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Static Electricity Precautions

Components on this motherboard can be damaged by static electricity. Take the following precautions when unpacking the motherboard and installing it in a system.

1. Keep the motherboard and other components in their original static-proof packaging until you are ready to install them.
2. During installation, wear a grounded wrist strap if possible. If you don't have a wrist strap, discharge static electricity by touching the bare metal of the system chassis.
3. Handle the motherboard carefully by the edges. Avoid touching the components unless it is absolutely necessary. During installation put the motherboard on top of the static-protection packaging it came in with the component side facing up.

Pre-Installation Inspection

1. Inspect the motherboard for damage to the components and connectors on the board.
2. If you suspect that the motherboard has been damaged, do not connect power to the system. Contact your motherboard vendor and report the damage.

Notice:

1. Owing to Microsoft's certifying schedule is various to every supplier, we might have some drivers not certified yet by Microsoft. Therefore, it might happen under Windows XP that a dialogue box (shown as below) pop out warning you this software has not passed Windows Logo testing to verify its compatibility with Windows XP. Please rest assured that our RD department has already tested and verified these drivers. Click the "Continue Anyway" button and go ahead the installation.



2. USB 2.0 Driver Limitations:

- 2-1 The USB 2.0 driver only supports Windows XP and Windows 2000.
- 2-2 If you connect a USB 2.0 hub to the root hub, plugging USB devices into this hub, the system might not successfully execute certain USB devices' connection because it could not recognize these devices.

Currently, we are working on such limitations' solution. As soon as the solution is done, the updated USB drive will be released to our website: www.pcchips.com.tw for your downloading.

Features & Checklist Translations

Liste de contrôle

Le coffret de votre carte mère contient les éléments suivants :

- ☐ La carte mère
- ☐ Le Manuel utilisateur
- ☐ Un câble plat pour lecteur de disquette (optionnel)
- ☐ Une câble plat pour lecteur IDE
- ☐ CD de support de logiciels

Caractéristiques

Processeur	Prise en charge du Processeur Socket-462 <ul style="list-style-type: none"> • Supporte le CPU AMD Athlon XP/Sempron/Athlon/Duron • Supporte un Bus Avant allant jusqu'à 333/266/200 MHz
Chipset	<p>Ce chipset comporte VIA KM266Pro Northbridge et VT8235 Southbridge conformément à une architecture novatrice et dimensionnable avec une fiabilité et des performances prouvées.</p> <ul style="list-style-type: none"> • Interface de CPU de Hautes Performances: Prend en charge les processeurs AMD Athlon XP/Sempron/Athlon/Duron Socket-A (Socket-462), adresse d'hôte et vitesse de transfert de données 333/266/200 MHz; Tampons d'écriture CPU sur DRAM intégrés et tampons de lecture anticipée de CPU sur DRAM • Contrôleur de Port Graphique Accéléré (AGP) Complet: AGP v2.0 conforme au mode mode de transfert 4X avec prise en charge de Fast Write; Transferts longue-rafale à transaction fractionnée en pipeline jusqu'à 1Go/sec • Contrôleur SDRAM DDR 64 bits de Haute Performance: Prend en charge les types de mémoire DDR333/266 avec interface DRAM 2.5V SSTL-2 • Contrôleur de Bus PCI concurrent: Interface PCI 3.3V 32 bits Conforme PCI 2.2, fonctionnant en 33 MHz avec entrées à tolérance de 5V. • Contrôleur Fast Ethernet: Fonctionnement full et half duplex en 1/10/100 MHz • Contrôleur EIDE de mode maître UltraDMA-133/100/66/33 : Vitesse de transfert jusqu'à 133Mo/sec pour couvrir les lecteurs PIO mode 4, multi-mots DMA mode 2, et interface UltraDMA-133 • Contrôleur Audio Numérique Direct Sound Ready AC'97: Conforme AC'97 2.2 • Contrôleur de bus USB: Compatible USB v2.0 et Interface de Contrôleur d'Hôte Avancé (EHCI) v1.0; compatible USB v1.1 et Interface de Contrôleur d'Hôte Universel (UHCI) v1.1
Support de Mémoire	<ul style="list-style-type: none"> • Deux logements DIMM DDR 184 broches pour modules mémoire • Supporte le bus mémoire DDR333/266 • La mémoire maximum installée est 2Go
Logements d'Extension	<ul style="list-style-type: none"> • Deux logements PCI 32 bits pour interface • Un logement 4X AGP pour interface • Un logement CNR
IDE Interne	<ul style="list-style-type: none"> • Deux Connecteurs IDE • Prend en Charge les modes PIO (Entrée/Sortie Programmable) et DMA

	(Accès Direct à la Mémoire) • Supporte maîtrise de bus UltraDMA IDE avec vitesse de transfert de 133/100/66/33 Mo/sec
VGA	• Prend en charge les tailles de Tampons de Trame de 16/32/64 Mo • Moteur graphique 3D/2D 128 bits • Performance AGP 8X Interne • Conforme AGP Rev. 3.0
AC'97 Codec	• 6 canaux et conforme aux Spéc. Intel® AC'97 (REV. 2.3), respectant les exigences de Microsoft® PC2001 • Gestion d'alimentation avancée et capacités d'économie d'énergie. • Fonction de ligne d'entrée stéréo partagée avec la sortie Contour. • Entrée de CD Audio analogique pseudo différentielle de haute qualité. • Support d'Entrée/Sortie S/PDIF : Entrée S/PDIF est dotée du support des fonctionnalités d'interruption, auto-verrouillage, anti-bruit, et anti-distorsion. • Technologie logicielle complémentaire de valeur. Supporte la plupart des standards de l'industrie de son 3D PC et support de fonction de karaoké unique qui comprend l'écho microphone, décalage de touche, et annulation vocale.
Ports E/S Internes	• Deux ports PS/2 pour souris et clavier • Un port série • Un port parallèle • Un port VGA • Un LAN port (optionnel) • Quatre USB 2.0 ports fond de panier • Prises audio pour microphone, ligne d'entrée et ligne de sortie
LAN Fast Ethernet (optionnel)	• Solution de Couche Physique 100Base-TX/10Base-T • Double Vitesse – 100/10 Mbps • Interface MII vers Contrôleur Ethernet/Configuration & Etat • Négociation automatique : 10/100, Full/Half Duplex • Conforme à tous les Standards IEEE802.3, 10Base-T et 100Base-TX Applicables
USB 2.0	• Conforme aux Spécifications de Bus Série Universel Révision 2.0 • Conforme aux Spécifications d'interface de Contrôleur d'Hôte Amélioré de Intel Révision 1.0 • Conforme aux Spécifications d'Interface de Contrôleur d'Hôte Universel Révision 1.1 • Le périphérique multifonction PCI consiste en deux noyaux de Contrôleur d'Hôtes UHCI pour signalisation pleine/faible vitesse et un noyau de Contrôleur d'Hôtes EHCI pour signalisation haute vitesse • Le hub racine consiste en 4 ports de face en aval avec émetteurs-récepteurs de couche physique intégrés partagés par le Contrôleur d'Hôte UHCI et EHCI • 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.



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

Checkliste

Die Verpackung Ihres Motherboards enthält folgende Teile:

- ☐ Motherboard
- ☐ Handbuch
- ☐ Bandkabel für Floppylaufwerke (optional)
- ☐ Bandkabel für IDE-Laufwerke
- ☐ Software-CD

Ausstattung

Prozessor	Unterstützt Socket-462-Prozessoren <ul style="list-style-type: none">• Unterstützung für AMD Athlon XP/Sempron/Athlon/Duron Prozessoren• Unterstützung von bis zu 333/266/200 MHz Front-Side Bus
Chipsatz	Dieser Chipsatz besteht aus einer VIA KM266Pro Northbridge und einer VIA 8235 Southbridge . Die Chipsatzarchitektur ist in einem innovativen und skalierbaren Design gehalten und verspricht sowohl Zuverlässigkeit als auch Leistungsstärke. <ul style="list-style-type: none">• Hochleistungs CPU-Schnittstelle: Unterstützt einen AMD Athlon XP /Sempron/Athlon/Duron Prozessor mit A-Fassung (Fassung-462), 333/266/200 MHz Host-Adresse und Datentransferrate; Integrierter CPU-zu-DRAM Schreibpuffer und CPU-zu-DRAM Vor-Lesepuffer• Controller mit beschleunigter Grafikkarte (AGP) mit kompletten Eigenschaften: Transfer-Modus von 4X, nach den Richtlinien von AGP v2.0 mit einer Unterstützung von Fast Write (Schnellschreibung); lange Ausgangs-Transaktionsübertragungen, geteilt und gleichmässig ausgerichtet von bis zu 1 GB/Sek.• Fortgeschrittener 64-Bit DDR SDRAM Hochleistungs-Controller: Er unterstützt DDR333/266 Speichertypen mit einer 2.5V SSTL-2 DRAM Schnittstelle.• Mitwirkender PCI-Bus-Controller: 33 MHz-Betrieb, nach den Richtlinien von PCI 2.2, 32 Bit 3.3V PCI-Schnittstelle mit einer Eingangsenergie-Toleranz von 5V.• Fast Ethernet Controller: Voller und halber Duplex-Betrieb von 1/10/100 MHz• UltraDMA-133/100/66/33 Master-Modus EIDE-Controller: Übertragungsrate von bis zu 133MB/Sek um die Driver des PIO-Modus 4, Multi-Word-DMA-Modus 2, und eine UltraDMA-133-Schnittstelle zu decken.• Direct Sound Ready (Direkter Fertigtton) AC'97 Digital Audio Controller: nach den Richtlinien von AC'97 2.2• Universaler Serien-Bus-Controller: USB v2.0 und vergrößerte Host-Controller-Schnittstelle (EHCI) kompatibel mit v1.0; USB v1.1 und Universale Host-Controller-Schnittstelle (UHCI) kompatibel mit v1.1
Speicherunterstützung	<ul style="list-style-type: none">• Zwei 184-pin DIMM Steckplätze für DDR Speichermodule• Unterstützung für DDR333/266 Speicherbus• Maximal auf 2GB Speicher erweiterbar
Erweiterungsteckplätze	<ul style="list-style-type: none">• Zwei 32-Bit PCI-Steckplätze• Ein 4X AGP-Steckplatz• Ein CNR-Steckplatz
Onboard IDE	<ul style="list-style-type: none">• Zwei IDE-Header• Unterstützt die Modi PIO (Programmable Input/Output) und DMA (Direct Memory Access)

	<ul style="list-style-type: none"> • Unterstützung für IDE UltraDMA-Busmastering mit Transferraten von 133/100/66/33 MB/Sek
VGA	<ul style="list-style-type: none"> • Unterstützt Rahmenpuffergrößen von 16/32/64 MB • 128-Bit3D/2D-Grafikmotor • Interne 8X AGP-Leistung • Nach den Richtlinien von AGP Rev. 3.0
AC'97 Codec	<ul style="list-style-type: none"> • 6-Kanäle und gemäß Spezifikationen von Intel® AC'97 (REV. 2.3) , entspricht den Anforderungen von Microsoft® PC2001 • Fortgeschrittene Betriebsstromzufuhr und stromsparend. • Stereo Line-in Funktion, geteilt mit Surround-Out. • Analoges CD Audio Input, pseudo-differential, von hoher Qualität. • S/PDIF Input/Output Unterstützung: S/PDIF-In kennzeichnet sich durch eine Unterbrechungs-Unterstützung, Selbstblockierung, Anti-Geräusche, und Anti-Störungs Funktionsfähigkeit. • Zusätzliche wertvolle Software-Technologie: Unterstützt die meisten PC 3D-Sound Industrienormen und die einzigartige Karaoke-Funktion, welche sich durch das Mikrofon-Echo, Tastatur-Umschaltung und Stoppen mittels Stimme hervorhebt.
Onboard I/O Ports	<ul style="list-style-type: none"> • Zwei PS/2-Steckplätze für Maus und Tastatur yboard • Ein serieller Steckplatz • Ein paralleler Steckplatz • Ein VGA-Steckplatz • Ein LAN-Steckplatz (optional) • Vier USB2.0-Ports auf der Rückseite • Audioanschlüsse für Mikrofon, line-in und line-out
Fast Ethernet LAN (optional)	<ul style="list-style-type: none"> • 100Base-TX/10Base-T Physical Layer-Lösung • Duale Geschwindigkeit – 100/10 MB/Sek. • MII-Interface für Ethernet Controller/Konfiguration & Status • Auto-Negotiation: 10/100 MB/Sek., Voll/Halfduplex • Entspricht allen anwendbaren Standards: IEEE802.3, 10Base-T und 100Base-TX
USB 2.0	<ul style="list-style-type: none"> • Entspricht Universal Serial Bus-Spezifikation, Revision 2.0 • Entspricht Intels Enhanced Host Controller Interface-Spezifikation, Revision 1.0 • Entspricht Universal Host Controller Interface -Spezifikation Revision 1.1 • PCI-Multifunktionsgerät besteht aus zwei UHCI Host Controller-Kernen für Signalübertragung bei voller und niedriger Geschwindigkeit sowie einem EHCI Host Controller-Kern für Hochgeschwindigkeits-Signalübertragung • Root Hub besteht aus 4 Downstream-Ports mit integrierten Physical Layer-Überträgern für gemeinsame Nutzung durch UHCI und EHCI Host Controller • Unterstützt PCI-Bus Power Management Interface , Spezifikation Release 1.1 • Legacy-Unterstützung für alle Downstream-Ports



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

Lista

L'imballo della scheda madre é composto da:

- ☐ La scheda madre
- ☐ Il manuale
- ☐ Una piattina per il collegamento dei drive (opzionale)
- ☐ Una piattina IDE
- ☐ Il CD con il Software di supporto

Caratteristiche

Processor	Dotata di Socket 462 per Processori <ul style="list-style-type: none">• Supporta CPU AMD Athlon XP/Sempron/Athlon/Duron• Supporta fino a 333/266/200 MHz Front Side Bus
Chipset	In accordo ad una architettura scabile e innovative sono presenti nel chipset il Northbridge VIA KM266Pro e Southbridge VT8235 . <ul style="list-style-type: none">• Interfaccia CPU di elevata performance: Supporta Socket-A (Socket-462) processori AMD Athlon XP/Sempron/Athlon/Duron, 333/266/200 MHz indirizzo host e trasferimento dati; Memorie tampone di scrittura da CPU a DRAM integrate e memorie tampone di lettura da CPU a DRAM• Programma di controllo della porta per applicazioni grafiche accelerate con tutte le funzioni: AGP v2.0 compatibile in modalit� trasferimento 4X con supporto Fast Write; Trasferimenti di lunghi pacchetti con transazioni split a condotta fino a 1 GB/sec.• Programma di controllo di elevata performance 64-bit DDR SDRAM: Supporta tipi di memoria DDR333/266 con interfaccia 2.5V SSTL-2 DRAM• Programma di controllo PCI Bus: operativit� 33 MHz , compatibile PCI 2.2, interfaccia 32 bit 3.3V PCI con immissione dati tollerante V5• Programma di controllo veloce Ethernet: 1/10/100 MHz operativit� piena o mezzo duplex• Programma EIDE di controllo UltraDMA-133/100/66/33 Master Mode EIDE: Velocit� di trasferimento fino a 133MB/sec che copre PIO mode 4, drive multi-parola modalit� DMA e interfaccia UltraDMA-133• Programma di controllo audio digitale per suono diretto AC'97: AC'97 2.2 compatibile• Programma di controllo per Bus universali seriali: USB v2.0 ed interfaccia Host Controller migliorata (EHCI) v1.0 compatibile; USB v1.1 e interfaccia universale Host Controller (UHCI) v1.1 compatibile
Memory Support	<ul style="list-style-type: none">• Due slot DIMM a 184 pin per moduli di memoria DDR• Supporta bus di memoria DDR333/266• Quantit� massima di memoria installabile, 2GB
Slot di espansione	<ul style="list-style-type: none">• Due slot PCI a 32 bit• Una slot AGP 4X• Una slot CNR

Onboard IDE	<ul style="list-style-type: none"> • Due connettori IDE • Supporto della modalità PIO (Programmable Input/Output) e DMA (Direct Memory Access) • Supporto per le modalità Bus Mastering e UltraDMA 133/100/66/33 MB/sec
VGA	<ul style="list-style-type: none"> • Supporta Frame Buffer 16/32/64 MB • Motore grafico 128-bit 3D/2D • AGP interno 8X • AGP Rev. 3.0 Compatibile
AC'97 Codec	<ul style="list-style-type: none"> • 6 canali, conforme alle specifiche Intel® AC'97 (REV. 2.3) ed i requisiti Microsoft® PC2001 • Gestione avanzata del risparmio energetico ed "Advanced power management". • Funzione Stereo Line IN condivisa con Surround out. • Input Audio CD pseudo differenziale ad alta qualità. • Input/Output S/PDIF: S/PDIF In é dotato delle funzioni interrupt, auto-lock, anti-noise ed anti-distortion. • Tecnologie software aggiuntive : Supporto della maggior parte degli standard industriali 3D sound PC ed una funzione karaoke dotata di microphone echo, key shifting e vocal cancellation.
Onboard I/O Ports	<ul style="list-style-type: none"> • Due porte PS/2 per tastiera e mouse • Una porta seriale • Una porta VGA • Una porta parallela • Una porta LAN (opzionale) • Quattro USB 2.0 porte sul pannello posteriore • Jack audio per microfono, ingresso linea e uscita linea
Fast Ethernet LAN (opzionale)	<ul style="list-style-type: none"> • Architettura 100Base TX/10Base T • Doppia velocità – 100/10 Mbps • Interfaccia MII per Controllo Ethernet /Configurazione & Stato • Negoziazione Automatica: 10/100, Full/Half Duplex • Supporto di tutti gli standard esistenti IEEE802.3, 10Base-T e 100Base-TX
USB 2.0	<ul style="list-style-type: none"> • Compliant with Universal Serial Bus Specification Revision 2.0 • Compliant with Intel's Enhanced Host Controller Interface Specification Revision 1.0 • Compliant with Universal Host Controller Interface Specification Revision 1.1 • PCI multi-function device consists of two UHCI Host Controller cores for full-/low-speed signaling and one EHCI Host Controller core for high-speed signaling • Root hub consists 4 downstream facing ports with integrated physical layer transceivers shared by UHCI and EHCI Host Controller • Support PCI-Bus Power Management Interface Specification release 1.1 • Legacy support for all downstream facing ports



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

LISTA DE VERIFICACIÓN

El paquete de su placa principal contiene los sigtes. ítems:

- ☐ La placa principal
- ☐ El Manual del Usuario
- ☐ Un cable cinta para el lector de disquete (optativo)
- ☐ Un cable cinta para el lector IDE
- ☐ CD de Software de soporte

Características

Procesador	Soporte de Procesador Socket-462 <ul style="list-style-type: none">• Soporta CPU de AMD Athlon XP/Sempron/Athlon/ Duron• Soporta hasta Bus de Lado Frontal de 333/266/200 MHz
Chipset	Hay VIA KM266Pro Northbridge y VT8235 Southbridge en este chipset en conformidad con una arquitectura innovadora y escalable con fiabilidad y rendimiento comprobados. <ul style="list-style-type: none">• Interfaz de CPU de alto rendimiento: Soporta los procesadores Socket-A (Socket-462) AMD Athlon XP/Sempron/Athlon/Duron, 333/266/200 MHz de dirección anfitrión e índice de transferencia de datos; buffers de escritura CPU-a-DRAM integrados y buffers de pre-buscar lectura CPU-a-DRAM.• Controlador de Puerto de Gráficas Acelerado (AGP) con Características Completas: modo de transferencia 4X conforme a AGP v2.0 con soporte Fast Write, transferencias de expulsión larga de transacción dividida y alineada a tubo hasta 1 GB/seg• Controlador Avanzado 64-bit DDR SDRAM de Alto Rendimiento: Soporta los tipos de memoria DDR333/266 con interfaz 2.5V SSTL-2 DRAM• Controlador de Bus PCI concurrente: operación de 33 MHz, conformidad PCI 2.2, interfaz 32 bit 3.3V PCI con entradas tolerantes de 5V• Controlador Fast Ethernet: operación duplex completo y medio de 1/10/100 MHz• Controlador EIDE de Modo Máster UltraDMA-133/100/66/33: Índice de transferencia hasta 133MB/seg para cubrir el PIO modo 4, unidades de multi-word DMA modo 2, e interfaz UltraDMA-133• Sonido Directo Listo Controlador de Sonido Digital AC'97: Conformidad AC'97 2.2• Controlador de Bus Serial Universal: USB v2.0 y compatible con la Interfaz de Controlador Anfitrión Reforzado (EHCI) v1.0; USB v1.1 y compatible con la Interfaz de Controlador Anfitrión Universal (UHCI) v1.1
Soporte de Memoria	<ul style="list-style-type: none">• Dos ranuras 184-pin DIMM para módulos de memoria DDR• Soporta bus de memoria de DDR333/266• Memoria máxima instalada es 2GB
Ranuras de Expansión	<ul style="list-style-type: none">• Dos ranuras 32-bit PCI• Una ranura 4X AGP• Una ranura CNR
IDE Abordos	<ul style="list-style-type: none">• Dos conectores IDE• Soporta modos PIO (Entrada/Salida Programable/Programmable Input/Output) y modos DMA (Acceso de Memoria Directo/Direct Memory Access).• Soporta mastering de bus IDE UltraDMA con índices de transferencia

	de 133/100/66/33 MB/sec
VGA	<ul style="list-style-type: none"> • Soporta tamaños de Buffers de Cuadro 16/32/64 MB • Motor de gráficas 128-bit 3D/2D • Rendimiento AGP 8X interno • Conformidad AGP Rev. 3.0
AC'97 Codec	<ul style="list-style-type: none"> • 6-canales y conforme con la Espec. Intel® AC'97 (REV. 2.3), satisface los requisitos de Microsoft® PC2001 • Capacidades de administración de alimentación avanzada y ahorro de energía. • Función Stereo Line-in compartida con Surround out. • Salida CD Audio pseudo-diferencial analógica de alta calidad. • Soporta S/PDIF Input/Output: S/PDIF In se caracteriza con el soporte de interrupción, auto-bloqueo, anti-ruido, y anti-distorción. • Tecnología de software adicional valiosa: Soporta la mayoría de las normas industriales de PC 3D sound y la función única de karaoke que se caracteriza por el eco de micrófono, cambio a teclados y cancelación a voz.
Puertos I/O Abordos	<ul style="list-style-type: none"> • Dos puertos PS/2 para ratón y teclado • Un puerto serial • Un puerto paralelo • Un puerto VGA • Un puerto LAN (optional) • Cuatro puertos USB 2.0 de panel trasero • Clavijas de sonido para micrófono, entrada y salida de línea
Ethernet LAN Rápido (optional)	<ul style="list-style-type: none"> • Solución de Capa Física 100Base-TX/10Base-T • Velocidad Dual – 100/10 Mbps • Interfaz MII a Controlador Ethernet/Configuración & Estado • Autonegociación: 10/100, Duplex Completo/Medio • Satisface Todas las Normas Aplicables IEEE802.3, 10Base-T y 100Base-TX
USB 2.0	<ul style="list-style-type: none"> • Conforme con la Especificación de Bus Serial Universal Revisión 2.0 • Conforme con Controlador Anfitrión Reforzado de Intel Interface Specification Revision 1.0 • Conforme con la Especificación de Interfaz de Controlador Anfitrión Universal Revisión 1.1 • Dispositivo PCI multi-función se consiste de dos centros de Controlador Anfitrión UHCI para señalización de velocidad completa/baja y un centro de Controlador Anfitrión EHCI para señalización de alta velocidad • Root hub consiste de 4 puertos que miran hacia abajo con transceptores de capa física integrado compartido por Controlador Anfitrión UHCI y EHCI • Soporta Especificación de Interfaz de Administración de Energía de BUS PCI versión 1.1 • Soporte de legado para todos los puertos que miran hacia abajo



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

Lista de verificação

A embalagem da sua placa principal contém os seguintes itens:

- ☐ A placa principal
- ☐ O Manual do Utilizador
- ☐ Um cabo para a unidade de disquetes (opcional)
- ☐ Um cabo para a unidade IDE
- ☐ CD de suporte para o software

Características

Processador	Suporte do Processador Socket-462 <ul style="list-style-type: none">• Suporta AMD Athlon XP/Sempron/Athlon/ Duron processadores• Suporta até 333/266/200 MHz Front-Side Bus
Chipset	Conta com VIA KM266Pro Northbridge e VT8235 Southbridge neste chipset, de acordo com uma arquitectura inovadora e escalável com um nível de confiança e desempenho comprovado. <ul style="list-style-type: none">• Interface CPU de Alta Performance: Com suporte para Socket-A (Socket-462) processadores AMD Athlon XP/Sempron/Athlon/Duron, endereço central 333/266/200 MHz e taxa de transferência de dados; buffers de escrita Integrados CPU-para-DRAM e buffers de leitura CPU-para-DRAM com pré-pesquisa• Controlador Com Todas as Características e Acelerado da Porta de Gráficos (AGP): AGP v2.0 compatível com modo de transferência 4X com suporte Fast Write; Transferências Paralelas de transacção-repartida e de longa duração até 1 GB/sec• Controlador Avançado de Alta-Performance 64-bit DDR SDRAM: Com suporte para tipos de memória DDR333/266 com interface 2.5V SSTL-2 DRAM• Controlador Corrente PCI do Bus: funcionamento 33 MHz, compatível com PCI 2.2, interface 32 bit 3.3V PCI com entradas tolerantes 5V• Controlador Ethernet Rápida: 1/10/100 MHz funcionamento completo e semi-duplex• Controlador UltraDMA-133/100/66/33 Master Mode EIDE: Taxa de transferência até 133MB/sec para abranger os drivers PIO mode 4, multi-word DMA mode 2, e o interface UntraDMA-133• Controlador Direct Sound Preparado para AC'97 Áudio Digital: compatível com AC'97 2.2• Controlador Universal de Série do Bus: USB v2.0 e (EHCI) Interface Melhorado do Controlador Central compatível com v1.0; (UHCI) Interface USB v1.1 e Universal do Controlador Central compatível com v1.1
Suporte de memória	<ul style="list-style-type: none">• Dois sockets DIMM com 184 pinos para módulos de memória DDR• Suporta bus de memória DDR333/266• A memória máxima instalada é de 2GB
Slots de expansão	<ul style="list-style-type: none">• Duas slots PCI de 32 bit• Um slot AGP4X• Um slot CNR
IDE na placa	<ul style="list-style-type: none">• Dois conectores IDE• Suporta modos PIO (Input/Output Programável) e DMA (Direct Memory Access)

	<ul style="list-style-type: none"> Suporta IDE UltraDMA bus mastering com razão de transferência de 133/100/66/33 MB/sec
VGA	<ul style="list-style-type: none"> Com suporte para tamanhos de Frame Buffer de 16/32/64 MB Barra de gráficos 128-bit 3D/2D Performance interna AGP 8X Compatível com AGP Rev. 3.0
AC'97 Codec	<ul style="list-style-type: none"> 6- canais e complacente com Especificação Intel® AC'97 (REV. 2.3) , de acordo com os requerimentos da Microsoft® PC2001 Gerenciamento de força avançada e capacidade de economia de energia. Função Stereo Line-in compatível com a saída do Surround. Input de CD Áudio análogo pseudo diferencial de alta qualidade. S/PDIF Input/Output suporta : S/PDIF In é caracterizado com suporte com funcionalidade de anti-distorção, anti-ruído, auto-trava, e interrompimento. Tecnologia add-on software valiosa: Suporta a maioria dos padrões industriais de som de PC 3D e função única de karaoke caracterizado com suporte para microfone eco, troca de tom e cancelamento vocal.
Portas I/O na placa	<ul style="list-style-type: none"> Duas portas PS/2 para o rato e teclado Uma porta série Uma porta paralela Uma porta VGA Uma porta LAN (optional) Quatro portas USB2.0 traseiros Jacks audio para microfone, line-in e line-out
Fast Ethernet LAN (optional)	<ul style="list-style-type: none"> 100Base-TX/10Base-T Solução de Camadas Físicas Velocidade Dupla – 100/10 Mbps MII Interface para Controlador Ethernet /Configuração & Status Auto Negociação: 10/100, Full/Half Duplex Satisfaz todos os Padrões IEEE802.3, 10Base-T e 100Base-TX Aplicáveis
USB 2.0	<ul style="list-style-type: none"> Compatível com Universal Serial Bus Revisão 2.0 da especificação Compatível com controlador Enhanced Host da Intel Revisão 1.0 da especificação da interface Compatível com controlador Universal Host Revisão 1.1 da especificação da Interface O dispositivo PCI multi-funções consiste em dois núcleos de Controlador UHCI Host Controller para sinalização de velocidade total/baixa em um núcleo de Controlador EHCI Host para sinalização de alta velocidade O núcleo de raiz consiste em 4 portas de protecção a jusante com transreceptores de camadas físicas integrados partilhados pelos controladores Host UHCI e EHCI Suporte de gestão de energia PCI-Bus Revisão 1.1 da especificação da interface Suporte para todas as portas de protecção a jusante



As especificações de alguns artigos de hardware e software encontram-se sujeitos a alterações sem aviso prévio.

检查单

您的主板包装含有以下项目：

- ☐ 主板
- ☐ 用户手册
- ☐ 一根磁盘驱动器扁平电缆（可选）
- ☐ 一根 IDE 驱动器扁平电缆
- ☐ 软件支持CD

功能

处理器	支持 Socket-462 处理器 <ul style="list-style-type: none">支持AMD Athlon XP/Sempron/Athlon/Duron CPU支持 333/266/200 MHz前端总线
芯片组	<p>芯片组包含VIA KM266Pro 北桥和VT8235 南桥，它基于一种新型的、可扩展的架构，能提供已经证明的可靠性和高性能。</p> <ul style="list-style-type: none">高性能 CPU 接口：支持 Socket-A (Socket-462) AMD Athlon XP/Sempron/Athlon/Duron 处理器，333/266/200 MHz 主机地址和数据传输速率；集成 CPU-到-DRAM 写缓冲和 CPU-到-DRAM 读预取缓冲全功能加速图形端口 (AGP) 控制器。符合 AGP v2.0 标准，4X 传输模式，支持快写；流水线分离传输长突发传输速度可达 1GB/sec增强高性能 64 位 DDR SDRAM 控制器：支持带 2.5V SSTL-2 DRAM 接口的 DDR333/266 内存并发 PCI 总线控制器：工作频率 33 MHz，符合 PCI2.2 标准，带 5V 输入的 32 位 3.3V PCI 接口。快速以太网控制器：1/10/100 MHz 全双工和半双工操作UltraDMA-133/100/66/33 主控模式 EIDE 控制器：传输速率可达 133MB/sec，支持 PIO 模式 4、多字 DMA 模式 2 驱动程序和 UltraDMA-133 接口AC' 97 数字音频控制器：符合 AC' 97 2.2 标准通用串行总线控制器：兼容 USB v2.0 和增强主控器接口 (EHCI) v1.0；兼容 USB v1.1 和通用主控器接口 (UHCI) v1.1
内存支持	<ul style="list-style-type: none">2 个用于 DDR 内存条的 184-pin DIMM 插槽支持 DDR333/266 存储总线

	<ul style="list-style-type: none"> • 内存最多可达 2GB
扩展槽	<ul style="list-style-type: none"> • 2 个 32 位 PCI 插槽 • 1 个 CNR 槽 • 1 个 4X AGP 插槽
Onboard IDE	<ul style="list-style-type: none"> • 2 个 IDE 接口 • 支持 PIO (程控输入/输出) 和 DMA (直接存储器存取) 模式 • 支持 IDE UltraDMA 总线控制, 传输速率可达 133/100/66/33 MB/sec
VGA	<ul style="list-style-type: none"> • 支持 16/32/64 MB 帧缓冲 • 128 位 3D/2D 图形引擎 • 内部 AGP 8X 性能 • 符合 AGP Rev. 3.0 规格
AC' 97 编解码器	<ul style="list-style-type: none"> • 6 通道, 符合 Intel® AC' 97 (REV. 2.3) 规格, 满足 Microsoft® PC2001 要求 • 高级电源管理和节电功能。 • 共享环绕输出的立体声线入功能。 • 高质量伪差分模拟 CD 音频输入。 • 支持 S/PDIF 输入/输出: S/PDIF In 支持中断、自锁、抗噪和抗失真功能。 • 增值软件技术。支持大部分 PC 3D 立体声行业标准和卡拉 OK 功能, 支持话筒回声消除、键移动和声音消除功能。
集成 I/O 端口	<ul style="list-style-type: none"> • 2 个用于鼠标和键盘的 PS/2 端口 • 1 个串口 • 1 个并口 • 1 个 VGA 端口 • 1 个 LAN 端口(可选) • 主板后面板带 4 个 USB 2.0 端口接口 • 麦克风、线入和线出声音插孔
内置以太网 LAN (可选)	<ul style="list-style-type: none"> • 100Base-TX/10Base-T 物理层解决方案 • 双速 – 100/10 Mbps • 到以太网控制器的 MII 接口/配置 & 状态 • 自动协商: 10/100, 全双工/半双工 • 符合所有相应的 IEEE 802.3、10Base-T 和 100Base-Tx 标准
USB 2.0	<ul style="list-style-type: none"> • 符合通用串行总线规格 2.0 版本 • 符合 Intel 1.0 版本的增强主控器接口规格

	<ul style="list-style-type: none"> • 符合 1.1 版本的通用主控器接口规格 • 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个用于高速传输数据的EHCI主控器组成 • Root集线器包括4个下行端口，带有与UHCI和EHCI主控制器共用的集成物理层收发器。 • 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
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部分硬件规格和软件项目若有更改恕不另行通知。

Chapter 1

Introduction

This motherboard has a **Socket-A** support for the **AMD Athlon XP/Sempron/Athlon/Duron** processors. The Socket-A processor's front-side bus (FSB) speed is **333/266/200 MHz**.

This motherboard integrates **VIA KM266Pro** Northbridge and **VT8235** Southbridge chipsets that support one **4X AGP** slot for highly graphics display, two 184-pin DIMM sockets for **DDR333/266** memory bus, and **UltraDMA ATA133/100/66/33** function to provide outstanding high system performance under all types of system operations. It has the built-in **AC'97 Codec**, a **CNR** (Communications and Networking Riser) slot and a built-in **10BaseT/100BaseTX Network Interface** (optional). It is compliant with AGP v2.0, up to 1 GB/sec data transfer rate capability, and pseudo-synchronous AGP and CPU interface to maximize system performance. Featuring **128-bit 3D/2D graphics** engine, it utilizes a highly pipelined architecture that provides high performance along with superior image quality.

There is a full set of I/O Ports including PS/2 keyboard and mouse ports, one serial port, one onboard VGA port, one parallel port, one LAN port (optional), four back-panel USB2.0 ports and onboard USB header USB3 providing two extra ports by connecting the extended USB module to the motherboard.

This motherboard has all the features you need to develop a powerful multimedia workstation that is network ready. The board is **Micro ATX size** and has power connectors for an **ATX** power supply.

Key Features

The key features of this motherboard include:

Socket-A Processor Support

- ◆ Supports AMD **Athlon XP/Sempron/Athlon/Duron** processors
- ◆ Supports Front-Side Bus (FSB) **333/266/200 MHz**

Chipset

There are **VIA KM266Pro** Northbridge and **VT8235** Southbridge in this chipset in accordance with an innovative and scalable architecture with proven reliability and performance. A few of the chipset's advanced features are:

- ◆ High Performance CPU Interface: Supports Socket-A (Socket-462) **Athlon XP/Sempron/Athlon/Duron** processors, **333/266/200 MHz** host address and data transfer rate; Integrated CPU-to-DRAM write buffers and CPU-to-DRAM read prefetch buffers
- ◆ Full Featured Accelerated Graphics Port (AGP) Controller: AGP v2.0 compliant 4X transfer mode with Fast Write support; Pipelined split-transaction long-burst transfers up to 1 GB/sec
- ◆ Advanced High-Performance 64-bit DDR SDRAM Controller: Supports **DDR333/266** memory types with 2.5V SSTL-2 DRAM interface
- ◆ Concurrent PCI Bus Controller: 33 MHz operation, PCI 2.2 compliant, 32 bit 3.3V PCI interface with 5V tolerant inputs
- ◆ **Fast Ethernet Controller: 1/10/100 MHz** full and half duplex operation
- ◆ **UltraDMA-133/100/66/33** Master Mode EIDE Controller: Transfer rate up to 133MB/sec to cover PIO mode 4, multi-word DMA mode 2 drives, and UltraDMA-133 interface
- ◆ Direct Sound Ready **AC'97** Digital Audio Controller: AC'97 2.2 compliant

- ◆ Universal Serial Bus Controller: **USB v2.0** and Enhanced Host Controller Interface (EHCI) v1.0 compatible; USB v1.1 and Universal Host Controller Interface (UHCI) v1.1 compatible

Memory Support

- ◆ Two 184-pin DIMM sockets for **DDR333/266** memory bus
- ◆ Maximum installed memory is 2GB

Expansion Slots

- ◆ One CNR slot
- ◆ One **4X AGP** slot for AGP 2.0-compliant interface
- ◆ Two 32-bit PCI slots for PCI 2.2-compliant bus interface

Onboard IDE

- ◆ Two IDE Connectors
- ◆ Supports PIO (Programmable Input/Output) and DMA (Direct Memory Access) modes
- ◆ Supports IDE UltraDMA bus mastering with transfer rates of **133/100/66/33 MB/sec**

VGA

- ◆ Supports 16/32/64 MB Frame Buffers sizes
- ◆ **128-bit 3D/2D** graphic engine
- ◆ Internal AGP 8X performance
- ◆ AGP Rev. 3.0 Compliant

AC'97 Codec

- ◆ 6- channel and compliant with Intel® AC'97 (REV. 2.3) Spec, meeting with Microsoft® PC2001 requirements
- ◆ Advanced power management and power saving capabilities.
- ◆ Stereo Line-in function shared with Surround out.
- ◆ High quality pseudo-differential analog CD Audio input.
- ◆ S/PDIF Output support: Output 96/48 kHz with 24/20/16 bits

- ◆ Valuable add-on software technology: Support most industry standards of PC 3D sound and unique karaoke function support featured with microphone echo, key shifting, and vocal cancellation.

Onboard I/O Ports

The motherboard has a full set of I/O ports and connectors:

- ◆ Two PS/2 ports for mouse and keyboard
- ◆ One serial port
- ◆ One parallel port
- ◆ One VGA port
- ◆ One LAN port (optional)
- ◆ Four back-panel USB2.0 ports
- ◆ Audio jacks for microphone, line-in and line-out

Built-in Ethernet LAN (optional)

- ◆ **10Base-T/100Base-TX Physical Layer Solution**
- ◆ Dual Speed – 100/10 Mbps
- ◆ MII Interface to Ethernet Controller/Configuration & Status
- ◆ Auto Negotiation: 10/100, Full/Half Duplex
- ◆ Meet All Applicable IEEE802.3, 10Base-T and 100Base-TX Standards

USB 2.0

- ◆ Compliant with Universal Serial Bus Specification Revision 2.0
- ◆ Compliant with Intel's Enhanced Host Controller Interface Specification Revision 1.0
- ◆ Compliant with Universal Host Controller Interface Specification Revision 1.1
- ◆ PCI multi-function device consists of two **UHCI Host Controller** cores for full-/low-speed signaling and one **EHCI Host Controller** core for high-speed signaling
- ◆ Root hub consists 4 downstream facing ports with integrated physical layer transceivers shared by **UHCI** and **EHCI** Host Controller
- ◆ Support PCI-Bus Power Management Interface Specification release 1.1

- ◆ Legacy support for all downstream facing ports

Bundled Software

- ◆ **Adobe Acrobat Reader** is the software to help users read PDF files.

Dimensions

- ◆ Micro ATX form factor (244 x 190 mm)

Note: *Hardware specifications and software items are subject to change without notification.*

Package Contents

Your motherboard package contains the following items:

- ❑ The motherboard
- ❑ The User's Manual
- ❑ One diskette drive ribbon cable (optional)
- ❑ One IDE drive ribbon cable
- ❑ The Software support CD

Optional Accessories

You can purchase the following optional accessories for this motherboard.

- ❑ Extended USB module
- ❑ Card Reader (You can buy your own Card Reader from the third party, but please contact your local Card Reader vendor on any issues of the specification and compatibility.)

Note: *You can purchase your own optional accessories from the third party, but please contact your local vendor on any issues of the specification and compatibility.*

Chapter 2

Motherboard Installation

To install this motherboard in a system, please follow these instructions in this chapter:

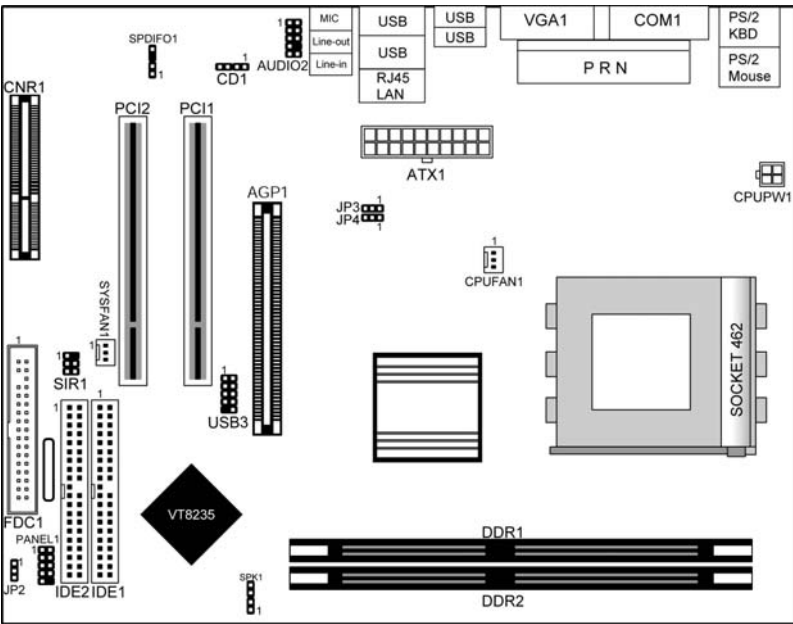
- ❑ Identify the motherboard components
- ❑ Install a CPU
- ❑ Install one or more system memory modules
- ❑ Make sure all jumpers and switches are set correctly
- ❑ Install this motherboard in a system chassis (case)
- ❑ Connect any extension brackets or cables to connectors/headers on the motherboard
- ❑ Install peripheral devices and make the appropriate connections to connectors/headers on the motherboard

Note:

1. Before installing this motherboard, make sure jumper JP2 is under Normal setting. See this chapter for information about locating JP2 and the setting options.
2. Never connect power to the system during installation; otherwise, it may damage the motherboard.

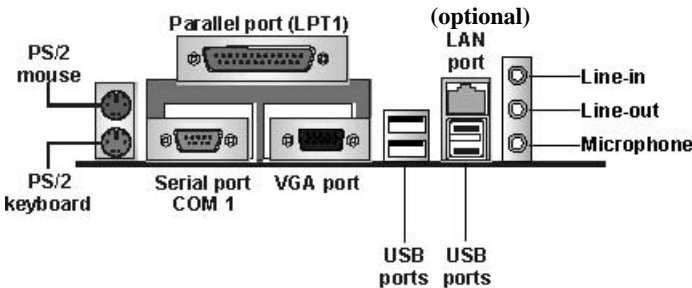
Motherboard Components

This diagram below identifies major components on the motherboard.



I/O Ports

The illustration below shows a side view of the built-in I/O ports on the motherboard.



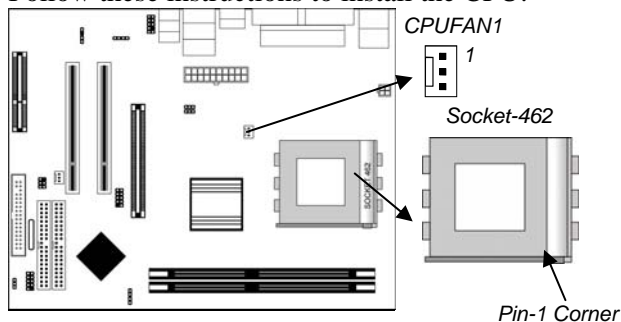
PS/2 Mouse	Use the upper PS/2 port to connect a PS/2 pointing device.
PS/2 Keyboard	Use the lower PS/2 port to connect a PS/2 keyboard.
LPT1	Use LPT1 to connect printers or other parallel communications devices.
COM1	Use the COM port to connect serial devices such as mice or fax/modems. COM1 is identified by the system as COM1.
VGA	Use the VGA port to connect VGA devices.
LAN Port (optional)	Connect an RJ-45 jack to the LAN port to connect your computer to the Network.
USB Ports	Use the USB ports to connect USB devices.
Audio Ports	Use the three audio ports to connect audio devices. The first jack is for stereo Line-In signal. The second jack is for stereo Line-Out signal. The third jack is for Microphone.

Installing The Processor

This motherboard 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

Follow these instructions to install the CPU:

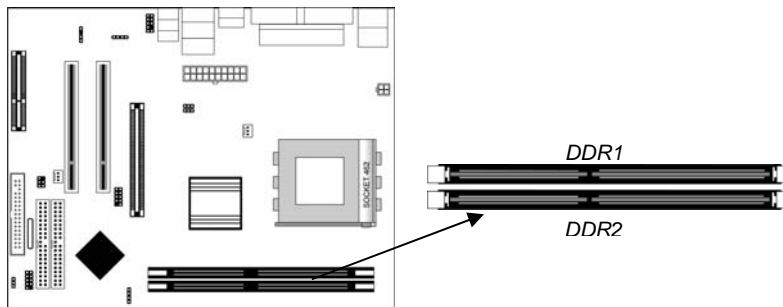


1. Unhook the CPU socket's locking lever by pulling it away from socket and raising it to the upright position.
2. Match the pin 1 corner of CPU socket to the one of processor, and insert the processor into the socket. Do not use force.
3. Push the locking lever down and hook it under the latch on the edge of socket.
4. Apply thermal grease to the top of the CPU.
5. Lower the CPU fan/heatsink unit onto the CPU and CPU socket, and then use the retention module clamps to snap the fan/heatsink into place.
6. Plug the CPU fan power cable into the CPU cooling fan power supply (CPUFAN1) on the motherboard.

Installing The Memory Modules

This motherboard accommodates two 184-pin 2.5V DIMM sockets (Dual Inline Memory Module) for unbuffered **DDR333/266** memory modules (Double Data Rate SDRAM), and maximum 2.0GB installed memory.

DDR SDRAM is a type of SDRAM that supports data transfers on both edges of each clock cycle (the rising and falling edges), effectively doubling the memory chip's data throughput.



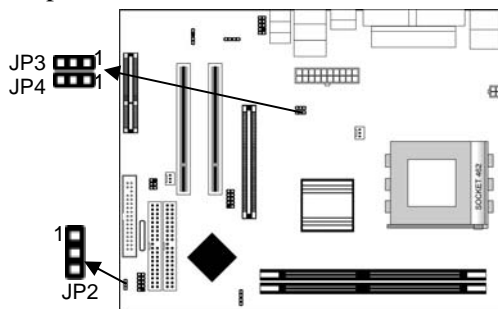
Installation Procedure

These modules can be installed with up to 2 GB system memory. Refer to the following to install the memory modules.

1. Push the latches on each side of the DIMM socket down.
2. Align the memory module with the socket. The DIMM sockets are keyed with notches and the DIMMs are keyed with cutouts so that they can only be installed correctly.
3. Check that the cutouts on the DIMM module edge connector match the notches in the DIMM socket.
4. Install the DIMM module into the socket and press it firmly down until it is seated correctly. The socket latches are levered upwards and latch on to the edges of the DIMM.
5. Install any remaining DIMM modules.

Jumper Settings

Using a jumper cap to connect two pins is SHORT, removing it from these pins, OPEN.



Jumper JP2: Clear CMOS Memory

This jumper can clear the CMOS memory. You may need to clear the CMOS memory if the settings in the Setup Utility are incorrect that your motherboard can't operate. To clear the CMOS memory, disconnect all the power cables, and then move the jumper cap into the CLEAR setting for a few seconds.

Function	Jumper Setting
Normal	Short Pins 1-2
Clear CMOS	Short Pins 2-3

Jumper JP3/JP4: CPU Clock Selector

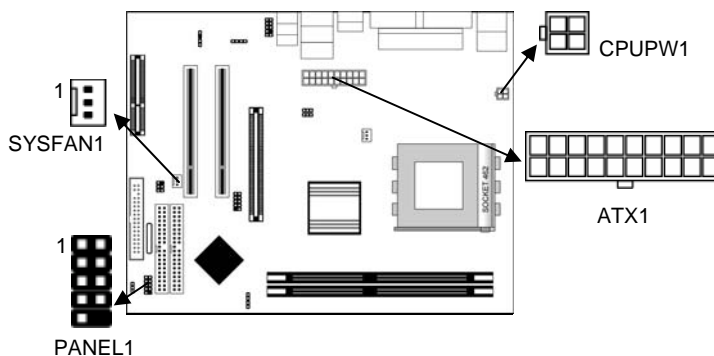
These two 3-pin jumpers select the processor 166 MHz, 133 MHz or 100 MHz.

CPU CLK	JP3	JP4
100 MHz	Short Pins 1-2	Short Pins 1-2
133 MHz	Short Pins 2-3	Short Pins 1-2
166 MHz	Short Pins 2-3	Short Pins 2-3

Installing The Motherboard

Install the motherboard in a system chassis (case). The board is a Micro ATX size motherboard. You can install this motherboard in an ATX case. Ensure your case has an I/O cover plate that matches the ports on this motherboard.

Install the motherboard in a case. Follow the case manufacturer's instructions to use hardware and internal mounting points on the chassis.



Connect the power connector from the power supply to the **ATX1** connector on the motherboard. **CPUPW1** is a +12V connector for CPU Vcore power.

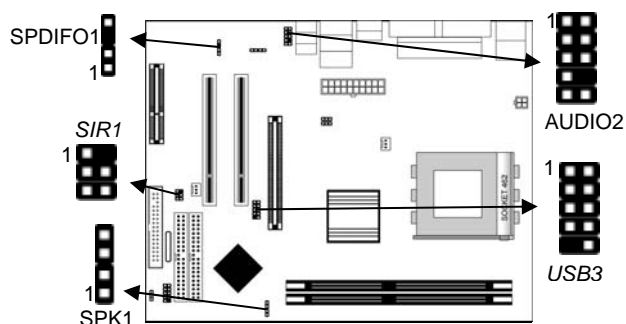
If there is a cooling fan installed in the system chassis, connect the cable from the cooling fan to the **SYSFAN1** fan power connector on the motherboard.

Connect the case switches and indicator LEDs to the **PANEL1** header.

Pin	Signal	Pin	Signal
1	HD_LED_P(+)	2	FP PWR/SLP(+)
3	HD_LED_N(-)	4	FP PWR/SLP(-)
5	RESET_SW_N(-)	6	POWER_SW_P(+)
7	RESET_SW_P(+)	8	POWER_SW_N(-)
9	RSVD_DNU	10	KEY

Connecting Optional Devices

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



SPK1: Speaker Header

Connect the cable from the PC speaker to the **SPK1** header on the motherboard.

Pin	Signal	Pin	Signal
1	+5V	2	NC
3	GND	4	SPKR

AUDIO2: Front Panel Audio Header

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

Pin	Signal	Pin	Signal
1	AUD_MIC	2	AUD_GND
3	AUD_MIC_BIAS	4	AUD_VCC
5	AUD_FPOUT_R	6	AUD_RET_R
7	HP_ON	8	KEY
9	AUD_FPOUT_L	10	AUD_RET_L

Note: If you want to connect the front panel sound jack, you have to remove jumper caps of Pin(5-6) and Pin(9-10) from the AUDIO2 header.

USB3: Front panel USB Header

The motherboard has 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 USB3 to connect the front-mounted ports to the motherboard.

Pin	Signal	Pin	Signal
1	VERG_FP_USBPWR0	2	VERG_FP_USBPWR0
3	USB_FP_P0(-)	4	USB_FP_P1(-)
5	USB_FP_P0(+)	6	USB_FP_P1(+)
7	GROUND	8	GROUND
9	KEY	10	NC

1. Locate the USB3 header on the motherboard.
2. Plug the bracket cable onto the USB3 header.
3. Remove a slot cover from one of the expansion slots on the system chassis. Install an extension bracket in the opening. Secure the extension bracket to the chassis with a screw.

SIR1: Infrared Port

The infrared port allows the wireless exchange of information between your computer and similarly equipped devices such as printers, laptops, Personal Digital Assistants (PDAs), and other computers.

Pin	Signal	Pin	Signal
1	NC	2	KEY
3	+5V	4	GND
5	IRTX	6	IRRX

1. Locate the infrared port **SIR1** header on the motherboard.
2. If you are adding an infrared port, connect the ribbon cable from the port to the SIR1 header and then secure the port to an appropriate place in your system chassis.

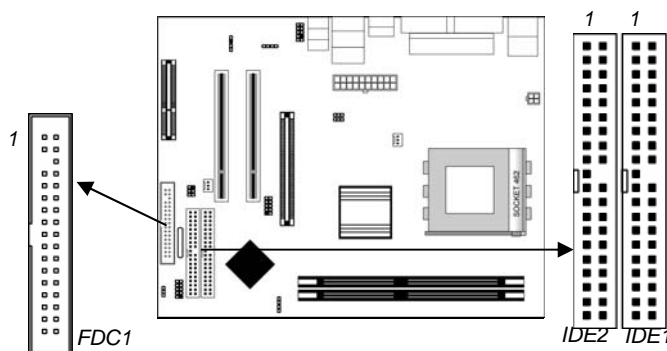
SPDIF01: S/PDIF Out Header

S/PDIF (Sony/Philips Digital Interface) is a standard audio transfer file format and allows the transfer of digital audio signals from one device to another without having to be converted first to an analog format. Via a specific audio cable, you can connect the SPDIF01 header (S/PDIF output) on the motherboard to the S/PDIF digital input on the external speakers or AC Decode devices.

Pin	Signal	Pin	Signal
1	SPDIFOUT	2	+5VA
3	KEY	4	GND

Installing Other Devices

Install and connect any other devices in the system following the steps below.



Floppy Disk Drive

The motherboard ships with a floppy disk drive cable that can support one or two drives. Drives can be 3.5" or 5.25" wide, with capacities of 360K, 720K, 1.2MB, 1.44MB, or 2.88MB.

Install your drives and connect power from the system power supply. Use the cable provided to connect the drives to the floppy disk drive connector **FDC1**.

IDE Devices

IDE devices include hard disk drives, high-density diskette drives, and CD-ROM or DVD-ROM drives, among others.

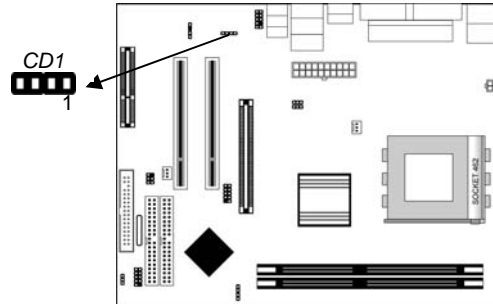
The motherboard ships with an IDE cable that can support one or two IDE devices. If you connect two devices to a single cable, you must configure one of the drives as Master and one of the drives as Slave. The documentation of the IDE device will tell you how to configure the device as a Master or Slave device. The Master device connects to the end of the cable.

Install the device(s) and connect power from the system power supply. Use the cable provided to connect the device(s) to the Primary IDE channel connector **IDE1** on the motherboard.

If you want to install more IDE devices, you can purchase a second IDE cable and connect one or two devices to the Secondary IDE channel connector **IDE2** on the motherboard. If you have two devices on the cable, one must be Master and one must be Slave.

Internal Sound Connections

If you have installed a CD-ROM drive or DVD-ROM drive, you can connect the drive audio cable to the onboard sound system.



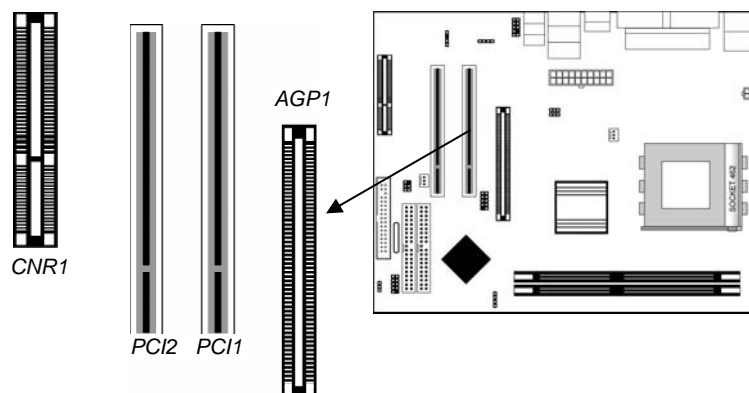
When you first start up your system, the BIOS should automatically detect your CD-ROM/DVD drive. If it doesn't, enter the Setup Utility and configure the CD-ROM/DVD drive that you have installed. On the motherboard, locate the 4-pin header **CD1**.

CD1

Pin	Signal
1	CD IN L
2	GND
3	GND
4	CD IN R

Expansion Slots

This motherboard has one AGP, one CNR and two 32-bit PCI slots.



Follow the steps below to install a PCI/AGP/CNR expansion card.

1. Locate the CNR, AGP or PCI slots on the motherboard.
2. Remove the blanking plate of the slot from the system chassis.
3. Install the edge connector of the expansion card into the slot.
Ensure the edge connector is correctly seated in the slot.
4. Secure the metal bracket of the card to the system chassis with a screw.

Chapter 3

BIOS Setup Utility

Introduction

The BIOS Setup Utility records settings and information of your computer, such as date and time, the type of hardware installed, and various configuration settings. Your computer applies the information to initialize all the components when booting up and basic functions of coordination between system components.

If the Setup Utility configuration is incorrect, it may cause the system to malfunction. It can even stop your computer booting properly. If it happens, you can use the clear CMOS jumper to clear the CMOS memory which has stored the configuration information; or you can hold down the **Page Up** key while rebooting your computer. Holding down the **Page Up** key also clears the setup information.

You can run the setup utility and manually change the configuration. You might need to do this to configure some hardware installed in or connected to the motherboard, such as the CPU, system memory, disk drives, etc.

Running the Setup Utility

Every time you start your computer, a message appears on the screen before the operating system loading that prompts you to “*Hit if you want to run SETUP*”. Whenever you see this message, press the **Delete** key, and the Main menu page of the Setup Utility appears on your monitor.

AMIBIOS SIMPLE SETUP UTILITY – VERSION 1.21.13 (C) 2000 American Megatrends, Inc. All Rights Reserved	
Standard CMOS Setup	Features Setup
Advanced Setup	CPU PnP Setup
Power Management Setup	Hardware Monitor
PCI / Plug and Play Setup	Change Password
Load Optimal Settings	Exit
Load Best Performance Settings	
Esc : Quit ↑ ↓ ← →: Select Item (Shift)F2 : Change Color F5 : Old Values F6 : Optimal values F7 : Best performance values F10 : Save&Exit	
Standards CMOS setup for changing time, date, hard disk type, etc.	

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 leave the setup utility, press the **Escape** key. To cycle through the Setup Utility’s optional color schemes hold down the **Shift** key and press **F2**.

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 of the items. Other options on the main menu page lead to dialog boxes requiring 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 default values. Press **F7** to install the setup utility with a set of high-performance values.

Standard CMOS Setup Page

Use this page to set basic information such as the date, the time, the IDE devices, and the diskette drives. If you press the F3 key, the system will automatically detect and configure the hard disks on the IDE channels.

AMIBIOS SETUP – STANDARD CMOS SETUP									
(C) 2000 American Megatrends, Inc. All Rights Reserved									
Date (mm/dd/yy) : Mon Apr 05, 2004									
Time (hh/mm/ss) : 13:51:23									
	Type	Size	Cyln	Head	WPcom	Sec	LBA Mode	Blk Mode	PIO 32Bit Mode
Pri Master	: Auto								On
Pri Slave	: Auto								On
Sec Master	: Auto								On
Sec Slave	: Auto								On
Floppy Drive A : 1.44 MB 3 1/2									
Floppy Drive B : Not Installed									
Month : Jan – Dec						ESC : Exit			
Day : 01 – 31						↑↓ : Select Item			
Year : 1980 – 2099						PU/PD/+/- : Modify			
						(Shift)F2 : Color			
						F3 : Detect All HDD			

Date & Time	Use these items to set the system date and time
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 <i>Auto</i> . If the <i>Auto</i> setting fails to find a hard disk drive, set it to <i>User</i> , and then fill in the hard disk characteristics (Size, Cyls, etc.) manually. If you have a CD-ROM drive, select the setting <i>CDROM</i> . If you have an ATAPI device with removable media (e.g. a ZIP drive or an LS-120) select <i>Floptical</i> .
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.

Advanced Setup Page

Use this page to set more advanced information about your system. Take some care with this page. Making changes can affect the operation of your computer.

AMIBIOS SETUP – ADVANCED SETUP		
(C) 2000 American Megatrends, Inc. All Rights Reserved		
Quick Boot	Enabled	
1 st Boot Device	IDE-0	
2 nd Boot Device	Floppy	
3 rd Boot Device	CD/DVD-0	
Try Other Boot Devices	Yes	
S.M.A.R.T. for Hard Disks	Disabled	
BootUp Num-Lock	On	
Floppy Drive Swap	Disabled	
Floppy Drive Seek	Disabled	
Password Check	Setup	
Boot To OS/2 > 64MB	No	
L2 Cache	Enabled	
System BIOS Cacheable	Enabled	
Graphic Win Size	64MB	
SDRAM Timing by SPD	Enabled	ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults
SDRAM CAS# Latency	2.5	
SDRAM Bank Interleave	Disabled	
Auto Detect DIMM/PCI Clk	Enabled	
Spread Spectrum	Disabled	

Quick Boot	If you enable this item, the system starts up more quickly by eliminating some of the power on test routines.
1 st Boot Device 2 nd Boot Device 3 rd 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 Device	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.
S.M.A.R.T. for Hard Disks	Enable this item if any IDE hard disks support the S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) feature.

BootUp Num-Lock	This item determines if the Num Lock key is active or inactive at system start-up time.
Floppy Drive Swap	If you have two diskette drives installed and you enable this item, drive A becomes drive B and drive B becomes drive A.
Floppy Drive Seek	If you enable this item, your system will check all floppy disk drives at start up. Disable this item unless you are using an old 360KB drive.
Password Check	If you have entered a password for the system, use this item to determine, if the password is required to enter the Setup Utility (<i>Setup</i>) or required both at start-up and to enter the Setup Utility (<i>Always</i>).
Boot to OS/2 > 64MB	Enable this item if you are booting the OS/2 operating system and you have more than 64MB of system memory installed.
L2 Cache	Leave these items enabled since all the processors that can be installed on this board have internal cache memory.
System BIOS Cacheable	If you enable this item, a segment of the system BIOS will be cached to main memory for faster execution.
Graphic Win Size	This item defines the size of aperture if you use a graphic adapter.
SDRAM Timing by SPD	This item enables or disables the SDRAM timing defined by the Serial Presence Detect electrical.
SDRAM CAS# Latency	This item determines the operation of SDRAM memory CAS (column address strobe). It is recommended that you leave this item at the default value. The 2T setting requires faster memory that specifically supports this mode.

SDRAM Bank Interleave	Enable this item to increase SDRAM memory speed. When enabled, separate memory banks are set for odd and even addresses, and upcoming byte of memory is accessible while refreshing the current byte.
Auto Detect DIMM/PCI Clk	When this item is enabled, BIOS will disable the clock signal of free DIMM/PCI slots.
Spread Spectrum	If you enable spread spectrum, it can significantly reduce the EMI(Electro-Magnetic Interference) generated by the system.

Power Management Setup Page

This page sets some of the parameters for system power management operation.

AMIBIOS SETUP – POWER MANAGEMENT SETUP (C) 2000 American Megatrends, Inc. All Rights Reserved		
ACPI Aware O/S	Yes	
Power Management	Enabled	
Suspend Time Out	Disabled	
Resume On RTC Alarm	Disabled	
RTC Alarm Date	15	ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults
RTC Alarm Hour	12	
RTC Alarm Minute	30	
RTC Alarm Second	30	
LAN/Ring Power On	Disabled	
Keyboard Power On	Disabled	
Wake-Up Key	Any Key	
Wake-Up Password	N/A	

ACPI Aware O/S	This item supports ACPI (Advanced Configuration and Power management Interface). Use this item to enable or disable the ACPI feature.
Power Management	This item enables or disables a power management scheme. If you enable power management, there are some options for you to decide the power management operation. Both APM and ACPI are supported.

Suspend Time Out	This item sets up the timeout (minutes) for the Suspend mode. The computer will be a power-saving Suspend mode if the system has been inactive after the setup time
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.
LAN/Ring Power On	The system can be turned off with a software command. If you enable this item, the system can automatically resume if there is an incoming call on the Modem. You must use an ATX power supply in order to use this feature.
Keyboard Power On Wake- Up Key Wake- Up Password	If you enable this item, system can automatically resume by pressing any key or power key on the keyboard, or typing in the password. You must use an ATX power supply in order to use this feature.

PCI / Plug and Play Setup Page

This page sets some of the parameters for devices installed on the PCI bus and devices that use the system plug and play capability.

AMIBIOS SETUP – PCI / PLUG AND PLAY SETUP (C) 2000 American Megatrends, Inc. All Rights Reserved		
Share Memory Size	32MB	<div>ESC : Quit ↑↓←→ : Select Item</div> <div>F1 : Help PU/PD/+/- : Modify</div> <div>F5 : Old Values (Shift)F2 : Color</div> <div>F6 : Load BIOS Defaults</div> <div>F7 : Load Setup Defaults</div>
Primary Graphics Adapter	PCI	
Allocate IRQ to PCI VGA	Yes	
PCI IDE BusMaster	Disabled	

Share Memory Size	This item lets you allocate a portion of the main memory for the onboard VGA display application with 8/16/32MB options.
Primary Graphics Adapter	This item indicates if the primary graphics adapter uses the PCI or the AGP bus. The default PCI setting still lets the onboard display work and allows the use of a second display card installed in a PCI slot.
Allocate IRQ to PCI VGA	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	This item enables or disables the DMA under DOS mode. We recommend you to leave this item at the default value.

Load 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 recommend that users enter this option to load optimal values for accessing the best performance.*

Load Best Performance 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 best-performance default values. These default values are quite demanding and your system might not function properly if you are using slower memory chips or other low-performance components.

Features Setup Page

This page sets some of the parameters for peripheral devices connected to the system.

AMIBIOS SETUP – FEATURES SETUP		
(C) 2000 American Megatrends, Inc. All Rights Reserved		
OnBoard FDC	Enabled	
OnBoard Serial PortA	3F8/COM1	
OnBoard IR Port	Disabled	
OnBoard Parallel Port	378	
Parallel Port Mode	ECP	
Parallel Port IRQ	7	ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults
Parallel Port DMA	3	
OnBoard PCI IDE	Both	
Audio Device	Enabled	
Modem Device	Auto	
Ethernet Device	Enabled	
Onboard USB Function	Enabled	
USB Function For DOS	Disabled	
ThumbDrive for DOS	Disabled	

OnBoard FDC	This item enables or disables the onboard floppy disk drive interface.
OnBoard Serial PortA	These items enable or disable the onboard COM1 serial port, and assign a port address.
OnBoard IR Port	This item enables or disables the Infrared port, and assigns a port address. If you select a specific address, the resources are assigned to the IR port, and you can use the five items below to determine the operation of the IR port
Onboard Parallel Port	This item enables or disables the onboard LPT1 parallel port, and assigns a port address. The Auto setting will detect and available address.
Parallel Port Mode	This item decides the parallel port mode. You can select SPP (Standard Parallel Port), ECP (Extended Capabilities Port), EPP (Enhanced Parallel Port), or ECP + EPP.
Parallel Port IRQ	This item assigns either IRQ 5 or 7 to the parallel port.
Parallel Port DMA	This item assigns a DMA channel to the parallel port. The options are 0, 1 and 3.
OnBoard PCI IDE	This item enables or disables either or both of the onboard Primary and Secondary IDE channels.
Audio Device	This item enables or disables the onboard AC'97 audio chip.
Modem Device	This item enables or disables the onboard AC'97 modem chip.
Ethernet Device	This item enables or disables the onboard Ethernet LAN.
Onboard USB Function	Enable this item if you plan to use the USB ports on this motherboard.
USB Function For	Enable this item if you plan to use the USB

DOS	ports on this mainboard in a DOS environment.
ThumbDrive for DOS	Enable this item to make a small portion of memory storage device for the USB ports.

CPU PnP Setup Page

This page lets you manually configure the motherboard for the CPU. The system will automatically detect the kind of CPU that you have installed and make the appropriate adjustments to the items on this page.

AMIBIOS SETUP – CPU PnP SETUP		
©2000 American Megatrends, Inc. All Rights Reserved		
CPU Over-clocking Func.	Disabled	ESC : Quit ↑↓↔ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load Optimal values F7 : Load Best performance values
CPU Frequency	166 MHz	
CPU Over-Clocking Freq.	N/A	
DRAM Frequency	Auto	

CPU Over-Clocking Func.	This item enables or disables the CPU over-clocking function installed in your system.
CPU/DRAM Frequency Ratio	This item adjusts the CPU/DRAM frequency installed in your system.
CPU Over-Clocking Frequency	This item decides CPU over-clocking frequency installed in your system. If the over-clocking fails, please turn off the system power. And then, hold the PageUp key (similar to the Clear CMOS function) and turn on the power, the BIOS will recover the safe default.

Hardware Monitor Page

This page sets some of the parameters for the hardware monitoring function of this motherboard.

AMIBIOS SETUP – HARDWARE MONITOR (C) 2000 American Megatrends, Inc. All Rights Reserved		
*** System Hardware ***		
Vcore	1.676V	
Vdimm	2.512V	
Vivdd	2.512V	
Vcc5V	4.972V	
SB3V	3.280V	
SYSTEM Fan Speed	0 RPM	ESC : Quit ↑↓←→ : Select Item F1 : Help PU/PD/+/- : Modify F5 : Old Values (Shift)F2 : Color F6 : Load BIOS Defaults F7 : Load Setup Defaults
CPU Fan Speed	3515 RPM	
SYSTEM Temperature	30°C/86°F	
CPU Temperature	52°C/125°F	

System / CPU Temperature	These items display CPU and system temperature measurement.
FANs & Voltage Measurements	These items indicate cooling fan speeds in RPM and the various system voltage measurements.

Change Password

If you highlight this item and press **Enter**, a dialog box appears which lets you enter a Supervisor password. You can enter no more than six letters or numbers. Press **Enter** after you have typed in the password. A second dialog box asks you to retype the password for confirmation. Press **Enter** after you have retyped it correctly. The password is then required to access the Setup Utility or for that and at start-up, depending on the setting of the Password Check item in Advanced Setup.

Change or Remove the Password

Highlight this item, press Enter and type in the current password.
At the next dialog box, type in the new password, or just press
Enter to disable password protection.

Exit

Highlight this item and press **Enter** to save the changes that you
have made in the Setup Utility configuration and exit the program.
When the Save and Exit dialog box appears, press **Y** to save and
exit, or press **N** to exit without saving.

Chapter 4

Software & Applications

Introduction

This chapter describes the contents of the support CD-ROM that comes with the motherboard package.

The support CD-ROM contains all useful software, necessary drivers and utility programs to properly run our products. More program information is available in a README file, located in the same directory as the software.

To run the support CD, simply insert the CD into your CD-ROM drive. An Auto Setup screen automatically pops out, and then you can go on the auto-installing or manual installation depending on your operating system.

If your operating system is Windows 98/ME/2000/XP, it will automatically install all the drivers and utilities for your motherboard; if Windows NT or manual installation, please follow the instructions described as the Installing under Windows NT or Manual Installation section.

Installing Support Software

1. Insert the support CD-ROM disc in the CD-ROM drive.
2. When you insert the CD-ROM disc in the system CD-ROM drive, the CD automatically displays an Auto Setup screen.
3. The screen displays three buttons of **Setup**, **Browse CD** and **Exit** on the right side, and three others **Setup**, **Application** and **ReadMe** at the bottom. Please see the following illustration.



The **Setup** button runs the software auto-installing program as explained in next section.

The **Browse CD** button is a standard Windows command that you can check the contents of the disc with the Windows 98 file browsing interface.

The **Exit** button closes the Auto Setup window. To run the program again, reinsert the CD-ROM disc in the drive; or click the CD-ROM driver from the Windows Explorer, and click the Setup icon.

The **Application** button brings up a software menu. It shows the bundled software that this motherboard supports.

The **ReadMe** brings you to the Install Path where you can find out path names of software driver.

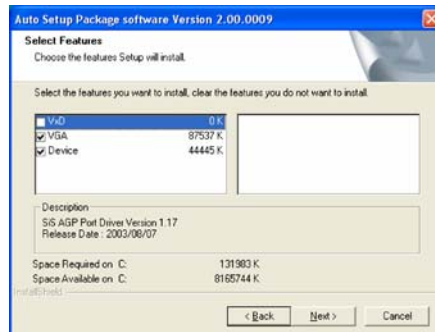
Auto-Installing under Windows 98/ME/2000/XP

If you are under Windows 98/ME/2000/XP, please click the **Setup** button to run the software auto-installing program while the Auto Setup screen pops out after inserting the support CD-ROM:

1. The installation program loads and displays the following screen. Click the **Next** button.



2. Select the items that you want to setup by clicking on it (the default options are recommended). Click the **Next** button to proceed.



3. The support software will automatically install.

Once any of the installation procedures start, software is automatically installed in sequence. You need to follow the onscreen instructions, confirm commands and allow the computer to restart as few times as needed to complete installing whatever software you selected. When the process is finished, all the support software will be installed and start working.

Installing under Windows NT or Manual Installation

If you are under Windows NT, the auto-installing program doesn't work out; or you have to do the manual installation, please follow this procedure while the Auto Setup screen pops out after inserting the support CD-ROM:

1. Click the **ReadMe** to bring up a screen, and then click the Install Path at the bottom of the screen.
2. Find out your motherboard model name and click on it to obtain its correct driver directory.
3. Install each software in accordance with the corresponding driver path.

Bundled Software Information

All bundled software available on the CD-ROM is for users' convenience. You can install bundled software as follows:

1. Click the **Application** button while the Auto Setup screen pops out after inserting the support CD-ROM.
2. A software menu appears. Click the software you want to install.
3. Follow onscreen instructions to install the software program step by step until finished.