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1.1 A Thank-you Note Before You Get Start

First of all, we would like to express our gratitude for purchasing AOpen products. Once again, this motherboard is designed uniquely to meet all your personal needs with our great industry-designing ability and our everlasting perseverance to the quality of all our products.

This manual will introduce you how this motherboard is installed. Please keep it well for your future reference. If you lost your printed manual, you may also go to our website at <http://www.aopen.com> to download the updated file.

Now, we would like to invite you to personally experience this user-friendly manual and all of the powerful functions this AOpen product offers.

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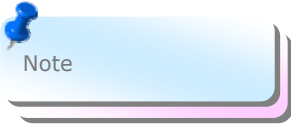
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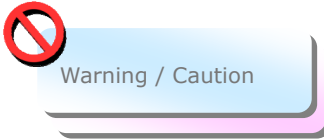
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1.2 Features of This Manual

To help you grab the useful information of this motherboard and aware of certain conditions that you might need to know, you will see the icons below frequently:



This contains knowledge you should know in process of assembling, or some helpful tips.



Please be careful when you see this mark. It highlights mistakes that occur often during assembling, or something you need to pay attention to.



This tip tells you some useful information that will make your installation smoothly.

1.3 Safety Information



Please wear a wrist strap and attach it to a metal part of the system unit before handling a component. Alternatively, you can also touch an object that is of ground connection or with metal surface.



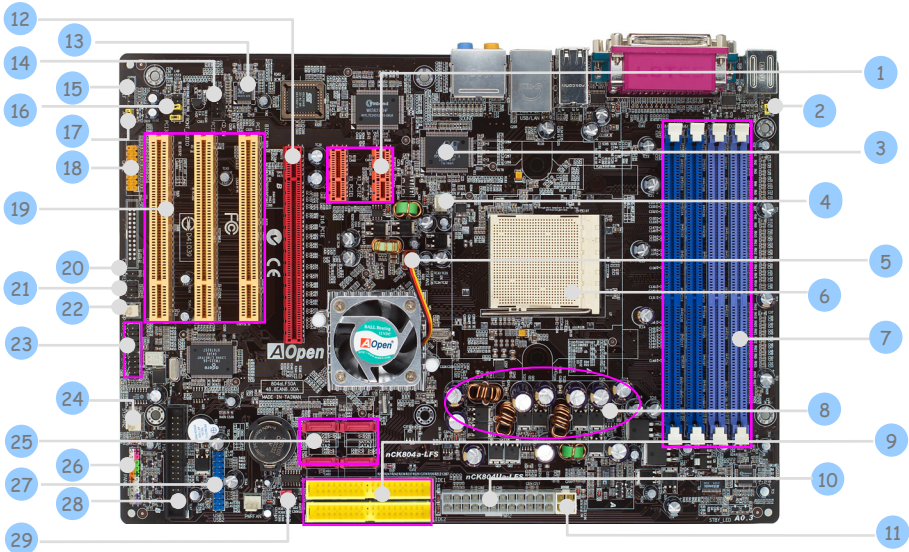
Always unplug the power before you make any jumper setting.



Before you install or remove any components on the motherboard, please make sure to disconnect the power first in case of damaging motherboard or other components.

Chapter 2 Introduction to This Motherboard

2.1 How does your motherboard look like?



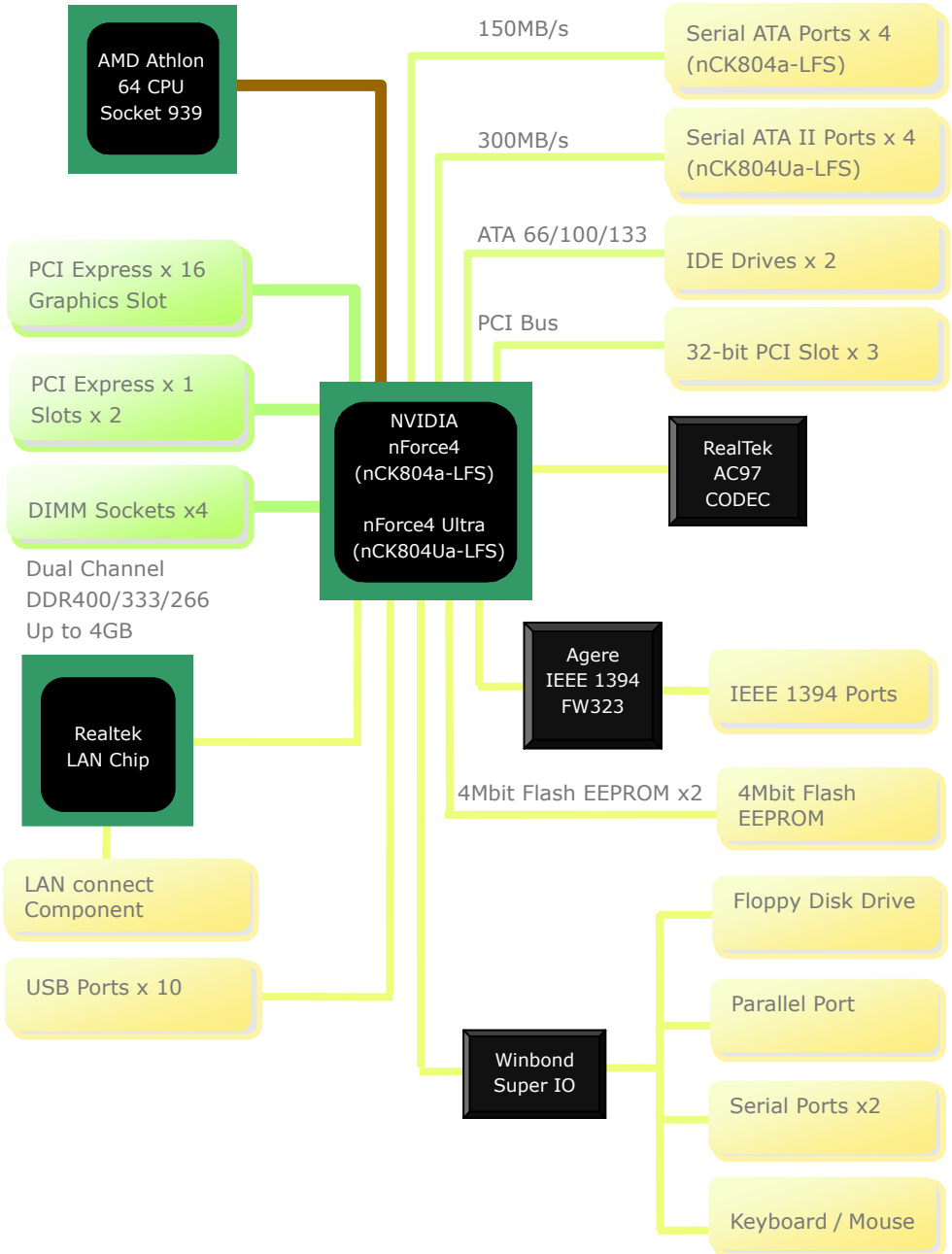
1. PCI Express x 1	16. Front Audio Connector
2. JP28 PS2 KB/Mouse Wakeup Jumper	17. JP40 S/PDIF Source Jumper
3. LAN PHY 88E1111	18. Game Port Connector
4. CPUFAN Connector	19. 32-bit PCI Expansion Slots x 3
5. SYSFAN1 Connector	20. Case Open Connector
6. 939-pin CPU Socket Supports AMD Athlon 64 CPU	21. IrDA Connector
7. 184-pin DIMMs x 4	22. Sensor of System Temperature Connector
8. 3300µ F Low ESR Capacitor	23. IEEE1394 Connectors X 2
9. ATA133 Connectors x 2	24. SYSFAN2 Connector
10. ATX Power Connector	25. Serial ATA II Ports x 2 (for nCK804Ua-LFS) Serial ATA Ports x 2 (for nCK804a-LFS)
11. 4-pin 12V ATX Power Connector	26. Front Panel Connector
12. PCI Express x 16	27. USB 2.0 Connector
13. Onboard AC'97 CODEC	28. FDD Connector
14. CD-IN Connector	29. JP24 BIOS Rescue Jumper
15. S/PDIF Connector	

2.2 Specification

Here is the main function of your motherboard.

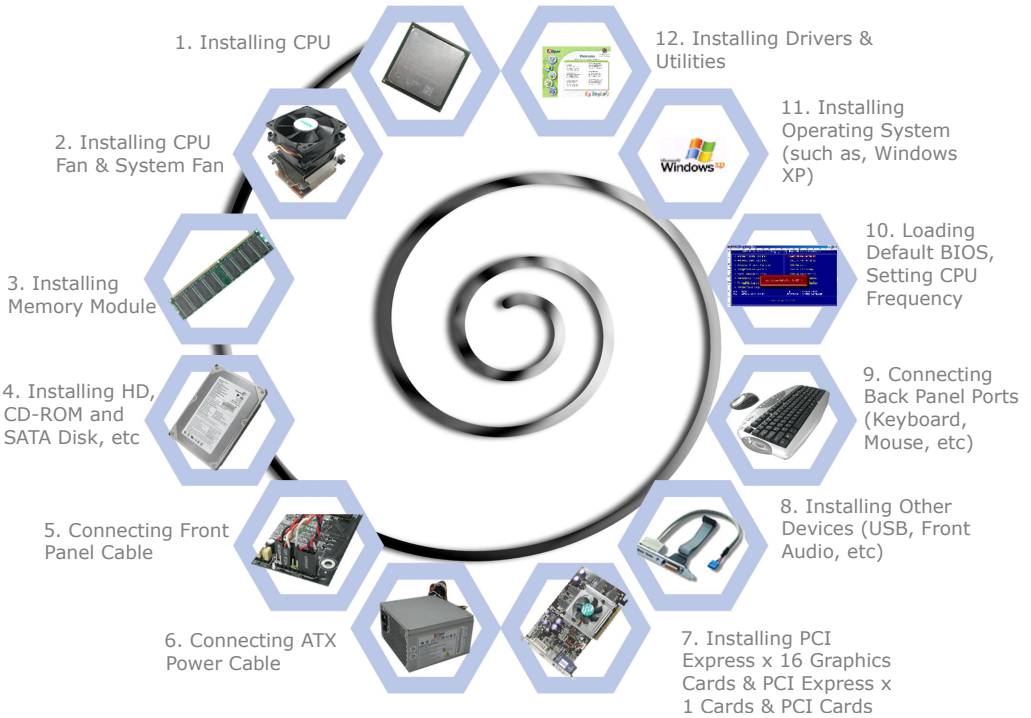
Models	nCK804a-LFS	nCK804Ua-LFS
CPU	AMD Athlon 64 CPU Socket 939	AMD Athlon 64 CPU Socket 939
Chipset	nVIDIA nFORCE4 CK8-04	nVIDIA nFORCE4 Ultra CK8-04
Main Memory	Dual Channel Mode Support:DDR400 [PC3200] DDR DIMM x 4 DIMM Type :256/512MB & 1GB Max Memory :4GB	Dual Channel Mode Support:DDR400 [PC3200] DDR DIMM x 4 DIMM Type :256/512MB & 1GB Max Memory :4GB
Graphics	PCI Express x16 (PCIe x16) slot	PCI Express x16 (PCIe x16) slot
IDE	Integrated ATA133 and Serial ATA Controller (Support Serial ATA RAID 0, 1 and 0+1) Max Disk:144,000,000GB [by 48 bits LBA Spec.]	Integrated ATA133 and Serial ATA II Controller (Support Serial ATA II RAID 0, 1 and 0+1) Max Disk:144,000,000GB [by 48 bits LBA Spec.]
LAN	Integrated nVidia Gigabit LAN Controller Marvell PHY	Integrated nVidia Gigabit LAN Controller Marvell PHY
Sound	Realtek AC'97 CODEC on-board 7.1 Channel	Realtek AC'97 CODEC on-board 7.1 Channel
USB	Integrated in chipset ,USB 2.0 x 10	Integrated in chipset ,USB 2.0 x 10
IEEE1394	Agere 1394 Control Chip	Agere 1394 Control Chip
Slots	PCI Express (PCIe x1) x 2 PCI Express x16 Graphics(PCIe x16)x 1 PCI x 3	PCI Express (PCIe x1) x 2 PCI Express x16 Graphics (PCIe x16) x 1 PCI x 3
Back Panel I/O	PS/2 Keyboard x 1, PS/2 Mouse x 1 USB Port x 6, LAN Port x 1 COM Port x 2, Printer Port x 1 Speaker_Out x 1 Line_In x 1 MIC_In x 1 Rear Surround x 1 Center/Subwoofer x 1 Side Surround x 1	PS/2 Keyboard x 1, PS/2 Mouse x 1 USB Port x 6, LAN Port x 1 COM Port x 2, Printer Port x 1 Speaker_Out x 1 Line_In x 1 MIC_In x 1 Rear Surround x 1 Center/Subwoofer x 1 Side Surround x 1
On Board Connector	Front Panel x 1 Front Audio x 1 CPU FAN x 1 System FAN x 1 Chassis FAN x 1 Power FAN x 1 Power Temperature Connector x 1 CD_IN x 1 AUX_IN x 1 IrDA x 1 Game Connector x 1 S/PDIF x 1 IEEE 1394 x 2 USB Port x 2	Front Panel x 1 Front Audio x 1 CPU FAN x 1 System FAN x 1 Chassis FAN x 1 Power FAN x 1 Power Temperature Connector x 1 CD_IN x 1 AUX_IN x 1 IrDA x 1 Game Connector x 1 S/PDIF x 1 IEEE 1394 x 2 USB Port x 2
BIOS	Award PnP 4Mb Flash ROM BIOS	Award PnP 4Mb Flash ROM BIOS
Board Size	Board Size : 305 mm x 215 mm	Board Size : 305 mm x 215 mm

2.3 Block Diagram



Chapter 3 Hardware Installation

3.1 Quick Installation Procedure

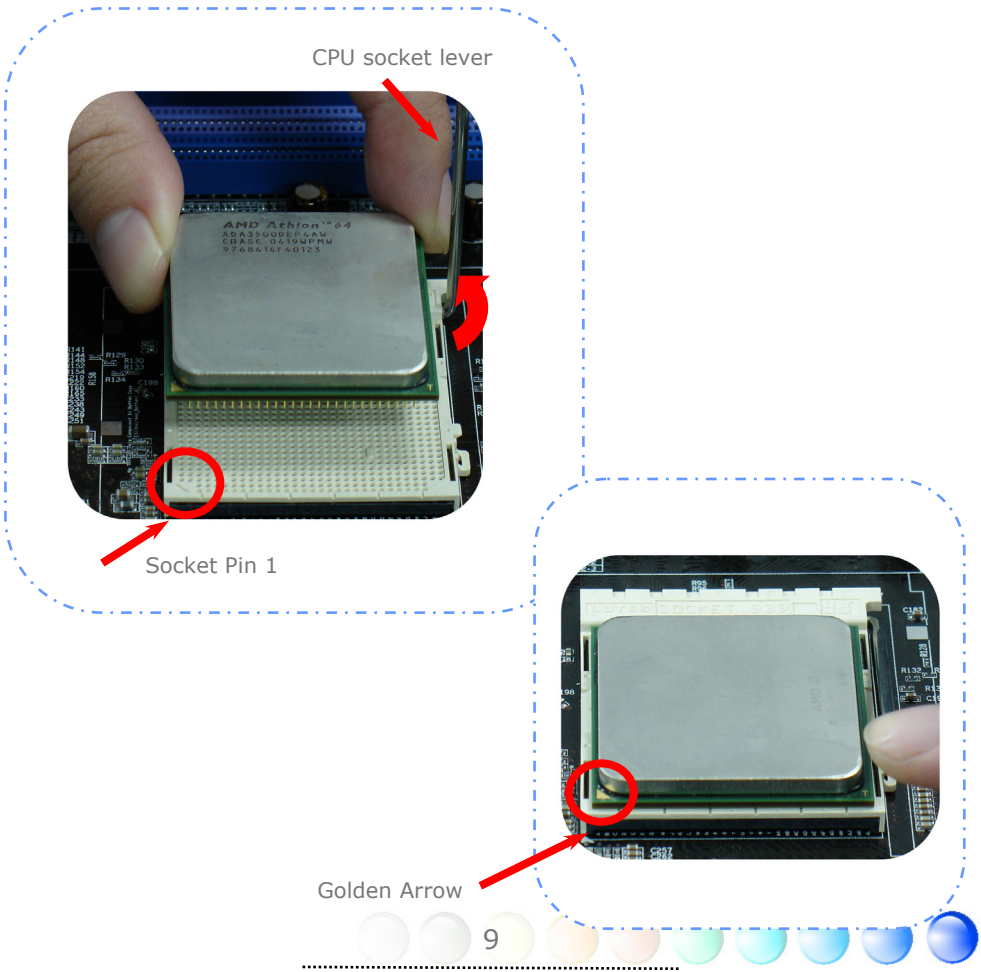


3.2 Installation You Have to Know

Installing CPU

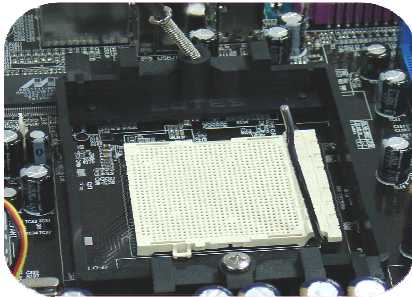
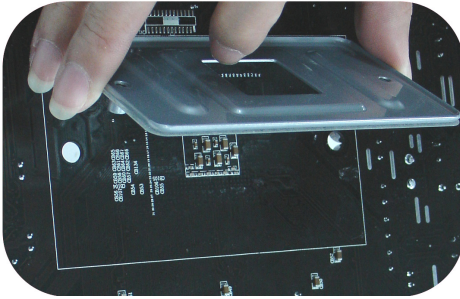
This motherboard supports AMD® Athlon 64 Socket 939 CPU. Be careful of CPU orientation when you plug it into CPU socket (with **CPU Overheat Protection** function implemented, the system will be automatically power off when the temperature of CPU reached 97 degree).

1. Pull up the CPU socket lever and up to 90-degree angle.
2. Locate Pin 1 in the socket and look for a golden arrow on the CPU upper interface. Match Pin 1 and golden arrow. Then insert the CPU into the socket.
3. Press down the CPU socket lever to finish CPU installation.



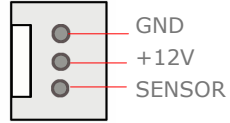
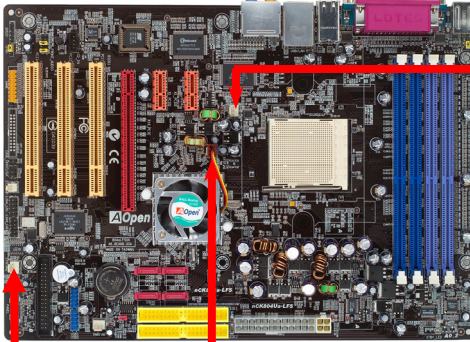
Installing Retention Module

1. To paste the adhesive side on the motherboard, and the two-screw holder should be relative to the hole of the screw holder.
2. To alien the two-side hole of the RM and screw holder of the motherboard, then lock the two screws holder.

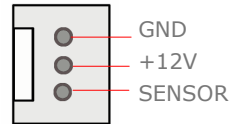


Installing CPU and System Fans

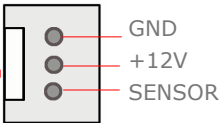
Plug the CPU fan cable to the 3-pin CPUFAN connector. If you have chassis fan, you can also plug it in SYSFAN1 or SYSFAN2 connector.



CPUFAN Connector



System Connector

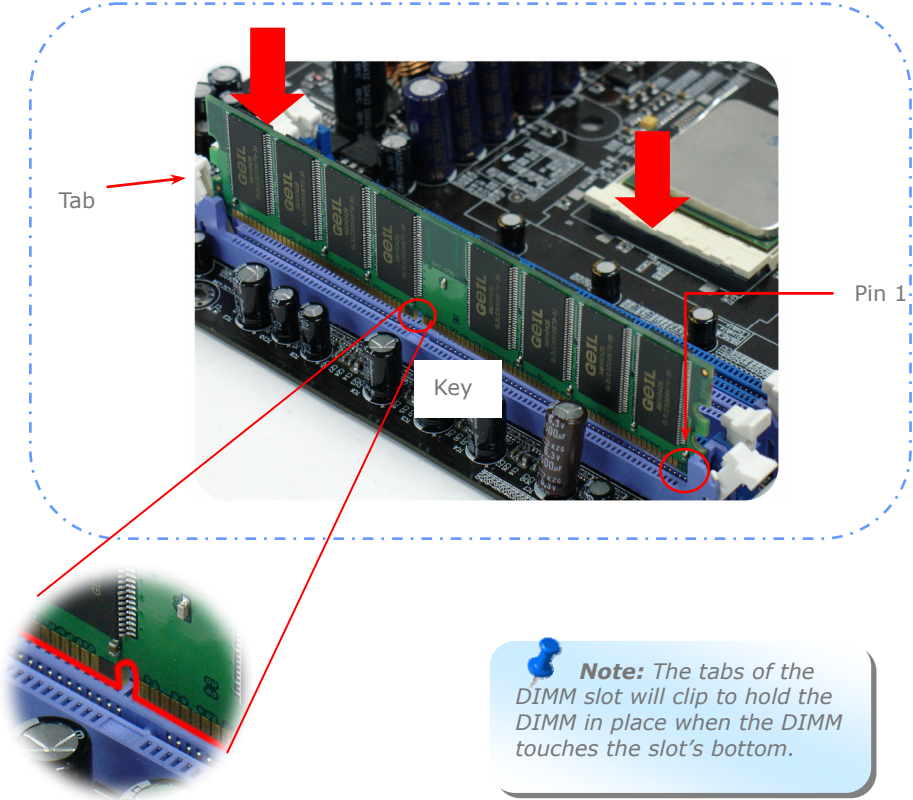


SYSFAN2 Connector

Note: Some CPU fans do not have sensor pin so that they cannot support fan monitoring.

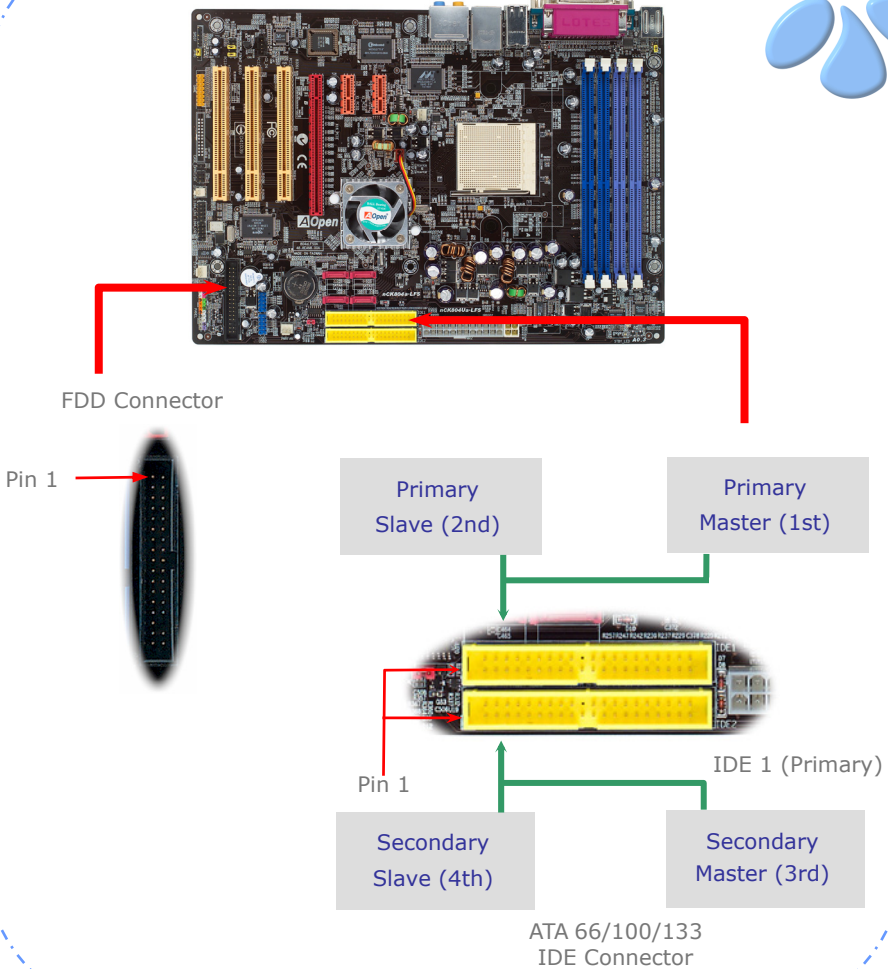
Installing Memory Modules

DIMM slots are designed in Navy Blue or Electronic Blue which are very easy to recognize. Insert the module straight down to the DIMM slot with both hands and press down firmly until the DIMM module is securely in place.



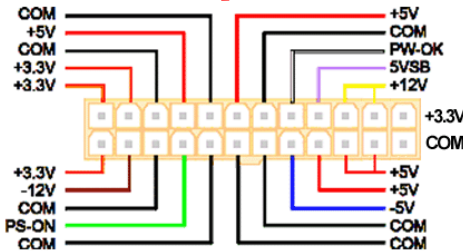
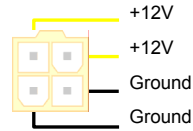
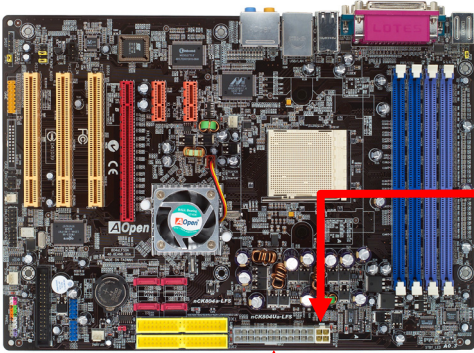
Connecting IDE and Floppy Cables

Connect the 34-pin floppy cable and 40-pin, 80-wire IDE cable to floppy connector and IDE connector. Be careful of the pin1 orientation. Wrong orientation may cause system damage.

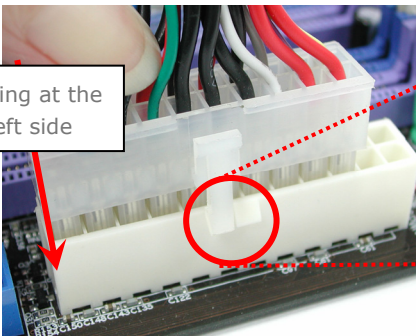


Connecting ATX Power Cables

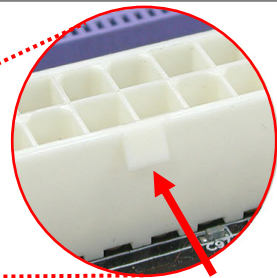
This motherboard comes with a 24-pin and 4-pin ATX power connector as shown below. Make sure you plug them in the right direction. We strongly recommend you to insert the 4-pin connector before connecting the 24-pin connector.



Note: Please aim the power plug at the **left side** of the 24-pin ATX power connector when the foolproof design faces you as shown.



Aiming at the left side

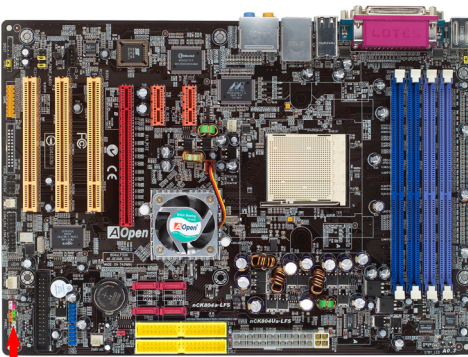


Foolproof

Connecting Front Panel Cable

Attach the power LED, speaker and reset switch connectors to the corresponding pins. If you enable "Suspend Mode" item in BIOS Setup, the ACPI & Power LED will keep flashing while the system is in suspend mode.

Locate the power switch cable from your ATX housing, which is a 2-pin female connector from the housing front panel. Plug this connector to the soft-power switch connector marked SPWR.



	1	
NC		Power Switch
NC		GND
+5V		Power LED-
HDD LED		GND
HDD LED		NC
+5V		NC
+5V		GND
GND		GND
NC		RESET
SPEAKER		GND

Front Panel Connector

3.3 Other Installation for Your Reference

Setting CPU Voltage and Frequency

Setting CPU Core Voltage

This motherboard supports Voltage ID (VID) function to detect CPU voltage automatically during power-on. However, if users are willing to do overclocking, we also provide a range from 0.80V to 1.55V in the BIOS. Sometimes increasing the original core voltage a little bit will make CPU overclock more properly.

Setting CPU Frequency

This motherboard is of CPU jumper-less design; you can set CPU frequency by 1MHz stepping CPU Overclocking in the BIOS. **CPU Core Frequency = CPU FSB clock x CPU Ratio**. However, all CPU now sold in market belong to "Fixed Multiplier". That means users can not adjust the CPU Ratio but change CPU FSB clock to achieve overclocking only.

BIOS Setup > Frequency / Voltage Control > CPU Speed Setup
(Users will do the overclocking at their own risks!!)

CPU Ratio	From 4x to 25x step 1x
CPU FSB (Adjustment manually)	FSB = 200 MHz-250 MHz by 1 MHz Stepping CPU Overclocking

AMD CPU	CPU Core Freq.	CPU Clock	L2 Cache	Ratio
Athlon 64 3000+	1800MHz	200MHz	512KB	9x
Athlon 64 3000+	2000MHz	200MHz	512KB	10x
Athlon 64 3200+	2000MHz	200MHz	512KB	11x
Athlon 64 3200+	2200MHz	200MHz	1024KB	11x
Athlon 64 3400+	2200MHz	200MHz	512KB	12x
Athlon 64 3400+	2400MHz	200MHz	1024KB	12x
Athlon 64 3700+	2000MHz	200MHz	256KB	10x

Note: With CPU speed changing rapidly, there might be faster CPU on the market by the time you received this installation guide. This table is kindly for your references only, please contact with your distributor for more information



Note: If your system hangs or fails to boot because of overclocking, simply use <Home> key to restore the default setting or you can wait the AOpen "Watch Dog ABS" reset the system in five seconds and system will auto-detect hardware

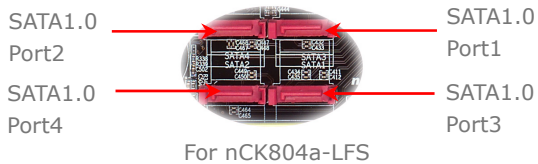
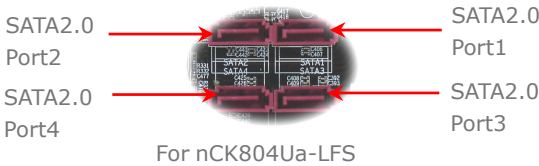
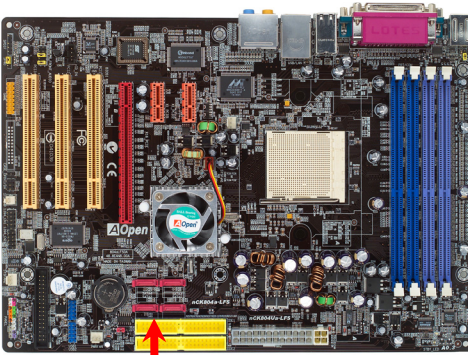


Warning: Supposed you have had adjusted CPU ratio on your current CPU, and you plan to replace a new CPU. Please use <Home> key or Clear CMOS to restore the default setting when changing a new CPU, because the system will still implement the previous CPU setting on the new one.



Connecting Serial ATA

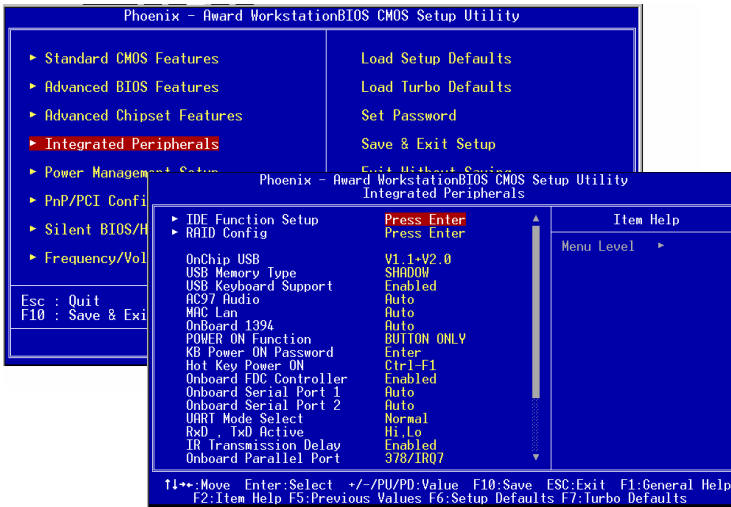
To connect a serial ATA disk, you have to have a 7-pin serial ATA cable. Connect two ends of the serial ATA cable to the serial ATA header on the motherboard and the disk. Like every other traditional disk, you also have to connect a power cable. Please be noted that it is a jumper free implement; you don't need to set jumpers to define a master or slave disk. When serial ATA hard disks are installed on serial ATA ports, the one connected on Port1(SATA1) will be set as the first boot device automatically. **Please note that it doesn't support Hot-Plug in function.**



Adjusting your Hard Disk Setting

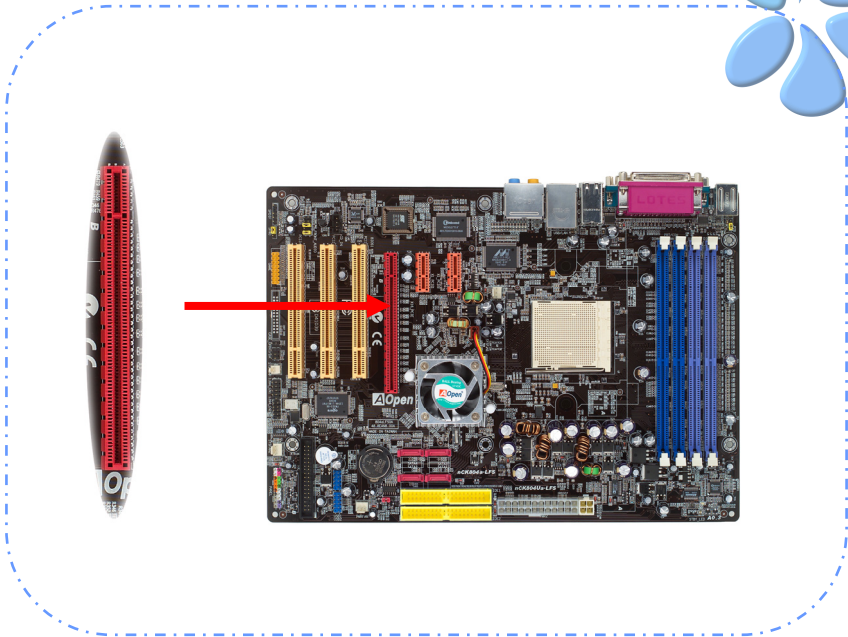
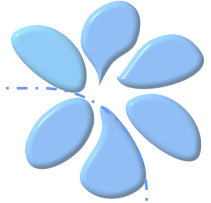
Except its original 2 sets of parallel IDE, this motherboard supports the latest serial ATA hard disk. If you are unable to find your newly installed serial ATA hard disks on your operating system after having them installed, the problem may lie in the BIOS setting. You can simply adjust BIOS settings to have them work properly.

After installing your hard disks properly, you can directly go to BIOS setting screen for adjustment. You may simply press "**Integrated Peripherals → IDE Function Setup**" to enable or disable SATA interface.



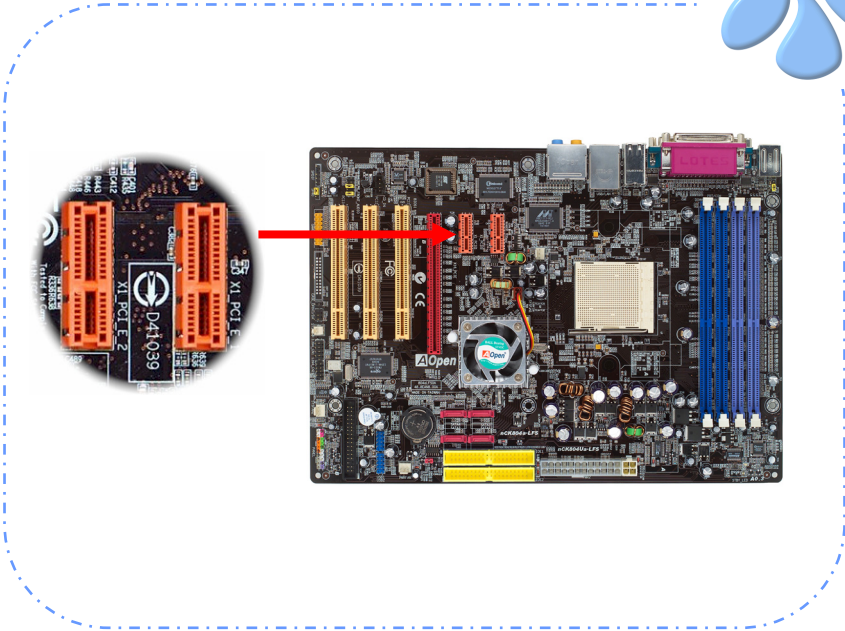
Connecting PCI Express x16 Graphics Slot

nCK804a-LFS/nCK804Ua-LFS provides a PCI Express x 16 Graphics slot, a black slot having the latest PCI Express x 16 specification on motherboard. The PCI Express x 16 is a bus interface targeted for high-performance 3D graphic. Traditionally AGP used both rising and falling edge of the 66MHz clock for 8X AGP, and the data transfer rate could achieve 2.1GB/s. Now PCI Express x 16 is moving to higher data transfer rate, which is upgraded to 8.0GB/s (250MB/s x 16 x 2, it's 4.0GB/s per direction).



Connecting PCI Express x 1 Slot

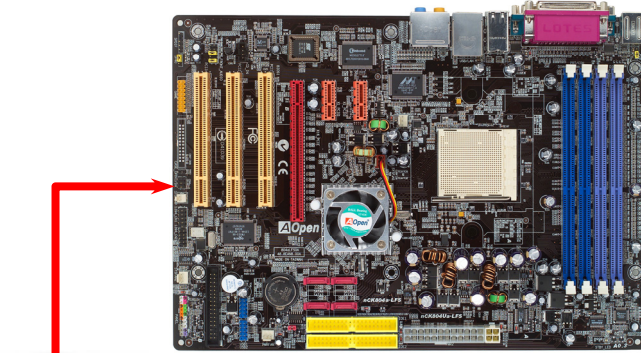
This motherboard provides two PCI Express x 1 slots, which are located between the PCI Express x 16 and traditional PCI slot. In order to go with the step of today's and tomorrow's processors, PCI Express x 1 provides higher I/O bandwidth. The transfer data rate could achieve 250MB/s, which is close to twice the traditional PCI 2.2 data transfer rate. You could install any PCI Express x 1 device in the slot for your preference.



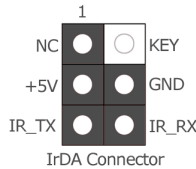
Connecting IrDA

The IrDA connector can be configured to support wireless infrared module, with this module and application software such as Laplink or Windows Direct Cable Connection, user can transfer files to or from laptops, notebooks, PDA devices and printers. This connector supports both HPSIR (115.2Kbps, 2 meters) and ASK-IR (56Kbps).

Install an infrared module onto the IrDA connector and enable the infrared function from BIOS Setup, UART Mode, you can use this function. Please make sure you connect correct orientation when plugging IrDA module.



Pin 1



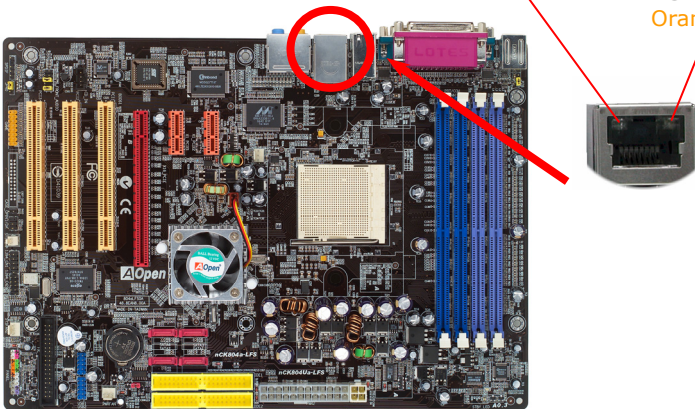
10/100/1000Mbps LAN Supported

On the strength of Gigabit LAN controller on board, this motherboard provides 10/100/1000Mbps Ethernet for office and home use. The Ethernet RJ45 connector is located on the top of USB connectors. The right hand side LED indicates link mode; it lights in orange when linking to network. The left hand side LED indicates the transfer mode and will light in green when data is transferring at 100Mbps (never lights while at 10Mbps), but will light in orange when transferring in Gigabit's mode. To enable or disable this function, you may simply adjust it through BIOS. To enable LAN wakeup function, you have to set the "Wake on PCI Card" enable in the BIOS "Power Management Setup" section.



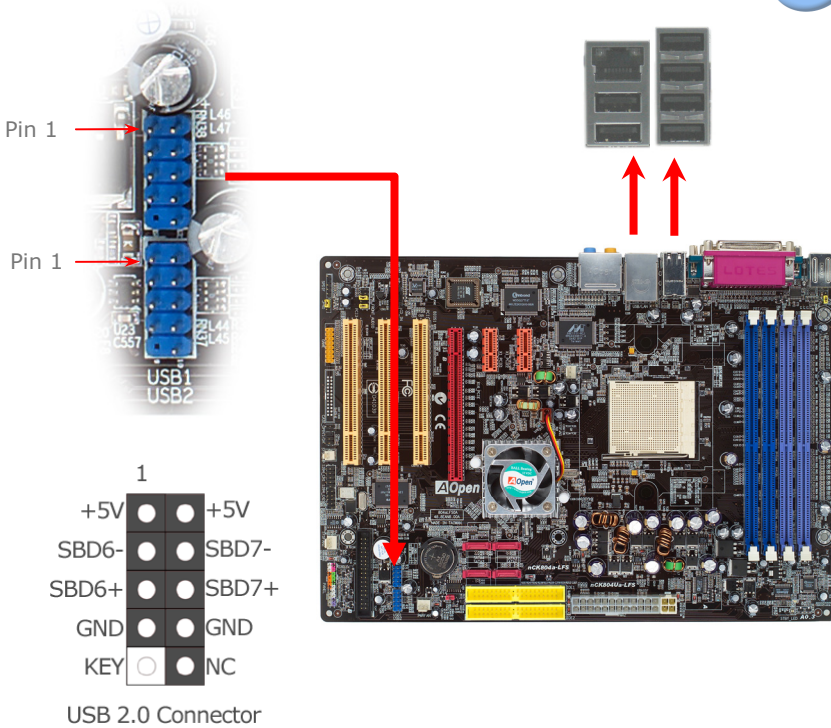
Speed LED (Left)
Green 100Mbps
Orange Gigabit mode

ACT LED (Right)
Orange



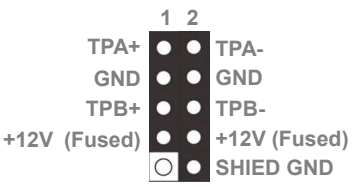
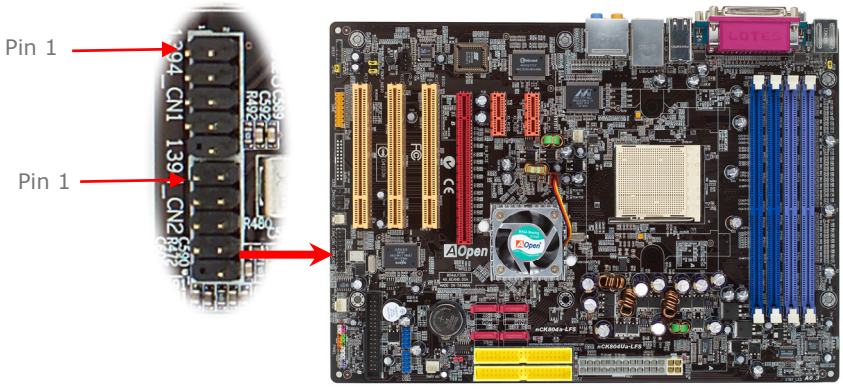
Connecting USB2.0

This motherboard provides ten USB 2.0 ports to connect USB devices such as mouse, keyboard, modem, printer, etc. There are six ports on the back panel. You can use proper cables to connect Front USB connector to USB modules or chassis front panel.



Connecting 1394

This motherboard comes with AGERE 1394 Control Chip onboard, the IEEE 1394 provides data transfer rate up to 400Mb/s, this interface can connect to devices that require high data transferring performance such as digital camera, scanner or others IEEE 1394 devices. Please use appropriate cables to connect IEEE1394 devices.



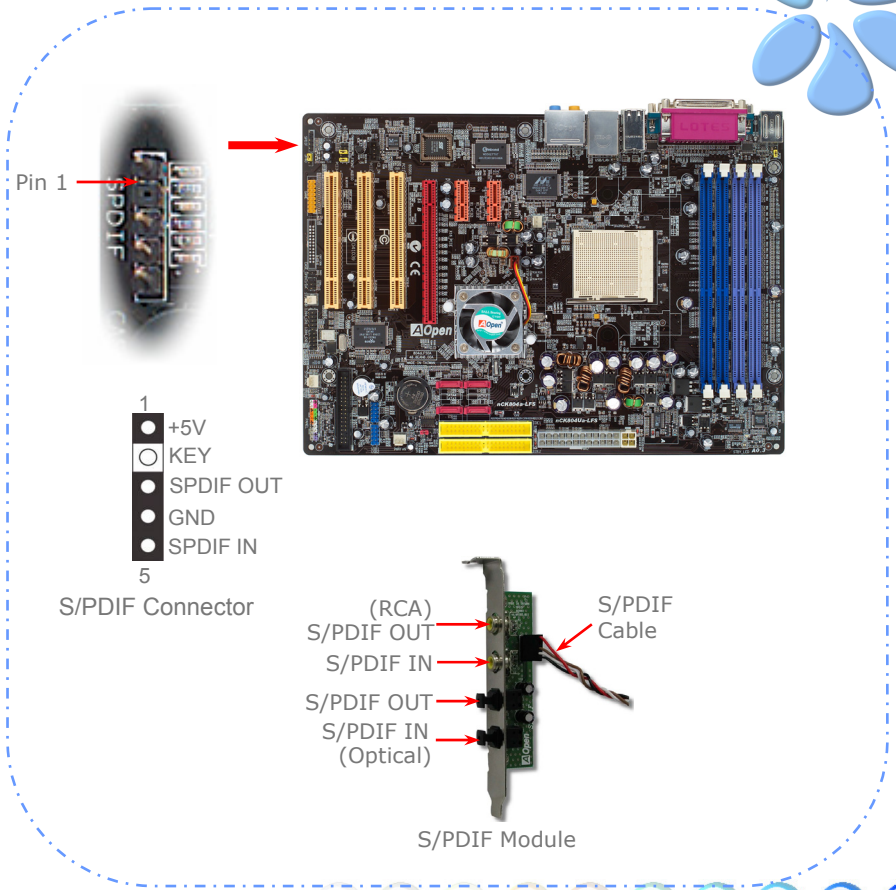
IEEE 1394 Connector



Warning: Please note that Hot-Plug is not allowed on IEEE 1394 headers; doing so will burn the controller IC and damage the motherboard.

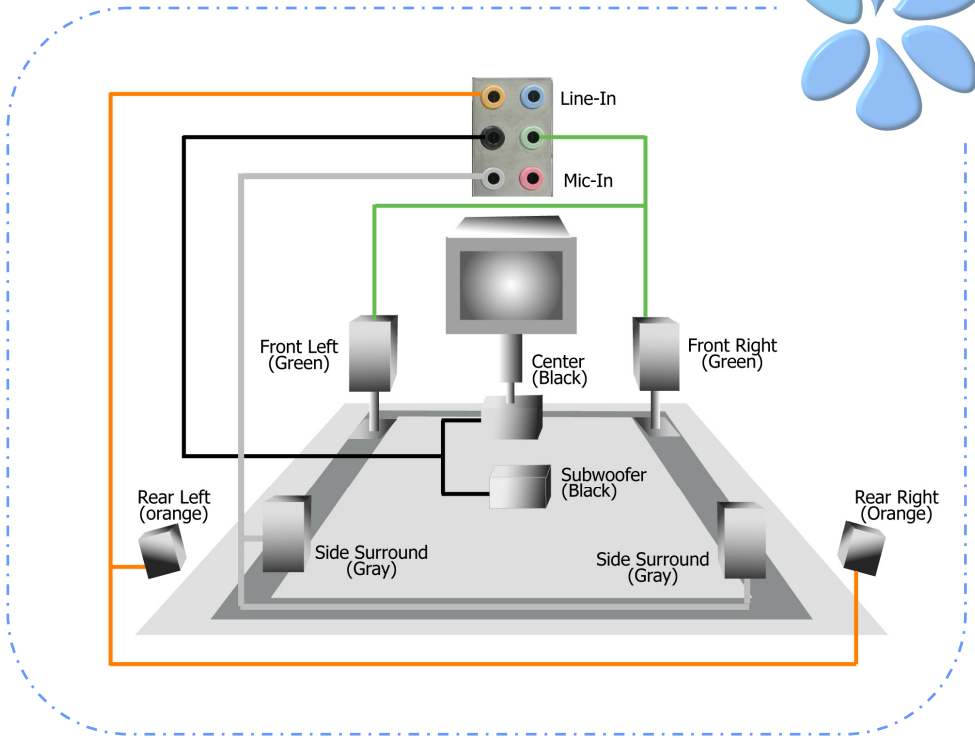
Connecting S/PDIF

S/PDIF (Sony/Philips Digital Interface) is a newest audio transfer file format, which provides impressive audio quality through optical fiber and allows you to enjoy digital audio instead of analog audio. Through a specific audio cable, you can connect the S/PDIF connector to other end of the S/PDIF audio module, which bears S/PDIF digital output. Normally there are two S/PDIF outputs as shown, one for RCA connector, the most common one used for consumer audio products, and the other for optical connector with better audio quality. Same as outputs, you can also connect RCA or optical audio products to input connectors on the module and have the voice or music come out from your computer. However, you must have a S/PDIF supported speaker/amplifier/decoder with S/PDIF digital input/output to connect to the S/PDIF digital input/output to make the most out of this function.



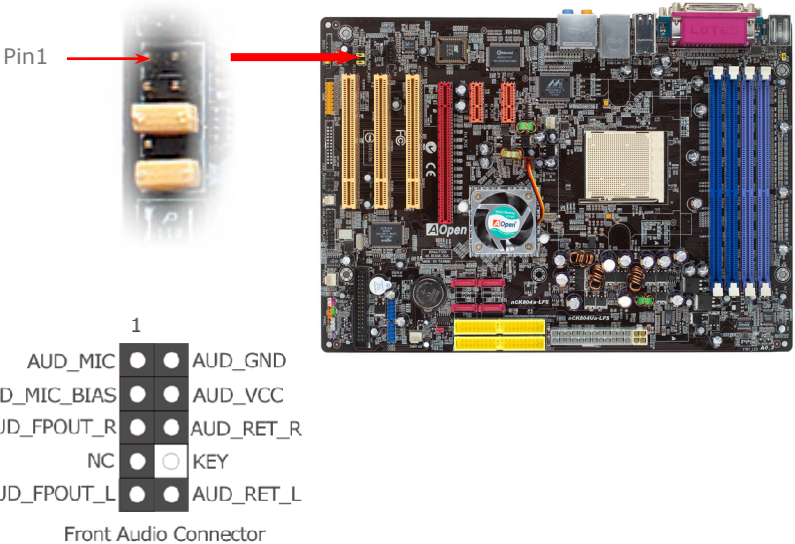
Super 7.1 Channel Audio Effects

This motherboard comes with an AC'97 (Realtek ALC850) CODEC, which supports the latest 7.1 Channel with high quality of audio effects, bringing you a brand new audio experience. This motherboard provides 7.1 Channel ports shown as below. Picture represents the standard location of all speakers in 7.1 Channel sound tracks. Please connect the plug of your front speakers to the green "Speaker out" port , rear surround speakers to orange port, side surround speakers to gray port and both of the center and subwoofer speakers to black port on the back panel.



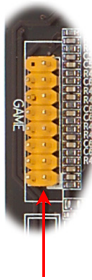
Connecting Front Audio

If the housing is designed with an audio port on the front panel, you'll be able to connect onboard audio to front panel through this connector. By the way, please remove the jumper cap from the Front Audio Connector before you connect the cable. Do not remove this yellow jumper cap if your housing doesn't have an audio port on the front panel.

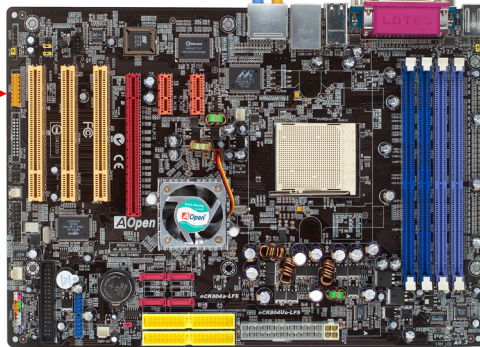


Connecting Game Port

This motherboard comes with a game port (Joystick-Midi) for you to connect any midi devices or joysticks. To use this function you have to have a joystick module and connect it with a game port cable to this port on the motherboard.

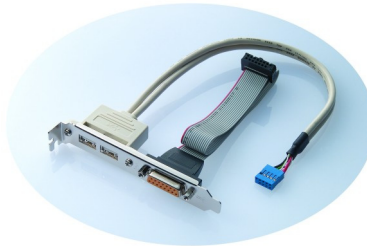


Pin1



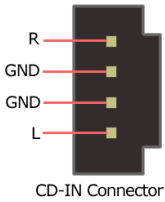
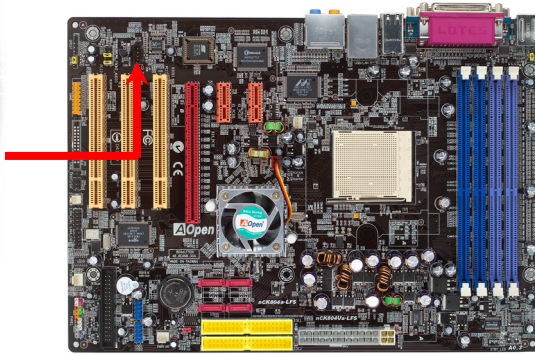
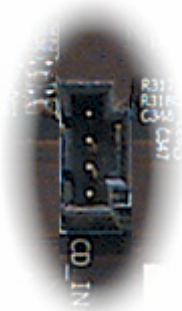
KEY	○	●	+5V
MIDI_RXD	●	●	JAB2
JBB2	●	●	JACY
JBCY	●	●	GND
MIDI_TXD	●	●	GND
JBCX	●	●	JACX
JBB1	●	●	JAB1
+5V	●	●	+5V
	2	1	

Game Port Connector
(User Upgrade Optional)



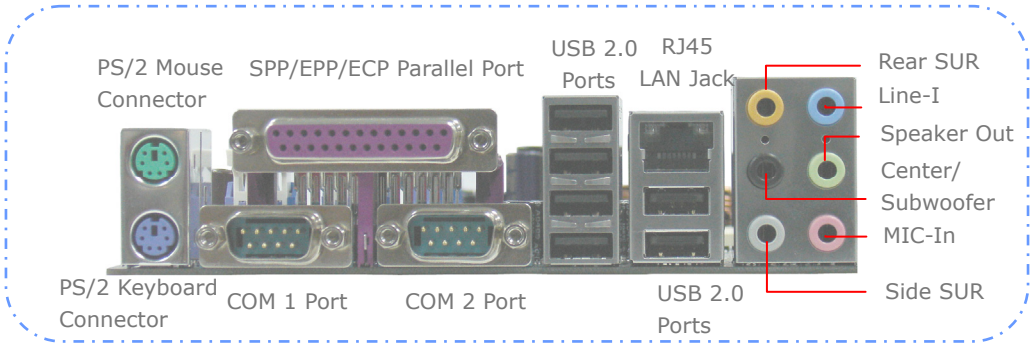
Connecting CD_IN

This connector is designed to connect CD Audio cable from CDROM or DVD drive to onboard sound.



Colored Coded Back Panel

The onboard I/O devices have PS/2 Keyboard, PS/2 Mouse, RJ-45 LAN Connector, COM1, COM2 port, Printer, USB, AC'97 sound. The view angle of drawing shown here is from the back panel of the housing.



PS/2 Keyboard: For standard keyboard, which use a PS/2 plug.

PS/2 Mouse: For PC-Mouse, which use a PS/2 plug.

USB Port: Available for connecting USB devices.

Parallel Port: To connect with SPP/ECP/EPP printer.

COM1 Port: To connect with pointing devices, modem or others serial devices.

COM2 Port: To connect with pointing devices, modem or others serial devices.

RJ-45 LAN Port: To connect Ethernet for home or office use.

Rear SUR: For rear speaker.

Center/Subwoofer: For center & subwoofer speaker.

Side SUR: For side surround speaker.

Speaker Out: To External Speaker, Earphone or Amplifier.

Line-In: Comes from the signal sources, such as CD/Tape player.

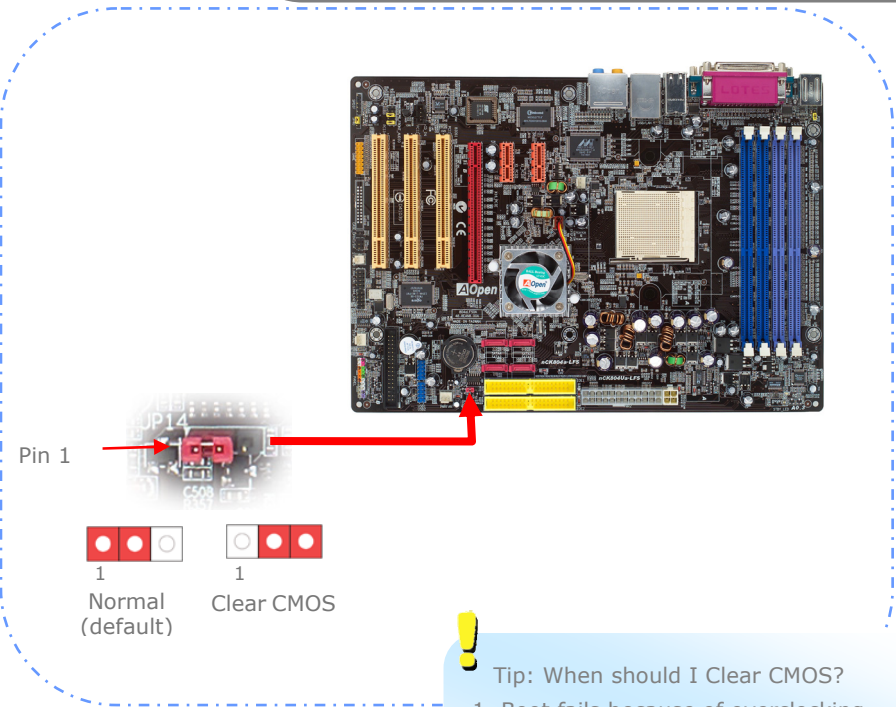
MIC-In: For Microphone

3.4 Jumper Settings

JP14 Clear CMOS

You can clear CMOS to restore system default setting. To clear the CMOS, follow the procedure below.

1. Turn off the system and unplug the AC power.
2. Remove ATX power cable from connector PWR2.
3. Locate JP14 and short pins 2-3 for a few seconds.
4. Return JP14 to its normal setting by shorting pin 1 & pin 2.
5. Connect ATX power cable back to connector PWR2.



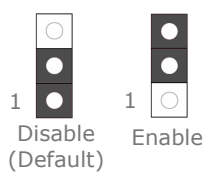
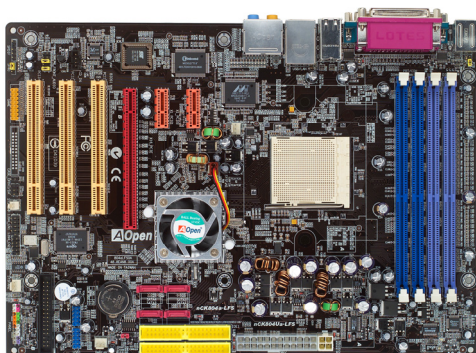
! Tip: When should I Clear CMOS?

1. Boot fails because of overclocking...
2. Forget password...
3. Troubleshooting...

JP28 Keyboard/

Mouse Wakeup Jumper

This motherboard provides keyboard / mouse wake-up function. You can use JP28 to enable or disable this function, which could resume your system from suspend mode with keyboard or mouse. The factory default setting is "Disable" (1-2), and you may enable this function by setting the jumper to 2-3.



Chapter 4 Special Features and Utilities

RAID (Redundant Array of Independent Disks)

This motherboard supports RAID 0, RAID 1 and RAID 0+1 functions. For more RAID introduction, please visit our website:

<http://english.aopen.com.tw/tech/techinside/RAID.htm>

RAID Configuration Utility

Nvidia nForce4 chipset support RAID 0, 1 and 1+0 functions. In order to make sure your system can recognize and operate Serial ATA RAID device smoothly, we have to enter RAID Configuration Utility to do some settings. After finishing the BIOS setup and reboot, you will see [Press F10 to enter RAID setup utility] about half way through the boot up. Pressing F10 immediately, you will later be presented with a screen as shown below, You can use this utility to create or delete your disk arrays.

```
NVIDIA RAID IDE ROM BIOS 4.34
Copyright (c) 2003 NVIDIA Corp.
```

```
Detecting array...
```

```
Press F10 to enter RAID setup utility
```

NVIDIA RAID Utility
- Define a New Array -

RAID Mode: **Mirroring** Striping Block: **Optimal**

Free Disks			Array Disks	
Loc	Disk Model Name		Loc	Disk Model Name
1.0.M	ST330013AS	=> Add		
1.1.M	ST330013AS			
		<=> Del		

[F6] Back [F7] Finish [TAB] Navigate [↑↓] Select [ENTER] Popup

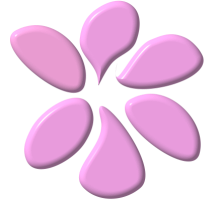


Note: For operating RAID 0 or RAID 1 smoothly, user has to install both NVIDIA RAID CLASS DRIVER and NVIDIA NForce Storage Controller.

Other Useful Features

With excellent design ability of R&D team, AOpen boasts for its various powerful and handy features that come with our product like follows. You are welcomed to visit our technical website to learn more about those features.

<http://english.aopen.com.tw/tech/techinside>



Gigabit LAN



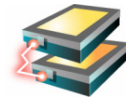
Dual Channel



ATA133



IEEE1394



RAID



Serial ATA



Serial ATA2

Chapter 5 Setting BIOS

Introduction

System parameters can be modified by going into BIOS Setup menu; this menu allows you to configure the system parameters and save the configuration into the 128 bytes CMOS area (normally in the RTC chip or in the main chipset).

The Phoenix-Award BIOS™ that installed in the Flash ROM of the motherboard is a custom version of an industry standard BIOS. The BIOS provides critical low-level support for standard devices such as hard disk drives, serial and parallel ports.

AOpen's R&D engineering team had optimized most BIOS settings of this motherboard. However, some default settings of BIOS cannot fine-tune those sections that controlled by chipset. Therefore, this chapter is intended to guide you and help you to configure some other settings.

To enter BIOS setup menu, press when POST (Power-On Self Test) screen is shown on your monitor.



Note: *Because BIOS code is the most often changed part on motherboard, the BIOS information contained in this manual may be different from the BIOS version that comes with your motherboard.*

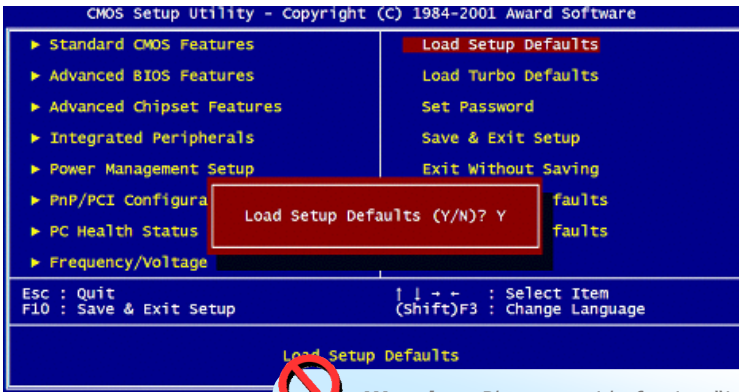
How To Use Phoenix-Award™ BIOS Setup Program

Generally, you can use arrow keys to highlight items that you want to choose, press <Enter> key to select, and use <Page Up> and <Page Down> keys to change setting values. You can press <Esc> key to quit Phoenix-Award™ BIOS setup program. The following table provides details about how to use keyboard in the Phoenix-Award™ BIOS setup program. Alternatively, it's strongly recommended to install AOpen's newest WinBIOS Utility to get more detailed description, further powerful functions and advanced setting of BIOS.

Key	Description
Page Up or +	Change setting to next value or increase the value.
Page Down or -	Change setting to previous value or decrease value.
Enter	Select the item.
Esc	In main menu: Quit without saving any changes. In sub menu: Exit current menu to main menu.
Up Arrow	Highlight previous item.
Down Arrow	Highlight next item.
Left Arrow	Move the light bar to left side of menu.
Right Arrow	Move the light bar to right side of menu.
F6	Load Setup Default setting value from CMOS.
F7	Load turbo setting value from CMOS.
F10	Save changed settings and exit setup program.

How To Enter BIOS Setup

After finishing the jumper settings and connecting cables, you can power on and enter the BIOS Setup. Press during POST (Power-On Self Test) and choose "Load Setup Defaults" for recommended optimal performance.



Warning: Please avoid of using "Load Turbo Defaults", unless you are certain your system components (CPU, SDRAM, HDD, etc.) are good enough for turbo setting.

Chapter 6 Installing Drivers



You may think that installing drivers and utilities would be a repeated task of going through those installation wizards and steps-by-steps. Now, you will be surprised with how "Ez" EzInstall could do. Without wizards or steps, all you have to do is to do one click and then it's done. Click and done. Yes. EzInstall makes installation easy and even foolproof!

After putting in the CD, you will be prompted with AOpen welcome page and our branches information.

First, click on the install driver ICON at left side for necessary drivers.

Second, click on the install utility ICON at left side for preferred utilities.

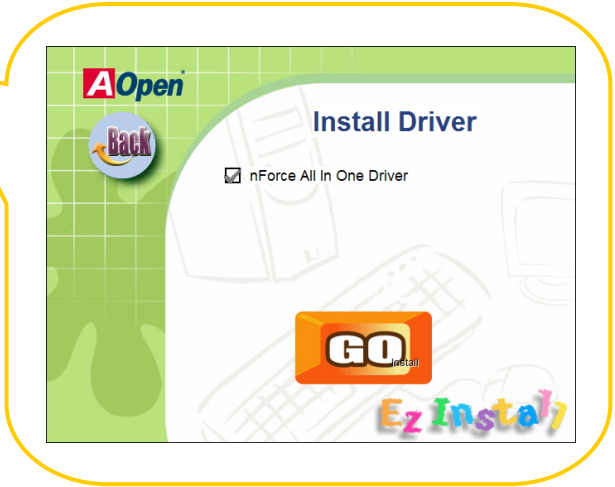
Practically, it's done. But you may also browse CD contents, Readme to get more information or just exit the CD installation.

The screenshot shows the AOpen EzInstall welcome screen. On the left side, there is a vertical menu of icons with callout boxes: 'Install driver' (pointing to a CD icon), 'Install utility' (pointing to a folder icon), 'Browse CD Contents' (pointing to a CD icon), 'Readme' (pointing to a document icon), and 'Exit CD' (pointing to a CD icon). The main area of the screen features the AOpen logo at the top left, a 'Welcome' message, and contact information for various branches. A callout box 'Click to install online manual' points to the 'Install User manual' link at the top right. Another callout box 'AOpen branches information' points to the contact information table.

Contact us	
AOpen Inc. http://www.aopen.com.tw TEL: +886-2-3789-5888 FAX: +886-2-3789-5899	AOpen Computer GmbH. http://www.aopen.com.de TEL: +49-1805-559191 FAX: +49-2102-157799
AOpen America Inc. http://english.aopen.com.tw TEL: +1-510-489-8928 FAX: +1-510-489-1998	AOpen Japan Inc. http://www.aopen.co.jp TEL: +81-048-290-1800 FAX: +81-048-290-1820
AOpen Computer B.V. http://www.aopen.nl TEL: +31-73-645-9516 FAX: +31-73-645-9604	AOpen International Co., Ltd. http://www.aopen.com.cn TEL: +86-21-6225-8622 FAX: +86-21-6225-7926

6.1 Installing Drivers

As you may see from the Installing driver page, EzInstall had picked up necessary for your motherboard. All you have to do is just click on the **"GO"**, and no more steps afterward, of all listed drivers, grey checks indicate necessary drivers; you cannot click them off. Red checks can be disabled if you don't want to install them now.



Press the icon will prompt the **"Install Driver"** page. You may also press **"Back"** to return to the Main page.



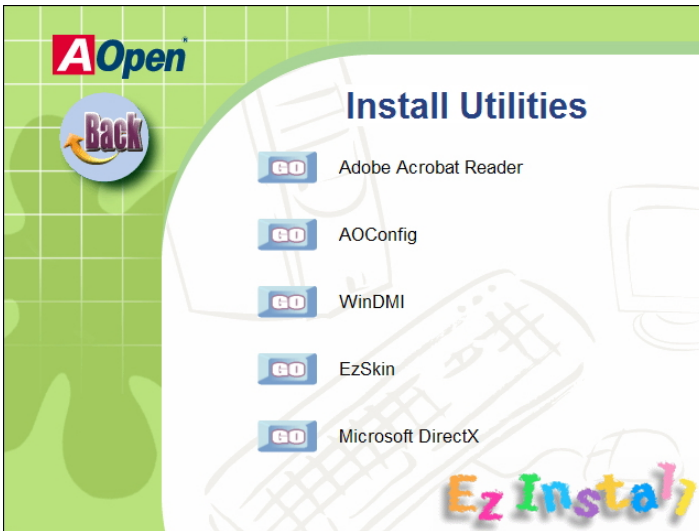
Once clicking **"GO"**, EzInstall will run the installing procedure automatically, and prompt a reboot dialog (Some drivers or utilities may skip the reboot part).

6.2 Installing Utilities

Installing Utilities is virtually the same as installing drivers. AOpen provides you many friendly and powerful utilities to manage your system. You may find lots of fabulous utilities listed there, and all you have to do is to click on the **"GO"**, then it will install the utilities to your system right away without complicated steps.

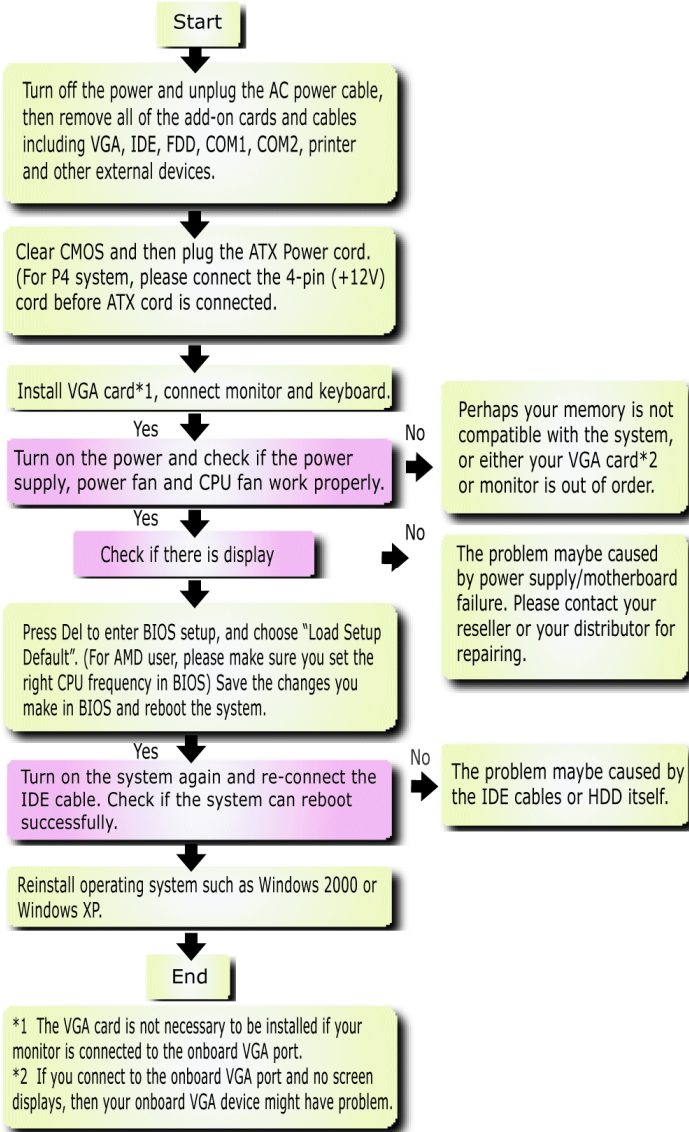


Press the icon will prompt the **"Install Utilities"** page for your selection. You may also press **"Back"** to get back to the Main page.





Troubleshooting



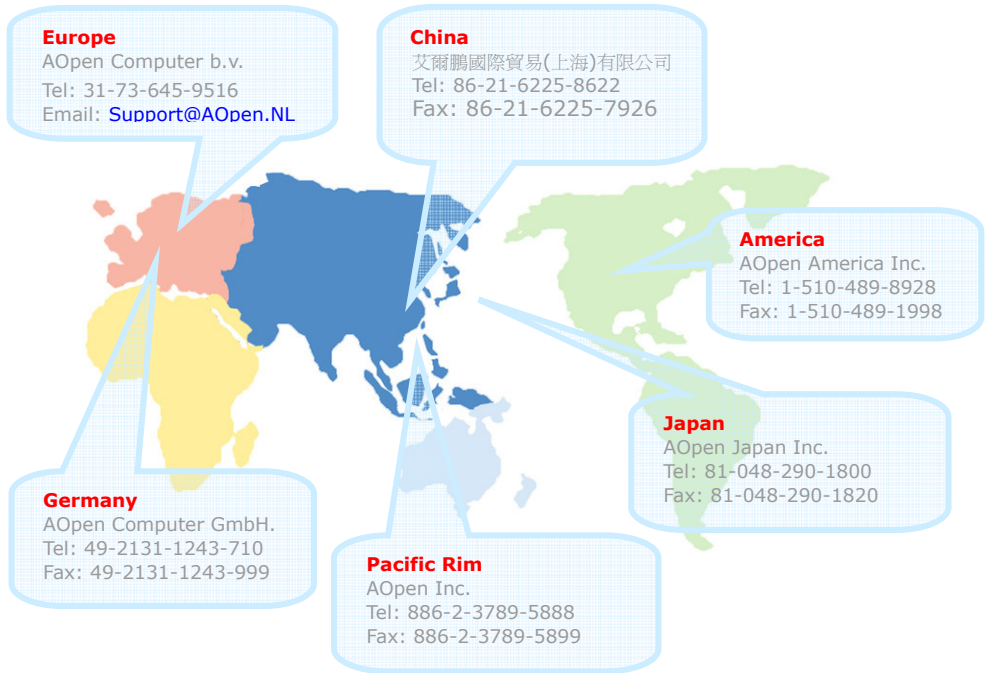
Chapter 8 Technical Support

Dear Customer,

Thanks for choosing AOpen products. We invite you to register at <http://www.aopen.com> to become a Gold Member of Club AOpen so as to ensure quality service in the future. In order to maintain the best service to every customer of us, we recommend you to follow the procedures below and seek help from our branches according to the region you buy the product. With your help, we can then continue to provide efficient and the best quality service to every customer.

Thanks very much for your understanding!

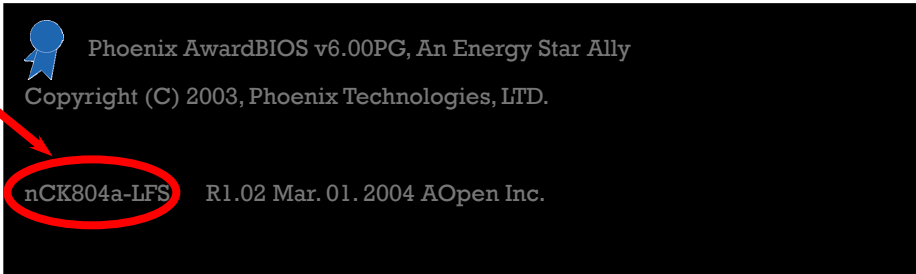
AOpen Technical Supporting Team



Europe Email: Support@AOpen.NL
Pacific Rim: <http://www.aopen.com.tw/tech/default.htm>
China: <http://www.aopen.com.cn/tech/default.htm>
Germany: <http://www.aopencom.de/tech/default.htm>
America: <http://usa.aopen.com/tech/default.htm>
Japan: <http://www.aopen.co.jp/tech/default.htm>

Model Name and BIOS Version

Model name and BIOS version can be found on upper left corner of first boot screen (POST screen).



For example: nCK804a-LFS is model name of motherboard; R1.02 is BIOS version

Register Your Motherboard

Thanks for choosing AOpen product, please register this motherboard at <http://club.aopen.com.tw/productreg/> to become a Gold member of Club AOpen, and to ensure high service quality and priority from AOpen. You will also have a chance to play slot machine game to win prize from AOpen. Please prepare the following information before you start: Model Name, Part Number (P/N), Serial Number (S/N) and Purchase Date. The Part Number and Serial number are printed on bar code label. You can find this bar code label on the outside packing or on component side of PCB. For example:



Part No.

Serial No.

P/N: 91.88110.201 is part number, S/N: 91949378KN73 is serial number.

Phoenix-Award BIOS ERROR Message	
Beep Sound	Message
1 short(Beep)	System booting is normally.
1 long - 1 short(Beep)	DRAM ERROR
1 long - 2 short(Beep)	Display card or monitor connected error
1 long - 3 short(Beep)	Keyboard Error
Long(Beep) continuous	DRAM hasn't inset correctly.



Technical Support

Online Manual: To download manual, please log on and then select your preferred language. Under "Type" directory, choose "Manuals" to go to our manual database. You can also find the manual and EIG in AOpen Bonus Pack.

<http://download.aopen.com.tw/downloads>

Test Report: We recommend you to choose board/card/device from the compatibility test reports for assembling your PC. It may prevent incompatibility problems.

<http://english.aopen.com.tw/tech/report/default.htm>

FAQ: Here we list problems that users often encounter and FAQ (Frequently Asked Questions). You may select your preferred language after log on, and may be able to find a solution to your problem.

<http://club.aopen.com.tw/fag/>

Download Software: After log on and having language selected, you may get the latest updated BIOS/utility and drivers you need under "Type" directory. In most case, newer versions of drivers and BIOS have solved earlier bugs or compatibility problems.

<http://download.aopen.com.tw/downloads>

eForum: AOpen eForum is provided to discuss our products with other users, in which your problem probably had been discussed before or will be answered. After log on, you may select your preferred language under "Multi-language".

<http://club.aopen.com.tw/forum>

Contact Us: Please prepare detail system configuration and error symptom before contacting us. The part number, serial number and BIOS version are also very helpful.

Contact Distributors/Resellers: We sell our products through resellers and integrators. They should know your system configuration very well and should be able to solve your problem efficiently and provide important reference for you.