Chapter 2: Installation

Quick Installation Table

This chapter explains how to successfully install the mainboard into a computer case and build a working system. The installation procedure is as follows:

|	
Quick Jumper Setting Reference	Provides a quick reference for the jumper settings on this mainboard.
Before you Begin	Provides advice on choosing a case, avoiding static electricity damage, and setting jumpers.
Preparing the Mainboard	Provides a guide to the mainboard and I/O port locations, full details on the jumper settings, and advice on installing the mainboard in the system case.
Install Other Hardware	Provides guidance on installing essential hardware: processor, memory, hard disk drive, CD-ROM, floppy disk drive, and expansion cards.
Make the External Connections	Provides advice on using the external I/O ports to install peripheral devices such as a keyboard, a monitor, a mouse, a printer, loudspeakers, and so on.

Quick Jumper Setting Reference

If you are familiar with most of the material in this chapter, you can begin preparing the mainboard for installation by using this quick reference to begin the setting the jumpers. A detailed description of the jumper setting appears later in this chapter.

JP1: Clear CMOS memory jumper

Use this 3-pin jumper to clear all the current data stored in the CMOS memory.

Function	Jumper Cap
Clear CMOS	Short pins 1-2
Normal operation	Short pins 2-3
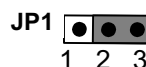
JP1

1 2 3

*Note: If you need to Flash a new BIOS after Clearing the CMOS memory, make sure to reboot the system first. The same rule applies to Clearing the BIOS memory after you have just Flashed it: always make sure to reboot the system before proceeding with the next step.*

JP2: Keyboard power on jumper

Use this 3-pin jumper to enable keyboard power on with hot keys or password.

Function	Jumper Cap
Enable keyboard power on	Short pins 1-2
Disable keyboard power on	Short pins 2-3

JP2

1 2 3
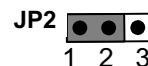
JP9: Flash BIOS jumper

Use this 3-pin jumper to allow the BIOS CMOS memory to be flashed, i.e. a new BIOS version to written to the CMOS chip onboard.

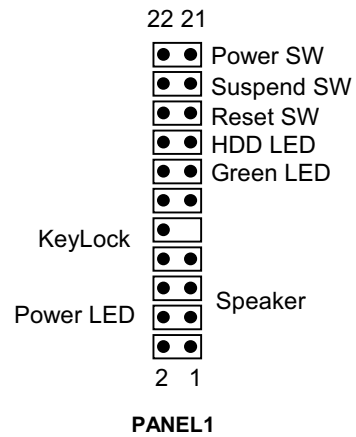| Function	Jumper Cap
Enable Flash BIOS	Short pins 1-2
Normal operation	Short pins 2-3

JP9

1 2 3
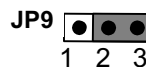
Note: JP3, JP4, JP5 and JP8 are featured on the board but are currently not supported.

8

PANEL1: Panel connectors for switches and indicators

Use the panel connector to implement the switches and indicators on your system case.

Function	Pins
Speaker	+1, 3, 5, 7
Power Indicator	+2, +4, 6
Keylock	8, 10
Green Indicator	13, 14
Hard Disk Indicator	+15, 16
Reset Switch	17, 18
Suspend Switch	19, 20
Power Switch	21, 22

22 21

● ● Power SW
● ● Suspend SW
● ● Reset SW
● ● HDD LED
● ● Green LED
● ●
KeyLock ●
● ●
● ● Speaker
Power LED ● ●
● ●
2 1

PANEL1

Before You Begin

Before you begin to install your P6STP-FL mainboard, take some precautions to ensure that you avoid the possibility of damage to the product from static electricity. Ensure too that you are installing the mainboard into a suitable case.

Static Electricity

In adverse conditions, static electricity can accumulate and discharge through the integrated circuits and silicon chips on this product. These circuits and chips are sensitive and can be permanently damaged by static discharge.

♦   If possible wear a grounding wrist strap clipped to a safely grounded device during the installation.

♦   If you don't have a wrist strap, discharge any static by touching the metal case of a safely grounded device before beginning the installation.

♦   Leave all components inside their static-proof bags until they are required for the installation procedure.

♦   Handle all circuit boards and electronic components carefully. Hold boards by the edges only. Do not flex or stress circuit boards.

Choosing a Case

The mainboard complies with the specifications for the FlexATX system case, although it can also be installed in most micro-ATX case designs. The micro-ATX specifications include a maximum size of 9.0" x 7.5" (228mm x 190mm), a reduced number of expansion slots, and support for a smaller power supply unit.

Some features on the mainboard are implemented by cabling connectors on the mainboard to indicators and switches on the system case. Ensure that your case supports all the features required. The P6STP-FL mainboard can support one or two floppy diskette drives, and four enhanced IDE drives. Ensure that your case has sufficient power and space for all the drives that you intend to install.

The mainboard has a set of I/O ports on the rear edge. Ensure that your case has an I/O template that supports the I/O ports and expansion slots.

How to Set Jumpers

A jumper consists of two or more pins mounted on the mainboard. Some jumpers might be arranged in a series with each pair of pins numbered differently. Jumpers are used to change the electronic circuits on the mainboard. When a jumper cap is placed on two jumper pins, the pins are SHORT. If the jumper cap is removed (or placed on just a single pin) the pins are OPEN.
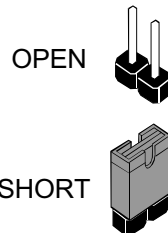
OPEN

This illustration shows a 2-pin jumper. When the jumper cap is placed on both pins, the jumper is SHORT. If you remove the jumper cap, or place the jumper cap on just one pin, the jumper is OPEN.

SHORT

This illustration shows a 3-pin jumper. The jumper cap is placed on pins 2 and 3, so this jumper setting is SHORT PINS 2-3.
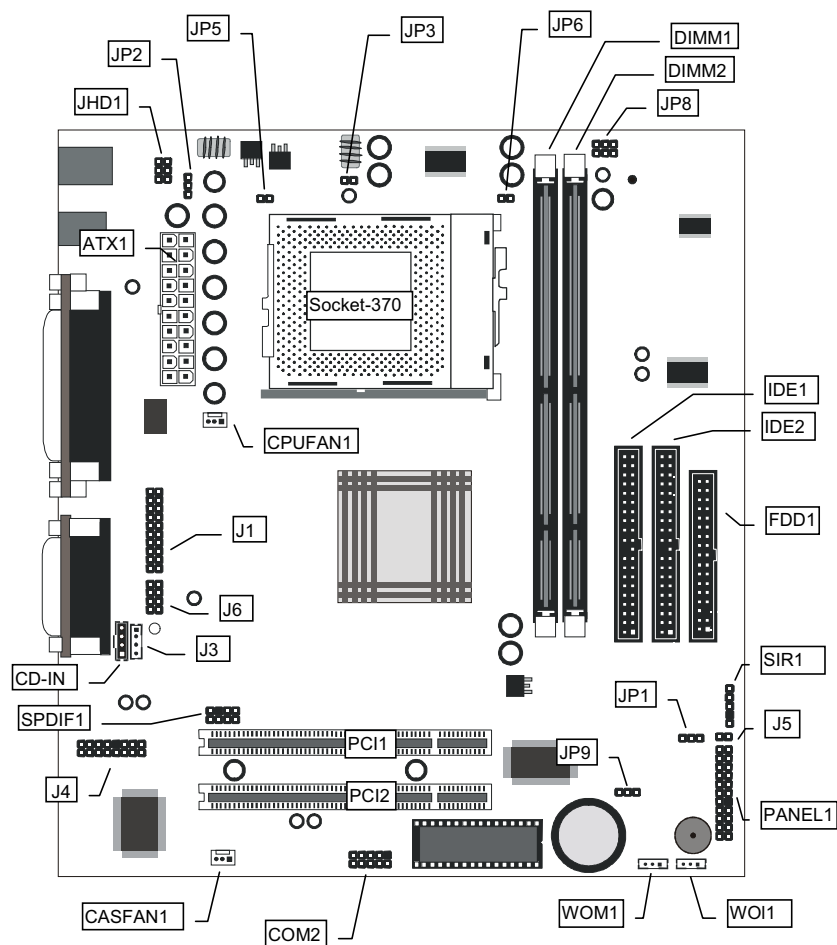
1 2 3
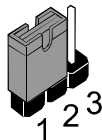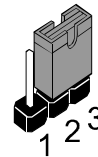
This illustration shows the same 3-pin jumper. The jumper cap is placed on pins 1 and 2, so this jumper setting is SHORT PINS 1-2.

1 2 3

In this manual, all the jumper illustrations clearly show the pin numbers. When you are setting the jumpers, make sure that the jumper caps are placed on the correct pins to select the function or feature that you want to enable or disable.

Preparing the Mainboard

Mainboard Guide

Use the following illustration and key to identify the components on your mainboard.

JP5   JP3   JP6   DIMM1
JP2   DIMM2
JHD1   JP8
ATX1
Socket-370
CPUFAN1
IDE1
IDE2
J1
FDD1
J6
J3
CD-IN
SIR1
SPDIF1
JP1
J5
JP9
J4
PCI1
PCI2
PANEL1
CASFAN1
COM2
WOM1
WOI1

12

Key to Mainboard Components

Component	Description
Socket-370	Socket for PPGA Celeron Processors
PCI 1, 2	Two 32-bit PCI Slots
DIMM 1, 2	Two slots for 168-pin SDRAM memory module
FDD1	Connector for floppy disk drives
IDE1, IDE2	Primary and secondary IDE channels
ATX1	Connector for ATX power supply
SIR1	Connector for optional infrared port
PANEL1	Panel connector for switches and indicators
WOM1	Connector for modem wake up
WOL1	Connector for LAN wake up
SPDIF1	SPDIF In/out connector (24-bit digital audio interface)
*LED2	DIMM Power LED
COM2	Connector for serial port 2/4
CASFAN1	Power connector for case cooling fan
CPUFAN1	Power connector for CPU cooling fan
CD-IN	Audio connector for CD-ROM/DVD drive
JHD1	Auxiliary keyboard connector
JP1	Clear CMOS jumper
JP2	Keyboard power on jumper
JP3, JP4, JP5, and JP8	These jumpers are featured, but currently not supported
JP9	Flash BIOS jumper
J1	Header for digital I/O port on front panel (optional)
J3	Auxiliary audio connector for CD-ROM/DVD drive
J4	Connector for modem DAA module
J5	Connector for two-color LED
J6	Header for analog I/O port on front panel (optional)

LED2
This red indicator turns on whenever the system enters Suspend-to-RAM mode.

I/O Ports Side View
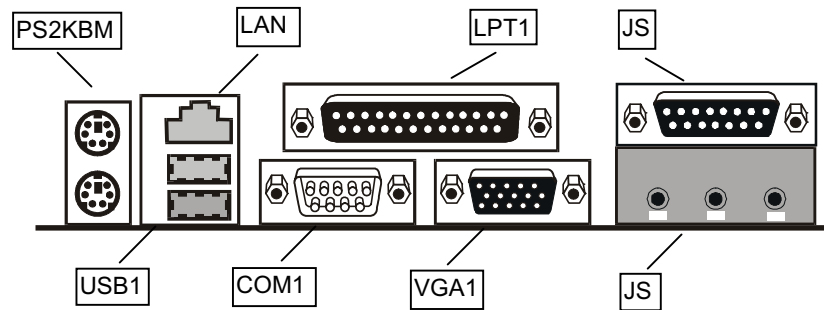
### *Key to I/O Ports*

| Component	Description
PS2KBM	PS/2 port for pointing device (upper port)
	PS/2 port for keyboard (lower port)
LAN	RJ45 socket for network cable
LPT1	External parallel port
JS (Upper)	External game/MIDI port
JS (Lower)	Audio jacks for (from left to right) line out, line in, microphone
VGA1	External monitor port
COM1	External serial port COM1/3
USB1	Two stacked Universal Serial Bus ports

14

Check the Jumper Settings

Check all the mainboard jumpers to ensure that the board is configured correctly.

JP2

JP1

JP9
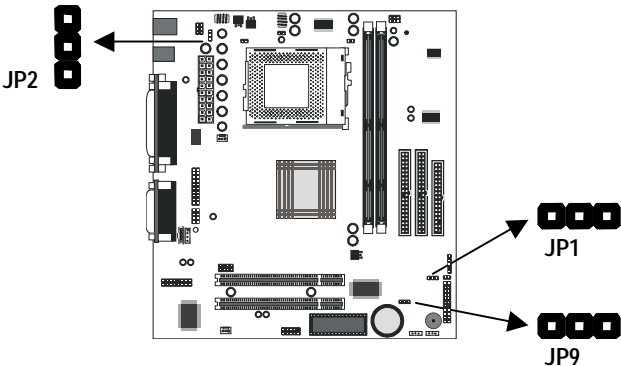
JP1 Clear CMOS Memory Jumper

This jumper lets you erase the system setup settings that are stored in CMOS memory. You might need to erase this data if incorrect settings are preventing your system from operating. To clear the CMOS memory, turn off the system, disconnect the power cable from the mainboard, and short the appropriate pins for a few seconds.

JP1

1   2   3
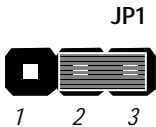
Function	Jumper Cap
Clear CMOS	Short pins 1-2
Normal Operation	Short pins 2-3

Note: If you need to Flash a new BIOS after Clearing the CMOS memory, make sure to reboot the system first. The same rule applies to Clearing the BIOS memory after you have just Flashed it: always make sure to reboot the system before proceeding with the next step.

### JP2: Keyboard Power On Jumper

This jumper lets you use a typed-in password as a power switch to turn your system on. If you enable this property, you need to define the password or the hot keys using the setup utility. See Chapter 3.

JP2

Function	Jumper Cap
Enable keyboard power on	Short pins 1-2
Disable keyboard power on	Short pins 2-3

1　　2　　3

JP9: Flash BIOS Jumper

Use this 3-pin jumper to allow the BIOS CMOS memory to be flashed, i.e. a new BIOS version to written to the CMOS chip onboard.

JP9

1　　2　　3
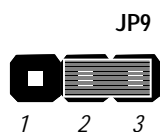
| Function	Jumper Cap
Enable Flash BIOS	Short pins 1-2
Normal operation	Short pins 2-3

Install the Mainboard in the Case

The mainboard is drilled with a series of holes. Most system cases have mounting brackets installed in the case which correspond to the holes in the mainboard. You can secure the mainboard in the system case by placing the mainboard over the mounting brackets and driving screws through the mainboard into the mounting brackets.

Most cases have a choice of I/O templates in the rear panel. Make sure that the I/O template in the case matches the I/O ports installed on the rear edge of the mainboard.

> **Note:** *Do not overtighten the screws as this can stress the mainboard.*

The illustration below shows a mainboard installing in a standard desktop case.
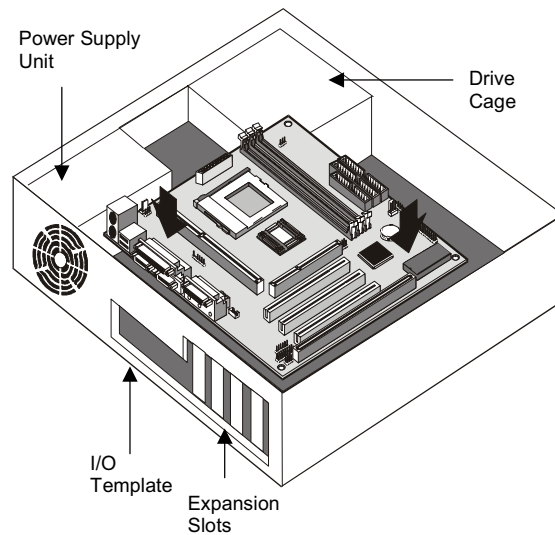
The illustration below shows the mainboard installing into a tower-type case.

Power Supply
Unit

Drive
Cage

I/O
Template

Expansion
Slots

18
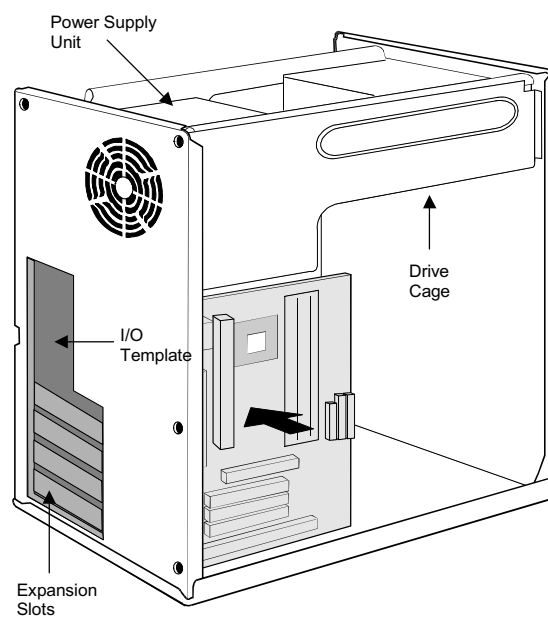
Connecting Power, Chassis Fans, and Switches and Indicators

After you have installed the mainboard into the system case, connect the power cable from the case power supply unit to the mainboard power connector ATX1. Connect the chassis/CPU fans (if your case has them) to the 12V power supply connectors CASFAN1or CPUFAN1 on the mainboard. Then connect the case switches and indicators to the PANEL connector and the J5 LED connector on the mainboard.
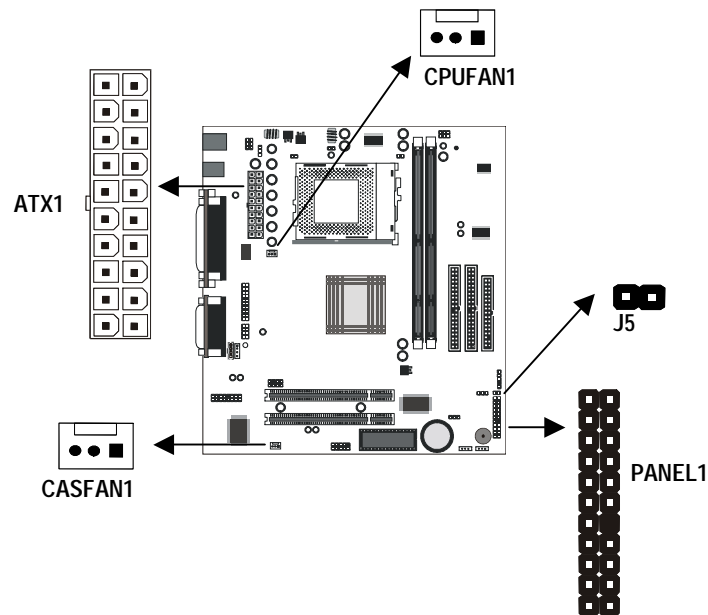
Power Connector

Locate the power cable from the case power supply unit and plug it into the ATX1 power connector.

Chassis and CPU Fans

If your case has a cooling fan installed in the chassis, plug the cable from the chassis-mounted fan into the mainboard 12V power supply connector CASFAN1. If your CPU has a cooling fan, plug the cable into the 12V power supply connector CPUFAN1.
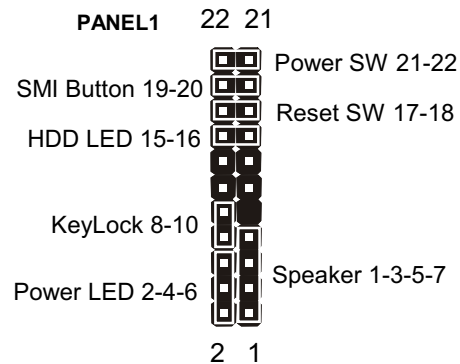
Green LED Connector

If your case has a dual color indicator lamp for the ACPI Green suspend mode, connect the cable from the indicator to the J5 dual color LED connector.

Panel Connector

The mainboard PANEL connector has a standard set of switch and indicator connectors that are commonly found on ATX system cases. Use the illustration below to make the correct connections to the case switches and indicators.

Function	Pins
Speaker	+1, 3, 5, 7
Power Indicator	+2, +4, 6
Keylock	8, 10
Green Indicator	13, 14
Hard Disk Indicator	+15, 16
Reset Switch	17, 18
Suspend Switch	19, 20
Power Switch	21, 22

PANEL1   22 21

SMI Button 19-20   Power SW 21-22

HDD LED 15-16   Reset SW 17-18

KeyLock 8-10

Power LED 2-4-6   Speaker 1-3-5-7

2   1

Install Other Hardware

Start installing the essential hardware required to get your system started.

Install the Processor

This mainboard has a Socket-370 processor socket. To choose a processor, you need to consider the performance requirements of the system and also the price of the processor. Performance is based on the processor design, the clock speed and system bus frequency of the processor, and the quantity of internal cache memory and external cache memory. Higher clock speeds and larger amounts of cache memory deliver greater performance.

About Socket-370 Processors

The socket-370 on this board currently supports PPGA Intel Celeron processors.

Intel PPGA Celeron
PPGA stands for Plastic Pin Grid Array. This is a description of the square plastic package that the processor is embedded in. The PPGA Celeron is identical to the SEPP Celeron, except for the external packaging. PPGA Celerons run at clock speeds from 300 MHz through to 533 MHz. All the current PPGA Celerons operate over a 66 MHz system bus. The PPGA Celeron is less expensive than a SEPP Celeron with the same clock speed.
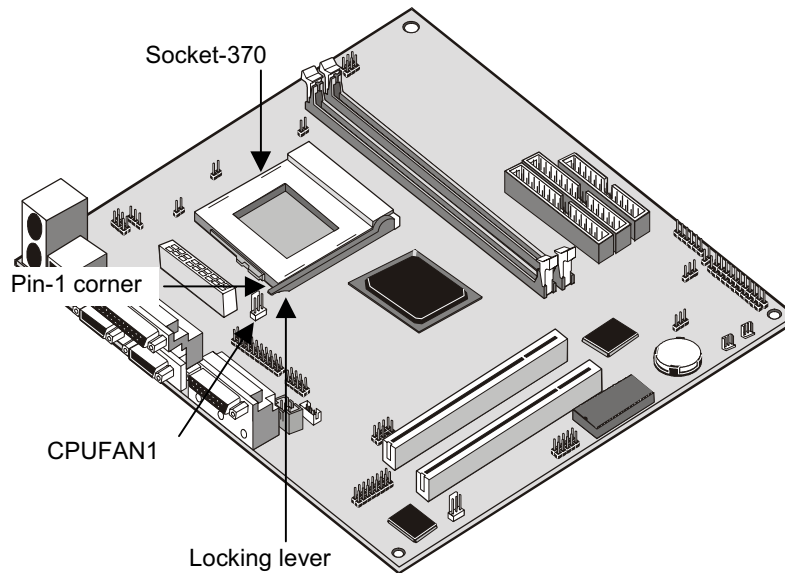
New Processors

This board is designed to support some future processors that have not yet been released. Ask your mainboard vendor for an up-to-date list of processors that can be installed on this mainboard.
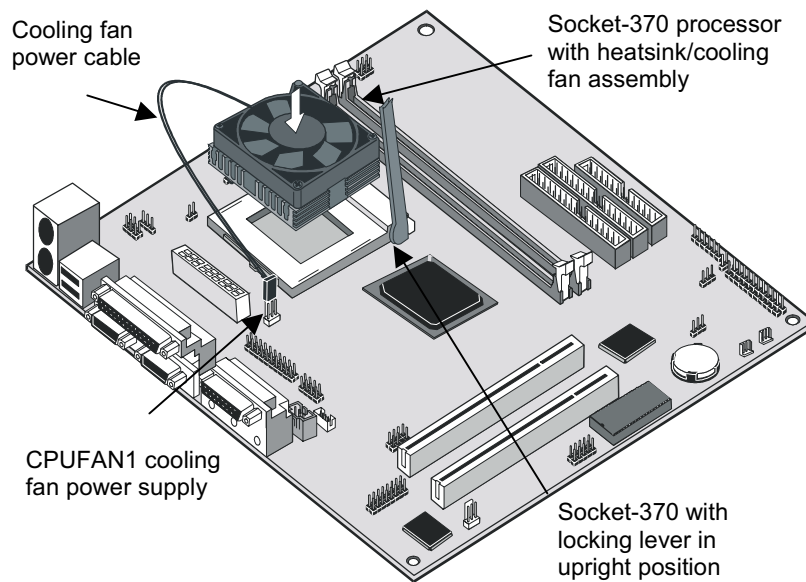
Installing a Socket-370 Processor

To install the mainboard with a PPGA Celeron processor, follow the steps below.

Locate the Socket-370 and CPUFAN1

1. On the mainboard, locate the socket-370 and CPUFAN1.
2. On the socket-370, pull the locking lever away from the socket to unhook it and then raise the locking lever to the upright position.
3. Identify the pin-1 corner on the socket-370 and the pin-1 corner on the processor. The socket pin-1 corner is adjacent to the handle of the locking lever. The processor pin-1 corner is beveled.
4. Matching the pin-1 corners, drop the processor into the socket. No force is required and the processor should seat into the socket easily.
5. Swing the locking lever down and hook it under the latch on the edge of the socket. This locks the processor in place.
6. Locate the power cable on the heatsink/cooling fan assembly that is attached to the top of the processor.
7. Plug the power cable into the CPUFAN1 12V power supply on the mainboard.

Cooling fan
power cable

Socket-370 processor
with heatsink/cooling
fan assembly

CPUFAN1 cooling
fan power supply

Socket-370 with
locking lever in
upright position

The mainboard must be configured to deliver the correct clock speed and the correct system bus for the kind of processor that you have installed. You can do this by using the system setup utility. The first time you start the system, immediately enter the setup system and make the appropriate settings. Usually, you can automatically configure the CPU by using the CPU & BIOS Features page of the setup utility. See Chapter 3 for more information.

Install the Memory Modules

For this mainboard, you must use 168-pin 3.3V non-buffered Dual In-line Memory Modules (DIMMs). The memory chips must be standard or registered SDRAM (Synchronous Dynamic Random Access Memory). The memory bus can run at 66 MHz or 100 MHz (100 MHz is recommended). If your processor operates over a 100 MHz system bus, you must install PC-100 memory that also operates over a 100 MHz bus. If you install a processor that operates over a 66 MHz bus, you can install memory chips that operate at 66 MHz.

You must install at least one memory module. You can install the module in any one of the three DIMM slots. Each module may be installed with up to 512 MB of memory so the maximum capacity is 1 GB. The mainboard supports memory chips that have EC (Error Correction) or ECC (Error Correction Code).

1. Locate the DIMM slots on the mainboard.
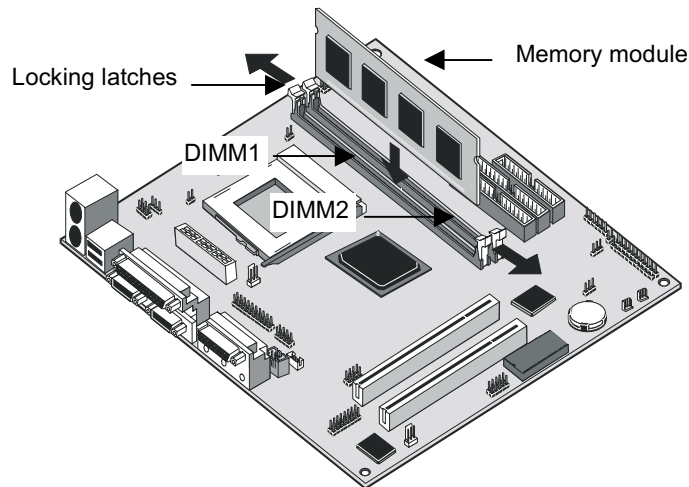
2. The DIMM slots are keyed with notches and the DIMMs are keyed with cut-outs so that they can only be installed correctly. Check that the cut-outs on the DIMM module edge connector match the notches in the DIMM slot.
3. Push the latches on each side of the DIMM slot down.

4. Install the DIMM module into the slot and press it carefully but firmly down so that it seats correctly. The latches at either side of the slot will be levered upwards and latch on to the edges of the DIMM when it is installed correctly.

Install a Hard Disk Drive and CD-ROM

This section describes how to install IDE devices such as a hard disk drive and a CD-ROM drive.

Note: Ribbon cable connectors are usually keyed so that they can only be installed correctly on the device connector. If the connector is not keyed make sure that you match the pin-1 side of the cable connector with the pin-1 side of the device connector. Each connector has the pin-1 side clearly marked. The pin-1 side of each ribbon cable is always marked with a colored stripe on the cable.

About IDE Devices.

Your mainboard has a primary IDE channel interface (IDE1) and a secondary IDE interface (IDE2). The mainboard ships with one IDE ribbon cable which supports one or two IDE devices. All IDE devices have jumpers or switches that can be used to set the IDE device as MASTER or SLAVE.

If you install two IDE devices on one cable, you must make sure that one device is set to MASTER and the other device is set to SLAVE. The documentation of your IDE device explains how to do this.

If you want to install more than two IDE devices, obtain a second IDE cable and you can add two more devices to the secondary IDE channel. If there are two devices on the cable, make one MASTER and one SLAVE.

About UDMA

This board supports UltraDMA 33/66. UDMA is a technology that speeds the performance of devices in the IDE channel. We recommend that you install IDE devices that support UDMA, and use IDE cables that support UDMA.

### *Installing a Hard Disk Drive*

1. Install the hard disk drive into the drive cage in your system case.

2. Plug the IDE cable into the primary IDE channel on the mainboard IDE1.

3. Plug one of the connectors on the IDE cable into the IDE connector on the back edge of the hard disk drive. It doesn't matter which connector on the cable that you use. Make sure that you have the pin-1 side of the cable matched with the pin-1 side of the connector.

4. Plug a power cable from the case power supply unit into the power connector on the back edge of the hard disk drive.

5. When you first start up your system, go immediately to the setup utility and use the IDE Hard Disk Auto Detect feature to configure the IDE devices that you have installed. See Chapter 3 for more information.
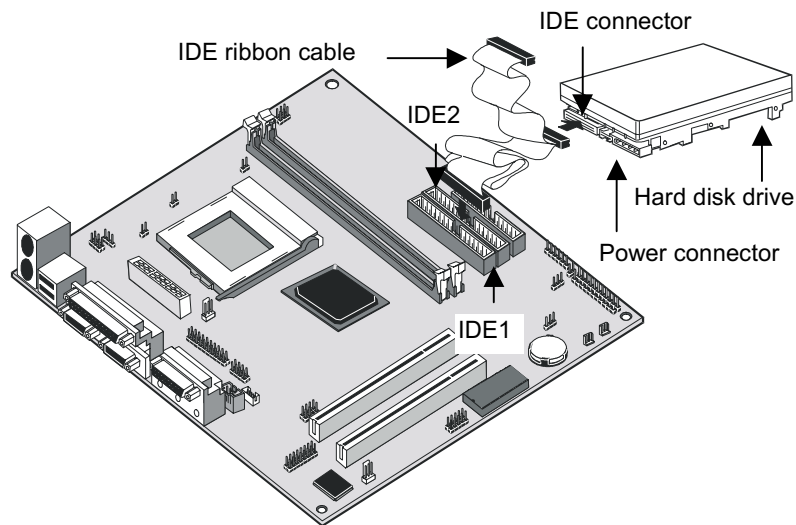
Installing a CD-ROM/DVD Drive

1. Install the CD-ROM/DVD drive into the drive cage in your system case. Plug the IDE cable into the primary IDE channel on the mainboard IDE1.

2. Plug one of the connectors on the IDE cable into the IDE connector on the back edge of the CD-ROM/DVD drive. It doesn't matter which connector on the cable that you use. Make sure that you have the pin-1 side of the cable matched with the pin-1 side of the connector.

26

3. Plug a power cable from the case power supply unit into the power connector on the back edge of the CD-ROM/DVD drive.
4. Use the audio cable provided with the CD-ROM/DVD drive to connect the audio connector on the rear edge of the CD-ROM/DVD drive to the one of the two audio-in connectors CD-IN and J4 on the mainboard.
5. When you first start up your system, go immediately to the setup utility and use the IDE Hard Disk Auto Detect feature to configure the IDE devices that you have installed. See Chapter 3 for more information.

Power connector

IDE connector

Audio connector

CD-ROM/DVD drive

IDE ribbon cable

IDE2

Hard disk drive

IDE1

CD-IN & J3
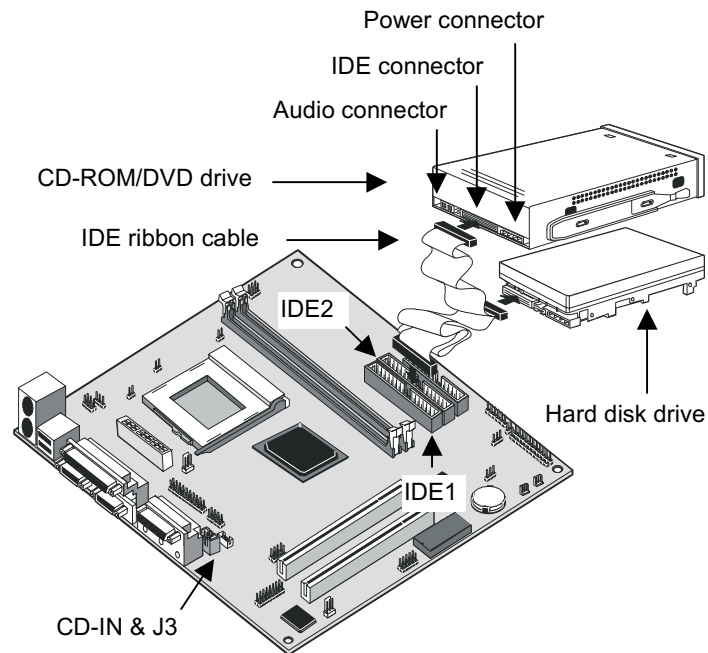
Installing a Floppy Diskette Drive

The mainboard has a floppy diskette drive interface and it ships with a diskette drive ribbon cable that supports one or two floppy diskette drives. You can install a 5.25" drive or a 3.5" drive with various capacities. The floppy diskette drive cable has one type of connector for a 5.25" drive and another type of connector for a 5.25" drive

1. Install the floppy diskette drive into the drive cage in your system case. Plug the diskette drive cable into the diskette drive interface on the mainboard FDD1.
2. Plug one of the connectors on the diskette drive cable into the data connector on the back edge of the floppy diskette drive. Make sure that you have the pin-1 side of the cable matched with the pin-1 side of the connector.
3. Plug a power cable from the case power supply unit into the power connector on the back edge of the diskette drive.
4. When you first start up your system, go immediately to the setup utility and use the Standard page to configure the floppy diskette drives that you have installed. See Chapter 3 for more information.
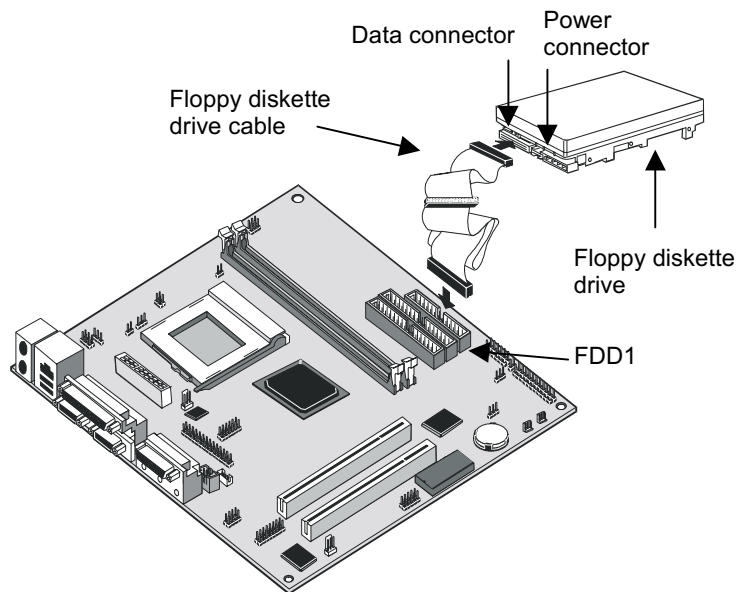
Using the Expansion Slots

This mainboard has two 32-bit PCI expansion.

PCI Slots: The PCI slots can be used to install add-in cards that have the 32-bit PCI (Peripheral Components Interconnect) interface.
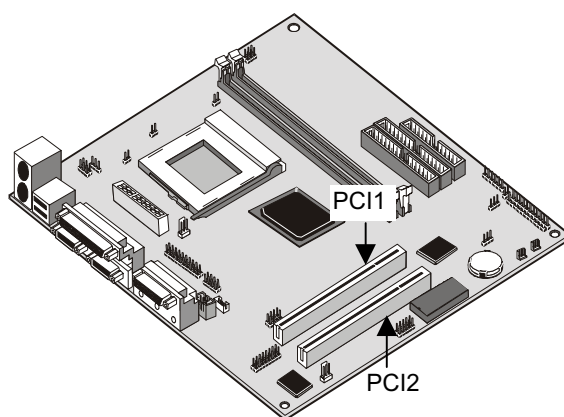
1. Before installing an expansion card, check the documentation for the card carefully. If the card is not Plug and Play, you may have to manually configure the card before installation.
2. Select which expansion slot you are going to use for your add-in card.
3. In the system case, remove the blanking plate from the slot in the system case that corresponds to the expansion slot that you are going to use.
4. Position the edge connector of the add-in card over the expansion slot. Position the metal bracket of the card in the empty slot in the system case.
5. Install the edge connector of the add-in card into the expansion slot. Press down quite firmly so that you are sure that the edge connector is correctly seated in the slot.
6. Secure the metal bracket of the card in the empty slot in the system case with a screw.
7. For some add-in cards, for example graphics adapters and network adapters, you have to install drivers and software before you can begin using the add-in card.

PCI add-in card

Metal bracket

PCI slot

Edge connector
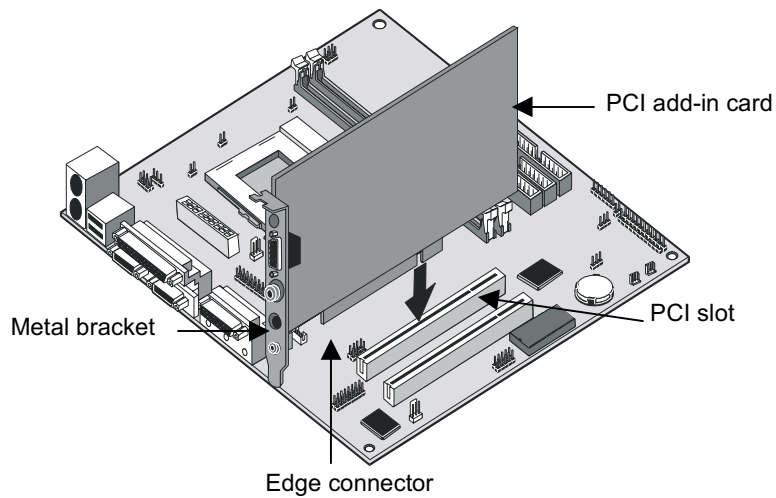
Add-in Card Options

The mainboard has two features that can be used if you have installed either a fax/modem card or a network adapter card.

WOL1: Wake on LAN

If you have installed a network adapter (LAN adapter), you can use the cable provided with the card to plug into the WOL1 connector on the mainboard. This is the Wake On LAN feature. When your system is in a power–saving mode, any traffic through the network automatically resumes the system. You must enable this item using the Power Management page of the setup utility. See Chapter three for more information.

WOM1: Wake on Modem

If you have installed a fax/modem card, you can use the cable provided with the card to plug into the WOM1 connector on the mainboard. This is the Wake On Modem feature. When your system is in a power–saving mode, any incoming calls to the modem automatically resume the system. You must enable this item using the Power Management page of the setup utility. See Chapter three for more information.

WOM1   WOL1
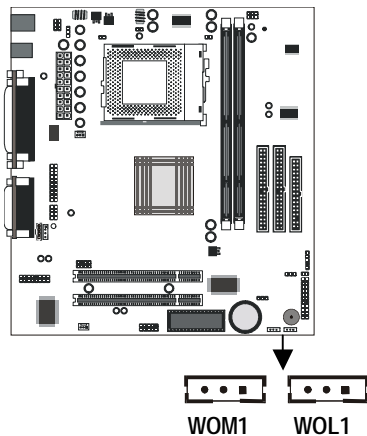
Install Options and Extension Brackets

This mainboard has a number of special connectors that allow you to add optional features to your system. You can install any of the following items:
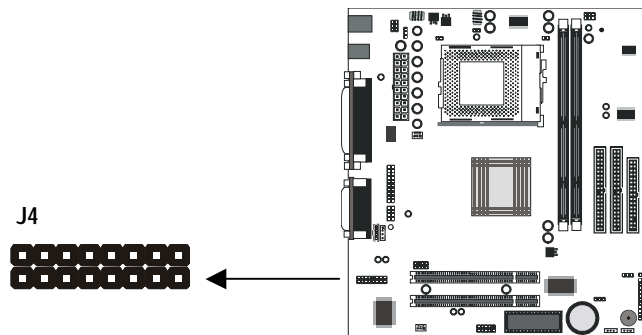
♦ Fax/modem card option
♦ Infrared port
♦ Second serial port
♦ 24-bit digital audio extension bracket (SPDIF)
♦ Digital I/O port on front panel
♦ Analog I/O port on front panel

Fax/modem Card

You must install the fax/modem card in order to use the built-in fax/modem.

The fax/modem card is an optional item supplied with this mainboard.

1. Locate the J4 fax/modem connector on the mainboard.

J4

2. Remove the expansion slot blanking plate from the system chassis that is adjacent to the fax/modem connector.
3. Install the fax/modem card on to the J4 connector as shown below. The RJ11 Line and Telephone sockets on the bracket are positioned in the expansion slot with the removed blanking plate.

Line and Tel
RJ11 sockets

Fax/modem
card

J4
fax/modem
connector
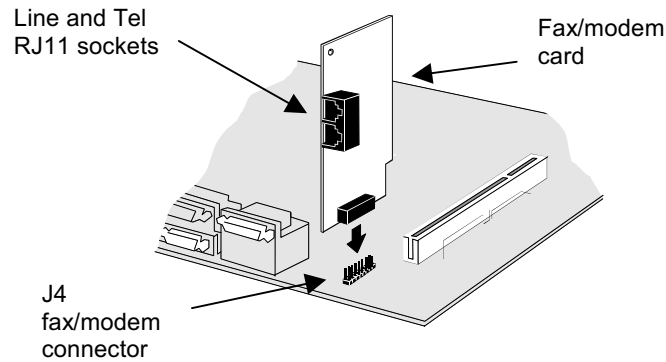
Infrared Port

This option can be purchased from third-party vendors.
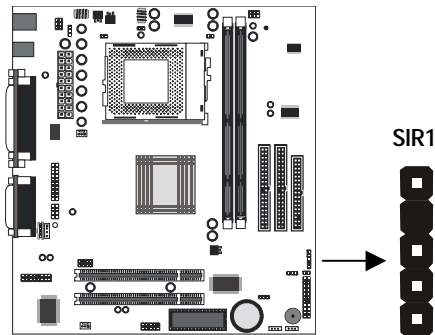
SIR1

1. If you are installing an optional serial infrared port, connect the cable from the optional IR port to the SIR1 connector on the mainboard.
2. After you have connected the cable, secure the optional IR port to the appropriate place on your system case.

Note: An IR port may use some of the resources required by a second serial port or a fax/modem card. If you have more than one of these items installed, you may not be able to use them at the same time. You can use the Peripherals page of the setup utility to switch resources between an IR port and a second serial port. See Chapter 3 for more information.

Second Serial Port

The mainboard has a connector for an optional second serial port. You can implement the second serial port by connecting an extension bracket with a serial port to the onboard serial port connector COM2.

COM2
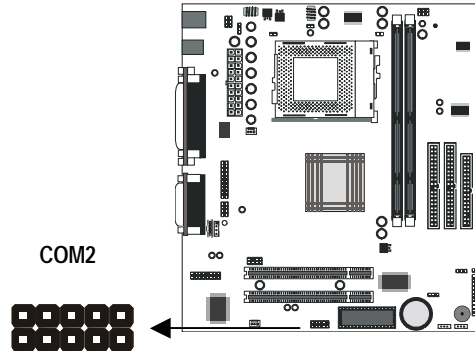
Note: An second serial port may use some of the resources required by an infrared port or a fax/modem card. If you have more than one of these items installed, you may not be able to use them at the same time. You can use the Peripherals page of the setup utility to switch resources between an IR port and a second serial port. See Chapter 3 for more information.

Digital Audio Extension Bracket

You can purchase an optional 24-bit digital audio extension bracket from a third-party vendor. You can use the audio RCA jacks to connect to digital audio devices. If your CD-ROM/DVD drive has digital audio output, you can connect it to the input pins of the SPDIF connector.
On the mainboard, locate the digital audio connector SPDIF1. Connect the cable from the digital audio extension bracket to SPDIF1. If you have digital audio output from your CD-ROM/DVD drive, connect it to the marked audio input pins.

Audio Input Pins

SPDIF1
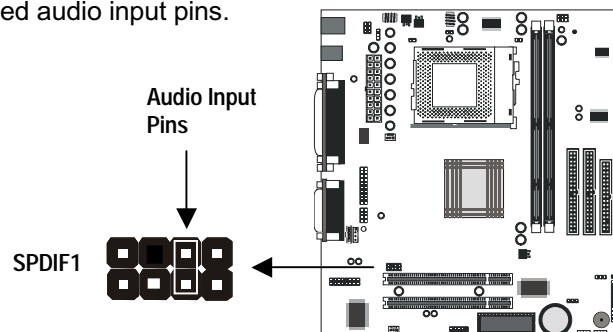
Auxiliary Keyboard Connector

The mainboard has connectors for an additional keyboard port. If your chassis has an additional bracket on the front side, you can use this connector on the mainboard to connect the proper feature to the extension bracket in the case.

JHD1
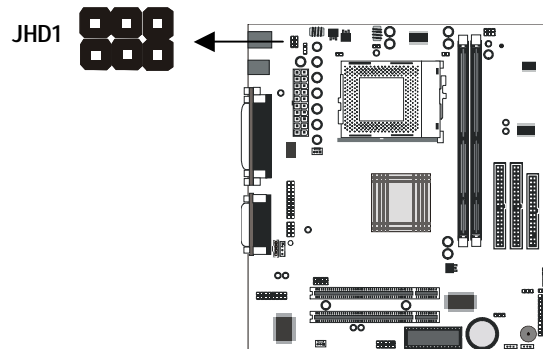
Digital and Analog I/O port

The mainboard had two connectors/jumpers for support of optional digital (J1) and analog (J6) I/O ports on the front panel of the system.
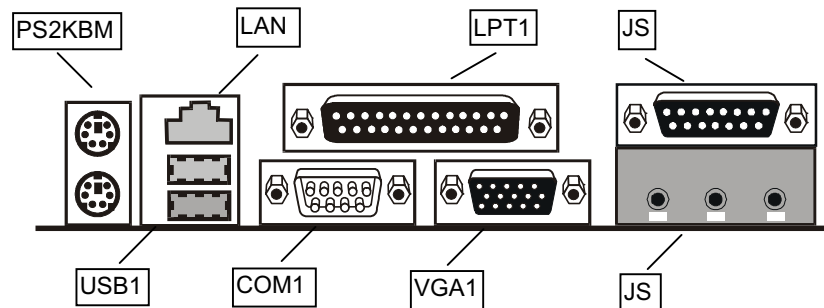In order to enable these ports, short the jumpers as indicated in the table below.

Enable Digital I/O Port – J1	Short pins:11-12, 13-14, 17-18, and 19-20
Enable Digital I/O Port – J6	Short pins 3-4, 5-6, and 7-8.

19 20

J1

1 2

7 8

J6

1 2
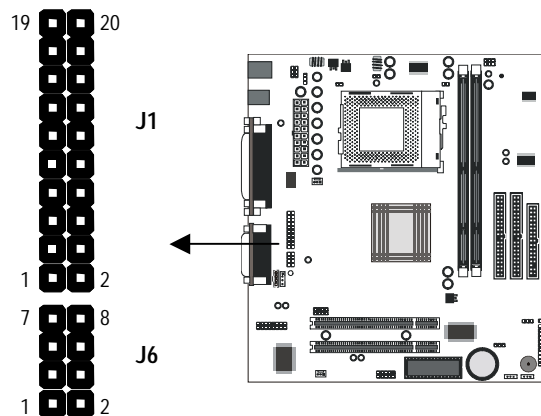
Make the External Connections

After you have installed the mainboard, make the connections to the external ports.

1. PS2KBM is a stack of two PS/2 mini-DIN ports. The upper port can be used by a PS/2 mouse or pointing device. The lower port can be used by a PS/2 keyboard.
2. LAN is an RJ45 connector. You can plug an Ethernet networking cable into this connector to join your system to a Local Area Network (LAN).
3. LPT1 is a parallel port that can be used by printers or other parallel communications devices. The system identifies the parallel port as LPT1.
4. The upper 15-pin port J2 is a game/MIDI port. You can use this port to connect a joystick or a MIDI device to your system
5. The lower part of J2 is three audio jacks. The left side jack is for a stereo line out signal. The middle jack is for a stereo line in signal. The right side jack is for a microphone.
6. VGA1 is the connector for a display monitor. Plug the data cable from the monitor into VGA1.
7. COM1 is a serial port that can be used by serial devices such as a mouse, a fax/modem and so on. This serial port is identified by the system as COM1/3.
8. USB1 is a stack of two Universal Serial Bus ports. Use these ports to connect to USB devices.

External Connector Color Coding

To help identify the external connectors, many connectors now use standard colors as shown in the table below.

Connector	Color
Analog VGA	Blue
Audio line in	Light blue
Audio line out	Lime
Digital monitor / flat panel	White
IEEE 1394	Grey
Microphone	Pink
MIDI/Game	Gold
Parallel	Burgundy
PS/2 compatible keyboard	Purple
PS/2 compatible mouse	Green
Serial	Teal or Turquoise
Speaker out / subwoofer	Orange
Right-to-left speaker	Brown
USB	Black
Video out	Yellow
SCSI, network, telephone, modem, and so on	None