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Version:

User's Manual V1.0 for A6VMX Series motherboard.
P/N: 3A220JS00-000-G

Symbol description:



Note: refers to important information that can help you to use motherboard better.



Attention: indicates that it may damage hardware or cause data loss, and tells you how to avoid such problems.



Warning: means that a potential risk of property damage or physical injury exists.

More information:

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WEEE: The use of the symbol indicates that this product may not be treated as household waste. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Declaration of conformity



HON HAI PRECISION INDUSTRY COMPANY LTD
66 , CHUNG SHAN RD., TU-CHENG INDUSTRIAL DISTRICT,
TAIPEI HSIEN, TAIWAN, R.O.C.

declares that the product

Motherboard
A6VMX/A6VMX-S/A6VMX-K

is in conformity with

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

- ☒ EN 55022: 1998/A2: 2003 Limits and methods of measurements of radio disturbance characteristics of information technology equipment
- ☒ EN 61000-3-2:2000 Electromagnetic compatibility (EMC)
Part 3: Limits
Section 2: Limits for harmonic current emissions
(equipment input current ≤ 16 A per phase)
- ☒ EN 61000-3-3/A1:2001 Electromagnetic compatibility (EMC)
Part 3: Limits
Section 2: Limits of voltage fluctuations and flicker in low-voltage supply systems for equipment with rated current ≤ 16 A
- ☒ EN 55024/A2:2003 Information technology equipment-Immunity characteristics limits and methods of measurement

Signature :

Place / Date : TAIPEI/2007

Printed Name : James Liang

Position/ Title : Assistant President

Declaration of conformity

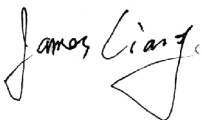


Trade Name:	FOXCONN
Model Name:	A6VMX/A6VMX-S/A6VMX-K
Responsible Party:	PCE Industry Inc.
Address:	458 E. Lambert Rd. Fullerton, CA 92835
Telephone:	714-738-8868
Facsimile:	714-738-8838
Equipment Classification:	FCC Class B Subassembly
Type of Product:	Motherboard
Manufacturer:	HON HAI PRECISION INDUSTRY COMPANY LTD
Address:	66 , CHUNG SHAN RD., TU-CHENG INDUSTRIAL DISTRICT, TAIPEI HSIEN, TAIWAN, R.O.C.

Supplementary Information:

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

Tested to comply with FCC standards.

Signature : 

Date : 2007

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i Attention:

1. Attach the CPU and heatsink using silica gel to ensure full contact.
2. It is suggested to select high-quality, certified fans in order to avoid damaging the motherboard and CPU due to high temperature.
3. Never turn on the computer if the CPU fan is not properly installed.
4. Ensure that the DC power supply is turned off before inserting or removing expansion cards or other peripherals, especially when you insert or remove a memory module. Failure to switch off the DC power supply may result in serious damage to your system or memory module.

i Attention:

We cannot guarantee that your system will operate normally while over-clocked. Normal operation depends on the over-clock capacity of your device.

i Attention:

Since BIOS programs are upgraded from time to time, the BIOS description in this manual is just for reference. We do not guarantee that the content of this manual will remain consistent with the actual BIOS version at any given time in the future.

i Attention:

The pictures of objects used in this manual are just for your reference. Please refer to the physical motherboard.

i Attention:

Please visit the Foxconn global English website (<http://www.foxconnchannel.com>) to download the latest BIOS file and drivers for this motherboard.

Chapter 1

Thank you for buying Foxconn's A6VMX Series motherboard. This series of motherboard is one of our new products, and offers superior performance, reliability and quality, at a reasonable price. This motherboard adopts the advanced AMD 690V+SB600 chipset, providing a computer platform with high integration, powerful compatibility and high performance-price ratio for users.

This chapter includes the following information:

- ❖ Specifications
- ❖ Jumpers

Chapter 1 Main Features

Specifications - - English

Size	• Micro ATX form factor : 244mm x 208mm
CPU	• Socket AM2 for AMD Athlon™ 64 X2 ,Athlon™ X2 ,Athlon™ 64 and Sempron™ processors • Socket AM2+ for AMD Phenom™ processor • Supports HyperTransport™ Technology
Chipset	• Northbridge: AMD 690V • Southbridge: AMD SB 600
Memory	• 2 x 240-pin DIMM slots • Supports Dual-Channel DDR2 800/667/533 • Supports up to 4GB
Expansion Slots	• 1 x PCI Express x16 slot • 1 x PCI Express x1 slot • 2 x PCI slots
Audio	• Realtek 6-channel Audio CODEC / Realtek 8-channel Audio CODEC • Supports S/PDIF output, Jack-Sensing function, Intel® High Definition Audio
LAN	• Realtek 10/100 Mb/s LAN Controller / Realtek Gigabit LAN Controller
Storage	• 2 x Ultra DMA 133/100/66 devices • 4 xSATA 300MB/s devices • RAID 0, RAID 1, RAID 10 configuration
Rear Panel I/O	• 1 x PS/2 Mouse Port • 1 x PS/2 Keyboard Port • 1 x Serial Port (COM1) • 1 x Parallel Port • 1 x VGA Port • 4 x USB 2.0 Ports • 1 x RJ45 LAN Port • 6/8-channel Audio Ports

(continued on the next page)

Chapter 1 Main Features

Internal I/O Connectors	• 2 x USB 2.0 headers (supports 4 USB 2.0 ports) • 4 x SATA connectors • 1 x Floppy connector • 1 x IDE connector • 1 x Chassis intruder header (INTR) • 1 x CD_IN header • 1 x S/PDIF_OUT header (optional) • 1 x TPM header (optional) • 1 x TV_OUT header • 1 x COM2 port header (optional) • 1 x Front Audio connector • 1 x 24-pin ATX Power Connector • 1 x 4-pin AUX Power Connector • 1 x IrDA header • 1 x CPU Fan connector • 1 x System Fan connector • 1 x NB Fan connector (optional) • Front panel connector
Support CD	• Driver • Utility

• Specifications are subject to change without notice

第一章 主要性能

产品规格- -简体中文

尺寸	• mATX 结构: 244mm x 208mm
中央处理器	• 支持Socket AM2 规格 AMD Athlon™ 64 X2,Athlon™ X2,Athlon™ 64 和 Sempron™ 处理器 • 支持Socket AM2+ 规格 AMD Phenom™ 处理器 • 支持 HyperTransport™ 技术
芯片组	• 北桥: AMD 690V • 南桥: AMD SB 600
内存	• 2 个 240针脚内存插槽 • 支持双通道 DDR2 800/667/533 • 内存总容量最大可达 4GB
扩展槽	• 1 个 PCI Express x16 插槽 • 1 个 PCI Express x1 插槽 • 2 个 PCI 插槽
音频	• Realtek 6 声道音频编解码器/ Realtek 8 声道音频编解码器 • 支持 S/PDIF 输出,Jack-Sensing 功能, Intel® High Definition Audio
LAN	• Realtek Gigabit LAN Controller/ Realtek 10/100 Mb/s LAN Controller
存储	• 2 个 Ultra DMA 133/100/66设备 • 4 个 SATA 300MB/s 设备 • RAID 0,RAID1,RAID 10
后面板I/O	• 1 个 PS/2 鼠标接口 • 1 个 PS/2 键盘接口 • 1 个 串行接口 (COM1) • 1 个 并行接口 • 1 个 VGA 接口 • 4 个 USB 2.0 接口 • 1 个 RJ45 网络接口 • 6/8声道音频接口

(下页继续)

内置连接器	• 2 个 USB 2.0 接头（提供 4 USB 2.0 接口） • 4 个 SATA 接头 • 1 个 软驱接口 • 1 个 IDE 接口 • 1 个 机箱开启侦测接头 • 1 个 CD_IN 接头 • 1 个 S/PDIF_OUT 接头（选配） • 1 个 TPM 接头（选配） • 1 个 TV_OUT 接头 • 1 个 COM2 接头（选配） • 1 个 前置音频接头 • 1 个 24 针 ATX 电源接口 • 1 个 4 针 AUX 电源接口 • 1 个 红外线通讯接头 • 1 个 CPU 风扇接头 • 1 个 系统风扇接头 • 1 个 北桥风扇接头（选配） • 前端面板接头
实用程序光盘	• 驱动程序 • 应用程序

• 规格若有任何更改，恕不另行通知

Kapitel 1 Hauptmerkmale

Technische Daten--Deutsch

Größe	• Micro ATX-Formfaktor: 244 mm x 208 mm
CPU	• AM2-Sockel für AMD Athlon™ 64 X2, Athlon™X2, Athlon™ 64 und Sempron™-Prozessoren • AM2+-Sockel für AMD Phenom™-Prozessor • Unterstützt HyperTransport™-Technologie
Chipsatz	• Northbridge: AMD 690V • Southbridge: AMD SB600
Speicher	• 2 240-polige DIMM-Steckplätze • Unterstützt Dual-Channel DDR2 800/667/533 • Unterstützt bis 4 GB
Erweiterungssteckplätze	• 1 x PCI Express x16-Steckplatz • 1 x PCI Express x1-Steckplatz • 2 x PCI-Steckplätze
Audio	• Realtek 6-Kanal-Audio CODEC/ Realtek 8-Kanal-Audio CODEC • Unterstützt S/PDIF-Ausgang, Anschlusserkennung, Intel® High Definition Audio
LAN	• Realtek Gigabit LAN Controller/ Realtek 10/100 Mb/s LAN Controller
Speichergeräte	• 2 x Ultra DMA 133/100/66-Geräte • 4 x SATA-Geräte, 300 MB/s • RAID-Konfiguration 0, 1, 10
I/O-Anschlüsse an der Rückseite	• 1 x PS/2-Mausanschluss • 1 x PS/2-Tastaturanschluss • 1 x Seriellanschluss(COM1) • 1 x Parallelanschluss • 1 x VGA-Port • 4 x USB 2.0-Ports • 1 x RJ45-LAN-Port • 6/8-Kanal-Audio-Port

(Fortsetzung auf der nächsten Seite)

Interne I/O-Anschlüsse	• 2 x USB 2.0-Anschlussleisten (Unterstützung für 4 USB 2.0-Ports) • 4 x SATA-Anschlüsse • 1 x Diskettenlaufwerkanschluss • 1 x IDE-Anschluss • 1 x Gehäuse-offen-Anschluss (INTR) • 1 x CD_IN-Anschluss • 1 x S/PDIF_OUT-Anschluss(optional) • 1 x TPM-Anschluss(optional) • 1 x TV_OUT-Anschluss • 1 x COM2-Port-Anschluss(optional) • 1 x Front-Audio-Anschluss • 1 x ATX Power, 24-polig-Anschluss • 1 x AUX Power, 4-polig-Anschluss • 1 x IrDA-Anschluss • 1 x CPU-Lüfter-Anschluss • 1 x Systemlüfter-Anschlüsse • 1 x NB- Lüfter (optional) • Frontbedienfeld-Anschluss
Support-CD	• Treibe • Dienstprogramme

• Angaben können sich ohne Vorankündigung ändern.

Capítulo 1 Principales funciones

Características- -Español

Tamaño	• Micro ATX factor de forma: 244mm x 208mm
CPU	• Conector AM2 para procesadores AMD Athlon™ 64 X2, Athlon™ X2, Athlon™ 64 y Sempron™ • Conector AM2+ para procesador AMD Phenom™ • Compatible con HyperTransport™
Conjunto de chips	• Northbridge: AMD 690V • Southbridge: AMD SB 600
Memoria	• 2 x ranuras DIMM de 240-pin • Compatible DDR 2 de doble canal 800/667/533 • Compatible con hasta 4GB
Ranuras de expansión	• 1 x ranuras PCI Express x16 • 1 x ranura PCI Express x1 • 2 x ranuras PCI
Audio	• Realtek 6 canales Audio CODEC / Realtek 8 canales Audio CODEC • Compatible salida S/PDIF, sensible a conexión, sonido Intel® de Alta Definición
LAN	• Realtek Gigabit LAN Controller / Realtek 10/100 Mb/s LAN Controller
Almacenamiento	• 2 X dispositivos Ultra DMA 133/100/66 • Dispositivo 4 SATA 300MB/s • Configuración RAID 0, RAID 1, RAID 10
Panel de E/S trasero	• 1 x Puerto de ratón PS/2 • 1 x Puerto de teclado PS/2 • 1 x Puerto Serie(COM1) • 1 x Puerto Paralelo • 1 x Puerto de VGA • 4 x Puertos USB 2.0 • 1 x Puerto LAN RJ45 • Puerto de 6/8 canales Audio

(continúa en la página siguiente)

Capítulo 1 Principales funciones

Conectores internos de E/S	• 2 x Cabeceras USB 2.0 (admite 4 puertos USB 2.0) • 4 x Conectores SATA • 1 x Conector de disco flexible • 1 x Conector de IDE • 1 x Cabecera de intrusos en bastidor (INTR) • 1 x Cabecera de CD_IN • 1 x Cabecera S/PDIF_OUT(opcional) • 1 x Cabecera TPM (opcional) • 1 x Cabecera TV_OUT • 1 x Conector de puerto COM2 (opcional) • 1 x Conector de Audio frontal • 1 x Conector de 24-pin ATX Power • 1 x Conector de 4-pin AUX Power • 1 x Cabecera de IrDA • 1 x Cabecera de Ventilador de CPU • 1 x Conectora de Ventiladores Sistema • 1 x Ventilador NB(opcional) • Conector de panel frontal
CD de soporte	• Controlador • Utilidades

- Las características se encuentran sujetas a cambios sin aviso previo.

Capítulo 1 Principais características

Especificações--Português

Tamanho	• Factor de forma Micro ATX de 244 x 208 mm
CPU	• Socket AM2 para processadores AMD Athlon™ 64 X2, Athlon™ X2, Athlon™ 64 e Sempron™ • Socket AM2+ para processador AMD Phenom™ • Suporta a tecnologia HyperTransport™
Chipset	• Northbridge: AMD 690V • Southbridge: AMD SB 600
Memória	• 2 ranhuras DIMM de 240 pinos • Suporta módulos de memória DDR2 800/667/533 de canal duplo • Suporta até 4 GB
Ranhuras de expansão	• 1 ranhura PCI Express x16 • 1 ranhura PCI Express x1 • 2 ranhuras PCI
Áudio	• Realtek com 6 canais, codec de áudio / Realtek 8 canais, codec de áudio • Suporta saída S/PDIF, função Jack-Sensing, áudio de alta definição da Intel®
LAN	• Realtek Gigabit LAN Controller / Realtek 10/100 Mb/s LAN Controller
Armazenamento	• 2 dispositivos Ultra DMA 133/100/66 • 4 dispositivos SATA de 300 MB/s • Configuração RAID 0, RAID1, RAID10
Entrada/Saída pelo painel traseiro	• 1 x Porta para rato PS/2 • 1 x Porta para Teclado PS/2 • 1 x Porta série (COM1) • 1 x Porta paralela • 1 x Porta VGA • 4 x Portas USB 2.0 • 1 x Porta LAN RJ45 • Porta 6/8 canais, áudio

(continua na página seguinte)

Capítulo 1 Principais características

Conectores internos de entrada/saída	• 2 x Conectores USB 2.0 (para 4 portas USB 2.0) • 4 x Conectores SATA • 1 x Conector da unidade de disquetes • 1 x Conector IDE • 1 x Conector para detecção de intrusão no chassis(INTR) • 1 x Conector CD_IN • 1 x Conector S/PDIF_OUT (opcional) • 1 x Conector TPM (opcional) • 1 x Conector TV_OUT (opcional) • 1 x Conector da porta COM2 (opcional) • 1 x Conector Áudio frontal • 1 x Conector de alimentação ATX de 24 pinos • 1 x Conector de alimentação auxiliar de 4 pinos • 1 x Conector IrDA • 1 x Conector da ventoinha da CPU • 1 x Conector ventoinha do sistema • 1 x Ventoinha NB(opcional) • Conector de painel frontal
CD de suporte	• Controlador • Utilitários

• As especificações estão sujeitas a alteração sem aviso prévio.

Capitolo 1 Caratteristiche principali

Specifiche- -Italiano

Dimensioni	• Formato micro ATX: 244 mm x 208 mm
CPU	• Socket AM2 per processori AMD Athlon™ 64 X2, Athlon™ X2, Athlon™ 64 e Sempron™ • Socket AM2+ per processor AMD Phenom™ • Supporto tecnologia HyperTransport™
Chipset	• Northbridge: AMD 690V • Southbridge: AMD SB600
Memoria	• 2 alloggi DIMM 240 pin • Supporto DDR2 800/667/533 Dual-Channel • Supporto fino a 4GB
Alloggi d'espansione	• 1 Alloggio PCI Express x16 • 1 Alloggio PCI Express • 2 Alloggi PCI
Audio	• Realtek 6-canali audio CODEC / Realtek 8-canali audio CODEC • Supporto output S/PDIF, funzione di rilevamento connettori, Intel® High Definition Audio
LAN	• Realtek Gigabit LAN Controller / Realtek 10/100 Mb/s LAN Controller
Archivio	• 2 Dispositivi Ultra DMA 133/100/66 • 4 dispositivi SATA 300MB/s • Configurazione RAID 0, RAID1,RAID10
Pannello posteriore I/O	• 1 x Porta mouse PS/2 • 1 x Porta tastiera PS/2 • 1 x Porta Seriale (COM1) • 1 x Porta Parallela • 1 x Porta VGA • 4 x Porta USB 2.0 • 1 x Porta LAN RJ45 • Porta 6/8-canali audio

(segue alla pagina successiva)

Capitolo 1 Caratteristiche principali

Connettori I/O interni	• 2 x Collettori USB 2.0 (supportano 4 porte USB 2.0) • 4 x Connettori SATA • 1 x Connettore Floppy • 1 x Connettore IDE • 1 x Collettore intrusione telaio (INTR) • 1 x Collettore CD_IN • 1 x Collettore S/PDIF_OUT (optional) • 1 x CollettoreTPM (optional) • 1 x Collettore TV_OUT • 1 x Collettore porta COM2 (optional) • 1 x Connettore Audio frontale • 1 x Connettore potenza ATX 24 pin • 1 x Connettore potenza AUX 4 pin • 1 x Connettore IrDA • 1 x Connettore ventolina CPU • 1 x Connettore ventolina di sistema • 1 x Ventolina NB (optional) • Connettore pannello frontale
CD di supporto	• Driver • Utilità

- Le specifiche tecniche sono soggette a cambiamenti senza preavviso.

Глава 1 Основные характеристики

Технические характеристики- -Русский

Размер	• Форм-фактор микро-ATX размером 244 x 208 мм
Процессор	• Гнездо AM2 для процессоров AMD Athlon™ 64 X2, Athlon™ X2, Athlon™ 64 и Sempron™ • Гнездо AM2+ для процессор AMD Phenom™ • Поддержка технологии HyperTransport™
Набор микросхем	• Северный мост: AMD 690V • Южный мост: AMD SB 600
Память	• 2 240-контактных гнезда DIMM • Поддержка Двухканальная память DDR2 800, 667, 533 • Поддержка до 4 Гб
Слоты расширения	• Один слот PCI Express x16 • Один слот PCI Express x1 • 2 слота PCI
Звук	• Realtek 6 каналов, звуковой КОДЕК / Realtek 8 каналов, звуковой КОДЕК • Поддержка Выход S/PDIF, функция определения разъема, поддержка технологии Intel® High Definition Audio
ЛВС	• Realtek Gigabit ЛВС / Realtek ЛВС10/100 Мбит/с
Устройство хранения	• 2 устройств с интерфейсом Ultra DMA 133, 100, 66 • 4 устройств с интерфейсом SATA и скоростью передачи данных 300 Мб/с • Конфигурации RAID 0, RAID 1, RAID10
Входы и выходы на задней панели	• 1 Порт мыши PS/2 • 1 Порт Клавиатура PS/2 • 1 Последовательный порт (COM1) • 1 Параллельный порт • 1 Порт VGA • 4 Порты USB 2.0 • 1 Разъем ЛВС RJ45 • Порт 6, 8 каналов, звуковой

(продолжение на следующей странице)

Глава 1 Основные характеристики

Встроенные входы и выходы	• 2 Разъемы USB 2.0 (поддержка 4 портов USB 2.0) • 4 Разъемы SATA • 1 Разъем дисковод гибких дисков • 1 Разъем IDE • 1 Разъем датчика открывания корпуса (INTR) • 1 Разъем CD_IN • 1 Разъем S/PDIF_OUT (дополнительный) • 1 Разъем TPM (дополнительный) • 1 Разъем ТВ-выход • 1 Разъем порт COM2 (дополнительный) • 1 Передний звуковой разъем • 1 Разъем 24-контактный ATX • 1 Разъем 4-контактный AUX • 1 ИК-порт • 1 Разъем Вентилятор процессора • 1 Разъемы системный вентилятор • 1 Вентилятор северного моста (дополнительный) • Передняя панель разъем
Поддержка компакт-дисков	• Драйвер • Служебная программа

- Технические характеристики могут изменяться без уведомления.

الفصل 1 الخصائص الرئيسية

المواصفات - العربية

الحجم	• حاوية من نوع Micro ATX مقاس 244 مم × 208 مم
وحدة المعالجة المركزية	• مقبس AM2 لمعالجات AMD AthlonTM64X2 و AthlonTMX2 و AthlonTM 64 and SempronTM • مقبس AM2+ لمعالجات AMD PhenomTM • دعم تقنية HyperTransportTM
الرقائق	• لجسر الشمالي (Northbridge): AMD 690V • لجسر الجنوبي (Southbridge): AMD SB 600
الذاكرة	• عدد 2 قحت DIMM × 240 ميبا • دعم التصميم ثنائي القناة Dual-Channel DDR2 800/667/533 • دعم يصل إلى 4 جيجا بايت
فتحت التوسعة	• عدد 1 قحة x16 PCI Express • عدد 1 قحة x1 PCI Express • عدد 2 فتحات PCI
الصوت	• ترميز صوتي بست قنوات بتقنية Realtek/ترميز صوتي ثمان قنوات بتقنية Realtek • دعم خرج S/PDIF، وظيفة استشعار المقياس، تقنية Intel® High Definition Audio
شبكة الاتصال المحلية	• Realtek 10/100 Mb/s LAN Controller / Realtek Gigabit LAN Controller
التخزين	• عدد 2 أجهزة Ultra DMA 133/ 100/66 • عدد 4 أجهزة SATA 300MB/s • تهيئة RAID 0, RAID 1, RAID 10
منفذ الدخل/الخروج للوحة الخلفية	• عدد 1 منفذ ماوس PS/2 • عدد 1 منفذ لوحة مفاتيح PS/2 • عدد 1 منفذ تسلسلي (COM1) • عدد 1 منفذ متوازي • عدد 1 منفذ VGA • عدد 4 منفذ USB 2.0 • عدد 1 منفذ شبكة اتصال محلية RJ45 • منفذ صوتي بست / ثمان قنوات بتقنية

تابع الصفحة التالية

الفصل 1 الخصائص الرئيسية

• عدد 2 أطراف توصيل USB 2.0 (تدعم 4 منافذ USB 2.0) • عدد 4 منافذ توصيل SATA • عدد 1 منفذ توصيل محرك الأقراص المرنة • عدد 1 منفذ توصيل IDE • عدد 1 طرف توصيل Intruder للبيكل (INTR) • عدد 1 طرف توصيل CD_IN • عدد 1 طرف توصيل S/PDIF_OUT (اختياري) • عدد 1 طرف توصيل TPM (اختياري) • عدد 1 طرف توصيل خرج التلفزيون TV_OUT • عدد 1 طرف توصيل COM2 (اختياري) • موصل الصوت الأمامي • عدد 1 موصل طاقة ATX ٤٠ 24 دبوس • عدد 1 موصل طاقة AUX 4 × دبائيس • عدد 1 طرف توصيل IrDA • عدد 1 مروحة لوحدة المعالجة المركزية • عدد 1 موصل لمروحة النظام • عدد NB1 مروحة (اختياري) • موصل اللوحة الأمامية	منافذ توصيل الدخل/الخروج الداخلية
• برنامج التشغيل • الأدوات	عم القرص المدم

• قد تتغير المواصفات بدون إخطار مسبق.

Chapter 1 Main Features

Jumpers

This section explains how to setup jumpers. You should read the following content carefully prior to modifying any jumper settings.

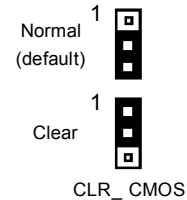
Attention

The jumpers on the motherboard, pin 1 can be identified by the bold silkscreen next to it. And in this manual, pin 1 is simply labeled as “1”.

Clear CMOS Jumper: CLR_CMOS

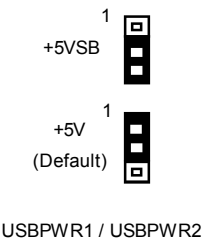
The CLR_CMOS jumper allows you to clear the data in CMOS. The data includes system setup information such as system password, data, time, and system setup parameters. To clear and reset the system parameters to default setup, please do as follows:

1. Turn off the computer and unplug the power cord from the power supply.
2. Move the jumper cap from pins 2-3 (default) to pins 1-2. Keep the cap on pins 1-2 for several seconds, then move the cap back to pins 2-3.
3. Plug the power cord and turn on the computer.



USB device wake-up Jumper: USBPWR1/USBPWR2

1. Set the jumper to pins 1-2 (+5V) to wake up the computer from S1 sleep mode using the connected USB devices.
2. Set the jumper to pins 2-3 (+5VSB) to wake up the computer from S3 and S4 sleep modes using the connected USB devices. At the same time, a corresponding setting must be set in BIOS as below:
Set “CMOS Setup”=>“Power Management Setup”=>“Wake on USB Devices” to “Enabled”.



Note

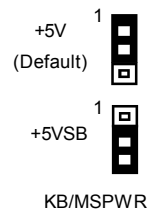
1. USBPWR1 is for the rear USB connectors, USBPWR2 is for the internal USB ports.
2. The USB device wake-up feature requires a power supply that can provide 500mA on +5VSB lead for each USB port; otherwise, the system will not power up.
3. The total current consumed must not exceed the power supply capability (+5VSB) whether under normal condition or in sleep mode.

Chapter 1 Main Features

Keyboard and Mouse Jumper: KB/MS_PWR

This jumper allows you to enable or disable the Keyboard and Mouse wake-up feature. Set the jumper to pins 2-3(+5VSB) to wake up the computer from sleep modes when you press a key on the keyboard or click the mouse, and a corresponding setting must be set in BIOS as below:

Set "CMOS Setup"=>"Power Management Setup"=>"Wake on PS2 Keyboard"and "Wake on PS2Mouse" to "Enabled".



Chapter 2

This chapter introduces how to change system settings through the BIOS Setup menus.

You have to run the Setup Program when the following cases occur:

1. An error message appears on the screen during the system POST process.
2. You want to change the default CMOS settings.

This chapter includes the following information:

- ❖ Enter BIOS Setup
- ❖ Main Menu
 - ❖ Standard CMOS Features
 - ❖ Central Control Unit
 - ❖ Advanced BIOS Features
 - ❖ Advanced Chipset Features
 - ❖ Integrated Peripherals
 - ❖ Power Management Setup
 - ❖ PnP/PCI Configuration
 - ❖ PC Health Status
 - ❖ BIOS Security Features
 - ❖ Load Optimal Defaults
 - ❖ Save Changes and Exit
 - ❖ Discard Changes and Exit

Enter BIOS Setup

The BIOS is the communication bridge between hardware and software. Correctly setting up the BIOS parameters is critical to maintain optimal system performance. Power on the computer, when the following message briefly appears at the bottom of the screen during the POST (Power On Self Test), press key to enter the BIOS CMOS Setup Utility.

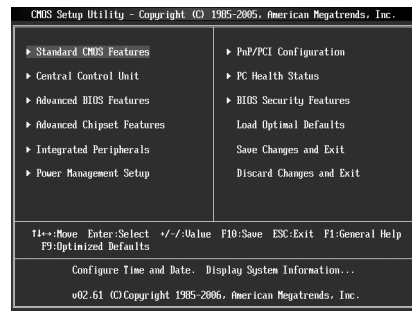
Press TAB to show POST Screen, DEL to enter SETUP.

Note:

We do not suggest that you change the default parameters in the BIOS Setup, and we shall not be responsible for any damage that results from any changes that you make.

Main Menu

The main menu displays a list of options that are available. Use the arrow keys to highlight an item, and execute the item by pressing <Enter>.



Main Menu

The items in the main menu are explained as below:

1. Standard CMOS Features

The basic system configuration can be set up through this menu.

2. Central Control Unit

The special features can be set up by this menu.

3. Advanced BIOS Features

The advanced system features can be set up through this menu.

4. Advanced Chipset Features

The advanced chipset features can be set up through this menu.

5. Integrated Peripherals

All onboard peripherals can be set up through this menu.

Chapter 2 BIOS Description

6. Power Management Setup

Through this menu you can set up all the Power Management events related items.

7. PnP/PCI Configuration

The system's PnP/PCI settings and parameters can be modified by this menu.

8. PC Health Status

This menu will display the current status of your PC.

9. BIOS Security Features

BIOS Security configuration can be setted through this item.

10. Load Optimal Defaults

You can load the optimal performance settings by this menu; however, the stable default values may be affected.

11. Save Changes and Exit

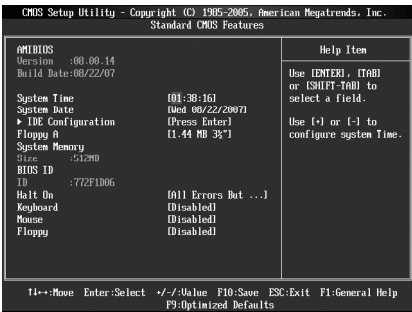
Save CMOS value settings to CMOS and exit setup.

12. Discard Changes and Exit

Abandon all CMOS value changes and exit setup.

1. Standard BIOS Features

This sub-menu is used to set up the standard BIOS parameters, such as the date, time, floppy driver and so on. Select the item by the arrow keys, and then use the <+> or <-> keys to choose the setting values.



Standard BIOS Features Menu

1.1 AMIBIOS

This item shows the version and build date of the AMIBIOS.

1.2 System Time/Date

This item allows you to set up the desired time and date(usually as the current time and date) with <hour><minute><second><day><month><date><year> format.

Day—weekday from Sun. to Sat.

Month—month from 1 to 12

Date—date from 1st to 31st

Year—year, set up by users.

Use <ENTER>, <TAB> or <SHIFT+TAB> to select a field. Use <+> or <-> to configure system time and date.

1.3 IDE Configuration

You may set configurations for the IDE device that you specify through this item. Take “Primary IDE Master” for example, when you set “Type” to “Auto”, please pay attention to the bellow warning.

Warning:

After selecting the hard disk information into BIOS, use a disk utility, such as FDISK, to partition or format the new IDE hard disk drives. This is necessary so that you can write or read data from the disk. Make sure to set the partition of the Primary IDE hard disk drives to active.

1.4 Floppy A

This option allows you to select the kind of FDD installed, including [none], [360K, 5¹/₄ in], [1.2M, 5¹/₄ in], [720K, 3¹/₂ in], [1.44M, 3¹/₂ in] and [2.88 M, 3¹/₂ in].

1.5 System Memory

This item shows the system memory size.

1.6 Halt On

This category determines whether or not the computer will stop if an error is detected during powering up.

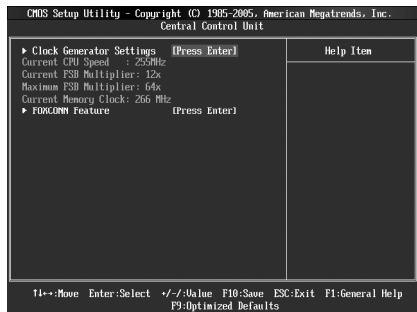
All Errors	Whenever the BIOS detects a nonfatal error, the system will stop and you will be prompted.
All Errors But	All errors except keyboard, mouse and floppy can result in system halt on. This requires you to set “Keyboard”, “Mouse” and “Floppy” as “Enabled”.

1.7 Keyboard/Mouse/Floppy

This item allows system to detect if the Keyboard/ Mouse/ Floppy is available automatically when booting. When set them to “Enabled”, BIOS will skip the detection of the keyboard, Mouse and Floppy. When set to “Disabled”, BIOS will detect them.

Chapter 2 BIOS Description

2. Central Control Unit



Central control Unit Menu

2.1 Clock Generator Settings

Press "Enter" to set AMD overclocking Configuration.

2.2 Current CPU Speed

This item shows the current CPU speed automatically. It can't be changed manually.

2.3 Current FSB Multiplier

This item shows the current speed of the front side bus automatically.

2.4 Maximum FSB Multiplier

This item tells you the maximum speed of the front side bus.

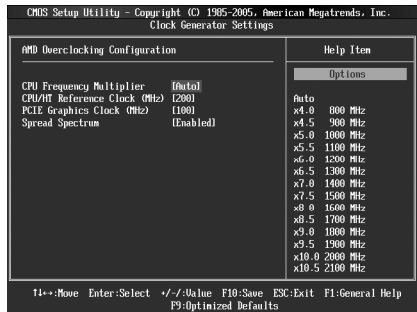
2.5 Current Memory Clock

This item shows the current memory clock frequency automatically.

2.6 FOXCONN Feature

Press "Enter" to set the characteristic features of FOXCONN.

2.1 Clock Generator Settings



Clock Generator Settings Menu

2.1.1 CPU Frequency Multiplier

You can select the CPU Frequency multiplier through this menu. The frequency

Chapter 2 BIOS Description

is The default value is “Auto”.If your CPU does not support frequency change. This item will be grayed-out.

2.1.2 CPU/HT Reference Clock (MHz)

Use this item to set the CPU /Hypertransport frequency.

2.1.3 PCIE Graphics Clock (MHz)

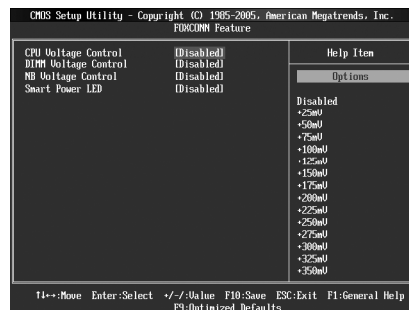
This item allows you to set the frequency of PCIE Graphics card. The default value is 100.

2.1.4 Spread Spectrum

Use this item to enable or disable the spread spectrum functions.

NOTE: The Spread Spectrum function can influence the EMI (Electromagnetic Interference)degree.

2.6 FOXCONN Feature



FOXCONN Feature Menu

2.6.1 CPU Voltage Control

Use this item to adjust the CPU core voltage manually. The voltage range is +25mv~+800mv. “Disabled” is the default value.

2.6.2 DIMM Voltage Control

You are able to use this item to select the DIMM voltage.The voltage range is +25mv~+600mv. “Disabled” is the default value.

2.6.3 NB Voltage Control

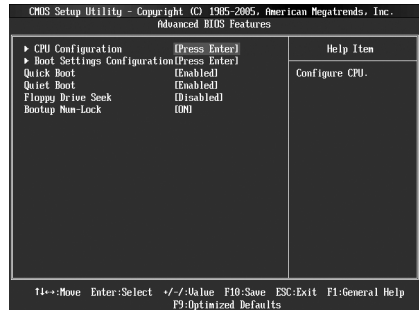
Through this item, you may adjust the North Bridge volatge manually.

2.6.4 Smart Power LED

Smart debug LED function within power LED. Enable this function, the power LED status can show the system status of POST process. If it detect the memory or graphics cards fail , the power LED will blink.

3.Advanced BIOS Features

Chapter 2 BIOS Description



Advanced BIOS Features Menu

3.1 CPU Configuration

Press “Enter”, you will see the CPU-related information that the BIOS automatically detects.

3.2 Boot Settings Configuration

Press “Enter”, you are able to specify the boot device priority sequence from the available devices.

3.3 Quick Boot

This item allows you to enable or disable the system quick boot feature. When enabled, the system skips certain tests while booting.

3.4 Quiet Boot

This item is used to enable or disable the quiet boot. [Disabled]: Displays normal POST messages. [Enabled]: Displays OEM Logo instead of POST messages.

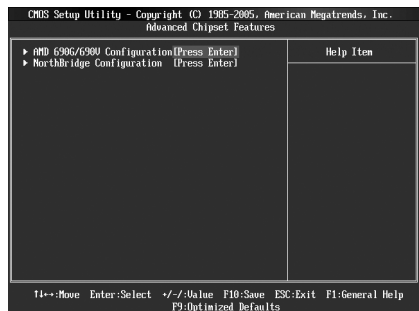
3.5 Floppy Drive Seek

You may enable or disable the floppy drive seek function through this item. Setting to “Enabled”, the BIOS will search for floppy disk drive at boot time.

3.6 Bootup Num-Lock

Use this item to select the power-on state for the Numlock. The default value is “ON”

4. Advanced Chipset Features



Advanced Chipset Features Menu

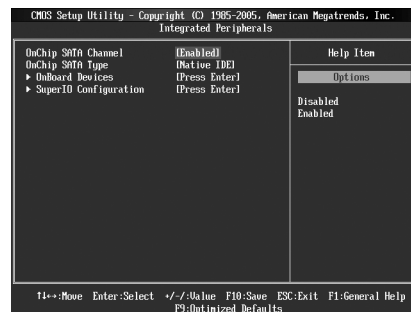
4.1 AMD 690G/690V Configuration

This sub-menu allows you to configure the parameters of Internal Grappics and PCI Express.

4.2 NorthBridge Configuration

This sub-menu allows you to set the memory configuration and enable or disable the power down function.

5.Integrated Peripherals



Integrated Peripherals Menu

5.1 OnChip SATA Channel

This item allows you to enable or disable SATA channel.

5.2 OnChip SATA Type

Use this item to select onboard SATA type. Selecting "Native IDE", the system will only support SATA devices. Selecting "Legacy IDE", the system will support SATA and IDE devices. The default value is "Native IDE".

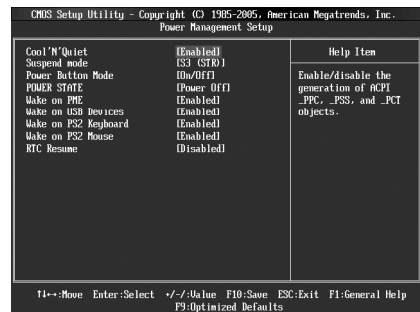
5.3 OnBoard Devices

This sub-menu allows you to enable or disable the onboard devices, such as onboard LAN, USB and Audio.

5.4 SuperIO Configuration

This sub-menu allows you to configure superIO devices, such as serial ports, parallel ports and so on. You can configure the resource and operation mode for these devices.

6.Power Management Setup



Power Management Setup Menu

6.1Cool 'N' Quiet

Enable or disable AMD “Cool ‘N’ Quiet” technology. Cool‘N’Quiet is a CPU speed throttling and power saving technology introduced by AMD with their Athlon 64 processor line. It works by reducing the processor’s clock rate and voltage when the computer has low usage. The aim of this technology is to reduce overall power consumption and lower heat generation

6.2 Suspend mode

Use this item to define your system suspends. In the default “S3(STR)”,the data and system operation status information will be stored in the memory, and the system will shut down with the exception of a refresh current to the system memory.If you select “S1(POS)”, the CPU clock will stop, but other devices of system still have power supply.

6.3 Power Button Mode

This item allows the system go into On/Off mode or suspend mode when the power button is pressed.Options:[On/Off] [Suspend].

6.4 POWER STATE

Use this item to control whether to start up your computer automatically or not after a power failure event.If you selected “Power On”,the computer will automatically start up when restore the power supply.If you selected “Power Off”, the computer will still remain power off. If you selected “Last State”,the computer will resume to the former state.

6.5 Wake on PME

This item helps to set whether to wake up the system by power management events or not.

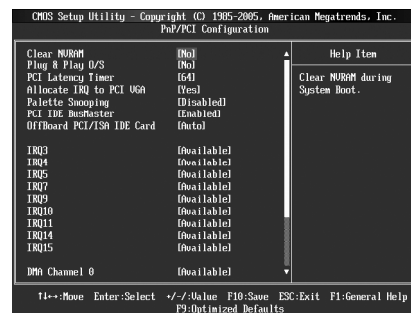
6.6 Wake on USB Devices/PS2 Keyboard/PS2 Mouse

Use these items to enable or disable USB Devices/PS2 Keyboard/PS2 Mouse wake-uping function from sleep mode.

6.7 RTC Resume

This item allows you to resume system by RTC alarm.

7.PnP/PCI Configuration



PnP/PCI Configuration Menu

7.1 Clear NVRAM

This item allows you to clear NVRAM(Non Volatile Random Access Memory) during System boot.

7.2 Plug & Play O/S

When set to "NO", the BIOS will configure all devices in the system. When set to "Yes" and if you install a Plug and Play operating system, the operating system configures the Plug and Play devices not required for boot.

7.3 PCI Latency Timer

This item allows you to select the value of PCI clocks for the PCI device latency timer register. The default value is 64.

7.4 Allocate IRQ to PCI VGA

Select "Yes", BIOS assigns an IRQ to PCI VGA card, if the card requests. If you select "No", BIOS does not assign an IRQ to PCI VGA card even if it requested.

7.5 Palette Snooping

Set this item to "Enabled", the palette snooping feature informs the PCI devices that an ISA graphics device is installed in the system so that the latter can function correctly.

7.6 PCI IDE BusMaster

Use this item to enable or disable the PCI IDE BusMaster feature.

7.7 OffBoard PCI/ISA IDE Card

Use this item to select PCI slots for the offboard PCI/ISA IDE card to plug in. Set to "Auto", BIOS will detect a slot for the card automatically. You may also select the PCI slot by yourself.

7.8 IRQ 3/4/5/7/9/10/11/14/15

This item allows to specify IRQ for PCI/PnP devices to use. The default value is "Available".

Chapter 2 BIOS Description

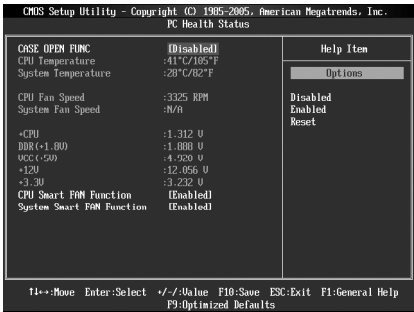
7.9 DMA Channel 0/1/3/5/6/7

Use this item to specify DMA Channel for PCI/PnP devices to use. The default value is "Available".

7.10 Reserved Memory Size

This item allows to reserve size of memory block for legacy ISA deices. We advise to keep the default value unchanged. The default value is "Disabled".

8. PC Health Status



CMOS Setup Utility - Copyright (C) 1985-2005, American Megatrends, Inc.		
PC Health Status		
CHSE OPEN FUNC	[Disabled]	Help Item
CPU Temperature	:41°C/105°F	Options
System Temperature	:20°C/62°F	
CPU Fan Speed	:3325 RPM	Disabled
System Fan Speed	:N/A	Enabled
+CPU	:1.312 V	Reset
DDR(+1.80)	:1.800 V	
VCC(+5V)	:4.920 V	
+12V	:12.056 V	
+3.3V	:3.232 V	
CPU Smart FAN Function	[Enabled]	
System Smart FAN Function	[Enabled]	
F10:More Enter:Select +/-:Value F10:Save ESC:Exit F1:General Help F9:Optimized Defaults		

PC Health Status Menu

8.1 CASE OPEN FUNC

This item allows you to enable or disable the chassis open status feature.

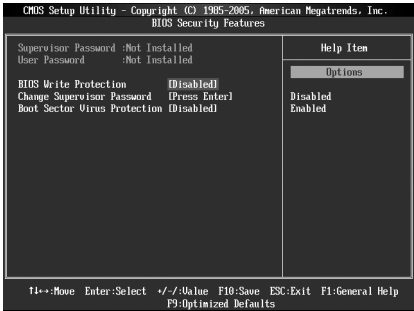
8.2 CPU Temperature /System Temperature/CPU Fan Speed/System Fan Speed/+CPU/DDR(+1.8V)/VCC(+5V)/+12V/+3.3V

These items display the current CPU/system temperature, fan speed and voltages that are automatically detected by the system.

8.3 CPU/System Smart FAN Function

These items enable or disable the smart fan function. When they are set at certain temperature, the speed of the fan will increase with the rise of the temperature.

9. BIOS Security Features



CMOS Setup Utility - Copyright (C) 1985-2005, American Megatrends, Inc.	
BIOS Security Features	
Supervisor Password	:Not Installed
User Password	:Not Installed
BIOS Write Protection	[Disabled]
Change Supervisor Password	(Press Enter)
Boot Sector Virus Protection	[Disabled]
	Help Item
	Options
	Disabled
	Enabled
F10:More Enter:Select +/-:Value F10:Save ESC:Exit F1:General Help F9:Optimized Defaults	

BIOS Security Features Menu

9.1 Supervisor/User Password

These items show supervisor/user password installed or not.

9.2 BIOS Write Protection

Enable this item to protect system BIOS from viruses.

9.3 Change Supervisor Password

Press “Enter” to change the supervisor password. The access rights and permissions associated with the Supervisor password are higher than those of a regular User password. The Supervisor password can be used to start the system or modify the CMOS settings. Enter your password, not exceeding 6 characters, then press <Enter>. The password you entered will replace any previous password. If you do not want to set a password, just press <Enter> when prompted to enter a password.

9.4 Boot Sector Virus Protection

This item allows to protect boot sector of hard disk from viruses. The default value is “Disabled”.

10. Load Optimal Defaults

This menu can let you load the optimal defaults set by BIOS, which have set the optimized performance parameters of system to improve the performances of system components. You can select <OK> or <Cancel> and then press <Enter> to load or not load the optimized defaults.

11. Save Changes and Exit

When you select this option and press <Enter>, the following message will appear in the center of the screen:

Save configuration changes and exit setup?

Press <Yes> to save your changes in CMOS and exit the program; press <Cancel> or <ESC> to return to the main menu.

12. Discard Changes and Exit

If you select this option and press <Enter>, the following message will appear in the center of the screen:

Discard Changes and Exit setup?

Press <OK> to exit CMOS without saving your modifications; press <Cancel> or <ESC> to return to the main menu.

Chapter 3

This chapter will introduce how to use attached software.

This chapter provides the following information:

- ❖ FOX ONE
- ❖ FOX LiveUpdate
- ❖ FOX LOGO
- ❖ FOX DMI

FOX ONE

FOX ONE is a powerful utility for easily modifying system settings. It also allows users to monitor various temperature values, voltage values, frequency and fan speed at any time.

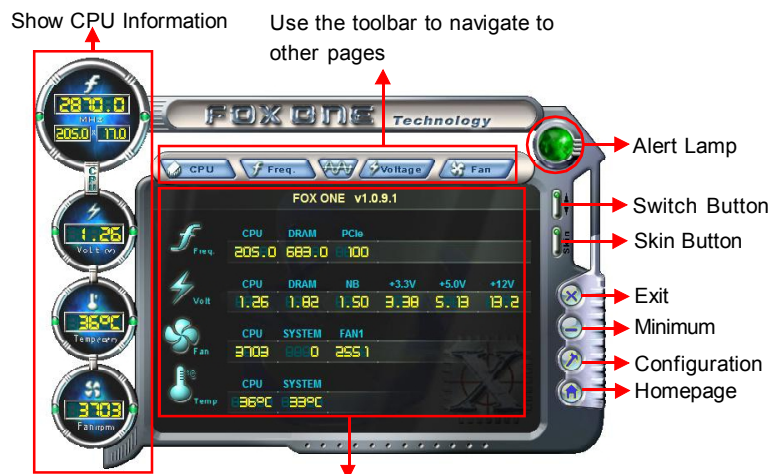
With FOX ONE, you can modify system performance settings such as bus speed, CPU voltage, fan speed, and other system performance options that are supported by the BIOS and you also can monitor hardware temperature, voltage, frequency and fan speed.

Supported Operating Systems:

- Windows 2000
- Windows XP (32-bit and 64-bit)
- Windows 2003 (32-bit and 64-bit)
- Windows Vista (32-bit and 64-bit)

Using FOX ONE:

1. Main Page



Alert Lamp

Monitor Frequency/Voltage/Fan speed/Temperature value

When the system is in healthy status, the alert lamp color is green. And if the system is in abnormal status, the alert lamp color will turn red.

Switch Button

Click this button, it will simplify the interface to HW monitor information bar as the below figure shows. The bar could help you to monitor if your system is in the healthy status at any time.

Chapter 3 Directions for Bundled Software



Click here to return to previous status

Skin Button

Click this button, you will see the additive figures such as "crystal" and "rock". Please select your favorite skin.

Exit

Click this button to exit the program.

Minimum

Click this button to minimize the window.

Configuration

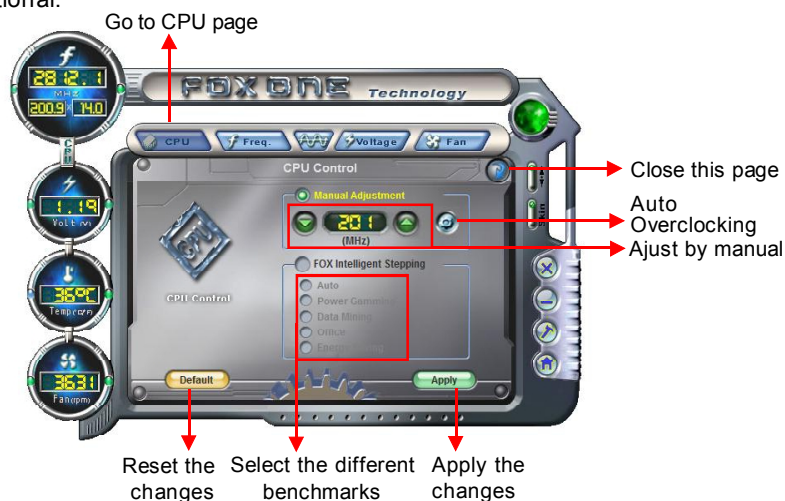
This function is used to configurate the parameters for the program. It determines which items will be shown in simple mode. Besides, it also provides F.I.S calibration function which will re-calibrate the CPU's loading. F.I.S calibration function is optional.

Homepage

Click this button to visit FOXCONN motherboard website.

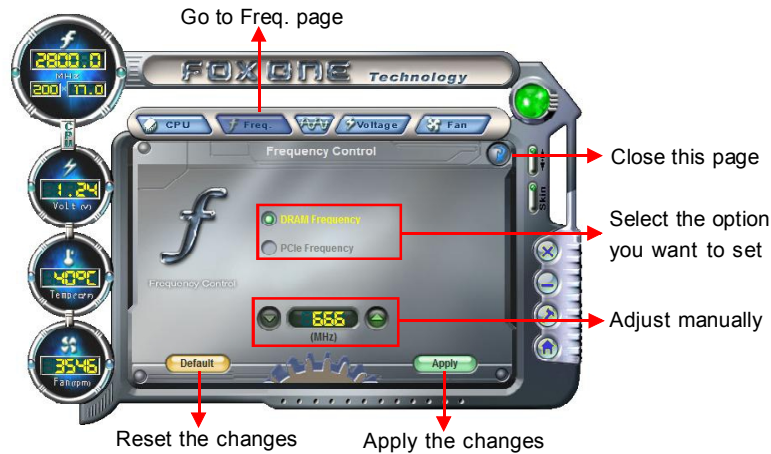
2. CPU Page - CPU Control

This page is used to select and run the CPU frequency to determine the current performance level of the system. You can adjust manually or select "Auto Overclock". Otherwise, it also provides FOX Intelligent Stepping, But this function is optional.



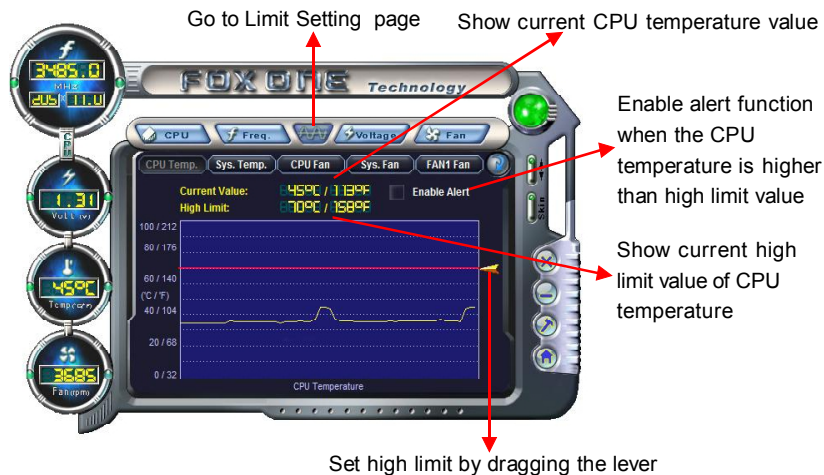
3. Freq. Page - Frequency Control

In this page ,you can set memory and PCI Express frequency manually.



4. Limit Setting - Adjust page

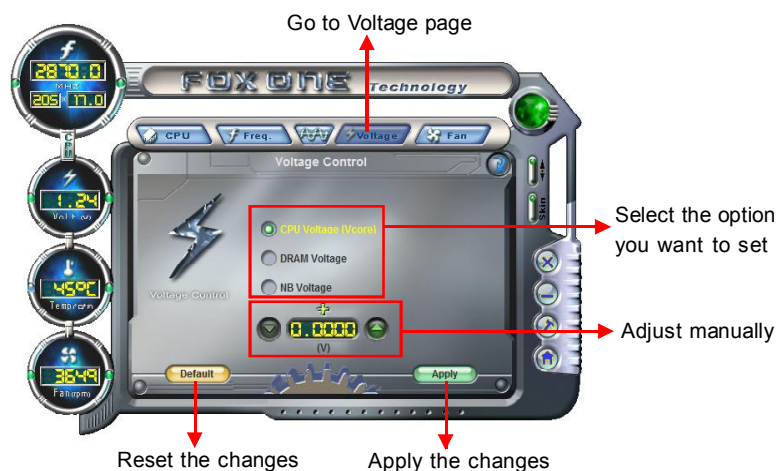
This page includes five different sections. "CPU Temp." and "Sys Temp." will help you to set high limit temperature. "CPU Fan", "Sys. Fan" and "FAN1 fan" are used to set low limit rpm. And all of them have alert function.



5. Voltage Page - Voltage Control

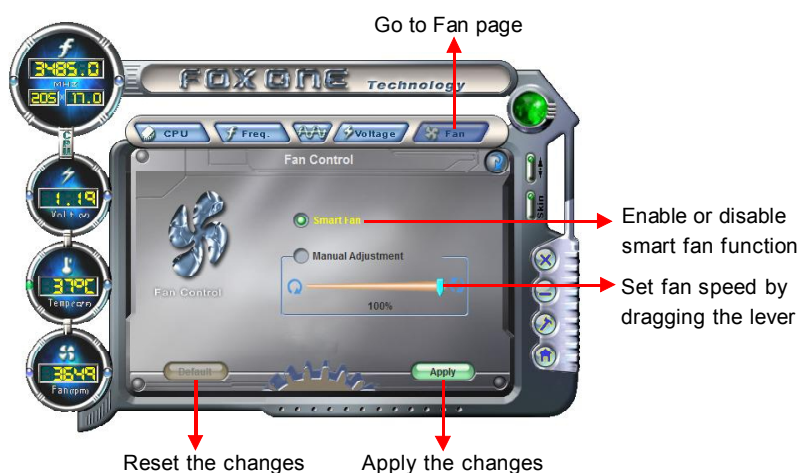
This page allows you to set CPU, memory and North Bridge voltage manually.

Chapter 3 Directions for Bundled Software



6. Fan Page - Fan Control

This page allows you to enable Smart Fan function and set fan speed manually.



FOX LiveUpdate

FOX LiveUpdate is a useful utility to backup and update the system BIOS online or locally. Drivers and utilities are also can be updated online.

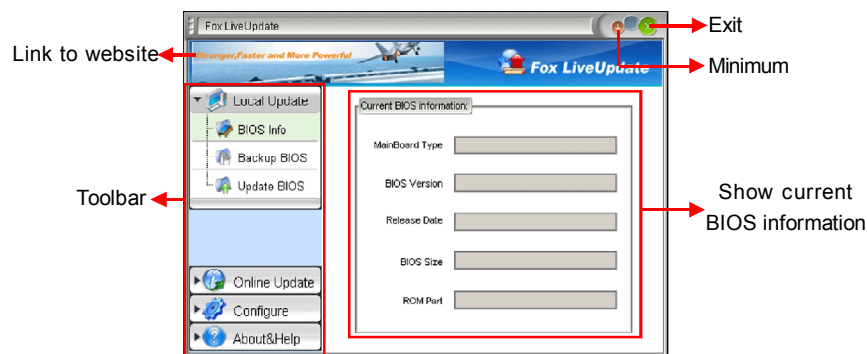
Supported Operating Systems:

- Windows 2000
- Windows 2003 (32-bit and 64-bit)
- Windows XP (32-bit and 64-bit)
- Windows Vista (32-bit and 64-bit)

Using FOX LiveUpdate:

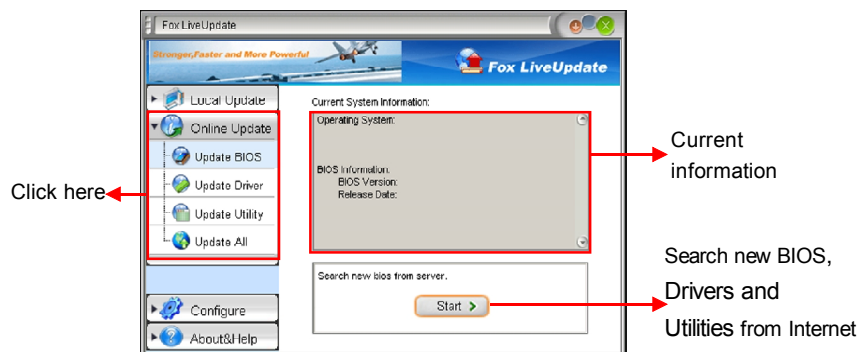
1. Local Update

“**BIOS Info**” tells you the system BIOS information; “**Backup BIOS**” could backup your system BIOS ,please click this button ,then key in a BIOS name and save it ; “**Update BIOS**” helps to update your system BIOS from local BIOS files ,please follow the wizard to finish the operation.



2. Online Update

This area lets you update your system BIOS, Drivers, Utilities and all of them from Internet. Click “start”, it will search the new BIOS ,Drivers and Utilities from Internet. Then follow the wizard to finish the update operation.

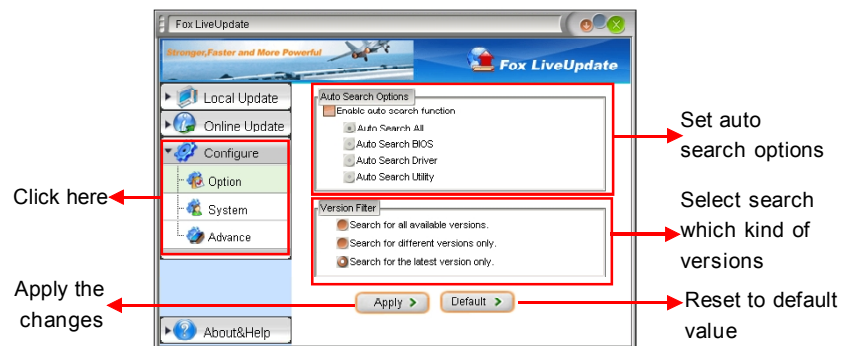


3. Configure

“**Option**” provides auto search options and version filter. After setting the auto search options, the utility will work in the background and the related information will show in a pop balloon notification;

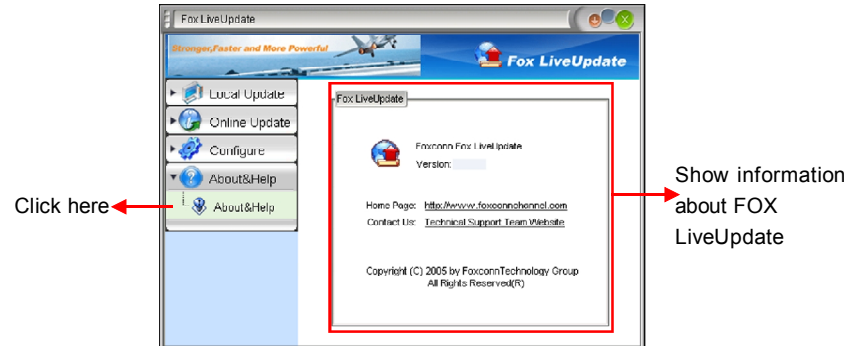
Chapter 3 Directions for Bundled Software

Click the **"System"** button, you can set the backup BIOS location and change different skin of the utility; **"Advance"** helps you to flash BIOS, Boot Block and clear CMOS, we recommend that you keep the default setting unchanged to avoid damage.



4. About & Help

This page shows some information about FOX LiveUpdate.



FOX LOGO

FOX LOGO is a simple and useful utility to backup, change and delete the boot Logo. The boot Logo is the image that appears on screen during the Power-On Self-Tests (POST).

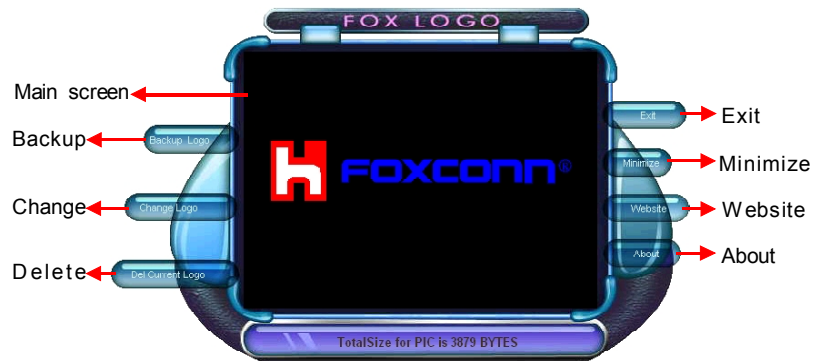
Supported Operating Systems:

- Windows 2000
- Windows XP (32-bit and 64-bit)
- Windows 2003 (32-bit and 64-bit)
- Windows Vista (32-bit and 64-bit)

Using FOX LOGO:

Chapter 3 Directions for Bundled Software

Main Page



Warning:

When you change Logo or delete the current Logo, the system will flash BIOS file automatically. During this time, please DO NOT shut down the application and the system, or the motherboard will be damaged seriously.

FOX DMI

FOX DMI is a full DMI information viewer, and it supports three kinds of DMI Data format :Report , Data Fields and memory Dump.

Supported Operating Systems:

- Windows 2000
- Windows XP (32-bit and 64-bit)
- Windows 2003 (32-bit and 64-bit)
- Windows Vista (32-bit and 64-bit)

Using FOX DMI:

Please operate this utility as the comments shows .

