- 4. Click **Next** to process the further step continuously when screen displays this command.
- 5. Press **Finish** to restart your system.

2.2.4 Installing EzButton Driver for Windows XP

Following is the procedure for installing the Internet, e-mail button and Audio DJ keys.

Installing EzButton driver for Windows XP

- Boot WinXP from your hard disk and insert the disc containing the EzButton driver for WinXP.
- 2. Double-click on the System icon, Hardware and then click on the Device Manager folder tab.
- Double-click Standard 101/102 key or Microsoft Natural PS/2 keyboard... and Select Update Driver
- 4. Select Install from a list of specific location (Advanced) and then click Next
- 5. Tick on "Include this location in the search". Then, click Browse button and navigate to the EzButton driver location as "E:\Drivers\WinXP\EzButton". Click Next to begin searching the driver.

- The Add New Hardware will found Keyboard en3886... Click Next to continue the driver installation.
- 7. Click Finish button to finish installing EzButton driver.
- 8. Click Yes to restart the computer

2.2.5 Installing Easy Mail Light Driver for Microsoft Outlook 98/2000...

- 1. Installing Easy Mail Light driver for Windows XP
- 2. Boot Windows from your hard disk and insert the disc containing the Easy Mail Light button driver.
- 3. Click the Start button, then click Run. In the Run dialog box, click Browse button and navigate to the directory as "E:\Drivers\WinXP\EzMail\EzMail.exe"
- 4. Run the execution file for installing the EzMail driver, and then click Finish after complete the installing procedure.

2.2.6 Installing Touch Pad Driver for Windows XP

Following is the procedure for installing Synaptics touch pad driver.

- 1. Click the **Start** button, and then point to **Run** to appear the Run dialog box.
- Click the Browse button to specify the directory as "E:\Drivers\WinXP\Touch Pad\Setup.exe"
- 3. Execute the setup program and then the **Welcome** dialog box appears.
- 4. Select the language version that you want to install and then click "OK" to continue.
- 5. Click **Next** button several times.
- 6. Click **Finish** to restart your system.

2.2.7 Installing the Internal Modem for Windows XP

Your notebook computer may come with an optional internal modem. The internal modem is a 56Kps V.90 Askey Data Fax modem.

Installing Internal Modem for Windows XP

- Boot Windows from your hard disk and insert the disc containing the Modem driver for Windows.
- 2. Click the **Start** button and then click **Run**. In the Run dialog box, click **Browse** button and navigate to the directory as "**E:\Drivers\WinXP\modem\setup.exe**" where the modem driver is located.

The system may prompt you the message to restart the computer to finish the installation

2.3 System Upgrades

This section provides an easy step in doing system upgrades for your M785 notebook computer.

2.3.1 Jumper Settings

This section provides a jumper setting lists of configuring the notebook.

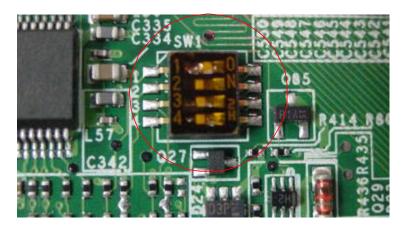


Figure 2-1 Switch 1 Jumper Setting

CPU SPEED, FSB SPEED Select (SW1)

CPU Type	Pin #1	Pin #3,4
2.0G , 2.4G FSB 400MHZ	OFF	ON
2.26G , 2.53G, 2.66G , 2.8G	ON	OFF
FSB 533MHZ		



Figure 2-2 Switch 2 Jumper Setting

Password Override (CMOS/RTC Data) Jumper Setting(SW 2)

Password Override	Pin #4
Password Normal	OFF
Clear Password	ON

Main Board ID Select

K/B select	Pin #1	Pin #2
US K/B	OFF	OFF
JP K/B	ON	OFF
Reserved	OFF	ON
UK K/B	ON	ON

CD-ROM

IDE Select	Pin #7
Master	OFF
Slave	ON

CMOS Clear Select

CMOS Reset	Pin #8
Normal	OFF
Clear CMOS	ON

2.3.2 CPU Upgrade Procedure

The M785 features Intel Pentium 4 SFF Processors. It is located on the middle-left side of the system motherboard.

How to upgrade the Intel CPU processor is as follows:

To install or replace the CPU, following the steps as below:

- 1. Turn off the system and remove both AC adapter and the battery pack from the notebook unit.
- 2. Remove keyboard cover by gently bending it and sliding it towards in front of you.



Figure 2-3 Remove Keyboard Cover

3. Remove keyboard you can see there are three screws to remove them.



Figure 2-4 Remove Three Screws on the Keyboard

4. Release keyboard cable by sliding the ZIF connector towards upward direction.

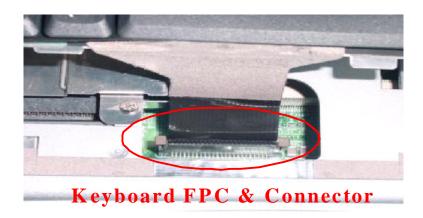


Figure 2-5 Remove the Keyboard FPC

5. There are two screws on the hinge cover and that should be removing as the picture indicated.

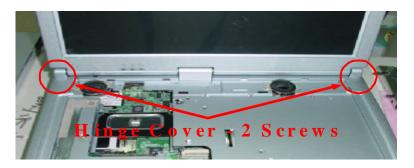


Figure 2-6 Remove the Hinge Cover

- 6. To release the LED board, there are two screws on the LED board.
- 7. Please also take out FPC gently from the LED board.



Figure 2-7 Removing the LED Board

8. Please see the location of top cover as the below picture shown.

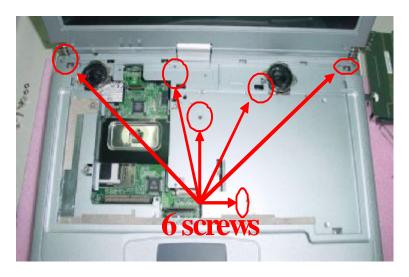


Figure 2-8 Location of Top Cover

9. To remove the top cover, you also need to remove the six screws from the bottom case.

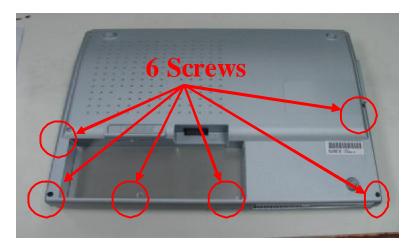


Figure 2-9 Removing the six screws of bottom case

10. There are also four screws from the rear side of this M785 notebook.

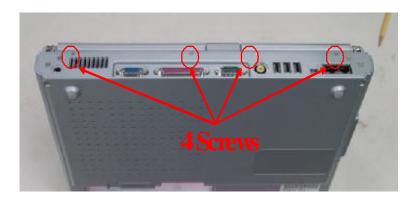


Figure 2-10 Removing the four screws from the rear side

11. Open the top cover and remove G/P from FPC connector



Figure 2-11 Removing the top cover and G/P cable

12. Please make sure there are two connectors for speakers, and that has to be releasing gently as the picture shown.



Figure 2-12 Removing the Connectors for Top Cover

13. Removing the heat sink, there are five screws and two fan cables as the picture shown.

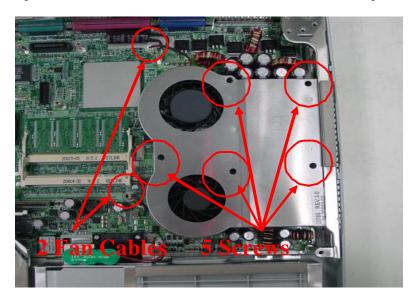


Figure 2-13 Release Heat Sink

14. Using a flat screwdriver, turn the socket lock counter-clockwise direction to unlock CPU from the socket.

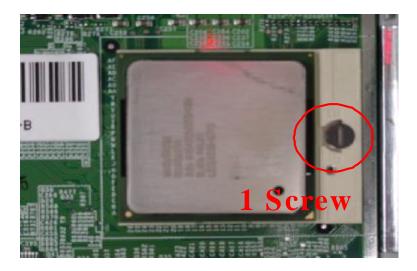


Figure 2-14 CPU Assembly

2.3.5 Memory Upgrade Procedure

The notebook computer offers two 64-bit memory slot using 144-pin SODIMM (Small Outline Dual Inline Memory Module) at 128 / 256 / 512MB DDRRAM. The memory compartment is located on the inside of your computer. The notebook has no memory onboard so you should have at least one SODIMM module inserted.

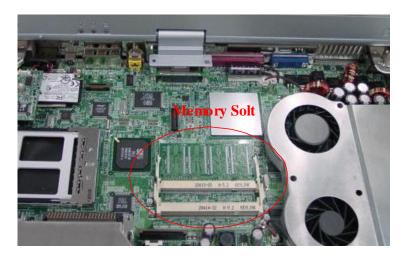


Figure 2-15 Memory Solt

With two memory slots, you can have several combinations up to 1024MB.

Using the Memory Slot inside the computer

Follow the steps below on how to upgrade the memory modules:

- 1. Make sure the system is powered off and that no peripheral devices are attached.
- 2. Turn the system over and locate the screw on the memory compartment.
- 3. Remove the screw and open the memory compartment. Locate the alignment notch on the module.
- 4. Locate the memory module socket. Align the notch with the notch in the socket connector and insert the module as follows:
 - Hold the SODIMM at a 60-degree angle and align the SODIMM connector with the socket in the system. Push the connector into the socket.
 - Press down on the edge of the SODIMM until the locking tabs on the sides snap into place, securing the module.
- 5. To remove a SODIMM, press the locking tabs away from the sides of the module until the module pops up. Then, remove the SODIMM.
- 6. Reassemble the notebook components as follows.
 - Put the DIMM door back.
 - Replace the screw and turn the system over.

2.3.6 Removing the Internal Hard Disk Drive

The notebook provides a built-in hard disk for the primary IDE controller. The HDD is an industry standard 2.5" IDE disk drive with a maximum height of 9.5mm, and can be upgraded with another standard 2.5" HDD with a maximum height of 9.5mm.

1. Find out the built-in hard disk secured with two screw at the right corner of the hard disk. Remove this screw and carefully pull the hard disk module from the connector.

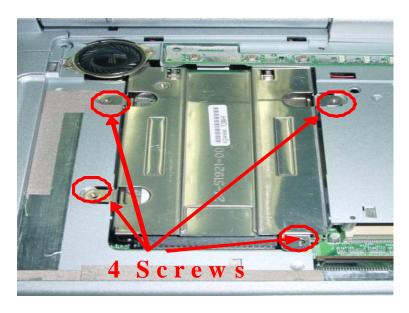


Figure 2-16 Remove Four Screw Securing HDD

2. Remove four screws of frame HDD bracket plate. Two small ones of them are at the front side, and others are at the both sides

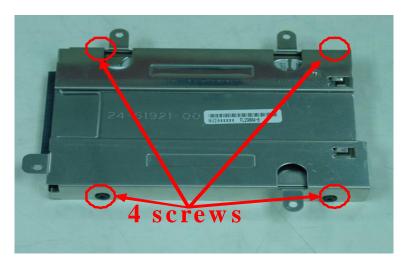


Figure 2-17 Screws Locations of the frame HDD bracket plate

2.3.7 System BIOS Upgrade Procedure

The notebook supports EPROM Flash BIOS that allows you to easily update the system BIOS using the Phoenix BIOS Flash utility program called "PHLASH.COM". This program runs under MS-DOS and requires the system not to load high memory like HIMEM.SYS. It also needs the "PLATFORM.BIN" file in order to activate.

Follow the steps below on how to update the system BIOS:

- 1. Prepare a clean bootable diskette without loading the HIMEM.SYS. Copy the files **PHLASH.COM** and **PLATFORM.BIN** into the diskette along with the BIOS ROM file.
- 2. Restart the computer and boot from the diskette. At the DOS prompt, type the command "PHLASH <BIOSfile.ROM>" to activate Flash BIOS programming utility. The computer will then start to update the system BIOS inside the notebook.
- 3. After programming is complete, the system will prompt you to press any key to shutdown the computer. The BIOS version is displayed inside the BIOS Setup Main menu. Press <F2> after power on to run CMOS Setup program.

BIOS Version: 1.0A-0716-0724

- It is very important not to power off the system whenever the FLASH BIOS program is running. Otherwise, the system may not be able to power on and you need to replace the BIOS EPROM chip from another working notebook.
- Always plug in the AC adapter when updating the BIOS.