

Hardware FAQ for A440

1.1 Question:

What are the available processors supported by A440?

Answer:

Currently, the supported processors are list as below,

- Intel Mobile Pentium III at 650//700/750/800/850MHz
- Intel Celeron 500/533/566/600/633/667MHz

We recommend the mobile processors which are tuned for optimal performance versus lowest power in the notebook computing environment. Take note that the A440 support socket 370 FC-PGA packaging only!

1.2. Question:

The Brightness (Fn+F8, F9) and contrast (Fn+F10, F11) keys do not work?

Answer:

Usually, the brightness adjustment is so trivial that human eyes cannot tell the difference. It is easier to see the changing of brightness in Windows environment rather than DOS environment. Please also note that the contrast control keys (Fn+F10, F11) do not work with TFT but DSTN/HPA notebooks. For a better sense of brightness adjustment, please change the background to white color if possible.

1.3 Question:

How to erase the password if the password is forgotten?

Answer:

You could adjust DIP SWITCH 5 to clear CMOS (RTC) data. The DIP SW5 position under Memory socket door. You can use small flat screw driver to adjust position#4 switch to ON and waiting for 3 to 5 minutes, then, please switch back to OFF position in the DIP SW3.

Warning!! Before clear CMOS (RTC) data, you must remove the AC adapter and Battery first.

1.4. Question:

The battery life becomes shorter, How can I rebuild it ?

Answer:

Battery life will vary from user to user depending on how the computer is being used. To help increase your battery life, you can configure the power management features within the Power Management properties of Windows 98 Second Edition.

To access Power Management properties click on the Start button, go to Settings and choose Control Panel. Next, click on the Power Management Icon. You can customize these settings as you choose. You should be aware that any power management features will be of benefit only if there are periods of inactivity which allow the settings to engage. Please note that the battery in the A440 takes about 2.5 hours to fully charge with the machine turned OFF.

1.5 Question:

Why does a brand-new system have an empty battery?

Answer:

Due to the reason that the Ni-MH battery has self-discharged during shipping and shelf period. Since the battery capacity is very low, it may take a few hours to prompt the battery voltage to its normal stage. Please note the AC adapter LED will remain green even the battery is fully recharged.

Also, the problem might be caused by BAD battery or drained battery. The drained battery is caused by excessively self-discharge of Ni-MH battery. It will happen after the battery has been stocked or shelved more than 3 months.

1.6 Question:

How do I do the battery learning cycle progress?

Answer:

Cycling your battery every month or so will extend the life expectancy of your A440 battery. Important! Before beginning this process make sure your AC adapter is plugged in. The best way to do this is to turn the unit ON and press the F2 key when prompted to enter Setup. Go to the Power Management Setup menu and press Enter. Arrow down to Battery Auto

Calibration, and change it to enabled. By pressing the Pg Dn key, you will get a message stating. "Please make sure that the AC adapter & battery are present. Do you wish to do battery auto-learning? (Y/N)" Press Y and then Enter. Once calibration is completed the computer will prompt you to shutdown and restart.

1.7 Question:

What is the function of PHDISK.EXE program and how to use it?

Answer:

The PHDISK utility of the notebook allows you to create a Suspend-To-Disk (STD) partition or file that is used to save the opened files when you activate STD mode and power off the computer. If you want to make use of the STD feature, you need first to run the PHDISK utility.

You could see a message appear in a red column during Power On Self Test before you execute the PHDISK.EXE. The red column displays ?Save To Disk file not found. Save to Disk feature is disabled. Run Phdisk for information.

File: creat new. Partition: consult manual. Hit any key to exit. ?The above message will disappear after you have execute the Phdisk.exe.

The Phdisk program has support FAT 16 and FAT 32 format also. To know the more detail information about PHDISK, you could execute Phdisk /? on the command from the directory where the PHDISK command is located.

1.8 Question:

How to adjust the CPU jumper switch setting?

You could find the string on the CPU surface , ex 700/256/100/1.65V, the 700 means CPU frequency, 256 means cache size, 100 means external frequency, and in the last, the 1.65V means core voltage.

The A440 could detects the CPU frequency automatically. For the CPU, you just need to adjust the external frequency only. for your reference. (Remove the heat sink plate then you could see the S4 jumper, in the upper side of CPU socket.)

The S4 Jumper setting	PIN1	PIN2	PIN3	PIN4
For 66 External Frequency	ON	OFF	OFF	OFF
For 100 External Frequency	ON	ON	ON	OFF
For 133 External Frequency	OFF	OFF	ON	OFF

S4 – CPU/PCI BUS CLOCK

Pos #4	Pos #3	Pos #2	Pos #1	CPU	PCI
OFF	OFF	OFF	OFF	91.5	30.5
OFF	OFF	OFF	ON	66.82	33.41
OFF	OFF	ON	OFF	96.22	32.07
OFF	OFF	ON	ON	90	33
OFF	ON	OFF	OFF	133.33	33.33
OFF	ON	OFF	ON	83.1	27.77
OFF	ON	ON	OFF	95	31.67
OFF	ON	ON	ON	100	33.3
ON	OFF	OFF	OFF	75	37.5
ON	OFF	OFF	ON	137	34.25
ON	OFF	ON	OFF	83.31	41.65
ON	OFF	ON	ON	105	35
ON	ON	OFF	OFF	109.99	36.66
ON	ON	OFF	ON	114.99	38.33
ON	ON	ON	OFF	120	40
ON	ON	ON	ON	124	41.33

S3 –GPI6/CPUSET

S3	ON	OFF
#1	TBD	TBD

S3 – K/B ID

S3	Pos #2	POS #3
US KEYBOARD	OFF	OFF
JP KEYBOARD	OFF	ON
GR KEYBOARD	ON	OFF
RESERVE	ON	ON

S3 – CLEAR RTC

S3	ON	OFF
#4	CLEAR CMOS(RTC) DATA	RTC BATTERY NORMAL

Before clear RTC ,must remove adapter and battery.

1.9 Question:

What is an S-Video output?

Answer:

Super Video is a cable connection that produces sharper video images than standard composite video cables. It accomplishes this by sending the video signal over the cable in two channels one for color the other for brightness, rather than one.

Connect your S-Video cable to the television and the S-Video port on the computer. Set your TV to the proper video input (refer to your TV's documentation for instructions). Click on the Settings tab. Click on the Advanced button. Click on the ATI Displays tab. Put a check in the box next to Television. Click in OK to close the menu.

1.10 Question:

How come of my Power Saving Function key can not work with windows 98 ACPI environment?

Answer:

In the ACPI environment, Power Saving Function was controlled by OS. That's why the Power Saving Function key can not work.

1.11 Question:

How come of my Power saving Function key cannot work with windows 2000 environment?

Answer:

In the ACPI environment, Power Saving Function was controlled by OS and the Windows 2000 was an ACPI OS. That's why the Power Saving Function key can not work.

1.12 Question:

Why the system detected 60MB during POST only? I have use 64MB RAM module into system.

Answer:

Due to the reason that the VGA memory share with system memory. Therefore, if the frame buffer under BIOS setting is set to 4MB, you can only see 60MB.

1.13 Question:

What is Card Bus?

Answer:

CardBus devices combine the best features of 16-bit PC Cards with the performance of 32-bit PCI adapters. The CardBus specification provides a standard interface for peripherals.

CardBus delivers increased throughput and functionality through 32-bit data transfers, bus mastering, and other PCI features, while maintaining backward compatibility with 16-bit PC Card adapters. The following are the CardBus key features:

- True 32-bit I/O with high speed 33MHz bus, compared with an 8.33MHz bus for 16-bit I/O.
- Bus mastering allows peer-to-peer CardBus data transfers.
- Burst-mode data transfers.
- Low power consumption using 3.3-volt CMOS devices.
- Hot Insertion and automatic configuration.
- Support for 16-bit PC Card and 32-bit CardBus devices in the same slot.
- True processor independence.

1.14 Question :

What is ZV port?

Answer:

ZV Port is the short form of Zoomed Video Port, which is one of the major multimedia data transports nowadays. ZV Port is also a low cost and compact solution requiring no additional chips or space on the motherboard. ZV port delivers a high performance video data transmission rate up to 27Mbytes/sec and supporting full motion/full screen video on a notebook. This alternative path for multimedia data transfer minimizes CPU utilization and PCI bus contention since video data is transferred directly to the video and audio system through a dedicated bus. Also, the only the upper slot of A440 series supports ZV port.

1.15 Question

Which PCMCIA Card did you tested on A440 machine?

Answer :

SRAM/ATA PC Card				
Brand	Model	Win98SE	WinME	Win2000
SunDisk	1.8 MB Flash Disk (ATA card)	✓	✓	✓
SunDisk	5 MB Flash Disk (ATA card)	✓	✓	✓
SunDisk	4 MB Flash Disk (ATA card)	✓	✓	✓

Data/ Fax/ Modem PC Card				
Brand	Model	Win98SE	WinME	Win2000
USRobotics Megahertz	Megahertz 56kbps PC Card Modem (XJ-5560)	✓	✓	✓
Simple	56K Communication	✓	✓	N/A
US Robotics	US Robotics 28800	✓	✓	✓

Network Interface (Ethernet/CardBus) PC Card				
Brand	Model	Win98SE	WinME	Win2000
Billionton	100Base-TX Ethernet CardBus PC Card (Realtek RTL8139A)	✓	✓	✓
Xircom	RealPort CardBus EthernetII 10/100 (RBE-100)	✓	✓	✓
3Com Megahertz	10/100 Lan CardBus PC Card (3CCFE575CT)	✓	✓	✓
D-Link	CardBus Fast Ethernet Adapter (DFE-660TX)	✓	✓	✓
Intel	EthernetExpress PRO/100	✓	✓	✓
Xircom	Credit Card Ethernet Adapter 10/100 ready (CE3B-100BTX)AP	✓	✓	✓
3Com	EtherLink III LAN PC Card (3C589D-TP)	✓	✓	✓

Combo (Lan/ Fax/ Modem) PC Card				
Brand	Model	Win98SE	WinME	Win2000
Intel	PRO/100 Lan+56K Modem CardBus II Adapter	✓	✓	✓
3Com Megahertz	10/100 Lan+56K Modem (3CCFEM556B)	✓	✓	✓
Xircom	RealPort Ethernet 10/100+Modem56	✓	✓	✓

IEEE1394 PC Card				
Brand	Model	Win98SE	WinME	Win2000
(No brand)	IEEE1394 to CardBus Interface PC Card 1	✓	✓	✓

Software FAQ For A440

1.1 Question:

How to check the BIOS version?

Answer:

You could get the BIOS version by pressing F2 function key to entering setup utility during Power On Self Test. The BIOS version will display at the bottom of the main item selected. The format should be : 1.0D-5711-6211, the 1.0D is BIOS version that you want.

1.2 Question:

How to install Windows 98?

Answer:

The easiest way to install Windows 98 is to boot from Windows 98 start-up disk. With Windows 98 start-up disk, you don't need to install CD-ROM driver since the start-up disk can support virtually all CD-ROM device. Insert Windows 98 Installation CD into CD-ROM drive and run setup.exe
If you don't have Windows 98 start-up disk, you need to install CD-ROM / DVD-ROM driver under DOS. Then, insert Windows 98 Installation CD into CD-ROM drive and run setup.exe

1.3 Question:

How to install VGA driver for Windows 98 in this computer?

Answer:

1. Insert the CD containing the VGA driver for Windows 98 into CD-ROM drive.
2. Click the **Start** button, then click **Run**. In the Run dialog box, click **Browse** button and specify the directory as "**E:\driver\win98\ VGA\setup**"
3. The Welcome message box appears. Click **Next** to continue with the next step.
4. Select Yes to follow "License Agreements".
5. The Select Components box appears. Click **Next** to begin with installation. Click Finish to complete VGA driver Installation.

1.4 Question:

How to install CD-ROM or DVD-ROM in DOS mode?

Answer:

For DOS installation, you must have a pre-installed MS-DOS v6.0 or higher operating system on your hard disk with the "MSCDEX.EXE" (Microsoft CD Extension) driver file.

Both CD-ROM and DVD-ROM drive are ATAPI IDE interface and uses the same driver.

1. Boot up the system of your computer and insert the Teac CD-ROM driver diskette into the floppy drive.
2. Change the directory of the DOS prompt to Drive A and run the CD-ROM installation program by typing the command **A:\>INSTALL** and pressing **<Enter>**.
3. The "CD/DVD-ROM Setup Program" message appears for asking if you want to continue the next step by pressing **<Enter>** or exit it by pressing **<Esc>**. Press **<Enter>** to continue with the installation.
4. A connection diagram appears with a message shown "Confirm the connection environment of the computer, are you sure ?" Press **<Y>** to confirm.
5. The installation program will ask you to specify the directory where you want to place CD/DVD-ROM driver. Press **<Enter>** to install into the default directory.
6. Press **<Enter>** to continue with the next step.
7. The Installation program will automatically copy the CD-ROM driver to your hard disk and modify the AUTOEXEC.BAT and CONFIG.SYS files in activating the CD-ROM drive every time you boot the system up.
8. Remove the diskette and restart the computer after installation is complete. Your computer will then detect the CD-ROM drive and will display the designated drive letter. The CD-ROM drive should be assigned to Drive D. If you have two disk partition, the CD-ROM drive will be assigned to Drive E.

1.5 Question:

How to install the Audio Driver for Windows 98?

Answer:

1. Boot Windows from your hard disk and insert the disc containing the Audio driver.
2. Click the **Start** button, then click **Run**. In the Run dialog box, click the **Browse** button and navigate into the directory where the new Audio driver is. Then, run "**setup.exe**".
3. The Welcome message box appears. Click **Next** to continue with the next step.

4. With “**Upgrade Drivers**” selected, click **Next** to begin install the Audio driver.
5. With “**Yes, I want to restart my computer now**” selected, click **Finish** to complete the audio installation.

1.6 Question:

How to install the Modem driver for the Windows 98?

Answer:

1. Click the **Start** button, then point to **Settings**, and click **Control Panel**.
2. Double-click on the **System** icon and click on the **Device Manager** folder tab.
3. Under the **Other Devices** line, you will find the **PCI Communication Device**, click **Remove**, **OK**, then **Refresh** buttons to appear the **New Hardware Found** Message Box.
4. In the Add New Hardware Wizard message box which shows searching PCI Communication Device driver. Click **Next** to proceed to the next step.
5. Select “**Search for the best driver for your device**”, and click **Next**.
6. Tick on “**Specify a location box**”. Then, click **Browse** button and navigate to the modem driver location as “**E:\driver\win98\ modem**”. Click **Next** to begin searching the driver.
7. The Add New Hardware will found **LT Win Modem**. Click **Next** to continue install the driver.
8. Click **Finish** button to finish install modem driver.

1.7 Question:

How to install LAN driver for the Windows 98?

Answer:

Following is the procedure for install the Intel 82559 Fast Ethernet LAN driver:

1. Boot Windows 98 from your hard disk and insert the disc containing the LAN driver for Windows 98.
2. Click the **Start** button, then click **Settings**, and **Control Panel**. Double click **System** and click **Device Manager** tab. Under **Other devices**, you'll see **PCI Ethernet Controller**. Select it and click **Remove** button.
3. Click **Refresh** button. The **Add New Hardware Wizard** will detect PCI Ethernet Controller. Click **Next** to search for the driver. Click **Next** to continue.
4. Tick **Specify a location** and click **Browse** button. Then, navigate to "d:\lan" and click **Next**.
5. Click **Next** to accept the updated driver for Intel 82559 Fast Ethernet LAN driver. Click **Next** to continue with LAN driver installation.
6. Insert the disk labeled "**Windows 98 Second Edition CD-ROM**", and then click **OK**.
7. Type "**D:\Win98SE\Setup\Win98**", then click "**OK**".
8. Click **Finish** to complete installation.

Restart Computer to finish setting up LAN.

1.8 Question:

How to install the EZ-button device for the Windows 98

Answer:

1. Boot Windows from your hard disk and insert the disc containing the Internet/e-mail button driver.
2. Click the **Start** button, then click **Run**. In the Run dialog box, click **Browse** button and navigate to the directory as "**E:\driver\EZbutton\setup.exe**".
3. The **Welcome** dialog will appear. Click **Next** to continue with the installation.
4. If you wish to install the driver in a different directory, click **Browse**. Otherwise, click **Next** to continue with the next step.

5. The **Select Program Folder** dialog box will appear. To setup icon on a different folder, you may type a new folder name or select one from the existing Folder list. Click **Next** to continue.
6. Click **Finish** to complete installation.

1.9 Question:

How to update the latest BIOS version for A440

Answer:

Warning!! Due to the reason that the incorrect BIOS version may cause encounter unexpected symptom and possible make system can not bootable!

You could get the latest BIOS version via our FTP site; <FTP://pcg.fic.com.tw/NBTECH/A440> , [Here is the procedure to upgrade the BIOS as below](#) :

1. Unzip the attached file from FTP site and save all of them to a formatted 1.44MB floppy diskette.
2. Power on the computer and enter the pure DOS environment . (Press F8 before enter to OS and choose "Safe mode command prompt only")
3. Insert the formatted 1.44MB floppy diskette which containing the attached file.
Please execute a:\phlash BIOS.ROM then the system will flash the BIOS automatically.

1.10 Question:

How to enhance and improve the system performance?

Answer:

You can enhance Hard Disk and CD-ROM drive performance. You can see the improvement when running Winbench99.

You will want to enable DMA or Ultra DMA support on IDE devices to improve performance, because this feature enable supporting hardware to copy data directly into memory rather than having the CPU copy very byte. This capability greatly lowers the CPU utilization of the system on I/O interfaces.

However, you will want to disable this feature if you frequently encounter data corruption during this feature enabled. To enable DMA or Ultra DMA setting:

1. Click Start button -> Setting -> Control Panel. Double click System and Click the Device Manager tab. Navigate to Disk drives and double click Generic IDE Disk Type01.

2. Click the Settings tab and tick on DMA. Click OK and restart the system. This DMA feature will improve Hard Disk performance under Win95/98. For Windows NT, you do not need to do the above steps.

(The CD-ROM steps are same as above but navigate to CD-ROM and double click on your CD-ROM title.)

1.11 Question:

How to install VGA driver for Windows NT4.0 on A440 system?

Answer:

1. Insert the CD containing the VGA driver for Windows NT4.0 into CD-ROM drive.
2. Click the **Start** button, then click **Run**. In the Run dialog box, click **Browse** button and specify the directory as "**E:\driver\NT40\ VGA\setup**"
3. The Welcome message box appears. Click **Next** to continue with the next step.
4. Select Yes to follow "License Agreements".
5. The Select Components box appears. Click **Next** to begin with installation.
6. Click Finish to complete VGA driver Installation.
* Be sure that you already install the Windows NT4.0 Service Pack 4 before you install VGA driver.

1.12 Question:

How to install CD-ROM / DVD in the Windows NT4.0?

Answer:

To install Windows NT directly from your CD-ROM or DVD-ROM, insert Windows NT installation CD into CD-ROM drive and enter BIOS Setup menu. Go to Boot menu and select "ATAPI CD-ROM Drive" as your boot device. Go to Exit menu and select "Exit Saving Changes"

1.13 Question:

How to install Modem driver for the Windows NT4.0?

Answer:

1. Boot Windows from your hard disk and insert the disc containing the modem driver.

2. Click the **Start** button, then click **Run**. In the Run dialog box, click Browse button and navigate to the directory as “**E:\driver\NT40\modem\setup**”. The Welcome dialog will appear. Click **Next** to continue with the installation. If you wish to install the driver in a different directory, click Browse. Otherwise, click **Next** to continue with the next step.
3. The Select Program Folder dialog box will appear. To setup icon on a different folder, you may type a new folder name or select one from the existing Folder list. Click **Next** to continue.
4. Click **Finish** to complete the driver installation.

1.14 Question:

How to install LAN driver for the Windows NT4.0?

Answer:

Boot Windows NT from your hard disk and insert the disc containing the Modem driver for Windows NT.

Following is the procedure for install the Intel 82559 Fast Ethernet LAN driver:

1. Boot Windows NT4.0 from your hard disk and insert the disc containing the LAN driver for Windows NT4.0.
2. Click the **Start** button, then click **Settings**, and **Control Panel**. Double click **Network** and click **Adapters** tab. Then click **Add** button and chose the "Have Disk".
3. Specify the directory as “**E:\driver\NT40\ LAN**”.
4. Click **OK** to accept the updated driver for Intel 82559 Fast Ethernet LAN driver.
5. Click **OK** to continue with LAN driver installation.
6. Chose the correct I/O base and IRQ, and then click **OK**.
7. Click **Finish** to complete installation.

Restart Computer to finish setting up LAN.

1.15 Question:

How to install the audio driver for the Windows NT4.0?

Answer:

1. Boot Windows from your hard disk and insert the disc containing the Audio driver.
2. Click the **Start** button, then click **Run**. In the Run dialog box, click the **Browse** button and navigate into the directory where the Audio driver is. Then, run "**Setup.exe**".
3. Click **OK** button to run the setup program. The Welcome message box appears. Click **Next** to continue with the next step.
4. With "**Install**" selected, click **Next** to begin install the audio driver.
5. With "**Yes, I want to restart my computer now**" selected, click **Finish** to complete the audio installation.

1.16 Question:

How to install the EZ-button device for the Windows NT4.0?

Answer:

1. Boot Windows from your hard disk and insert the disc containing the Internet/e-mail button driver.
2. Click the **Start** button, then click **Run**. In the Run dialog box, click **Browse** button and navigate to the directory as "**E:\driver\EZbutton\setup.exe**".
3. The **Welcome** dialog will appear. Click **Next** to continue with the installation.
4. If you wish to install the driver in a different directory, click **Browse**. Otherwise, click **Next** to continue with the next step.
5. The **Select Program Folder** dialog box will appear. To setup icon on a different folder, you may type a new folder name or select one from the existing Folder list. Click **Next** to continue.
6. Click **Finish** to complete installation.