Preface

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Version 1.0

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Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment onto an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Shielded interconnect cables and a shielded AC power cable must be employed with this equipment to ensure compliance with the pertinent RF emission limits governing this device. Changes or modifications not expressly approved by the system's manufacturer could void the user's authority to operate the equipment.

Declaration of Conformity

This device complies with part 15 of the FCC rules. Operation is subject to the following conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

Canadian Department of Communications

This class B digital apparatus meets all requirements of the Canadian Interference-causing Equipment Regulations.

Cet appareil numérique de la classe B respecte toutes les exigences du Réglement sur le matériel brouilieur du Canada.

About the Manual

The manual consists of the following:

Chapter 1
Introducing the Mainboard

Describes features of the mainboard, and provides a shipping checklist.

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Chapter 2
Installing the Mainboard

Describes installation of mainboard components.

Go to ⇒ page 8

Chapter 3
Using BIOS

Provides information on using the BIOS Setup Utility.

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Chapter 4
Using the Mainboard Software

Describes the mainboard software.

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Features and Packing List Translations

Liste de contrôle

Vérifiez que le contenu de l'emballage de la carte mère correspond à la liste suivante :

Eléments standards

- Une carte mère
- Un câble plat pour lecteur de disquette (optionnel)
- Un câble plat pour lecteur IDE
- Un CD d'installation automatique pour le logiciel
- Ce guide d'utilisation

Caractéristiques

Processeur	• Supporte le Socket A 462 broches AMD • Supporte les processeurs AMD Athlon XP/Athlon/Duron • Supporte un bus frontal (FSB) de 100/133 MHz
	• Supporte les processeurs AMD Athlon XP/Athlon/Duron internes • Supporte un bus frontal (FSB) de 100 MHz
Chipset	Les chipsets SiS740 Northbridge et SiS962L Southbridge sont basés sur une architecture novatrice et dimensionnable avec une fiabilité et des performances prouvées. Quelques-unes des caractéristiques avancées des chipsets sont: • Contrôleur DRAM intégré supportant un bus mémoire jusqu'à 266 MHz • Un bus de données bi-directionnel 16 bits offre un haut débit E/S • Accelérateur 2D/3D intégré offrant de hautes performances graphiques. • Une SDRAM DDR266 en 2.5 volts de faible consommation qui en fait une excellente solution pour les notebooks et les ordinateurs de bureau avec un faible encombrement • Accélérateur GDI+ intégré • Une interface ATA 133 sur le chipset, aidant à revitaliser les performances du système en offrant une connexion à haute vitesse aux Disques Durs ATA 133, délivrant des vitesses soutenues de transfert de données maximum de 133 Mo/sec Les caractéristiques clé supplémentaires comprennent le support de six ports USB, une liaison AC 97 pour audio et modem, surveillance matérielle, et gestion d'alimentation ACPI/OnNow.
USB 2.0	Le Contrôleur USB 2.0 est conforme aux Spécifications de Bus Série Universel Révision 2.0. Le USB 2.0 supporte les vitesses de transfert allant jusqu'à 480Mo/sec pour les périphériques à grande vitesse et spécifie une microtrame qui sera de 1/8ème de trame de 1msec. Ceci

	permet aux périphériques USB 2.0 d'avoir des mémoires tampons plus petites, même à des vitesses de transfert plus importantes. Les connecteurs USB 1.1 et autres câbles pleine vitesse peuvent supporter la vitesse plus élevée de USB 2.0 sans modification. Le chipset a les caractéristiques USB avancées suivantes : • Conforme aux Spécifications d'Interface de Contrôleur d'Hôte Améliorée (EHCI) Révision 0.95 et aux Spécifications d'Interface de Contrôleur d'Hôte Universel (UHCI) Révision 1.1 • Le périphérique multi-fonction PCI consiste en deux Contrôleurs d'Hôte UHCI pour signalisation pleine/faible vitesse et un Hôte EHCI • Le noyau de contrôleur pour signalisation haute vitesse • Support des Spécifications d'Interface de Gestion d'Alimentation de Bus PCI version 1.1 • Support hérité pour tous les ports face à l'aval.
Mémoire	La carte mère peut recevoir une DDR SDRAM (DRAM Synchrone à Double Débit de Données) DDR200/266 jusqu'à 2 Go utilisant deux modules DIMM sans mémoire tampon 2.5V.
Codec Audio AC'97	• Conforme aux spécifications AC'97 v2.2 • Support d'alimentation double : Numérique : Analogique 5V/3.3V: 5V • Ligne d'entrée/sortie arrière partagent la même prise • Centre/basses partagent la prise MIC • Support de SORTIE S/PDIF numérique
Options d'Extensions	La carte mère est livrée avec les options d'extensions suivantes: • Deux logements PCI 32 bits • Un logement Communications Network Riser (CNR) • Deux connecteurs IDE supportant quatre canaux IDE et une interface de lecteur de disquette Le S740MP/S740M supporte la maîtrise de bus Ultra DMA avec des vitesses de transfert de 33/66/100/133 Mo/sec.
E/S Intégrées	La carte mère possède un jeu complet de ports d'E/S et de connecteurs: • Deux ports PS/2 pour souris et clavier • Un port VGA • Quatre ports USB • Un port LAN • Prises audio pour microphone, ligne d'entrée et ligne de sortie
LAN Interne (optionnel)	Le VT6103L est un périphérique à Couche Physique pour Ethernet 10BASE-T et 100BASE-TX utilisant des câbles Non blindés de catégorie 5, Blindés de Type 1, et à Fibres Optiques. • Double Vitesse – 100/10 Mbps • Half et Full Duplex • Conforme à tous les Standards IEEE 802.3, 10Base-T et 100Base-Tx Applicables • Egaliseur Adaptatif

Microprogramme BIOS	Cette carte mère utilise AMI BIOS qui permet aux utilisateurs de configurer de nombreuses caractéristiques du système comprenant les suivantes: • Gestion d'alimentation • Alarmes de réveil • Paramètres de CPU • Synchronisation de CPU et de mémoire Le microprogramme peut aussi être utilisé pour définir les paramètres pour les vitesses d'horloges de différents processeurs.

Certaines spécifications matérielles et éléments de logiciels peuvent être modifiés sans avertissement.

Checkliste

Vergleichen Sie den Packungsinhalt des Motherboards mit der folgenden Checkliste:

Standard Items

- Ein Motherboard
- Ein Bandkabel für Diskettenlaufwerke (optional)
- Ein Bandkabel für IDE-Laufwerke
- Eine Auto-Installations-Support-CD
- Dieses Benutzerhandbuch

Features

Prozessor	• Unterstützt AMD 462-Pin Socket A • Unterstützt AMD Athlon XP/Athlon/Duron-CPUs. • Unterstützt 100/133 MHz Frontsidebus (FSB).
	• Unterstützt AMD Athlon XP/Athlon/Duron-CPUs. • Unterstützt 100 MHz Frontsidebus (FSB).
Chipsatz	Die Chipsätze SiS740 Northbridge und SiS962L Southbridge basieren auf einer innovativen und skalierbaren Architektur mit bewiesener Zuverlässigkeit und Leistung. Einige der modernen Eigenschaften des Chipsatzes: • Integrierter DRAM Controller unterstützt Speicherbus bis zu 266 • Ein 16-Bit bidirektionaler Datenbus bietet hohen I/O Durchsatz • Integrierter 2D/3D Beschleuniger liefert exzellente Grafikleistung • Niedriger 2.5 Volt DDR266 SDRAM-Stromverbrauch macht es zu einer exzellenten Lösung für Notebooks und Desktops mit kleiner Standfläche • Eingebauter GDI+ Beschleuniger • Ein ATA 133-Interface auf dem Chipsatz verbessert die Systemleistung mit Hilfe eines Hochgeschwindigkeitsanschlusses für ATA 133-Festplatten mit einer maximalen Sustained Data Transferrate von 133 MB/sec Zusätzliche Schlüsseleigenschaften umfassen Unterstützung für sechs USB-Ports, ein AC 97-Link für Audio und Modem, Hardwareüberwachung und ACPI/OnNow-Energieverwaltung.
USB	Der USB 2.0 Controller ist mit der Universal Serial Bus Spezifikation, Revision 2.0 kompatibel. USB 2.0 unterstützt Datentransferraten von bis zu 480MB/Sek für Hochgeschwindigkeitsgeräte und spezifiziert einen Mikrorahmen von ⅛ eines 1msek Rahmens. Dies ermöglicht USB 2.0 Geräten auch bei hohen Datenraten einen kleinen Puffer zu haben. Die USB 1.1 Verbinder und andere Vollgeschwindigkeitskabel können die höhere Geschwindigkeit des USB 2.0 ohne jegliche Änderungen unterstützen. Der Chipsatz verfügt über die folgenden erweiterten USB-Merkmale:

	• Kompatibel mit Enhanced Host Controller Interface (EHCI) Spezifikation Revision 0.95 und Universal Host Controller Interface (UHCI) Spezifikation Revision 1.1 • PCI Multifunktionsgerät besteht aus zwei UHCI Host Controllern für Voll/Niedriggeschwindigkeits-Signalisieren und einem EHCI Host Controller Speicher für Hochgeschwindigkeits-Signalisieren • Unterstützt PCI-Bus Power Management Interface Spezifikation, Ausgabe 1.1 • Legacy Unterstützung für alle nachgeschalteten Anschlüsse
Speicher	Das Mainboard nimmt mittels zweier ungepufferter 2.5V DIMM Module DDR200/266 DDR SDRAM (Double Data Rate Synchronous DRAM) von bis zu 2 GB auf.
AC' 97 Audio Codec	• Kompatibel mit der AC'97 v2.2-Spezifikation • Duale Netzversorgung: Digital: 5 Volt/3.3 Volt; Analog: 5 Volt • Line-in/Rear-out über gemeinsamen Port • Center/Bass über den MIC-Port • Unterstützung für digitalen S/PDIF OUT
Erweiterungs-optionen	Das Mainboard bietet die folgenden Erweiterungsoptionen: • Zwei 32-bit PCI Steckplätze • Einen Steckplatz für Communications Network Riser (CNR) • Zwei IDE-Stecker, die vier IDE-Kanäle und eine Schnittstelle für ein Floppydiskettenlaufwerk unterstützen Das S740MP/S740M unterstützt Ultra DMA Bus-Mastering mit Übertragungsraten von 33/66/100/133 MB/Sek.
Integrierte I/O	Das Mainboard verfügt über einen kompletten Satz von I/O-Schnittstellen und Anschlüssen: • Zwei PS/2-Schnittstellen für Maus und Tastatur • Eine VGA-Schnittstelle • Vier USB-Schnittstellen • Eine LAN-Schnittstelle • Audiobuchsen für Mikrofon, Line-in und Line-out
Integriertes LAN (optional)	Das VT6103L ist ein Physical Layer-Gerät für Ethernet 10BASE-T und 100BASE-TX. Es verwendet Kategorie 5 Kabel ohne Abschirmung, Typ 1-Kabel mit Abschirmung und fiberoptische Kabel. • Duale Geschwindigkeit– 10/100 MB/Sek. • Halb-/Vollduplex • Entspricht allen geltenden IEEE 802.3, 10Base-T und 100Base-Tx-Standards • Einstellbarer Equalizer

BIOS-Firmware	Dieses Mainboard setzt das Award BIOS ein, mit dem der Anwender viele Systemeigenschaften selbst konfigurieren kann, einschließlich der folgenden: • Energieverwaltung • Wake-up-Alarm • CPU-Parameter und Speichertiming • CPU und Speichertiming Mit der Firmware können auch Parameter für verschiedene Prozessortaktgeschwindigkeiten eingestellt werden.

Bestimmte Hardwarespezifikationen und Teile der Softwareausstattung können ohne weitere Ankündigung abgeändert werden.

Lista di controllo

Confrontate il contenuto della confezione della scheda madre con la seguente lista di controllo:

Articoli standard

- Una scheda madre
- Un cavo a nastro per il drive dischetti (opzionale)
- Un cavo a nastro IDE
- Un CD di supporto software auto-installante
- Il manuale dell'utente

Caratteristiche

Processor	• Supporta le prese AMD di tipo A da 462 pin • Supporta i processori AMD Athlon XP/Athlon/Duron • Supporta un bus di sistema (FSB) a 100/133 Mhz
	• Supporta i processori AMD Athlon XP/Athlon/Duron onboard • Supporta un bus di sistema (FSB) a 100 Mhz
Chipset	I chipset SiS740 Northbridge e SiS962L Southbridge sono basati su un'architettura del tutto nuova avendo migliorato affidabilità e prestazioni. Alcune caratteristiche migliorate dei chipset sono: • Il controller DRAM integrato supporta bus di memoria fino a 266 Mhz • Il bus bidirezionale a 16 bit di dati fornisce alta capacità I/O • L'acceleratore 2D/3D integrato fornisce alte prestazioni grafiche • Un consumo ridotto di energia a 2.5 volt della SDRAM DDR266, che rappresenta la soluzione ottimale per notebook e computer da tavolo di dimensioni ridotte • Acceleratore GDI+ integrato • Un'interfaccia ATA 133 integrata al chipset, che facilita l'avvio del sistema fornendo un collegamento ad alta velocità ai dischi rigidi ATA 133, con velocità massima di trasferimento dati pari a 133 MB/sec Caratteristiche chiave addizionali includono supporto per sei porte USB, supporto per collegamento AC 97 per audio e modem, controllo hardware, e gestore d'energia ACPI/OnNow
USB 2.0	Il controller USB 2.0 è compatibile con Universal Serial Bus Specification Revision 2.0. USB 2.0 supporta trasferimento dati fino a 480MB/sec per dispositivi ad alta velocità disponendo di un microframe pari a 1/8 di 1msec frame. Ciò permette ai dispositivi USB 2.0 di disporre di piccole memorie di tampone anche ad alte velocità di trasferimento dei dati. I connettori e i cavi USB 1.1 sono in grado di supportare la maggiore velocità di USB 2.0. Il chipset è fornito delle seguenti caratteristiche tecniche avanzate USB: • Compatibile con Enhanced Host Controller Interface (EHCI) Specification Revision 0.95 e Universal Host

	Controller Interface (UHCI) Specification Revision 1.1 • Il dispositivo multifunzione PCI è formato da due Host Controller UHCI per trasmissione a velocità massima/ridotta ed un EHCI Host • Controller Core per trasmissione ad alta velocità • Supporta PCI-Bus Power Management Interface Specification release 1.1 • Supporta i precedenti formati di porte
Memoria	La scheda madre supporta DDR200/266 DDR SDRAM (Double Data Rate Synchronous DRAM) fino a 2GB utilizzando due moduli DIMM privi di memoria di tampone a 2.5V.
AC 97 Audio Codec	• Conforme alle specifiche AC'97 v2.2 • Supporto per doppio alimentatore: digitale da 5V/3,3V; analogico da 5V • Line-in/rear out condividono la stessa presa jack • Center/bass condividono la stessa presa jack MIC • Supporto S/PDIF OUT digitale
Opzioni di espansione	La scheda madre include le seguenti opzioni di espansioni: • Due slot PCI da 32 bit • Una slot Communications Network Riser (CNR) • Due connettori IDE in grado di supportare quattro canali IDE ed un'interfaccia lettore dischi floppy S740MP/S740M supporta gestione di canali Ultra DMA con percentuali di campionamento di 33/66/100/133 MB/sec
I/O integrati	La scheda madre è dotata di un set completo di connettori e porte I/O: • Due porte PS/2 per mouse e tastiera • Una porta VGA • Quattro porte USB • Due porte LAN • Jack audio per microfono, linea d'ingresso e linea d'uscita
LAN integrato (opzionale)	La scheda VT6103L è una periferica di livello fisico per Ethernet 10BASE-T e 100BASE-TX, che utilizza cavi di Classe 5 non schermati, cavi di Tipo 1 schermati e cavi in fibre ottiche. • Doppia velocità – 100/10 Mbps • Half e Full Duplex • Conforme a tutte le norme IEEE 802.3, 10Base-T e 100Base-Tx • Stabilizzatore adattivo
BIOS	Questa scheda madre utilizza AMI BIOS che permette l'utente di configurare numerose caratteristiche di sistema tra cui le seguenti: • Gestione energetica • Segnali di attivazione • Parametri CPU • Temporizzazione parametri e memoria CPU E' possibile inoltre possibile impostare i parametri di velocità della clock del processore su diversi valori.

Alcune specifiche hardware ed elementi software sono soggetti a variazioni senza preavviso.

Lista de Verificación

Compare los contenidos del paquete de la placa principal con la sigte. lista:

Ítems Estándares

- Una placa principal
- Un cable cinta del lector de diskette (optativo)
- Un cable cinta de la unidad IDE
- Un CD de soporte en software de autoinstalación
- Este manual del usuario

Características

Procesador	• Soporta AMD 462-pin Socket A • Soporta procesadores AMD Athlon XP/Athlon/Duron • Soporta bus de lado frontal 100/133 MHz (FSB)
	• Soporta procesadores abordo AMD Athlon XP/Athlon/ Duron • Soporta bus frontal 100 MHz (FSB)
Chipset	Los Chipsets SiS740 Northbridge y SiS962L Southbridge se basan de una arquitectura innovadora y escalable con fiabilidad y rendimiento comprobados. Unas pocas características avanzadas de los chipsets son: • El controlador DRAM Integrado soporta memoria y bus hasta 266 MHz • Un bus de datos bi-direccional 16-bit provee resultado I/O alto • El acelerador 2D/3D integrado provee alto rendimiento de gráficas • Un bajo consumo SDRAM DDR266 de 2.5-voltio que lo hace una solución excelente para notebooks y desktops con una huella pequeña • Acelerador GDI+ incorporado • Una interfaz ATA 133 en el chipset, que ayuda el rendimiento de sistema de inicio con proveer una conexión de alta velocidad a las Unidades Rígidas ATA 133, entrega los índices de transferencia de datos sostenidos de 133 MB/seg Las características claves adicionales incluyen soporte para seis puertos USB, un vínculo AC 97 para sonido y modem, monitoreo de hardware, y administración de alimentación ACPI/OnNow.
USB 2.0	El Controlador USB 2.0 se conforma con la Especificación de Bus Serial Universal Revisión 2.0. El USB 2.0 soporta los índices de transferencia de datos hasta 480MB/seg para los dispositivos de alta velocidad y especifica un micromarco que será 1/8th de un marco de 1mseg. Ésto permite que los dispositivos USB 2.0 para que tengan buffers pequeños aun en los índices de datos altos. Los conectores USB 1.1 y otros cables de alta velocidad pueden soportar la velocidad superior de USB 2.0 sin cambios. El chipset tiene las sigtes características USB avanzadas: • Comforme con la Enhanced Host Controller Interface

	(EHCI) Specification Revisión 0.95 y Universal Host Controller Interface (UHCI) Specification Revisión 1.1 • Dispositivo PCI multi-función de dos Controladores Anfitriones UHCI para la señalización de velocidad completa/baja y un Anfitrión EHCI • Centro de controlador para la señalización de alta velocidad • Soporta la Especificación de Interfaz de Administración de Suministro revisión 1.1 de PCI-BUS • Soporte de legado para todos los puertos frontales inferiores
Memory	La placa principal acomoda DDR200/266 DDR SDRAM (DRAM Sincrónico de Índice de Datos Dobles/Double Data Rate Synchronous DRAM) hasta 2 GB con dos módulos DIMM sin buffer de 2.5V.
Codec de Sonido AC 97	• Conforme con la especificación AC'97 v2.2 • Soporte de suministro dual: Digital: 5V/3.3V Analógico: 5V • Entrada de línea/salida trasera comparten la misma clavija • Centro/bajo comparten la clavija MIC • Soporte de Digital S/PDIF OUT
Opciones de Expansión	La placa principal viene con las sigtes. opciones de expasión: • Dos ranuras PCI de 32-bit • Una ranura Communications Network Riser (CNR) • Dos conectores IDE que soportan cuatro canales IDE y una interfaz de unidad de floppy La S740MP/S740M soporta el mastering de bus Ultra DMA con índices de transferencia de 33/66/100/133 MB/seg
I/O Integrado	La placa principal tiene un juego completo de puertos y conectores I/O: • Dos puertos PS/2 para ratón y teclado • Un puerto VGA • Un puerto LAN • Cuatro puertos USB • Clavijas de sonido para micrófono, entrada y salida de línea
LAN Abordo (optativo)	El VT6103L es un dispositivo de Capa Física para Ethernet 10BASE-T y 100BASE-TX con la categoría 5 no cubierto, Tipo 1 cubierto, y cables de Fibra Óptica. • Velocidad Dual – 100/10 Mbps • Duplex Medio y Completo • Satisface todas las normas IEEE 802.3, 10Base-T y 100Base-Tx • Ecualizador Adaptivo

BIOS Firmware	La placa principal usa AMI BIOS que habilita a los usuarios para que configuren muchas características de sistema que incluyen las sigtes: • Administración de alimentación • Alarmas depertadoras • Parámetros de CPU • Cronometraje de CPU y de memoria También se puede usar el firmware para configurar los parámetros para diferentes velocidades de reloj del procesador.

Algunas especificaciones de hardware e ítems de software son sujetos a cambio sin previo aviso.

チェックリスト

下記のチェックリストに列挙されている製品が同封されているかを確認してください。

標準同封アイテム

- メインボード　1枚
- ディスクドライブ用リボンケーブル　1個（オプション）
- IDEドライブ用リボンケーブル　1個
- 自動インストール機能対応ソフトウェアCD　1枚
- ユーザーマニュアル

製品特徴

プロセッサ	• AMD 462-pin Socket Aを搭載 • AMD Athlon XP/Athlon/Duron プロセッサをサポート • 100/133 MHz システムバス (FSB) を採用
	• オンボードAMD Athlon XP/Athlon/Duron プロセッサをサポート • 100 MHz システムバス (FSB) を採用
チップセット	搭載したSiS740ノースブリッジおよびSiS962Lスブリッジ・チップセットは最新且つ拡張性あるアーキテクチャを採用し、高い安定性およびパフォーマンスを兼ね備えたものであります。また、次の特徴があります： • 搭載したDRAMコントローラーが最大266MHzのメモリバスをサポートします • 16ビット二方向性データバスが高いI/O処理能力をお届けします • 内蔵した2D/3Dアクセラレータが高いグラフィックパフォーマンスをお届けします • 低消費電力の2.5V仕様DDR266 SDRAMを採用し、ノートブックや小型デスクトップコンピュータに最適です • GDI+アクセラレータが搭載されています。 • チップセットに搭載されているATA133インターフェースは、最大133ＭＢ/秒までの転送レートをサポートし、ATA 133仕様のハードディスクを接続することにより、システムのパフォーマンスが大幅に向上します その他に、次の重要機能をサポートしています：６つのUSBポートをサポート、オーディオおよびモデム向けのAC 97リンク、ハードウェアのモニタ、およびACPI/OnNow 電源管理。
USB 2.0	USB 2.0 コントローラはUniversal Serial Bus Specification Revision 2.0仕様に適合しています。 USB 2.0 様では最大 80MB/秒までの転送速度をサポートし、1msフレームの1/8になるマイクロフレームで転送を制御する。これにより、より小さいバッファーでの高速なデータ伝送が可能です。 高速なUSB2.0のデータ伝送には、USB 1.1 向けのコネクターおよびフルスピードケーブルを直接適用することが出来ま

	す。 このチップセットは次の先進なUSB機能を提供します： • EHCI（Enhanced Host Controller Interface）0.95仕様およびUHCI（Universal Host Controller Interface）1.1仕様に適合しています • PCIマルチ機能デバイスは2つのフルスピード/ロースピード伝送用UHCIホストコントローラおよび1つのEHCIホストで構成されています • ハイスピード転送制御用のコントローラコア • PCIバス電源管理インターフェース1.1仕様に適合 • すべてのダウンストリームフェースポートをサポート
メモリ	DDR200/266のDDR SDRAM をサポートします。メインボードに搭載された 2つの非バッファー 2.5V仕様の DIMMモジュールが、トータルで 2GBまでのメモリをサポートします。
AC’ 97 オーディオ・コーデック	• AC’97 v2.2 規格に適合 • 二重電源をサポート：デジタル方式では 5V/3.3V、アナログ方式では 5V • ライン入力/リア出力は同一ジャックを共用 • 中/低音はMICジャックを使用 • デジタル S/PDIF出力をサポートt
拡張オプション	メインボードには次に拡張オプションが搭載されています： • 2つの32ビットPCI スロット • 1つの通信ネットワークライザー(CNR) スロット • 2つのIDEコネクタが、４つIDEチャネルおよび１つフロッピーディスクドライブインターフェースをお届けします S740MP/S740M は転送レート33/66/100/133 MB/secに対応するUltra DMAバスマスタ機能をサポートします。
統合されたI/O	このメインボードにはフルーセットのI/Oポートおよびコネクタが搭載しています。 • 2つのマウスおよびキーボードのPS/2ポート • 1つのVGAポート • 4のUSBポート • マイクロフォンやラインイン、ラインアウト向けのオーディオジャック
オンボードLAN（オプション）	VT6103Lはカテゴリ5案シールド、Type 1 シールド、光ファイバーケーブルを使ったEthernet 10BASE-Tと100BASE-TXのための物理レイヤーです。 • デュアルスピード - 100/10 Mbps • 半/全二重 • すべてのIEEE 802.3、10Base-T、100Base-Tx標準に対応 • 適応エコライザ

BIOS ファームウェア	本メインボードは次ぎのシステム機能を含めた設定をすることができるAMIBIOSを採用しています： • 電源管理 • Wake-up警告 • CPUパラメータ • CPUとメモリとのタイミング この他に、各種プロセッサクロック速度のパラメータを設定することができます。

一部のハードウェア仕様及びソフトウェアアイテムは予告なく変更されることがあります。

품목 목록

다음 품목들이 메인보드 패키지에 모두 포함되어 있는지 확인해 보십시오:

표준 품목

- 메인 보드 1개
- 디스켓 드라이브 리본 케이블 1개(선택적)
- IDE 드라이브 리본 케이블 1개
- 자동 설치 소프트웨어 지원 CD 1개
- 본 사용자 설명서

기능

프로세서	• AMD 462 핀 소켓 A 지원 • AMD Athlon XP/Athlon/Duron 프로세서 지원 • 100/133 MHz frontside bus (FSB) 지원
	• 보드 내장 AMD Athlon XP/Athlon/Duron 프로세서 지원 • 100 MHz frontside bus (FSB) 지원
칩셋	SiS740 Northbridge 와 SiS962L Southbridge 칩셋은 혁신적인 기술을 바탕으로 하며 인정된 신뢰성과 성능을 지닌다. 이 고급의 칩 세트는 다음과 같은 특징이 있다: • 통합 DRAM 컨트롤러는 메모리 버스를 최대 266 MHz 까지 지원한다. • 16-bit 양방향 데이터 버스로 고성능의 I/O 처리 능력비를 제공한다. • 통합 2D/3D 액설레이터로 우수한 그래픽 성능을 제공한다. • 2.5-volt DDR266 SDRAM 의 낮은 전력 소모로 전력 용량이 작은 노트북과 데스크 톱에 해결책을 제공한다. • 내장 GDI+ accelerator • 칩 세트의 ATA 133 인터페이스는133 MB/sec 의 최대 데이터 전송 속도로, ATA 133 하드디스크 드라이브에의 고속 연결을 통해 시스템 작동을 돕는다. 추가적 키로, 6 개의 USB 포트, 오디오와 모뎀을 위한 AC 97 링크와 하드웨어 모니터링 및 ACPI/OnNow 전력 관리 지원을 포함한다.
USB 2.0	USB 2.0 컨트롤러는 Universal Serial Bus 2.0 사양과 호환한다. USB 2.0은 고속 장치를 위해 데이터 전송 속도를 최대 480MB/sec 까지 지원하고 1msec 프레임의 8분의 1인 마이크로 프레임을 지원하여, USB 2.0 장치는 고속의 데이터 속도에도 작은 버퍼를 유지할 수 있다. USB 1.1 커넥터와 기타 전속 케이블은 다른 변경 없이 USB 2.0 의 고속을 지원할 수 있다. 이 칩셋은 다음과 같은 고급의 USB 특징을 지닌 다: • Enhanced Host Controller Interface (EHCI) 0.95 사양 및 Universal Host Controller Interface (UHCI) 1.1 사양 호환

	• 2개의 UHCI 호스트 컨트롤러(전속/저속 시그널링 용) 과 1개의 EHCI 호스트로 이루어진 PCI 다기능 장치 • 고속 시그널링을 위한 컨트롤러 코어 • PCI-버스 전력 관리 인터페이스 1.1 사양 지원 • 모든 다운스트림 페이싱 포트를 지원하는 Legacy
메모리	이 메인보드는 2개의 2.5V unbuffered DIMM 모듈 사용 최대 2GB의 DDR200/266 DDR SDRAM (Double Data Rate Synchronous DRAM) 과 부합.
AC 97 오디오 코덱	• AC'97 v2.2 사양 부합 • 듀얼 파워 지원: 디지털: 5V/3.3V 아날로그: 5V • 라인 입력/후면 출력이 동일한 잭 공유 • 중앙/베이스가 MIC 잭 공유 • Digital S/PDIF OUT 지원
확장 옵션	이 메인보드는 다음과 같은 풀 세트의 확장 옵션이 있다: • 32-bit PCI 슬롯 2 개 • Communications Network Riser (CNR) 슬롯 1개 • 4개의 IDE 채널과 1개의 플로피 디스크 드라이브 인터페이스를 지원하는 IDE 커넥터 2개. S740MP/S740M 는 전송 속도 33/66/100/133 MB/sec의 Ultra DMA bus mastering을 지원한다.
통합 I/O	이 메인보드는 세트의 I/O 포트와 커넥터가 있다: • 마우스 및 키보드 용 PS/2 포트 2개 • VGA 포트 1개 • USB 포트 4개 • LAN 포트 1개 • 마이크 용 오디오 잭, 라인 입력과 라인 출력
보드 내장 LAN (선택 사항)	VT6103L 은 카테고리 5 언실드, 타입 1 실드 및 광섬유 케이블을 사용하는 이더넷 10BASE-T 와 100BASE-TX 를 위한 물리적 레이어 장치이다. • 듀얼 스피드 – 100/10 Mbps • Half 및 Full Duplex • IEEE 802.3, 10Base-T 및 100Base-Tx 표준에 모두 부합 • 적응 가능한 이콸라이저
BIOS 펌웨어	본 메인보드는 AMI BIOS 를 사용하여 사용자가 다음과 같은 시스템 기능을 구성할 수 있도록 한다: • 전력 관리 • 기상 알람 • CPU 파라미터 • CPU 와 메모리 타이밍 펌웨어는 각 프로세서 클럭 속도의 파라미터를 설정하는데도 사용될 수 있다.

하드웨어 사양 및 소프트웨어 아이템은 사전 통보 없이 변경될 수 있음.

檢查表

請依下列檢查表，核對主機板包裝之內容：

標準項目

- 主機板一片
- 軟碟機排線一條 ( )
- IDE磁碟機排線一條
- 自動安裝CD一片
- 本使用手冊

性能

	• 支援 AMD 462針Socket A • 支援 AMD Athlon XP/Athlon/Duron 處理器 • 支援 100/133 MHz 系統匯流排(FSB)
	• 支援機載 AMD Athlon XP/Athlon/Duron 處理器 • 支援 100 MHz 系統匯流排 (FSB)
	SiS740北橋及SiS962L南橋晶片組，採用了獨創且具有擴充功能的架構，能夠發揮最佳的穩定性及功能。本晶片組具有下列先進的功能： • 內建之DRAM控制卡支援高達266MHz的記憶匯流排 • 16位元雙向資料匯流排提供您高I/O效能 • 內建之2D/3D加速器提供您高繪圖效能 • 採用了低功率2.5V之DDR SDRAM，對筆記型電腦及小型桌上型電腦而言，為最佳的選擇 • 內建有GDI加速器 • 晶片組上的ATA133介面，能夠持續進行133MB/秒的資料傳輸，藉由連接ATA133硬碟，可大大提升系統效能 其他重要功能包括：支援6個USB埠、音效及數據機連接用的 AC 97 link 、硬體監視功能、及ACPI/OnNow 電源管理功能。
USB 2.0	USB 2.0控制卡符合通用串列匯流排2.0版規格。 USB 2.0可為高速週邊設備提供高達480MB/sec 的資料傳輸速度及1/8微秒框架，使得USB2.0設備僅需較小的緩衝記憶區，便可進行高速資料傳輸。 USB 1.1 連接器及其全速連接線可直接支援更高速的USB 2.0規格。

	本晶片組具有以下先進的USB功能： • 符合EHCI(Enhanced Host Controller Interface)規格0.95版及UHCI(Universal Host Controller Interface) 格1.1版 • PCI 多功能設備係由2個全/低速信號處理用UHCI 主控制卡及1個EHCI 控制卡所組成 • 支援高速信號處理的控制核心 • 支援 PCI-匯流排式 電源管理介面(Power Management Interface) 規格1.1版 • 支援所有舊式的下行傳輸埠
	本主機板支援DDR200/266MHz的DDR SDRAM 。 並且 ，配備 2 個無緩衝 2.5V DIMM 模組，可支援高達 2GB 的記憶體。
AC' 97 /	• 符合AC'97 v2.2 規格 • 支援雙電源: 數位為 5V/3.3V，類比為 5V • 外部音源輸入及後聲道輸出共用一端子 • 中/低音共用麥克風端子 • 支援數位 S/PDIF輸出t
	本主機板具有下列的擴充選擇： • 2個32位元 PCI插槽 • 1個CNR(Communications Network Riser) 槽 • 2個IDE連接器，支援4個IDE 通路及1個軟碟槽介面 S740MP/S740M 主機板具有Ultra DMA 匯流排控制功能，能夠支援 33/66/100/133 MB/sec的傳輸速度。
I/O	本主機板完整地支援各種 I/O埠及連接器： • 2個 PS/2 埠，分供滑鼠及鍵盤連接 • 1個VGA埠 • 1個LAN埠 • 4個USB埠 • 麥克風、線輸入及線輸出音效端子
LAN **( )**	VT6103L係為乙太10BASE-T 和 100BASE-TX之實體層元件, 使用 Category 5(速率100 Mbps) 無遮蔽式雙絞線、Type 1屏蔽電纜、及光纖電纜。 • 雙倍速 – 100/10 Mbps 傳輸速率 • 支援半或全雙工運作模式 • 適用於所有可用之IEEE 802.3, 10BaseT和100Base-Tx 雙絞線, 等之標準 • 自適均衡器

BIOS	本主機板使用了Award BIOS ，使用者 可藉此對包括下列之系統功能進行設定 ： • 電源管理 • 喚醒警示 • CPU參數 • CPU及記憶體的定時 本BIOS也可用以設定各種有關處理器時脈的參數。

校验表

将本主板的组件内容与以下校验表进行对照：

标准组件

- 一只主板
- 一条磁盘驱动器带状电缆（可选）
- 一条 IDE 驱动器带状电缆
- 一张自动安装软件支持光盘
- 本用户手册

特性

处理器	• 支持 AMD 462-pin Socket A 处理器 • 支持 AMD Athlon XP/Athlon/Duron 处理器 • 支持 100/133 MHz 前端总线 (FSB)
	• 支持主板集成 AMD Athlon XP/Athlon/Duron 处理器 • 支持 100 MHz 前端总线 (FSB)
芯片组	SiS740 北桥和 SiS962L 南桥芯片组是基于一种新型的、可扩展的架构，能提供已经证明的可靠性和高性能。此芯片组具有以下一些高级功能： • 集成的 DRAM 控制器，支持的存储总线速度到 266 MHz • 16 位双向数据总线，提供高性能的 I/O 传输 • 集成 2D/3D 加速器，提供高图形性能 • 2.5 V 低功耗 DDR266 SDRAM，是笔记本电脑和台式电脑的最佳解决方案

	• 内建 GDI+ 加速器 • 芯片组带一个 ATA 133 接口，通过提供到 ATA 133 硬盘的高速连接明显改善系统性能，最大可提供 133 MB/sec 的稳定数据传输速率 其它主要功能包括支持 6 个 USB 端口、用于音频和调制解调器的 AC 97 连接、硬件监测和 ACPI/OnNow 电源管理。
USB 2.0	USB 2.0 控制器与通用串行总线规格 2.0 兼容。 USB 2.0 支持的高速设备数据传输速率可达 480MB/sec，并指定一个 microframe（即 1msec 帧的 1/8）。这就使 USB 2.0 设备在高速数据传输速率时能够保持较小的缓冲区。 USB 1.1 接口和其它全速电缆可支持 USB2.0 更高的速度，不需要做任何修改。 此芯片组还具备以下增强 USB 功能： • 与 0.95 版本的增强主控器接口 (EHCI) 规格和 1.1 版本的通用主控器接口 (UHCI) 规格兼容 • PCI 多功能设备由 2 个用于全速/低速传输数据的 UHCI 主控器 和1 个 EHCI 主控器组成 • 用于高速传输数据的控制器内核 • 支持 1.1 版本的 PCI 总线电源管理接口规格 • 支持所有传统下行端口
内存	此主板支持 DDR200/266 DDR SDRAM（双数据速率同步 DRAM）可到 2 GB（使用 2 条 2.5V 无缓冲 DIMM 内存条）。
AC’ 97 音频编解码器	• 兼容 AC’97 v2.2 规格 • 支持双电源：数字：5V/3.3V 模拟：5V • 线入/后部输出共享同一插孔 • 中置/低音共享 MIC 插孔 • 支持 S/PDIF OUT
扩展 选项	此主板提供如下扩展选项： • 2 个 32 位 PCI 扩展插槽 • 1 个通信网络转接 (CNR) 插槽 • 2 个 IDE 接口，可支持 4 个 IDE 通道；1 个软驱接口 S740MP/S740M 支持 Ultra DMA 总线控制，传输速率可达 33/66/100/133 MB/sec。
集成 I/O	此主板具有完整的 I/O 端口和插孔： • 2 个用于连接鼠标和键盘的 PS/2 端口 • 1 个 VGA 端口 • 4 个 USB 端口 • 1 个 LAN 端口 • 麦克风、线入和线出声音插孔
Onboard LAN （可选）	VT6103L 是一种物理层设备，可用于使用 5 类非屏蔽线、1 类屏蔽线和光缆的以太网 10BASE-T 和 100BASE-TX。 • 双速 - 100/10 Mbps • 半双工和全双工 • 符合所有相应的 IEEE 802.3、10Base-T 和 100Base-Tx 标准 • 自适应均衡器
BIOS	此主板使用 AMI BIOS，可以让用户自己配置以下系统功能：

	• 电源管理 • 唤醒报警 • CPU 参数 • CPU 和记忆定时 还可用于设置不同处理器时钟速度的参数。

部分硬件规格和软件项目若有更改恕不另行通知。

TABLE OF CONTENTS

Chapter 1

Introducing the Mainboard

Introduction

Thank you for choosing the S740MP/S740M mainboard. This mainboard is a high performance system board integrated with SiS740 Northbridge and SiS962L Southbridge chipset. This mainboard accommodates AMD Athlon XP processors supporting frontside bus (FSB) speeds up to 100/133 MHz.

The mainboard has 2 built-in 184-pin DIMM slots, and the main memory is expandable to a maximum of 2GB. It also supports the high-end CPU of all series of current Athlon XP or higher.

The S740MP/S740M is equipped with advanced set of I/O ports, such as a VGA port, four USB (Universal Serial Bus) connectors, a LAN port, a PS/2 keyboard connector, mouse connector and audio jacks for microphone, line-in and line-out. Two PCI local bus slots and one communication and networking riser (CNR) slot provide expandability for add-on peripheral cards. It also comes with a built-in Enhanced PCI Bus Master PCI IDE controller that provides high-speed connections to full range of IDE devices such as HDD and CD-ROM. This mainboard is designed in a standard micro-ATX form factor using a 4-layer printed circuit board and measures 244 mm x 190 mm.

Notice to user:

If your S740MP mainboard has CPU onboard. Please refer to the mainboard layout on page 6.

Checklist

Compare the mainboard's package contents with the following checklist:

Standard Items

- One mainboard
- One diskette drive ribbon cable (optional)
- One IDE drive ribbon cable
- One auto-install software support CD
- This user's manual

Features

Processor	• Supports AMD 462-pin Socket A • Supports AMD Athlon XP/Athlon/Duron processors • Supports 100/133 MHz frontside bus (FSB)
	• Supports onboard AMD Athlon XP/Athlon/Duron processors • Supports 100 MHz frontside bus (FSB)
Chipset	The SiS740 Northbridge and SiS962L Southbridge chipsets are based on an innovative and scalable architecture with proven reliability and performance. A few of the chipset's advanced features are: • Integrated DRAM controller supports memory bus up to 266 MHz • A 16-bit bi-directional data bus provides high I/O throughput • Integrated 2D/3D accelerator providing high graphics performance • A low 2.5-volt DDR266 SDRAM power consumption which makes it an excellent solution for notebooks and desktops with a small footprint • Built in GDI+ accelerator • An ATA 133 interface on the chipset, which helps boost system performance by providing a high-speed connection to ATA 133 Hard Disk Drives, delivering maximum sustained data transfer rates of 133 MB/sec Additional key features include support for six USB ports, an AC 97 link for audio and modem, hardware monitoring, and ACPI/OnNow power management.
USB 2.0	The USB 2.0 Controller is compliant with Universal Serial Bus Specification Revision 2.0. The USB 2.0 supports data transfer rates up to 480MB/sec for high-speed devices and specifies a microframe that will be 1/8th of a 1msec frame. This allows the USB 2.0 devices to have small buffers even at high data rates. The USB 1.1 connectors and other full speed cables can support the higher speed of USB 2.0 without any changes. The chipset has the following advanced USB features: • Compliant with Enhanced Host Controller Interface (EHCI) Specification Revision 0.95 and Universal Host Controller Interface (UHCI) Specification Revision 1.1 • PCI multi-function device consists of two UHCI Host Controllers for full/low-speed signaling and one EHCI Host • Controller core for high-speed signaling • Supports PCI-Bus Power Management Interface Specification release 1.1 • Legacy support for all downstream facing ports
Memory	The mainboard accommodates DDR200/266 DDR SDRAM (Double Data Rate Synchronous DRAM) up to 2 GB using two 2.5V unbuffered DIMM modules.

AC 97 Audio Codec	• Compliant with AC'97 v2.2 specification • Dual power support: Digital: 5V/3.3V Analog: 5V • Line-in/rear out share the same jack • Center/bass share the MIC jack • Digital S/PDIF OUT support
Expansion Options	The mainboard comes with the following expansion options: • Two 32-bit PCI slots • A Communications Network Riser (CNR) slot • Two IDE connectors which support four IDE channels and a floppy disk drive interface The S740MP/S740M supports Ultra DMA bus mastering with transfer rates of 33/66/100/133 MB/sec.
Integrated I/O	The mainboard has a full set of I/O ports and connectors: • Two PS/2 ports for mouse and keyboard • One VGA port • Four USB ports • One LAN port • Audio jacks for microphone, line-in and line-out
Onboard LAN (optional)	The VT6103L is a Physical Layer device for Ethernet 10BASE-T and 100BASE-TX using category 5 Unshielded, Type 1 Shielded, and Fiber Optic cables. • Dual Speed – 100/10 Mbps • Half And Full Duplex • Meet All Applicable IEEE 802.3, 10Base-T and 100Base-Tx Standards • Adaptive Equalizer
BIOS Firmware	This mainboard uses AMI BIOS that enables users to configure many system features including the following: • Power management • Wake-up alarms • CPU parameters • CPU and memory timing The firmware can also be used to set parameters for different processor clock speeds.

Some hardware specifications and software items are subject to change without prior notice.

Choosing a Computer Case

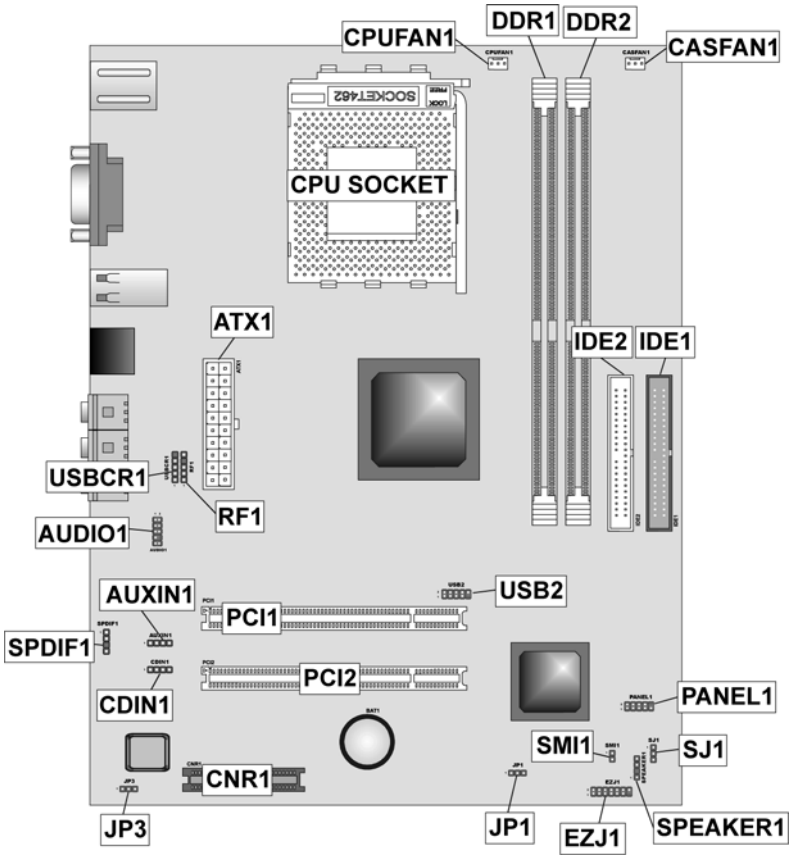
There are many types of computer cases on the market. The mainboard complies with the specifications for the micro ATX system case. Some features on the mainboard are implemented by cabling connectors on the mainboard to indicators and switches on the system case. Ensure that your case supports all the features required. The 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.

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.

This mainboard has a Micro ATX form factor of 244 mm x 190 mm. Choose a case that accommodates this form factor.

Mainboard Components

S740M: Without CPU onboard



S740MP: With CPU onboard

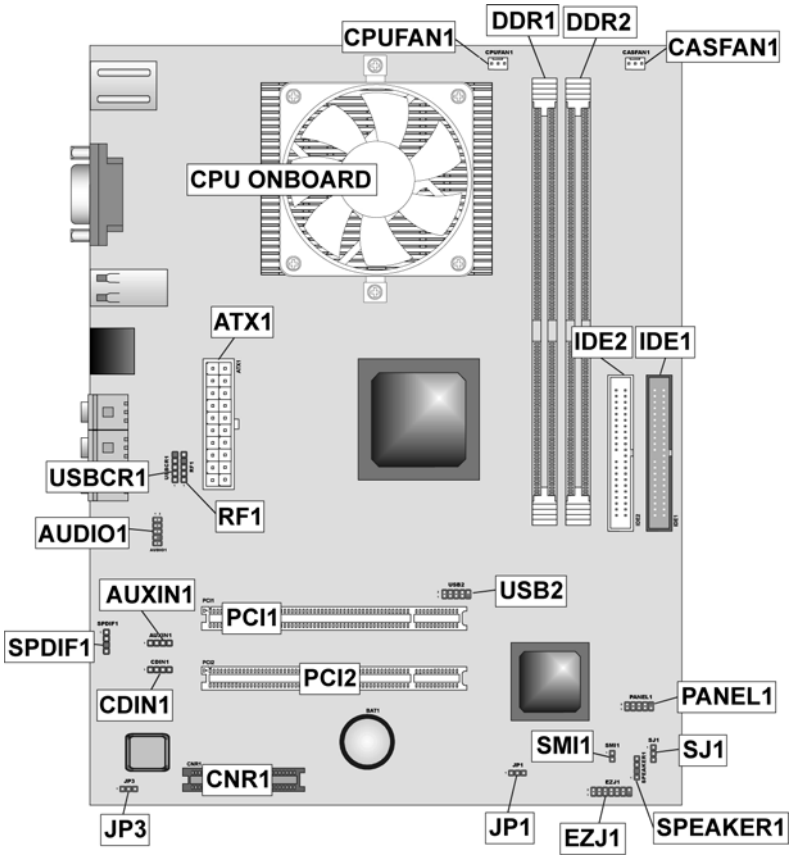


Table of Mainboard Components

Label	Component
ATX1	Standard 20-pin ATX power connector
AUDIO1	Front-oriented microphone/line-out port header
AUXIN1	Extra line-in connector
BAT1	Three volt realtime clock battery
CASFAN1	Auxiliary case cooling fan
CDIN1	CD-in connector
CNR1	Communications Networking Riser slot
CPU socket/ CPU onboard	Socket A/onboard for AMD Athlon XP/Athlon/Duron processors
CPUFAN1	Cooling fan for CPU
DDR1~DDR2	Two 184-pin DIMM sockets
EZJ1	EZ-Watcher interface header
IDE 1	Primary IDE channel
IDE 2	Secondary IDE channel
JP1	Clear CMOS jumper
JP3	BIOS protect jumper
PANEL1	Connector for case front panel switches and LED indicators
PCI1 ~ PCI2	Two 32-bit add-in card slots
RF1	IR Mouse header
SPDIF1	SPDIF out header
SJ1	Single-color LED header
SMI1	System Management Interrupt
SPEAKER1	Speaker connector
USB2	Front panel USB headers
USBCR1	USB Card Reader connector

This concludes Chapter 1. The next chapter explains how to install the mainboard.

Chapter 2

Installing the Mainboard

Safety Precautions

Follow these safety precautions when installing the mainboard:

- Wear a grounding strap attached to a grounded device to avoid damage from static electricity.
- Discharge static electricity by touching the metal case of a safely grounded object before working on the mainboard.
- Leave components in the static-proof bags they came in.
- Hold all circuit boards by the edges. Do not bend circuit boards.

Quick Guide

This Quick Guide suggests the steps you can take to assemble your system with the mainboard.

The following table provides a reference for installing specific components:

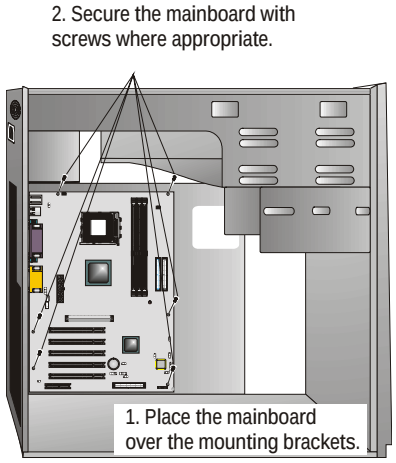
Installing the Mainboard in a Case

Refer to the following illustration and instructions for installing the mainboard in a case:

This illustration shows an example of a mainboard being installed in a tower-type case:

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

Most system cases have mounting brackets installed in the case, which correspond to the holes in the mainboard. Place the mainboard over the mounting brackets and secure the mainboard onto the mounting brackets with screws.



Ensure that your case has an I/O template that supports the I/O ports and expansion slots on your mainboard.

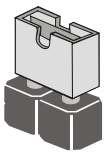
Checking Jumper Settings

This section explains how to set jumpers for correct configuration of the mainboard.

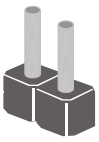
Setting Jumpers

Use the mainboard jumpers to set system configuration options. Jumpers with more than one pin are numbered. When setting the jumpers, ensure that the jumper caps are placed on the correct pins.

The illustrations below show 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.

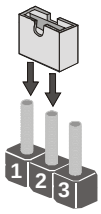


Short



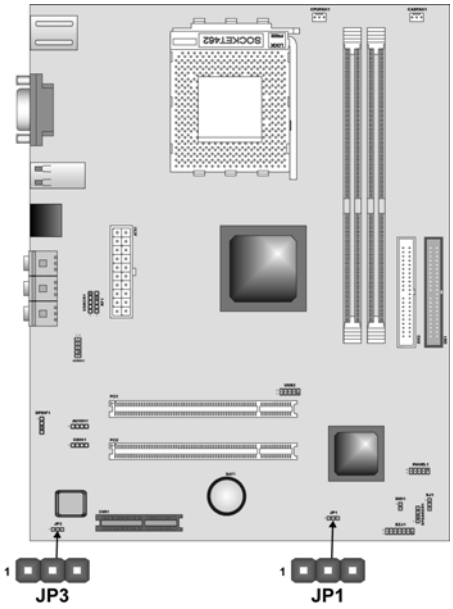
Open

This illustration shows a 3-pin jumper. Pins 1 and 2 are SHORT.



Checking Jumper Settings

The following illustration shows the location of the mainboard jumpers. Pin 1 is labeled.



Jumper Settings

Jumper	Type	Description	Setting (*default*)
JP1	3-pin	Clear CMOS	1-2: Normal *2-3: Clear*
JP3	3-pin	BIOS protect	1-2: Disabled BIOS Protect *2-3: Enabled BIOS Protect*

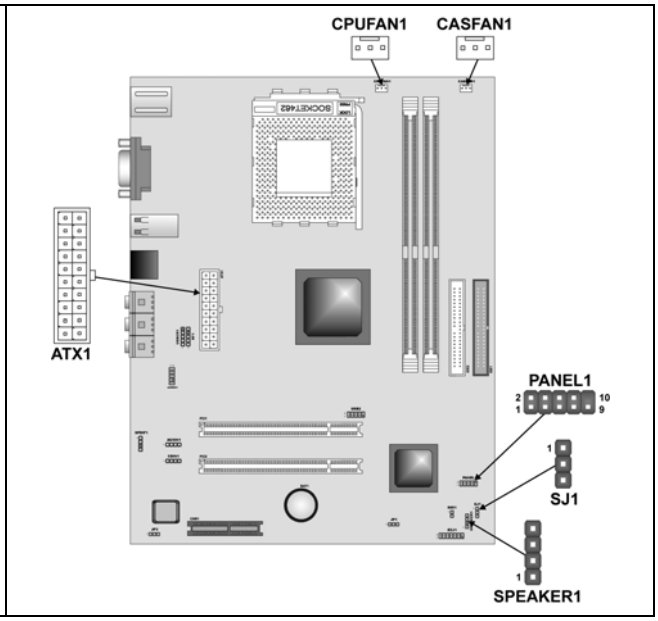
Jumper 1 – Use this jumper to clear the contents of the CMOS memory. You may need to clear the CMOS memory if the settings in the Setup Utility are incorrect and prevent your mainboard from operating. To clear the CMOS memory, disconnect all the power cables from the mainboard and then move the jumper cap into the CLEAR setting for a few seconds.

Jumper 3 – Enables you to prevent the BIOS from being updated (flashed). Set the jumper to disabled if you are going to update your BIOS. After updating the BIOS, return it to the default setting (Enabled).

Connecting Case Components

After you have installed the mainboard into a case, you can begin connecting the mainboard components. Refer to the following:

1. Connect the case power supply connector to **ATX1**.
2. Connect the CPU cooling fan cable to **CPUFAN1**.
3. Connect the case cooling fan connector to **CASFAN1**.
4. Connect the case speaker cable to **SPEAKER**.
5. Connect the case LED cable to **SJ1**.
6. Connect the case switches and indicator to **PANEL1**.



ATX1: ATX 20-pin Power Connector

Pin	Signal Name	Pin	Signal Name
1	+3.3V	11	+3.3V
2	+3.3V	12	-12V
3	Ground	13	Ground
4	+5V	14	PS ON#
5	Ground	15	Ground
6	+5V	16	Ground
7	Ground	17	Ground
8	PWRGD	18	+5V
9	+5VSB	19	+5V
10	+12V	20	+5V

CPUFAN1/CASFAN1: FAN Power Connectors

Pin	Signal Name	Function
1	GND	System Ground
2	+12V	Power +12V
3	Sense	Sensor

SPEAKER1: Internal speaker

Pin	Signal Name
1	Signal
2	Key
3	Ground
4	VCC

SJ1: Single color LED header

Pin	Signal Name	Function
1	ACPI LED	MSG LED (-) green
2	ACPI LED	MSG LED (-) green
3	SB5V	Power LED (+)

ACPI LED function:

SJ1 	S0	S1	S4/S5
	Light	Blinking	Dark

Front Panel Connector

The front panel connector (PANEL1) provides a standard set of switch and LED connectors commonly found on ATX or micro-ATX cases. Refer to the table below for information:

PANEL1

Pin	Signal	Function	Pin	Signal	Function
1	HD_LED_P	Hard disk LED (positive)	2	FP PWR/SLP	MSG LED [dual color or single color (+)]
3	HD_LED_N	Hard disk active LED (negative)	4	FP PWR/SLP	MSG LED [dual color or single color (-)]
5	RST_SW_N	Reset Switch	6	PWR_SW_P	Power Switch
7	RST_SW_P	Reset Switch	8	PWR_SW_N	Power Switch
9	RSVD	Reserved	10	NC	No pin

Hard Drive Activity LED

Connecting pins 1 and 3 to a front panel mounted LED provides visual indication that data is being read from or written to the hard drive. For the LED to function properly, an IDE drive should be connected to the onboard IDE interface. The LED will also show activity for devices connected to the SCSI (hard drive activity LED) connector.

Power / Sleep / Message Waiting LED

Connecting pins 2 and 4 to a single- or dual-color, front panel mounted LED provides power on/off, sleep, and message waiting indication.

Reset Switch

Supporting the reset function requires connecting pins 5 and 7 to a momentary-contact switch that is normally open. When the switch is closed, the board resets and runs POST.

Power Switch

Supporting the power on/off function requires connecting pins 6 and 8 to a momentary-contact switch that is normally open. The switch should maintain contact for at least 50 ms to signal the power supply to switch on or off. The time requirement is due to internal debounce circuitry. After receiving a power on/off signal, at least two seconds elapses before the power supply recognizes another on/off signal.

Installing Hardware

Installing the Processor

Caution: When installing a CPU heatsink and cooling fan make sure that you DO NOT scratch the mainboard or any of the surface-mount resistors with the clip of the cooling fan. If the clip of the cooling fan scrapes across the mainboard, you may cause serious damage to the mainboard or its components.

On most mainboards, there are small surface-mount resistors near the processor socket, which may be damaged if the cooling fan is carelessly installed.

Avoid using cooling fans with sharp edges on the fan casing and the clips. Also, install the cooling fan in a well-lit work area so that you can clearly see the mainboard and processor socket.

Before installing the Processor

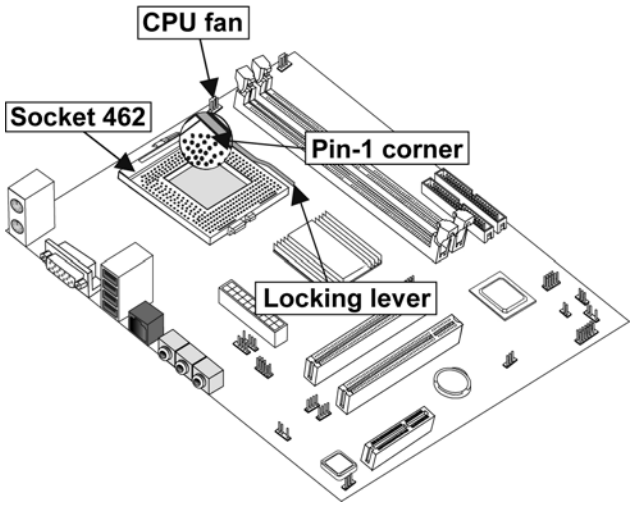
This mainboard automatically determines the CPU clock frequency and system bus frequency for the processor. You may be able to change these automatic settings by making changes to jumpers on the mainboard, or changing the settings in the system Setup Utility. We strongly recommend that you do not overclock processors or other components to run faster than their rated speed.

Warning: Overclocking components can adversely affect the reliability of the system and introduce errors into your system. Overclocking can permanently damage the mainboard by generating excess heat in components that are run beyond the rated limits.

This mainboard has a Socket 462 processor socket. When choosing a processor, consider the performance requirements of the system. 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.

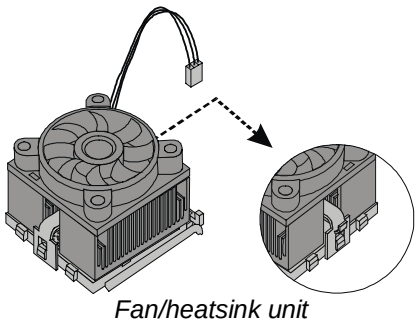
CPU Installation Procedure

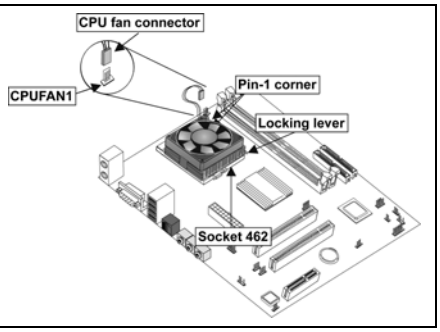
The following illustration shows CPU installation components. Skip this section when your mainboard has CPU onboard.



Note: The pin A-1 corner on the CPU and socket is empty.

Follow these instructions to install the CPU:

1. Pull the CPU socket locking lever away from the socket to unhook it and raise the locking lever to the upright position.	
2. Match the corner on the CPU marked with an arrow with pin A-1 on the CPU socket (the corner with the pinhole noticeably missing). Insert the processor into the socket. Do not use force.	
3. Swing the locking lever down and hook it under the latch on the edge of the socket.	
4. Apply thermal grease to the top of the CPU.	
5. Lower the CPU cooling fan/heatsink assembly onto the CPU	
6. Secure the two retention clips on either side of the fan/heatsink unit onto the Socket 462 base.	 *Fan/heatsink unit secured to socket*

7. Connect the CPU Cooling Fan power cable connector to the CPUFAN connector.	

Note: CPU fan and heatsink installation procedures may vary with the type of CPU fan/heatsink supplied. The form and size of fan/heatsink may also vary.

Installing Memory Modules

This mainboard accommodates two 184-pin 2.5V unbuffered Double Data Rate (DDR) SDRAM memory modules. You must install at least one module in any of the two slots. Each module can be installed with 32 MB to 1 GB of memory; total memory capacity is 2 GB.

Note: SDRAM provides 800 MBps or 1 GBps data transfer depending on whether the bus is 100 MHz or 133 MHz. Double Data Rate SDRAM (DDR SDRAM) doubles the rate to 1.6 GBps and 2.1 GBps. DDR SDRAM uses additional power and ground lines and requires 184-pin DIMM modules rather than the 168-pin DIMMs used by SDRAM.

Do not remove any memory module from its antistatic packaging until you are ready to install it on the mainboard. Handle the modules only by their edges. Do not touch the components or metal parts. Always wear a grounding strap when you handle the modules.

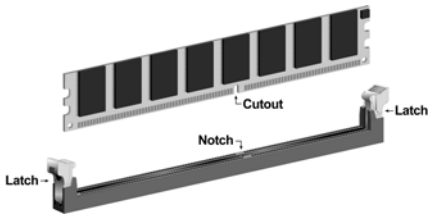
Installation Procedure

Refer to the following to install the memory modules.

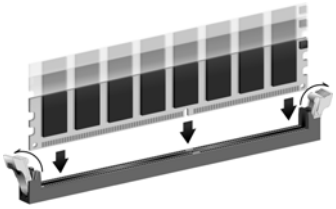
1. This mainboard supports unbuffered DDR SDRAM only. Do not attempt to insert any other type of DDR SDRAM into the slots.

2. Push the latches on each side of the DIMM slot down.

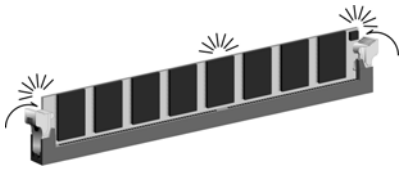
3. Align the memory module with the slot. The DIMM slots are keyed with notches and the DIMMs are keyed with cutouts so that they can only be installed correctly.



4. Check that the cutouts on the DIMM module edge connector match the notches in the DIMM slot.



5. Install the DIMM module into the slot and press it firmly down until it seats correctly. The slot latches are levered upwards and latch on to the edges of the DIMM.



6. Install any remaining DIMM modules.

Installing a Hard Disk Drive/CD-ROM

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

About IDE Devices

Your mainboard has a primary and secondary IDE channel interface (IDE1 and IDE2). An IDE ribbon cable supporting two IDE devices is bundled with the mainboard.

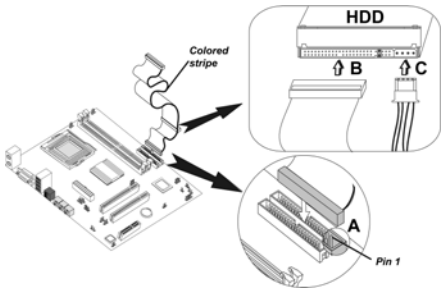
If you want to install more than two IDE devices, get a second IDE cable and you can add two more devices to the secondary IDE channel.

IDE devices have jumpers or switches that are used to set the IDE device as MASTER or SLAVE. Refer to the IDE device user's manual. When installing two IDE devices on one cable, ensure 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.

About UltraDMA

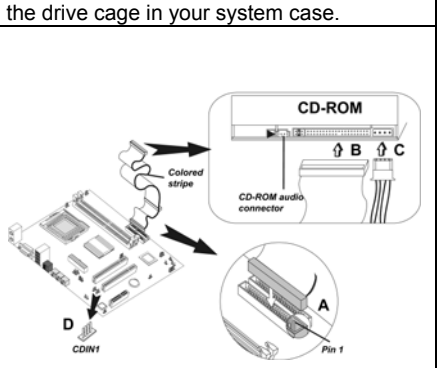
This mainboard supports UltraDMA 66/100/133. UDMA is a technology that accelerates the performance of devices in the IDE channel. To maximize performance, install IDE devices that support UDMA and use 80-pin IDE cables that support UDMA 66/100/133.

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 IDE1 (**A**): **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.	
3. Plug an IDE cable connector into the hard disk drive IDE connector (**B**). It doesn't matter which connector on the cable you use.	
4. Plug a power cable from the case power supply into the power connector on the hard disk drive (**C**).	

When you first start up your system, the BIOS should automatically detect your hard disk drive. If it doesn't, enter the Setup Utility and use the IDE Hard Disk Auto Detect feature to configure the hard disk drive that you have installed.

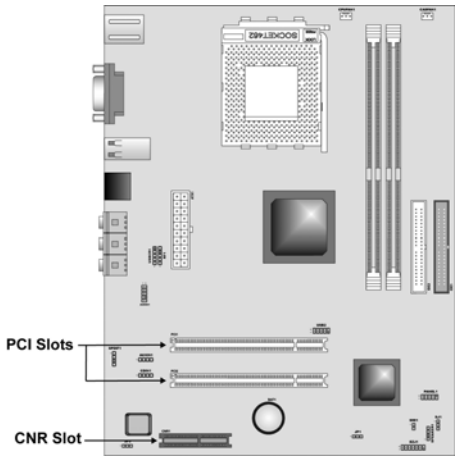
Installing a CD-ROM/DVD Drive

1. Install the CD-ROM/DVD drive into the drive cage in your system case.	
2. Plug the IDE cable into IDE1 (**A**). If you have already installed an HDD, use the other connector on the IDE cable. **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.	
3. Plug an IDE cable connector into the CD-ROM/DVD drive IDE connector (**B**). It doesn't matter which connector on the cable you use.	
4. Plug a power cable from the case power supply into the power connector on the CD-ROM/DVD drive (**C**).	
5. Use the audio cable provided with the CD-ROM/DVD drive to connect to the mainboard CD-in connector CDIN1 (**D**).	

When you first start up your system, the BIOS should automatically detect your CD-ROM/DVD drive. If it doesn't, enter the Setup Utility and configure the CD-ROM/DVD drive that you have installed.

Installing Add-on Cards

The slots in this mainboard are designed to hold expansion cards and connect them to the system bus. Expansion slots are a means of adding or enhancing the mainboard's features and capabilities. With these efficient facilities, you can increase the mainboard's capabilities by adding hardware which performs tasks that are not part of the basic system.

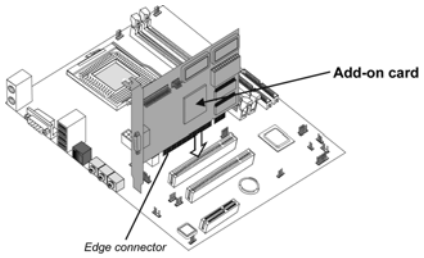


PCI Slots PCI slots are use to install expansion cards that have the 32-bit PCI interface.

CNR Slot This slot is use to insert CNR cards with Modem and Audio functionality.

Note: Before installing an add-on 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.

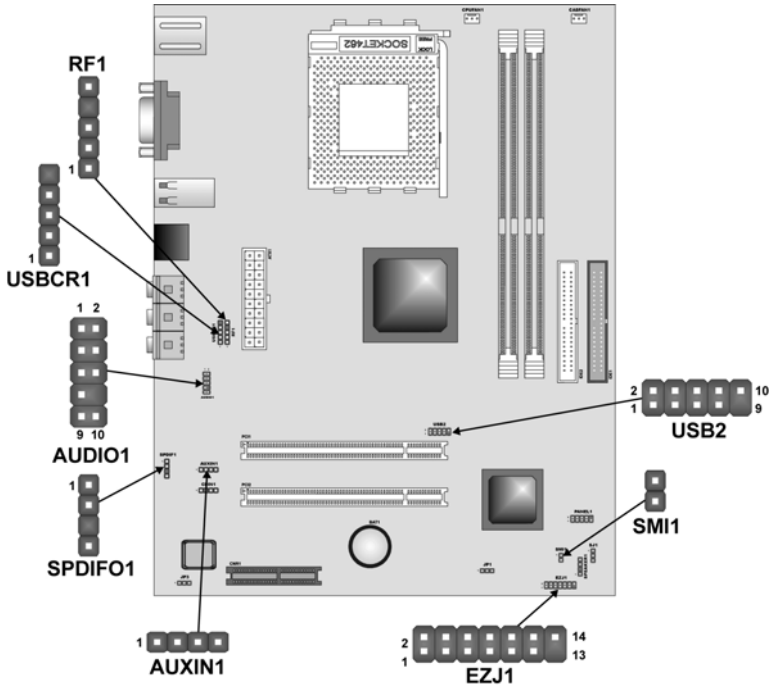
Follow these instructions to install an add-on card:

1.	Remove a blanking plate from the system case corresponding to the slot you are going to use.	
2.	Install the edge connector of the add-on card into the expansion slot. Ensure that the edge connector is correctly seated in the slot.	
3.	Secure the metal bracket of the card to the system case with a screw.	

Note: For some add-on cards, for example graphics adapters and network adapters, you have to install drivers and software before you can begin using the add-on card.

Connecting Optional Devices

Refer to the following for information on connecting the mainboard's optional devices:



AUDIO1: Front Panel Audio header

This header allows the user to install auxiliary front-oriented microphone and line-out ports for easier access.

Pin	Signal Name	Function
1	AUD_MIC	Front Panel Microphone input signal
2	AUD_GND	Ground used by Analog Audio Circuits
3	AUD_MIC_BIAS	Microphone Power
4	AUD_VCC	Filtered +5 V used by Analog Audio Circuits
5	AUD_FPOUT_R	Right Channel Audio signal to Front Panel
6	AUD_RET_R	Right Channel Audio signal to Return from Front Panel
7	HP_ON	Reserved for future use to control Headphone Amplifier
8	KEY	No Pin
9	AUD_FPOUT_L	Left Channel Audio signal to Front Panel
10	AUD_RET_L	Left Channel Audio signal Return from Front Panel

USB2: Front panel USB ports

The mainboard has two USB ports installed on the rear edge I/O port array. Additionally, some computer cases have USB ports at the front of the case. If you have this kind of case, use auxiliary USB connector USB2 to connect the front-mounted ports to the mainboard.

Pin	Signal Name	Function
1	VREG_FP_USBPWR0	Front Panel USB Power
2	VREG_FP_USBPWR0	Front Panel USB Power
3	USB_FP_P0-	USB Port 0 Negative Signal
4	USB_FP_P1-	USB Port 1 Negative Signal
5	USB_FP_P0+	USB Port 0 Positive Signal
6	USB_FP_P1+	USB Port 1 Positive Signal
7	GND	Ground
8	GND	Ground
9	KEY	No pin
10	NC	Not connected

Note: Please make sure that the USB cable has the same pin assignment as indicated above. A different pin assignment may cause damage or system hang-up.

USBCR1: USB Card Reader connector

This connector is for connecting internal USB card reader. You can use a card reader to read or transfer files and digital images to your computer.

Pin	Signal Name	Function
1	USBVCC2	+5V dual
2	USB2-	Data signal port 2-
3	USB2+	Data signal port 2+
4	GND	Ground
5	Key	No pin

Note: The USBCR1 is shared with one of the USB ports of the I/O back panel. See “Connecting I/O Devices” for more information.

Please check the pin assignment of the cable and the USB header on the mainboard. Make sure the pin assignment will match before plugging in. Any incorrect usage may cause unexpected damage to the system.

SMI1: System Management Interrupt

This connector is for use with SMI hardware interrupt power management.

Pin	Signal Name	Function
1	-EXTSMI	Sleep button
2	GND	Ground

SPDIF1: SPDIF out header

This is an optional header that provides an S/PDIF (Sony/Philips Digital Interface) output to digital multimedia device through optical fiber or coaxial connector.

Pin	Signal Name
1	SPDIF Out
2	VCC
3	KEY
4	GND

AUXIN1: Extra line-in connector

This connector is an additional line-in audio connector. It allows you to attach a line-in cable when your rear line-in jack is set as line out port for 4-channel function.

Pin	Signal Name	Function
1	AUX_L	AUX In left channel
2	GND	Ground
3	GND	Ground
4	AUX_R	AUX In right channel

EZJ1: EZ-Watcher interface header

This connector is for use with EZ-Watcher interface only. The EZ-Watcher allows you to adjust the CPU frequency according to your desire.

Pin	Signal Name	Pin	Signal Name
1	PCDAT	2	PCREQ
3	SCI#	4	PCIRST#
5	GND	6	VCC
7	GND	8	VCC
9	GND	10	VCC
11	HDDN	12	CDROM
13	Key	14	RSVD

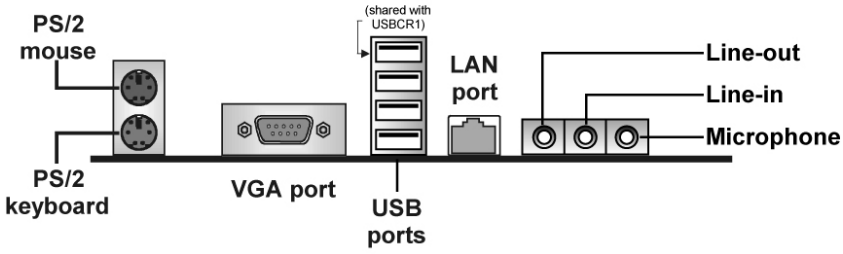
RF1: IR Mouse header

If you have a wireless mouse, connect the IR mouse cable to this header.

Pin	Signal Name
1	VCC
2	PMDAT
3	PMCLK
4	KEY
5	GND

Connecting I/O Devices

The backplane of the mainboard has the following I/O ports:



PS/2 Mouse and Keyboard	The mainboard provides a standard PS/2 mouse/keyboard mini DIN connector for attaching a PS/2 mouse/keyboard. You can plug a PS/2 mouse/keyboard directly into this connector.
VGA Port	Connect your VGA monitor to this port.
USB Ports	You can plug any USB device into one of the USB ports.
LAN Port (optional)	Connect an RJ-45 jack to the LAN port to connect your computer to the Network.
Audio Ports	The Line-in jack can be connected to devices such as a cassette or minidisk player to playback or record. The Line-out jack is used to connect speakers or headphones for audio output. The Microphone-in jack can be connected to a microphone for voice input.

External Connector Color Coding

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
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	None

This concludes Chapter 2. The next chapter covers the BIOS.

Chapter 3

Using BIOS

About the Setup Utility

The computer uses the latest AMI BIOS with support for Windows Plug and Play. The CMOS chip on the mainboard contains the ROM setup instructions for configuring the mainboard BIOS.

The BIOS (Basic Input and Output System) Setup Utility displays the system's configuration status and provides you with options to set system parameters. The parameters are stored in battery-backed-up CMOS RAM that saves this information when the power is turned off. When the system is turned back on, the system is configured with the values you stored in CMOS.

The BIOS Setup Utility enables you to configure:

- Hard drives, diskette drives, and peripherals
- Video display type and display options
- Password protection from unauthorized use
- Power management features

The settings made in the Setup Utility affect how the computer performs. Before using the Setup Utility, ensure that you understand the Setup Utility options.

This chapter provides explanations for Setup Utility options.

The Standard Configuration

A standard configuration has already been set in the Setup Utility. However, we recommend that you read this chapter in case you need to make any changes in the future.

This Setup Utility should be used:

- when changing the system configuration
- when a configuration error is detected and you are prompted to make changes to the Setup Utility
- when trying to resolve IRQ conflicts
- when making changes to the Power Management configuration
- when changing the password or making other changes to the Security Setup

Running the Setup Utility

Each time your computer starts, before the operating system loads, a message appears on the screen that prompts you to "*Hit <DEL> if you want to run SETUP*". When you see this message, press the **Delete** key and the Main menu page of the Setup Utility appears on your monitor.

BIOS Navigation Keys

You can use the cursor arrow keys to highlight any of the options on the main menu page. Press **Enter** to select the highlighted option. To exit the setup utility, press the **Escape** key. To cycle through the Setup Utility's optional color schemes press down the **F2/F3**.

Some of the options on the main menu page lead to tables of items with installed values. In these pages, use the cursor arrow keys to highlight the items, and then use the **PgUp** and **PgDn** keys to cycle through the alternate values for each item. Other options on the main menu page lead to dialog boxes that require you to answer Yes or No by hitting the Y or N keys.

If you have already made changes to the setup utility, press **F10** to save those changes and exit the utility. Press **F5** to reset the changes to the original values. Press **F6** to install the setup utility with a set of high-performance values.

Using BIOS

When you start the Setup Utility, the main menu appears. The main menu of the Setup Utility displays a list of the options that are available. A highlight indicates which option is currently selected. Use the cursor arrow keys to move the highlight to other options. When an option is highlighted, execute the option by pressing <Enter>.

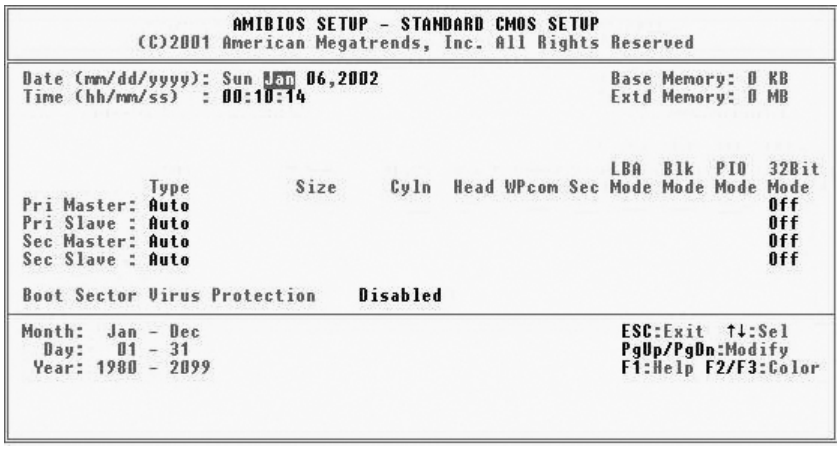
Some options lead to pop-up dialog boxes that prompt you to verify that you wish to execute that option. Other options lead to dialog boxes that prompt you for information.

Some options (marked with a triangle ►) lead to submenus that enable you to change the values for the option. Use the cursor arrow keys to scroll through the items in the submenu.

In this manual, default values are enclosed in parenthesis. Submenu items are denoted by a triangle ►.

Standard CMOS Setup

The Standard CMOS setup is used to modify basic system configuration data, such as date, time floppy and hard disk drive types, video type and keyboard.



Date & Time

Use these items to set the system date and time.

Floppy Drive A/Floppy Drive B

Use these items to set the size and capacity of the floppy diskette drive(s) installed in the system.

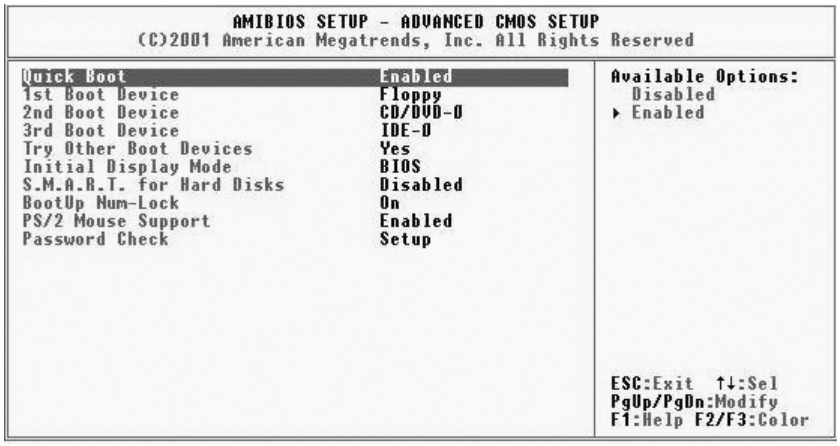
Pri Master/Pri Slave/Sec Master/Sec Slave

Use these items to configure devices connected to the Primary and Secondary IDE channels. To configure an IDE hard disk drive, choose *Auto*. If the *Auto* setting fails to find a hard disk drive, set it to *User*, and then fill in the hard disk characteristics (Size, Cyls, etc.) manually. If you have a CD-ROM

drive, select the setting *CDROM*. If you have an ATAPI device with removable media (e.g. a ZIP drive or an LS-120) select *Floptical*.

Advanced CMOS Setup

The Advanced CMOS setup is used to control advanced system information such as hardware access and boot settings.



Quick Boot (Enabled)

If you enable this item, the system starts up more quickly be elimination some of the power on test routines.

1st Boot Device/2nd Boot Device/3rd Boot Device

Use these items to determine the device order the computer uses to look for an operating system to load at start-up time.

Try Other Boot Devices (Yes)

If you enable this item, the system will also search for other boot devices if it fails to find an operating system from the first two locations.

Initial Display Mode (BIOS)

This option specifies the initial display mode when the system boots.

S.M.A.R.T for Hard Disks (Disabled)

Set this option to Enabled to permit the BIOS to use the SMART (System Management and Reporting Technologies) protocol for reporting server system information over a network. Enabling this feature allows you to back up your data when your hard disk is about to fail. If a password has been set for the supervisor, this item will not be visible for the user.

BootUp Num-Lock (On)

Set this option to Off to turn the Num Lock key off when the computer is booted you can use the arrow keys in both the numeric keypad and the keyboard.

PS/2 Mouse Support (Enabled)

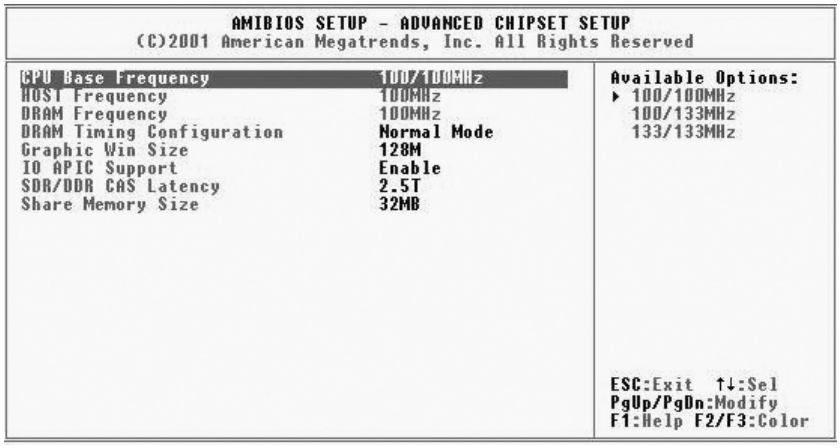
Set this option to Enabled to enable the BIOS support for a PS/2-type mouse. The BIOS will allocate IRQ12 for the PS/2 mouse.

Password Check (Setup)

This option enables password checking every time the system boots or when you run the BIOS Setup. If you choose Always, a user password prompt appears every time the computer is turned on. If you choose Setup, the password prompt appears if the BIOS is executed.

Advanced Chipset Setup

The Advanced Chipset Setup option is used to change the values of the chipset registers. These registers control most of the system options in the computer. You should leave the items on this page at their default values, if you change the values incorrectly, you may introduce fatal errors or recurring instability into your system.



Current Base Frequency (100/100 MHz)

This option allows you to select the current CPU/DRAM frequency for your CPU.

Host Frequency (100 MHz)

This item displays the host frequency. This is a display-only item. You cannot make changes to this field.

DRAM Frequency (133 MHz)

This item displays the memory (DRAM) frequency. This is a display-only item. You cannot make changes to this field.

DRAM Timing Configuration (Normal Mode)

The DRAM timing is controlled by the DRAM Timing Registers. The Timings programmed into this register are dependent on the system design. Slower

rates may be required in certain system designs to support loose layouts or slower memory.

Graphic Win Size (128M)

This setting controls just how much system RAM can be allocated to AGP for video purposes.

IO APIC Support (Enable)

This item allows you to enable or disable the APIC (Advanced Programmable Interrupt Controller) mode. APIC provides symmetric multi-processing (SMP) for systems, allowing support for up to 60 processors.

SDR/DDR CAS to Latency (2.5T)

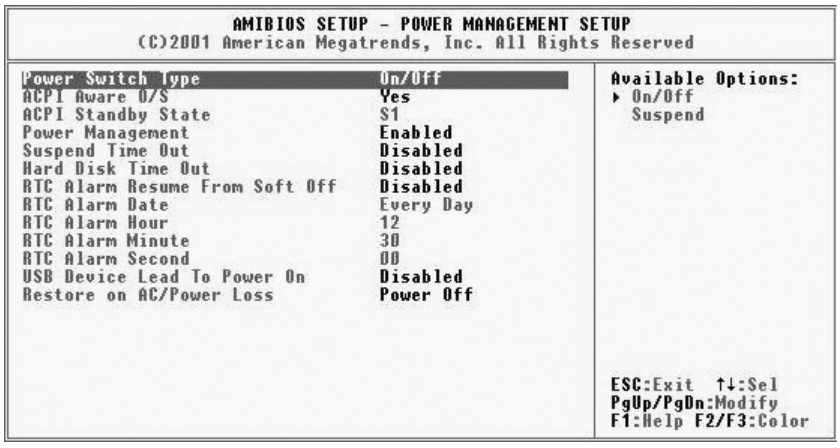
This item determines the operation of the SDR/DDR memory CAS (column address strobe). We recommend that you leave this item at the default value.

Share Memory Size (32 MB)

This item allows you to select the shared memory size for VGA usage.

Power Management Setup

The Power Management Setup Menu option is used to change the values of the chipset registers for system power management.



Power Switch Type (On/Off)

This option specifies how the power button is used. In the Suspend mode, the hard disk motor is spindled down, the monitor is shut down, and the processor clock is stopped.

ACPI Aware O/S (Yes)

Set this option to Yes to enable Advanced Configuration and Power Interface (ACPI) BIOS for an ACPI-aware operating system.

ACPI Standby State (S1)

This item allows you to select the standby type under ACPI operating system.

Power Management (Enabled)

Set this option to Enabled to enable the chipset power management and APM (Advanced Power Management) features.

Suspend Time Out (Disabled)

This option defines the length of time that the system while in Standby mode, it must be inactive before it enters Suspend mode.

Hard Disk Time Out (Disabled)

This option specifies the length of period of hard disk drive inactivity. When this time period expires, the computer enters the power-conserving state specified in the Hard Disk Power Down Mode option.

RTC Alarm Resume From Soft Off (Disabled)

This option enable or disable the RTC alarm to wake up the system from Soft Off.

Resume On RTC Alarm / Date / Hour / Minute / Second

The system can be turned off with a software command. If you enable this item, the system can automatically resume at a fixed time based on the system's RTC (realtime clock). Use the items below this one to set the date and time of the wake-up alarm. You must use an ATX power supply in order to use this feature.

USB Device Lead To Power On (Disabled)

If you enable this item, the system can automatically resume if there is traffic on the USB device.

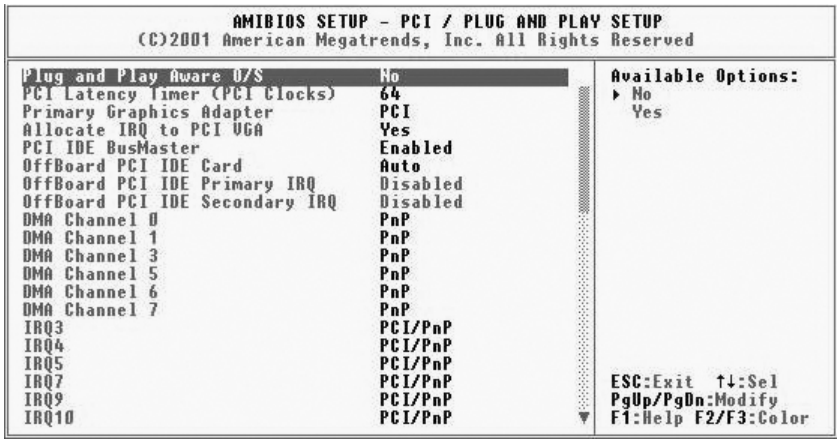
Restore on AC/Power Loss (Power Off)

This sets the power state after a shutdown due to an unexpected interrupt of AC power.

PCI / Plug and Play Setup

This section describes configuring the PCI bus system. PCI (Peripheral Component Interconnect) is a system, which allows I/O devices to operate at speeds nearing CPU's when they communicate with own special components.

All the options describes in this section are important and technical and it is strongly recommended that only experienced users should make any changes to the default settings.



Plug and Play Aware O/S (No)

Enable this item if you are using an O/S that supports Plug and Play such as Windows 95/98/ME.

PCI Latency Timer (PCI Clocks) (64)

This item controls how long each PCI device can hold the bus before another takes over. When set to higher values, every PCI device can conduct transactions for a longer time and thus improve the effective PCI bandwidth.

Primary Graphics Adapter (PCI)

This item indicates if the primary graphics adapter uses the PCI or the AGP bus.

Allocate IRQ to PCI VGA (Yes)

If this item is enabled, an IRQ will be assigned to the PCI VGA graphics system. You set this value to No to free up an IRQ.

PCI IDE BusMaster (Enabled)

This item allows the controls for the Bus Master for the IDE controller to be enabled or disabled.

OffBoard PCI IDE Card (Auto)

This option specifies if an offboard PCI IDE controller adapter card is used in the computer. You must also specify the PCI expansion slot on the mainboard

where the offboard PCI IDE controller card is installed. If an offboard PCI IDE controller is used, the onboard IDE controller is automatically disabled.

OffBoard PCI IDE Primary IRQ (Disabled)

This option specifies the PCI interrupt used by the primary IDE channel on the offboard PCI IDE controller.

OffBoard PCI IDE Secondary IRQ (Disabled)

This option specifies the PCI interrupt used by the secondary IDE channel on the offboard PCI IDE controller.

DMA Channel 0/1/3/5/6/7 (PnP)

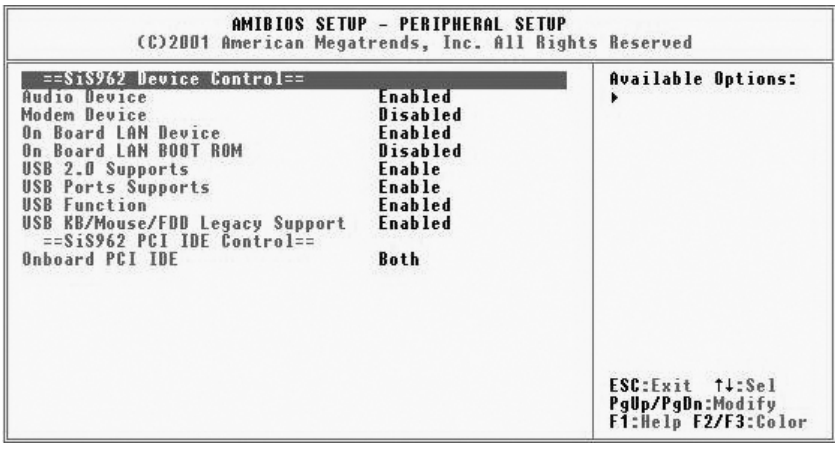
This option allows you to specify the bus type used by each DMA channel.

IRQ (PCI/ PnP)

This option specifies the bus that the specified IRQ line is used on. They allow you to reserve IRQs for legacy ISA adapter cards and determine if the BIOS should remove an IRQ from the pool of available IRQs passed to devices that are configurable by the system BIOS. The available IRQ pool is determined by reading the ESCD NVRAM. If more IRQs must be removed from the pool, the end user can use these options to reserve the IRQ by assigning an ISA/EISA setting to it. Onboard I/O is configured by the BIOS. All IRQs used by onboard I/O are configured as PCI/PnP. IRQ12 only appears if the PS/2 Mouse Support option in Advanced Setup is set to Disabled. IRQ14 and 15 will not be available if the onboard PCI IDE is enabled.

Peripheral Setup

The Peripheral Setup menu describes I/O resources assignment for all of the on-board peripheral devices.



Audio Device (Enabled)

This item enables or disables the onboard AC'97 audio chip.

Modem Device (Disabled)

This item enables or disables the onboard AC'97 modem chip.

Onboard LAN Device (Enabled)

Select Enabled if your system contains a built-in LAN device.

Onboard LAN Boot ROM (Disabled)

This item allows you to enable or disable the onboard LAN Boot ROM function.

USB 2.0 Supports (Enabled)

Select enabled if your system support the USB 2.0 function.

USB Function (Enabled)

Enable this item if you plan to use the USB ports on this mainboard.

USB KB/Mouse/FDD Legacy Support (Enabled)

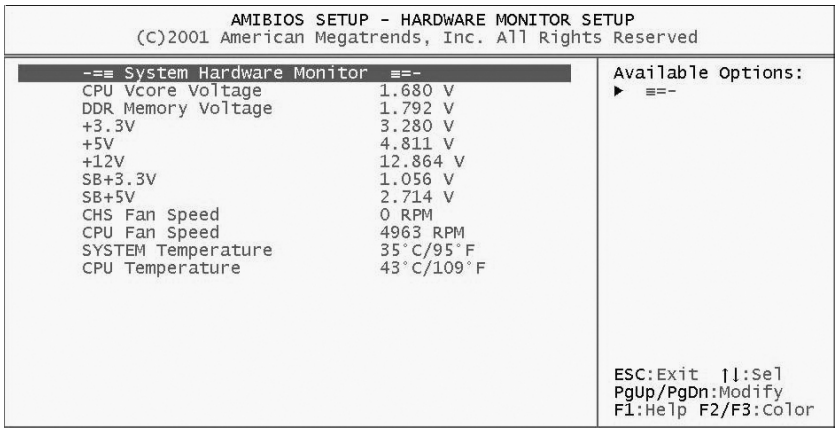
Set this item to enable to support for older keyboard and mouse devices if the USB option is set to enable.

Onboard PCI IDE (Both)

Use this item to enable or disable either or both of the onboard Primary and Secondary IDE channels.

Hardware Monitor Page

This section sets some of the parameters for the hardware monitoring function of this mainboard.



CPU Vcore Voltage

Set this field to match the voltage of the installed CPU, or set to Auto to permit the BIOS to auto detect the voltage. End users should not change the value in this field unless they replace the CPU with one of a different voltage.

DDR Memory Voltage

The DDR memory voltage can be set to any voltage in .1v increments. You

should not change the value in this field unless you are familiar with it.

FANs & Voltage Measurements

These items indicate cooling fan speeds in RPM and the various system voltage measurements.

CPU / System Temperature

These items display CPU and system temperature measurement.

Change Supervisor/User Password

When this function is selected, the following message appears at the center of the screen to assist you in creating a password.

ENTER PASSWORD

Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection.

To disable password, just press <Enter> when you are prompted to enter password. A message will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter BIOS Setup freely.

PASSWORD DISABLED

If you have selected "**System**" in "Security Option" of "BIOS Features Setup" menu, you will be prompted for the password every time the system reboots or any time you try to enter BIOS Setup.

If you have selected "**Setup**" at "Security Option" from "BIOS Features Setup" menu, you will be prompted for the password only when you enter BIOS Setup.

Supervisor Password has higher priority than User Password. You can use Supervisor Password when booting the system or entering BIOS Setup to modify all settings. Also you can use User Password when booting the system or entering BIOS Setup but can not modify any setting if Supervisor Password is enabled.

Auto Configuration with Optimal Settings

If you select this item and press **Enter** a dialog box appears. If you press **Y**, and then **Enter**, the Setup Utility loads a set of fail-safe default values. These default values are not very demanding and they should allow your system to function with most kinds of hardware and memory chips.

Note: It is highly recommended that users enter this option to load optimal values for accessing the best performance.

Auto Configuration with Fail Safe Settings

This option opens a dialog box that lets you install fail-safe defaults for all appropriate items in the Setup Utility:

Press <Y> and then <Enter> to install the defaults. Press <N> and then <Enter> to not install the defaults. The fail-safe defaults place no great demands on the system and are generally stable. If your system is not functioning correctly, try installing the fail-safe defaults as a first step in getting your system working properly again. If you only want to install fail-safe defaults for a specific option, select and display that option, and then press <F6>.

Save Settings and Exit

Highlight this item and press <Enter> to save the changes that you have made in the Setup Utility and exit the Setup Utility. When the Save and Exit dialog box appears, press <Y> to save and exit, or press <N> to return to the main menu.

Exit Without Saving

Highlight this item and press <Enter> to discard any changes that you have made in the Setup Utility and exit the Setup Utility. When the Exit Without Saving dialog box appears, press <Y> to discard changes and exit, or press <N> to return to the main menu.

Note: If you have made settings that you do not want to save, use the "Exit Without Saving" item and press <Y> to discard any changes you have made.

This concludes Chapter 3. Refer to the next chapter for information on the software supplied with the mainboard.

Chapter 4

Using the Mainboard Software

About the Software CD-ROM

The support software CD-ROM that is included in the mainboard package contains all the drivers and utility programs needed to properly run the bundled products. Below you can find a brief description of each software program, and the location for your mainboard version. More information on some programs is available in a README file, located in the same directory as the software.

Note: Never try to install software from a folder that is not specified for use with your mainboard.

Before installing any software, always inspect the folder for files named README.TXT, INSTALL.TXT, or something similar. These files may contain important information that is not included in this manual.

Auto-installing under Windows 98/ME/2000/XP

The Auto-install CD-ROM makes it easy for you to install the drivers and software for your mainboard.

Note: If the Auto-install CD-ROM does not work on your system, you can still install drivers through the file manager for your OS (for example, Windows Explorer). Refer to Utility Folder Installation Notes later in this chapter.

The support software CD-ROM disc loads automatically under Windows 98/ME/2000/XP. When you insert the CD-ROM disc in the CD-ROM drive, the autorun feature will automatically bring up the install screen. The screen has three buttons on it, Setup, Browse CD and Exit.

Note: If the opening screen doesn't appear, double-click the file "setup.exe" in the root directory.

Setup Tab

Setup	Click the **Setup** button to run the software installation program. Select from the menu which software you want to install.
Browse CD	The **Browse CD** button is the standard Windows command that allows you to open Windows Explorer and show the contents of the support CD. Before installing the software from Windows Explorer, look for a file named README.TXT, INSTALL.TXT or something similar. This file may contain important information to help you install the software correctly. Some software is installed in separate folders for different operating systems, such as DOS, WIN NT, or WIN98/95. Always go to the correct folder for the kind of OS you are using. To install the software, execute a file named SETUP.EXE or INSTALL.EXE by double-clicking the file and then following the instructions on the screen.
Exit	The **Exit** button closes the Auto Setup window.

Application Tab

Lists the software utilities that are available on the CD.

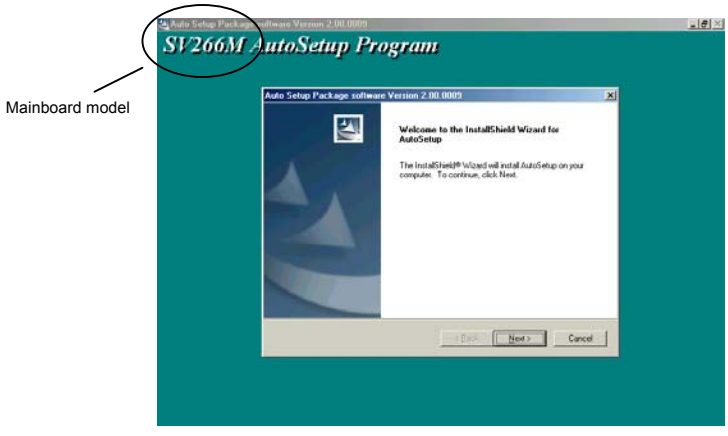
Read Me Tab

Displays the path for all software and drivers available on the CD.

Running Setup

Follow these instructions to install device drivers and software for the mainboard:

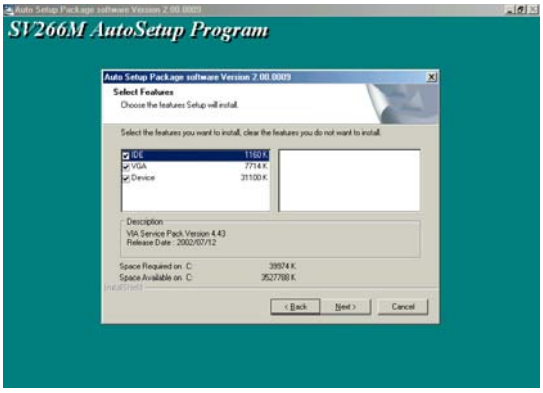
1. Click **Setup**. The installation program begins:



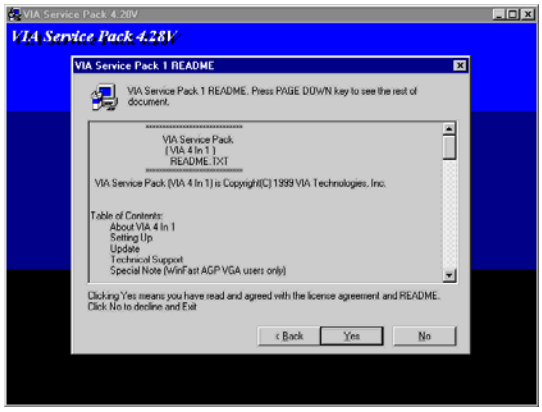
Note: The following screens are examples only. The screens and driver lists will be different according to the mainboard you are installing.

The mainboard identification is located in the upper left-hand corner.

2. Click **Next**. The following screen appears:



3. Check the box next to the items you want to install. The default options are recommended.
4. Click **Next** run the Installation Wizard. An item installation screen appears:



5. Follow the instructions on the screen to install the items.

Drivers and software are automatically installed in sequence. Follow the onscreen instructions, confirm commands and allow the computer to restart a few times to complete the installation.

Manual Installation

Insert the CD in the CD-ROM drive and locate the PATH.DOC file in the root directory. This file contains the information needed to locate the drivers for your mainboard.

Look for the chipset and mainboard model; then browse to the directory and path to begin installing the drivers. Most drivers have a setup program (SETUP.EXE) that automatically detects your operating system before installation. Other drivers have the setup program located in the operating system subfolder.

If the driver you want to install does not have a setup program, browse to the operating system subfolder and locate the readme text file (README.TXT or README.DOC) for information on installing the driver or software for your operating system.

Utility Software Reference

All the utility software available from this page is Windows compliant. They are provided only for the convenience of the customer. The following software is furnished under license and may only be used or copied in accordance with the terms of the license.

Note: These software(s) are subject to change at anytime without prior notice. Please refer to the support CD for available software.

AWARD Flash Memory Utility

This utility lets you erase the system BIOS stored on a Flash Memory chip on the mainboard, and lets you copy an updated version of the BIOS to the chip. Proceed with caution when using this program. If you erase the current BIOS and fail to write a new BIOS, or write a new BIOS that is incorrect, your system will malfunction. Refer to Chapter 3, *Using BIOS* for more information.

WinFlash Utility

The Award WinFlash utility is a Windows version of the DOS Award BIOS flash writer utility. The utility enables you to flash the system BIOS stored on a Flash Memory chip on the mainboard while in a Windows environment. This utility is currently available for WINXP\ME\2000\98SE. To install the WinFlash utility, run WINFLASH.EXE from the following directory:

\UTILITY\WINFLASH 1.51

PC-CILLIN 2002

The PC-CILLIN 2002 software program provides anti-virus protection for your system. This program is available for Windows 2000/ME/98SE/XP and Windows NT. Be sure to check the readme.txt and install the appropriate anti-virus software for your operating system.

We strongly recommend users to install this free anti-virus software to help protect your system against viruses.

MediaRing Talk – Telephony Software

To install the MediaRing Talk voice modem software for the built-in modem, go to the directory \UTILITY\MEDIARING TALK, then run MRTALK-SETUP72.EXE to install the application software.

Super Voice – Fax/Modem Software

To install the Super Voice voice, fax, data communication application for use with the built-in fax/modem, go the directory \UTILITY\SUPER_VOICE, then run PICSHELL.EXE to install the application software.

PageABC

The PageABC application software enables you to create your very own home page. To install the PageABC, go to the directory \UTILITYPageABC, and then run SETUP.EXE to install the application software.

This concludes Chapter 4.