

Item Checklist

Completely check your package. If you discover damaged or missing items, contact your retailer.

- ☒ SynactiX 1 mainboard
- ☒ QDI Driver CD 2000
- ☒ I/O shield
- ☒ 1 IDE ribbon cable
- ☒ 1 floppy ribbon cable
- ☒ 1 9-pin ribbon cable with bracket for serial port 2 (manufacturing option)
- ☒ 1 spare jumper cap
- ☒ QDI Serial Product R.M.A. Warranty Card
- ☒ User's manual

Notice

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If you require further information, please visit our web-site: "www.qdigrp.com".

Declaration of conformity



QUANTUM DESIGNS(HK) LTD.

**5/F Somerset House, TaiKoo Place 979 Kings Road,
Quarry Bay, Hong Kong**

declares that the product

**Mainboard
SynactiX 1**

is in conformity with

(reference to the specification under which conformity is declared in
accordance with 89/336 EEC-EMC Directive)

- ☒ EN 55022 Limits and methods of measurements of radio disturbance characteristics of information technology equipment
- ☒ EN 50081-1 Generic emission standard Part 1:
Residential, commercial and light industry
- ☒ EN 50082-1 Generic immunity standard Part 1:
Residential, commercial and light industry

European Representative:

QDI COMPUTER (UK) LTD

QDI COMPUTER (SCANDINAVIA) A/S

QDI SYSTEM HANDEL GMBH

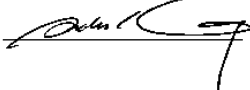
QDI COMPUTER (NETHERLANDS) B. V.

QDI COMPUTER (FRANCE) SARL

QDI COMPUTER HANDELS GMBH

QDI COMPUTER (ESPANA) S.A.

QDI COMPUTER (SWEDEN) AB

Signature :  , Place / Date : HONG KONG/2000

Printed Name : Anders Cheung Position/ Title : President

Declaration of conformity

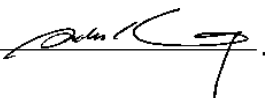


Trade Name: QDI Computer (U. S . A.) Inc.
Model Name: SynactiX 1
Responsible Party: QDI Computer (U. S. A.) Inc.
Address: 41456 Christy Street
Fremont, CA 94538
Telephone: (510) 668-4933
Facsimile: (510) 668-4966

Equipment Classification: FCC Class B Subassembly
Type of Product: Mainboard
Manufacturer: Quantum Designs (HK) Inc.
Address: 5/F, Somerset House, TaiKoo Place
979 Kings Road, Quarry Bay, HONG
KONG

Supplementary Information:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Signature : 

Date : 2000



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Caution 1

Be sure to unplug the AC power supply before adding or removing expansion cards or other system peripherals, especially the SDRAM memory, otherwise your mainboard or the system memory might be seriously damaged.

The power status of the system is indicated by the red LED near the three DIMM sockets. If the LED is on, adding or removing devices like SDRAM memory is prohibited.

Caution 2

Be sure to add some Silicone Grease between the PentiumIII (Coppermine) CPU and the FAN to keep them fully contact , meanwhile to meet the heat sink requirement.



SpeedEasy Quick Setup

Procedures :

1. Correctly insert the Intel® Pentium III FC-PGA or Celeron™PPGA 370processor.
2. Plug in other configurations and restore the system.
3. Switch on power to the system and press the key to enter BIOS Setup.
4. Enter "CPU SpeedEasy Setup" menu to set up the CPU speed.

Note: If you do not set the CPU speed, your system will run at the default setting (400MHz processor with 133MHz host bus speed, 300MHz for processor with 100MHz host bus speed, 200MHz for processor with 66MHz host bus speed, for bus ratio locked processor, run its real speed.

5. Save and exit BIOS Setup, your system will now boot successfully.



CPU SpeedEasy Setup Menu

Select <CPU SpeedEasy Setup> item from the main menu and enter the sub-menu:



Figure - 1 CPU SpeedEasy Setup Menu

BIOS provides you with a set of basic values for your processor selection instead of the jumper settings. The processor speed can be manually selected on the “CPU SpeedEasy SETUP” menu screen.



Warning:

Do not set CPU frequency higher than its working frequency. If you do, we will not be responsible for any damages caused.



SpeedEasy 快速安装指南

程序：

1. 正确地插入 Intel® Pentium III FC-PGA or Celeron™PPGA 370 中央处理器。
2. 插入其他配置，组装成完整的微机系统。
3. 开启系统电源，并且按住 键，进入 BIOS 设置程序。
4. 进入“CPU SpeedEasy Setup”菜单，以调节中央处理器的速度。

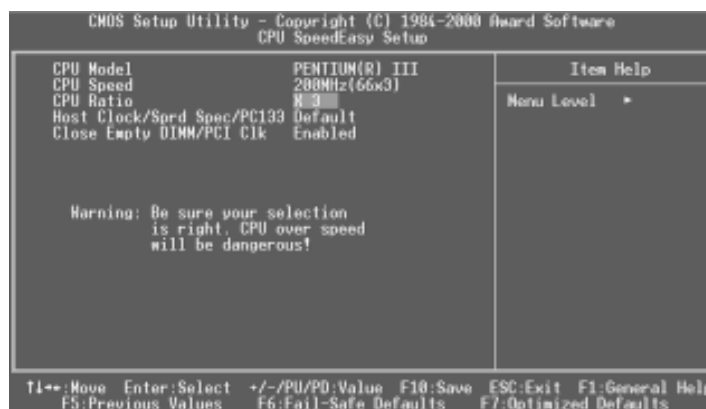
注意：若不调节中央处理器的速度，系统将以预设的速度运行（133 兆赫总线的 CPU 会以 400 兆赫运行，100 兆赫总线的 CPU 会以 300 兆赫运行，66 兆赫总线的 CPU 会以 200 兆赫运行，对于倍频数锁死的 CPU，运行其实际速度）。

5. 存储设定值，退出 BIOS，系统就可以按你设定的速度运行了。



SpeedEasy 中央处理器设定菜单

从主设置菜单中选择<CPU SpeedEasy Setup>项，然後进入子菜单：



图一 1 SpeedEasy 中央处理器设定项目单

BIOS为你的中央处理器提供一组基本选项，以代替传统的跳线(jumper)方式，使你可以在“CPU SpeedEasy Setup”菜单上，为中央处理器选择正确的工作频率。



警告：

请勿将中央处理器的频率调节至高於其正常工作频率，否则本公司将不会负责由此而产生的任何损毁。



Installation de la carte mère SynactiX 1

1. Assurez-vous que votre ensemble est complet: carte mère, câbles IDE et FLOPPY, notice d'utilisation et CD-ROM d'installation.
2. Vérifiez que l'alimentation est débranchée et reliez-vous à la terre par une courroie à votre poignet. A défaut, maintenez le contact de vos deux mains avec un objet lui-même relié à la terre, ou une partie en métal de votre système.
3. Fixez la carte mère dans le boîtier grâce aux vis fournies avec celui-ci.
4. Si votre carte mère est munie de cavaliers, placez les en fonction des options que vous souhaitez utiliser: réglage de la fréquence du processeur si votre carte n'est pas SpeedEasy, fonction allumage par saisie du mot de passe...(voir le manuel, rubrique «configuration des cavaliers» pages 13 à 17)
5. Insérez le processeur dans son logement avec son ventilateur que vous brancherez au connecteur «CPUFAN».
6. Insérez la/les barrette(s) mémoire dans les slots DIMM.
7. Installez vos éventuelles cartes PCI et AMR dans les slots prévus à cet effet (voir page centrale du manuel).
8. Branchez vos périphériques IDE et FLOPPY sur les connecteurs prévus à cet effet grâce aux nappes fournies avec la carte. Vérifiez que le sens de branchement est correct (liseré rouge du câble sur la broche 1 du connecteur).
9. Reliez les câbles du boîtier aux connecteurs prévus à cet effet (Connecteur d'alimentation, LED de marche/arrêt, disque dur, haut-parleur...voir manuel pages 9 à 12). Refermez le boîtier.
10. Branchez les périphériques externes sur les sorties du fond de panier: clavier, souris PS/2, périphériques USB, moniteur, imprimante...(voir manuel pages 7-8)
11. Lorsque tous les éléments du système sont installés physiquement, rebranchez l'unité centrale.



Installation du système.

1. Démarrez votre système en pressant le bouton «POWER».
2. Pressez la touche «Suppr» pour entrer dans le setup du BIOS.
3. Dans le menu «SpeedEasy CPU Setup», réglez la vitesse de votre processeur (ATTENTION: il est recommandé de ne pas sélectionner une fréquence supérieure à celle de votre processeur, nous déclinons toute responsabilité pour les dommages qui en résulteraient)
4. Effectuez les autres réglages du BIOS selon votre configuration (nous vous conseillons fortement de maintenir les réglages par défaut afin d'éviter toute manipulation hasardeuse pouvant résulter en un dysfonctionnement). Pour plus d'informations sur les fonctions du BIOS, vous pouvez consulter la version française du manuel sur le CD-ROM.
5. Pressez la touche F10 ou choisissez «Save and exit» pour enregistrer vos paramètres et relancer la machine.
6. Installez votre système d'exploitation
7. Après installation, assurez-vous qu'il ne subsiste aucun conflit ou périphérique inconnu dans votre système.
8. Installation des pilotes:
 - Logiciel Demo Shield
Un logiciel qui vous apporte une nouvelle interface plus conviviale et facile à utiliser.
 - Point-and-Click
Placez simplement la souris sur l'option que vous désirez et cliquez , le pilote ou le logiciel dont vous avez besoin s'installe automatiquement.
 - Intelligently Recognition
Reconnaissance automatique du matériel et installation des pilotes nécessaires pour les composants intégrés.



Express Install

Il est recommandé d'installer les programmes avec les options les plus communes.

- A. Intel 815 INF
- B. Intel INF utility
- C. Intel Security driver
- D. VGA driver
- E. Audio driver
- F. MIDI driver (optionnel)
- G. Pilote réseau (optionnel)

Redémarrez l'ordinateur après installation des pilotes son, le système trouvera un périphérique Son, cliquez sur « Suivant » jusqu'à « Terminer » et le périphérique son fonctionnera normalement. N'oubliez pas de redémarrer une nouvelle fois l'ordinateur !

Note : si vous cliquez sur « Annuler » au lieu de « Suivant » pendant la procédure ci-dessus, le périphérique son risque de ne pas être détecté, redémarrez alors l'ordinateur et reprenez la procédure ci-dessus.

1. Accessory

Les logiciels contenus dans ce répertoire sont :

- A. DirectX 7.0
- B. QDI ManageEasy
- C. PC-Cillin

2. Browse CD

Vous pouvez voir le contenu du CD-ROM

Dans le répertoire Utility :

- A. AWDFLASH.EXE
- B. LFEXE

3. Dans le répertoire Documents :

- A. Adobe Acrobat Reader V3.0 – Ar32e301.exe
- B. Manuels français WinneX 1 et WinneX 3 – WX1FR.doc et WX3FR.doc



Note: si vous ne déterminez pas la vitesse de votre unité centrale, votre système fonctionnera par défaut (400MHz pour les CPU avec une fréquence de Bus de 133MHz et 300MHz pour les CPU avec une fréquence de Bus de 100MHz et 200MHz pour les CPU à 66MHz).

V. Sauvegardez et quittez le Bios.

CMOS Setup Utility – Copyright© 1984-1999 Award Software

SpeedEasy CPU Setup

| | | |
|-----------------|--------------------|--------------|
| CPU Model | : Intel® Celeron™ | Item Help |
| CPU Speed | : 433 Mhz (66x6.5) | |
| X Multiplier | X2 | Menu Level > |
| X Bus Clock | 66MHz | |
| Spread Spectrum | Disabled | |

Prévenir :

Le menu SpeedEasy vous fournit un ensemble de valeurs. Vous pouvez sélectionner manuellement la vitesse de CPU dans ce menu soit en mode «SpeedEasy» soit en mode «Jumper Emulation» (voir manuel).

ATTENTION: Ne pas sélectionner une fréquence de fonctionnement du CPU supérieure à celle indiquée par le constructeur. Nous déclinons toute responsabilité pour tout dégât qui en résulterait.



Chapter 1

Introduction

Overview

SynactiX 1 green mainboard utilizes the Intel integrated graphics chipset — Intel® 815 Chipset, providing a fully compatible, high performance and cost-effective PC/microATX platform. The new integrated technologies, together with the software configurable AC'97 audio and modem system give customers an advanced, multimedia solution at an extremely low price. It provides 66/100/133 MHz system bus to support all Intel® Pentium III & Celeron FC-PGA processors and Celeron™ PPGA 370 processors. 100/133MHz SDRAMs are supported up to 512MB. It also provides advanced features such as Wake-on-LAN, Wake-on-Modem and Keyboard Password Power-on functions. Suspend to RAM, the optimal implementation of the Advanced Configuration and Power Interface (ACPI) specification, makes the PC's power consumption drop to the lowest possible level and enable quick wakeup. ManageEasy, our system management application is also supplied to enable remote monitoring and configuration of the system.

Key Features

Form factor

- MicroATX form factor of 244mm x 205mm.

Microprocessor

- Supports all Intel® Pentium III(Coppermine) FC-PGA processors at 533/600/667/733/800/866/933MHz and future processors with 133MHz bus speed.
- Supports all Intel® Pentium III(Coppermine) FC-PGA processors at 500/550/600/650/700/750/800/850MHz and future processors with 100MHz bus speed.
- Supports all Intel® Celeron™FC-PGA processors at 533/566/600MHz and future processors with 66MHz bus speed.
- Supports all Intel® Celeron™ PPGA processors at 300/300A/333/366/400/433/466/500/533MHz and future processors with 66MHz bus speed.
- Supports 66/100/133MHz host bus speed.
- CPU core frequency = Bus speed x3, x3.5, x4, x4.5, x5, x5.5, x6, x6.5, x7, x7.5, x8, x8.5, x9, x9.5, x10, x10.5, x11, x11.5, x12.
- The CPU core voltage adjustable from 1.3V to 2.0V automatically through onboard switching voltage regulator with VID(Voltage ID).
- Provides onboard 1.5V, 1.8V, 2.5V and 3.3V standby regulator.

System memory

- Provides three 168 pin 3.3V unbuffered DIMM sockets.
- Supports 64-bit wide DIMM modules with 100/133MHz SDRAM devices.
- Supports 32MB to 256MB SDRAM using 16Mb/64Mb/128Mb technology.



- Supports 512MB SDRAM using 256Mb technology.
- Supports up to three double-sided DIMMs(6 Rows) at 100MHz system memory bus.
- Supports up to two double-sided or three single-sided DIMMs(4 Rows Max) at 133MHz system memory bus(PC-133).

Onchip AGP

- Integrated 2D/3D Graphics Controller.
- Up to 1600x1200 in 8bit color at 85MHz refresh.
- Integrated H/W Motion Compensation Engine.
- Intel D.V. M. technology.
- 4MB 32-bit 133MHz SDRAM Display Cache interface multiplexed on the AGP interface, providing flexibility by optional AIMM.

Onboard IDE

- Supports two PCI PIO and Bus Master IDE ports.
- Two fast IDE interfaces supporting four IDE devices including IDE hard disks and CD-ROM drives.
- Supports up to PIO Mode 4 timing.
- Supports "Ultra ATA/33" Synchronous DMA modes, transferring data up to 33MB/s.
- Supports "Ultra ATA/66" Synchronous DMA modes, transferring data up to 66MB/s.
- Integrated 16x32bit buffer for IDE PCI Burst Transfers.

Onboard I/O

- Winbond W83627HF LPC I/O chip.
- One floppy port supporting up to two 3.5" or 5.25" floppy drives with 360K/720K/1.2M/1.44M/2.88M format.
- Two high speed 16550 compatible UART (COM1/COM2/COM3/COM4 selective) with 16-byte send/receive FIFOs.
- USB host interface supporting 2 USB ports.
- One joystick port.
- Infrared interface.
- All I/O ports can be enabled/disabled in the BIOS setup.

Onboard Sound

- AC'97 2.1 Specification Compliant.
- 18bit stereo codec.
- Multiple stereo input mixer.
- Mono and stereo volume control.
- Provides onboard Line-in Jack, Microphone-in Jack, Speaker-out Jack and MIDI/Joystick Connector.

AGP Interface

- AGP Universal Connector supports AGP 2.0 including 4x AGP data transfers.

Advanced features

- PCI 2.2 Specification Compliant.
- Provides Trend ChipAwayVirus On Guard.



- Supports Windows 95/98/2000 software power-down.
- Supports Wake-on-LAN and Wake-on-Modem.
- Supports Keyboard Password Power-on function.
- Onboard I/O Winbond 83627HF supports system monitoring (monitors CPU and system temperatures, system voltages, chassis intrusion and fan speed).
- Supports management applications such as QDI's ManageEasy or LDCM (LANDesk Client Manager). (optional)
- Provides onboard 3.3V regulator to support ATX power supply without 3.3V output. (Optional)
- System status resumes after AC power failure.
- Supports QDI's innovations such as SpeedEasy, RecoveryEasy, BIOS-ProtectEasy and LogoEasy.
- Protects the system BIOS from being attacked by severe virus such as CIH.
- Supports Suspend to RAM.

BIOS

- Licensed advanced AWARD BIOS, supports flash ROM with 4Mb memory size, plug and play ready.
- Supports IDE CD-ROM or SCSI boot up.

Green function

- Supports ACPI (Advanced Configuration and Power Interface) and ODPM (OS Directed Power Management).
- Supports four ACPI power status: Full-on, Stop Grant, Suspend to RAM, and soft-off.

Expansion slots

- 1 AGP slot.
- 2 PCI slots.
- 1 AMR slot.

Introduction to New Features

AGP In-Line Memory Module(AIMM)

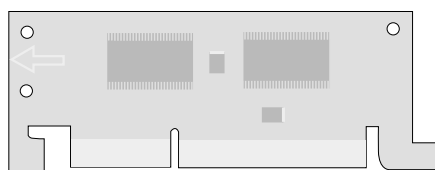
The Intel 815 chipset GMCH multiplexes the integrated graphics' display cache interface with the AGP signal interface. As a result, for a flexible mainboard that supports both integrated graphics and add-in AGP video cards, display cache (for integrated graphics) is needed to populate on a card sharing the universal AGP slot. The card is called an AGP In-Line Memory Module(AIMM) .

When an AGP card is installed in the system, the Intel 815 GMCH internal graphics is disabled and the AGP controller will be enabled. You can choose to populate the AGP slot with AGP graphics card to utilize the advanced features that your AGP card may provide you, or with an AIMM card to enable the highest-possible internal graphics performance, or with nothing to obtain the lowest-cost internal graphics solution.



Installation Steps:

1. Insert the AIMM card into the AGP slot. Please notice that the side of Display Cache is towards to the 2 PCI slots.
2. Install the AGP retention(Optional) on the APG slot to ensure its fixity.



AIMM Card

ESD(Electrostatic discharge) Protection:

This mainboard provides a very high level(up to 25kv) of protection for sensitive electronic components that may be subjected to electrostatic discharge(ESD), especially for the USB interface and PS2 connector. The ESD components that complies with IED61000-4-2 (level 4) and MIL STD883C-Method 3015-6 Class-3 are populated on the mainboard to prevent the system from resetting or hanging by static electricity.

BIOS-ProtectEasy

The BIOS of the mainboard is inside the FWH. Some severe viruses such as CIH virus are so dangerous that it may overwrite the BIOS of the mainboard. If the BIOS has been damaged, the system will be unable to boot. We provide the following solution which protects the system BIOS from being attacked by such viruses.

Here are two choices which implements this function.

1. Set the jumper (JAV) as closed, the BIOS can not be overwritten.
2. Set the jumper (JAV) as open, meanwhile set "Flash Write Protect" as Enabled in AWARD BIOS CMOS Setup. In this way, the BIOS can not be overwritten, but the DMI information can be updated.

Refer to page 16 for detailed information on jumper setting, and page 28 for related BIOS setting.



Suspend to RAM

Suspend to RAM is a cost-effective, optimal implementation of the Advanced Configuration and Power Interface (ACPI) 1.0 specification, which makes a PC's power consumption drop to the lowest possible level and enables quick wakeup. When the system is in Suspend-to-RAM status, the system context is maintained in system memory, the system consumes only a small fraction of the power used for full operation. Instead of shutting down the system to save power when not in use and then having to reboot later, Suspend-to-RAM solution enables the system to quickly wake up, restoring all applications and features, enabling operation in a few seconds.

To implement this function, the following requirements are essential:

1. Power supply requirements: The current of 5VSB line of the power supply should be more than 0.72A.
2. The BIOS option "ACPI function" should be enabled, and "ACPI Suspend Type" should be set as S3 in AWARD BIOS CMOS setup. Refer to page 30 for detailed information.
3. An ACPI-enabled operating system such as Windows 98 or Windows 2000 family is needed. Set the "ACPI Function" as "Enabled" in "Power Management Setup" of BIOS. Navigate to the CD-ROM drive from the MS-DOS Command Prompt and enter the following from the Win98 directory on the CD:

D:\SETUP

(This manual assumes that your CD-ROM device driver letter is D:)

Windows 98 will be installed with ACPI enabled.

For Windows 98 SE and Windows 2000, just install them directly.

4. Three ways to enter Suspend-to-RAM status under ACPI-enabled Windows 98 or Windows 2000:
 - Click Start -> Shut down -> Standby to enable the system to enter Suspend-to-RAM status.
 - Click Start -> Setup -> Control Panel -> Power Management -> Advanced and choose Standby item, the system will enter Suspend-to-RAM status when you press power button.
 - From Power Management Properties in Control Panel, set the latency time in System Standby, the system will enter Suspend-to-RAM status when time out.

The same ways used to power up the system can be used to wake up the system from Suspend-to-RAM status. For example, pushing the power button, through the Wake-on-LAN, Wake-on-Modem function or RTC Alarm. If the keyboard password power-on function is enabled, the keyboard password should be used to wake up the system instead of pushing the power button.



Ultra ATA/66

According to the previous ATA/IDE hard drive data transfer protocol, the signaling way to send data was in synchronous strobe mode by using the rising edge of the strobe signal. The Ultra ATA/33 protocol doubles the burst transfer rate from 16.6MB/s to 33.3MB/s, by using both the rising and falling edges of the strobe signal, this time Ultra ATA/66 doubles the Ultra ATA burst transfer rate once again (from 33.3MB/s to 66.6MB/s) by reducing setup times and increasing the strobe rate. The faster strobe rate increases EMI, which cannot be eliminated by the standard 40-pin cable used by ATA and Ultra ATA. To eliminate this increase in EMI, a new 40-pin, 80-conductor cable is needed. This cable adds 40 additional ground lines between each of the original 40 ground and signal lines. The additional 40 lines help shield the signal from EMI, reduce crosstalk and improve signal integrity.

Ultra ATA/33 introduced CRC (Cyclical Redundancy Check), a new feature of IDE that provides data integrity and reliability. Ultra ATA/66 uses the same process. The CRC value is calculated by both the host and the hard drive. After the host-request data is sent, the host sends its CRC to the hard drive, and the hard drive compares it to its own CRC value. If the hard drive reports errors to the host, then the host retries the command containing the CRC error.

Ultra ATA/66 technology increases both performance and data integrity. However there are basically five requirements for your system to run in Ultra ATA/66 mode:

1. The system board must have a special Ultra ATA/66 detect circuit, such as SynactiX 1 mainboard.
2. The system BIOS must also support Ultra ATA/66.
3. The operating system must be capable of DMA transfers. Win95 (OSR2) and Win98 are capable.
4. An Ultra ATA/66 capable, 40-pin, 80-conductor cable is required.
5. Ultra ATA/66 compatible IDE device such as a hard drive or CD-ROM drive.



Chapter 2

Installation Instructions

This section covers External Connectors, Jumper Settings and Memory Configuration. Refer to the mainboard layout chart for locations of all jumpers, external connectors, slots and I/O ports. Furthermore, this section lists all necessary connector pin assignments for your reference. The particular state of the jumpers, connectors and ports are illustrated in the following figures. Before setting the jumpers or inserting these connectors, please pay attention to the directions.

Be sure to unplug the AC power supply before adding or removing expansion cards or other system peripherals, otherwise your mainboard and expansion cards might be seriously damaged.

External Connectors

PS/2 Keyboard Connector, PS/2 Mouse Connector

PS/2 keyboard connector is for the usage of PS/2 keyboard. If using a standard AT size keyboard, an adapter should be used to fit this connector. PS/2 mouse connector is for the usage of PS/2 mouse.



USB1, USB2

Two USB ports are available for connecting USB devices.



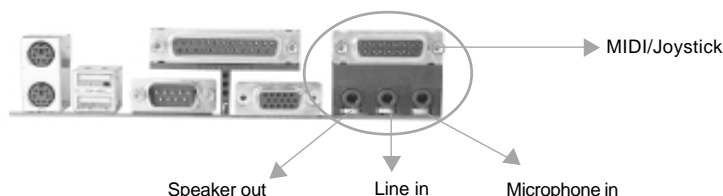
Parallel Port Connector, Serial Port Connector and Monitor Output Connector(Parallel, UART1, VGA Monitor)

The parallel port connector can be connected to a parallel device such as a printer. The monitor output connector is for output to a VGA-compatible device. You can enable/disable them and choose the IRQ or I/O address in "Integrated Peripherals" from AWARD BIOS SETUP.



Line-in jack, Microphone-in jack, Speaker-out jack and MIDI/Joystick connector

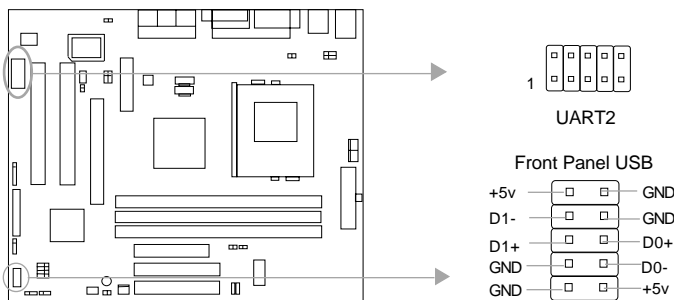
The Line-in jack can be connected to devices such as a cassette or minidisc player for playback or recording. The Microphone-in jack can be connected to a microphone for voice input. The Speaker-out jack allows you to connect speakers or headphones for audio output from the internal amplifier. The MIDI/Joystick connector allows you to connect a game joystick or a MIDI device.



USB3, USB4, UART2

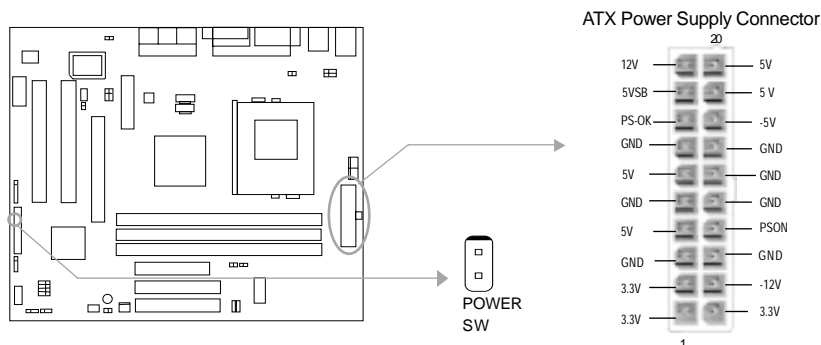
SynactiX 1 provides one extra Front Panel USB header to connect to the front panel USB ports of your chassis. But you can only enable either back panel USB or front panel USB at one time.

The serial port UART2 is not available on the back panel. Therefore, we provide a 9-pin ribbon cable with bracket for UART2 port. (manufacturing option)



ATX Power Supply Connector & Power Switch (POWER SW)

Be sure to connect the power supply plug to this connector in its proper orientation. The power switch (POWER SW) should be connected to a momentary switch. When powering up your system, first turn on the mechanical switch of the power supply (if one is provided), then push once the power switch. When powering off the system, you needn't turn off the mechanical switch, just ***Push once*** the power switch.



Note: If you change “Soft-off by PWR-BTTN” from default “Instant-off” to “Delay 4 Secs” in the “POWER MANAGEMENT SETUP” section of the BIOS, the power switch should be pressed for more than 4 seconds before the system powers down.



Hard Disk LED Connector (HD_LED)

The connector connects to the case's IDE indicator LED indicating the activity status of IDE hard disk. The connector has an orientation. If one way doesn't work, try the other way.

Reset Switch (RESET)

The connector connects to the case's reset switch. Press the switch once, the system resets.

Speaker Connector (SPEAKER)

The connector can be connected to the speaker on the case.

Power LED Connector (PWR_LED)

The power LED has four status. When the system is in power up status, the LED is on. When the system is in suspend status, the LED is blink. When the system is in Suspend to RAM, the LED is off. When the system is in Soft-Off status, the LED is off. The connector has an orientation.

ACPI LED Connector (ACPI_LED)(Reserved)

The ACPI LED is a double-color light with three pins. Pin1&Pin2 drive different color lights. If Pin1 drives the orange light, Pin2 drives the green light, the following status will come out. When the system is in power up status, the LED is green on. When the system is in suspend status, the LED is green blink. When the system is in Suspend to RAM status, the LED is orange on. When the system is in soft-off status, the LED is off.

GREEN LED Connector (GREEN_LED)

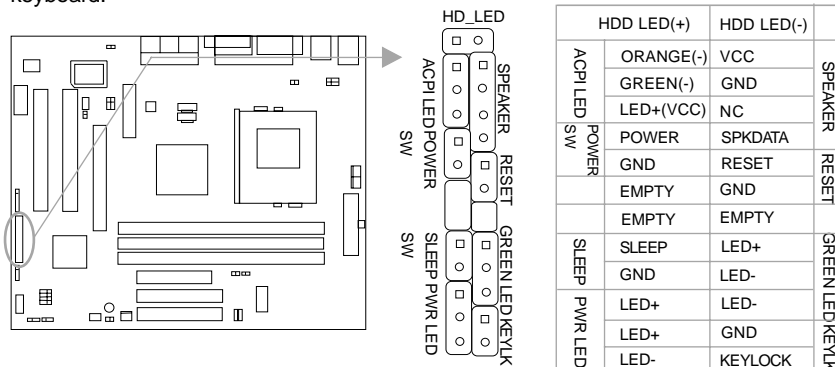
The GREEN LED has four status. When the system is in three status (including power up, suspend, soft-off), the LED is off. When the system is in suspend to RAM status, the LED is on.

Hardware Green Connector (SLEEP_SW)

Push once the switch connected to this header, the system enters suspend mode.

Key Lock Connector (KEYLK)

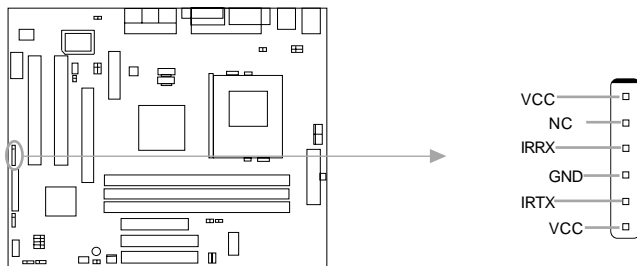
The connector can be connected to the keyboard lock switch on the case for locking the keyboard.





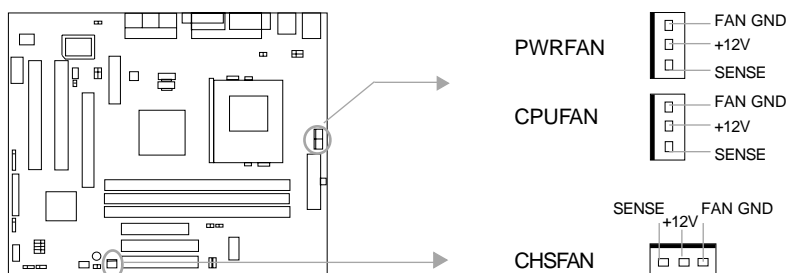
Infrared Header (IrDA)

This connector supports wireless transmitting and receiving. Before using this function, configure the settings for IR Address, IR Mode and IR IRQ from the “INTEGRATED PERIPHERALS” section of the BIOS.



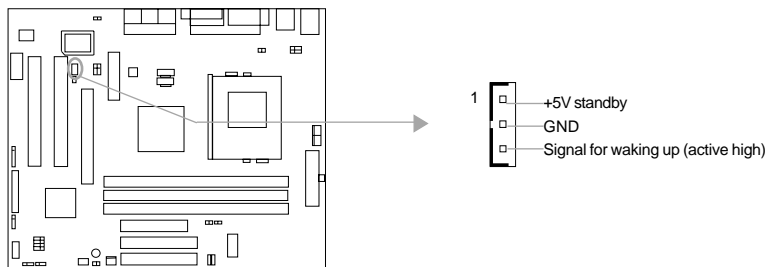
Fan Connector (PWRFAN, CPUFAN, CHSFAN)

The fan speed of these three fans can be detected and viewed in “PC Health” section of the BIOS. These three fans will be automatically turned off after the system enters suspend mode.



Wake-Up On LAN (WOL)

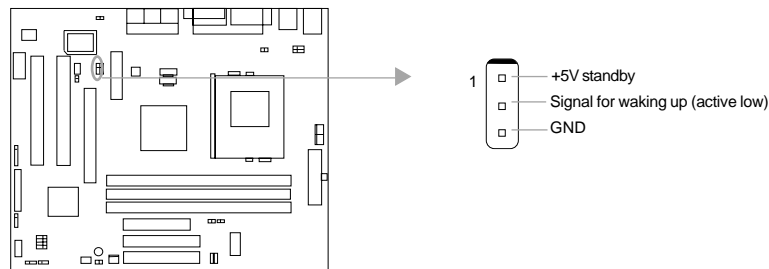
Through the Wake-Up On LAN function, a wake event occurring from the network can wake up the system. If this function is to be used, please be sure an ATX 2.01 power supply of which 5VSB line is capable of delivering 720mA, and a LAN adapter which supports this function is used. Then connect this header to the relevant connector on the LAN adapter, set “Wake-Up by LAN/Ring” as Enabled in the “POWER MANAGEMENT SETUP” section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.





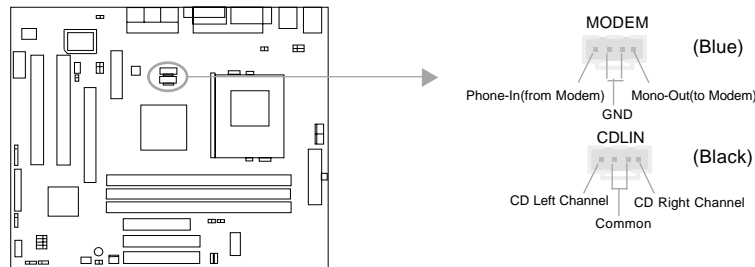
Wake-Up On Internal Modem (WOM)

Through this function, the system which is in the power-off status can be powered on by a ring signal received from the internal modem. When this function is used, be sure an internal modem card which supports this function is used. Then connect this header to the relevant connector on the modem card, set "Wake-Up by LAN/Ring" to Enabled in the "Power Management Setup" section of the BIOS. Save & exit, then boot the operating system once to make sure this function takes effect.



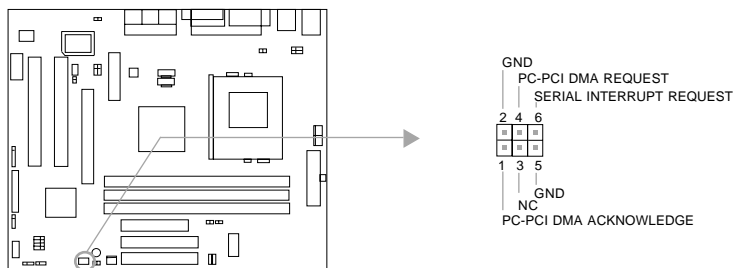
Audio Connector (CDLIN, MODEM)

CDLIN is a Sony standard CD audio connector, it can be connected to a CD-ROM drive through a CD audio cable. The MODEM connector allows the onboard audio to interface with a voice modem card with a similar connector. It also allows the sharing of mono_in (such as a phone) and mono_out (such as a speaker) between the onboard audio and the voice modem card.



Sound Connector (PC-PCI)

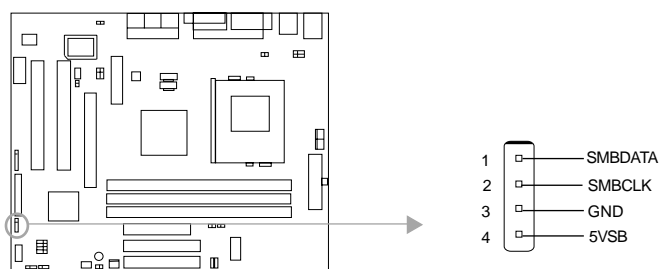
This connector provides a bridge between the mainboard and PCI sound card to deliver sound compatibility under DOS real-mode environment.





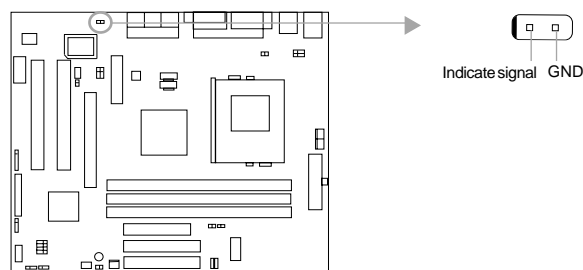
4 pin SMBus Connector(SMBUS)

This connector allows you to connect SMBus devices. SMBus devices communicate by means of the SMBus with an SMBus host and/or other SMBus devices. The SMBus or System Management Bus is a specific implementation of an I²C bus, which is a multi-master bus, that is, multiple chips can be connected to the same bus and each one can act as a master by initiating data transfer.



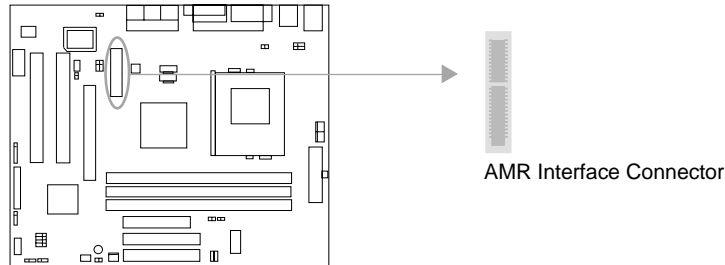
Chassis Security Switch (CHSSEC)

The connector connects to the chassis security switch on the case. The system can detect the chassis intrusion through the status of this connector. If the connector has been closed once, the system will record the status and indicate the chassis has been opened. You can receive this information from QDI ManageEasy software.



Audio/Modem Riser Interface Connector (AMR)

The AMR Interface Connector is the interface between the mainboard and the Audio/Modem Riser card. The connector provides all necessary signals which supports several different configurations of audio and modem in the system, such as audio and modem on the Riser, audio on the mainboard and modem on the Riser, or no audio with modem on the Riser. SynactiX 1 mainboard provides you with audio onboard solution, onboard audio can be enabled/disabled. Either AMR (Audio/Modem Riser) card or MR (Modem Riser) card can be used on this system. If you choose to use the audio on AMR card, the onboard audio can be set as disabled. This software configurable AC'97 audio and modem system gives customers an advanced, multimedia solution at an extremely low price.






AMR Interface Connector

Expansion Slots & I/O Ports description

| Slot / Port | Description |
|-------------|-----------------------------|
| PCI1 | First PCI slot. |
| PCI2 | Second PCI slot. |
| IDE 1 | Primary IDE port. (Blue) |
| IDE2 | Secondary IDE port. (White) |
| AMR | AMR slot. |
| AGP | AGP slot. |
| FLOPPY | Floppy Drive Port. |

Jumper Settings

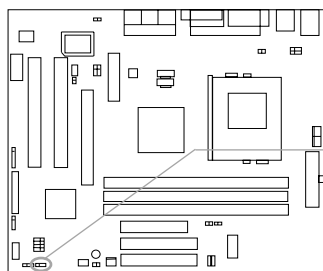
Jumpers are located on the mainboard, they represent, clear CMOS jumper JCC, enable keyboard password power-on function jumper JKB, and enable/disable onboard audio jumper JSD etc. Pin 1 for all jumpers are located on the side with a thick white line (Pin1→ ), referring to the mainboard's silkscreen. Jumpers with three pins will be shown as  to represent pin1 & pin2 connected and  to represent pin2 & pin3 connected. For default jumper settings, please refer to the following table:

| | |
|------------|---|
| JFS0 | 1-2 (Auto) |
| JFS1 | 1-2 (Auto) |
| JCC | 2-3 (Normal Status) |
| JSD | 2-3 (Enable Audio) |
| JSB | Closed (Connect PCI 3.3Vsb) (Optional) |
| JKB | 1-2 (Enable KB Power-on) |
| JP26&JP27, | 1-2 (Back Panel USB Enabled) |
| JP35&JP36 | 2-3 (Front Panel USB Enabled) |
| JFUSB/JUSB | 1-2 (Enable Front/Back Panel USB Device Wake-up Function) |
| JAV | Open (Enable Flash BIOS) |



Clear CMOS (JCC)

If you want to clear CMOS, unplug the AC power supply first, close JCC (pin1 & pin2) once, set JCC back to the normal status with pin2 & pin3 connected, then power on the system.



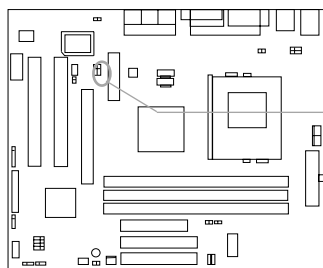
Normal status:  JCC


Clear CMOS:  JCC


(Unplug the AC power supply)

Enable/Disable on-board audio(JSD)

If you want to use the on-board audio, set JSD with pin2 & pin3 closed (default). Otherwise, set JSD with pin1 & pin2 closed for disabling this function.

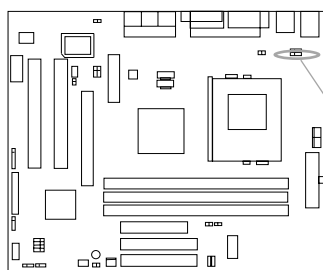


Enable on-board audio:  JSD

Disable on-board audio:  JSD

Enable keyboard password power-on function (JKB)

The mainboard provides the advanced keyboard password power-on function. Before using this function, set JKB with pin1 & pin2 closed. Otherwise, set JKB with pin2 & pin3 closed for disabling.



Disable:  JKB

Enable:  JKB



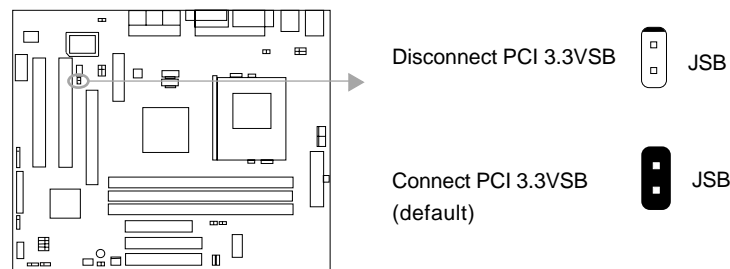
Furthermore in order to implement this function, set “POWER ON Function” to Password and enter the keyboard power-on password in the “INTEGRATED PERIPHERALS” section of the BIOS. Save and exit, then power off your system. In this case, the power button’s power-on function has been disabled.

Note:

1. If using this function, 5VSB line of the power supply should be capable of delivering enough current (eg. 200mA) for all the devices connected to the keyboard port, if not, you will be unable to power up the system using the keyboard.
2. If you set JKB with pin2 & pin3 closed, set “POWER ON Function” to **BUTTON ONLY**, don’t set it to Password, or you’ll be unable to power up your system by the keyboard or the power button.
3. If you encounter the above problems, clear CMOS and set the jumper and BIOS option again.

Connector PCI 3.3VSB Voltage Jumper (JSB) (Optional)

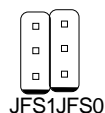
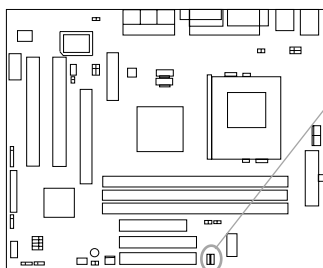
Setting JSB open can disconnect the 3.3VSB voltage to PCI slots. This can prevent the mainboard from being damaged if you add or remove expansion cards without unplugging the AC power supply. However, if you want to use the PCI 2.2 specification compliant expansion cards to wake up the system, for example, a network card which supports wake-up on LAN function but without the WOL header, set JSB as closed, meanwhile set “Wake-Up by PCI card” as enabled in “Power Management Setup” section of the BIOS.



Note: If AMR card is used, this jumper must be set as default setting closed.

Overclocking Jumper Setting (JFS0, JFS1)

Jumpers labeled JFS0 and JFS1 are located on the mainboard providing users with CPU overclocking feature. The host bus speed can be set as 66/100/133MHz or AUTO select. Refer to the chart below for the location of these jumpers, and the table for information on how to set them.



| CPU FSB | 66MHz | 100MHz | 133MHz | AUTO |
|---------|-------|--------|--------|------|
| JFS0 | 2-3 | OPEN | OPEN | 1-2 |
| JFS1 | 2-3 | 2-3 | OPEN | 1-2 |

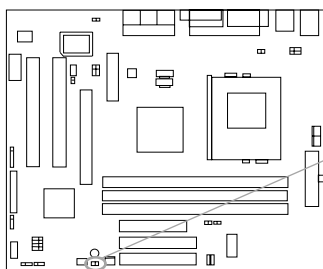
'1-2' represents pin1 & pin2 closed.

'2-3' represents pin2 & pin3 closed.

If CPU FSB is set as default setting Auto, the system detects the CPU front side bus automatically. If CPU FSB is set as 100MHz, the system will run at 100MHz even if a processor with 66MHz or 133MHz FSB is installed. Setting up to 133MHz using processors with 100MHz bus speed is also supported. However, whether or not the system can be overclocked depends on your processor's capability. Whether the processor is bus ratio locked or unlocked should also be taken into account. For bus ratio unlocked processor, this overclocking feature can be implemented by setting CPU FSB as 100/133MHz, meanwhile adjusting the bus ratio(multiplier) lower in "CPU SpeedEasy Setup" in AWARD BIOS CMOS Setup. We do not guarantee the overclocking system to be stable.

BIOS Protection Jumper (JAV)

The BIOS of the mainboard is inside the FWH. If the jumper JAV is set as closed, you will be unable to flash the BIOS to the mainboard. However in this status, the system BIOS is protected from being attacked by serious virus such as CIH virus.



Flash Write Disabled



JAV

Flash Write Enabled



JAV

Setting the jumper JAV as open (default), meanwhile disabling the "Flash Write Protect" item in AWARD BIOS CMOS Setup, allows you to flash the BIOS to the flash ROM in FWH.

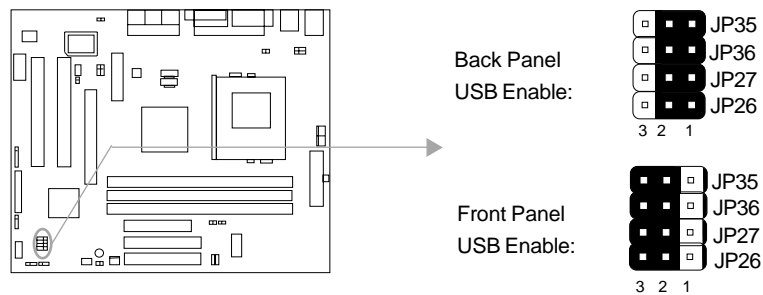
The DMI (Desktop Management Interface) system information such as the CPU type/speed, memory size, and expansion cards will be detected by the onboard BIOS and stored in the flash ROM in FWH. Whenever the system hardware configuration is changed, DMI information will be updated automatically. However, setting jumper JAV as closed makes flashing BIOS and updating DMI information impossible.

Refer to page 4 for the two choices to implement BIOS-ProtectEasy.



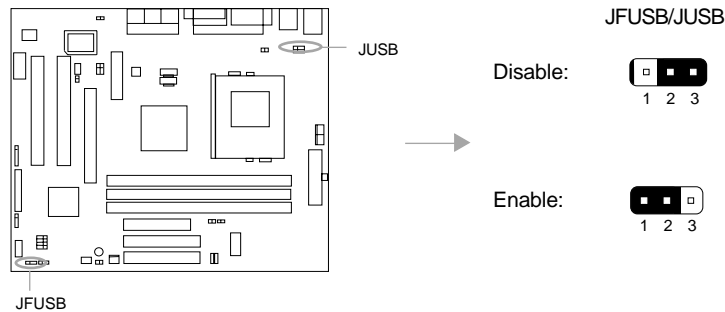
Front/Back Panel USB Enable (JP26&JP27, JP35&JP36)

Set JP26&27, JP35&36 as pin1&pin2 closed to enable the back panel, if they are set as pin2&pin3 closed, then the front panel USB is enabled. Please be noted that these four jumpers must be set as the same status.



Enable Front/Back Panel USB Device Wake-up Function (JFUSB/JUSB)

The mainboard provides the advanced USB device wake-up function. The system can be waken up from its power saving including ACPI S3 by activating USB device. Before using this function, set JFUSB/JUSB with pin1 & pin2 closed. Otherwise, set JFUSB/JUSB with pin2 & pin3 closed for disabling.



Front Panel USB Port (USB3.4)

