KM18G PRO/ KM18G PRO II

Copyright

Disclaimer

FCC Compliance Statement

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. However, there is no guarantee that interference will not occur in a particular installation.

120410029M2N

KM18G PRO/ KM18G PRO II

NVIDIA® nForce™2 IGP & MCP or MCP-T
Supports Socket A AMD® Athlon™XP/ Athlon™/ Duron™/ Barton™
Processors

User Manual

Package Contents:

- KM18G Series mainboard x 1
- IDE ATA Cable x 1
- FDC Cable x 1
- USB Bracket x 1 (optional)
- 1394 Bracket x 1 (optional)
- TV-Out Bracket x 1 (optional)
- Installation and Setup Driver CD x 1
- KM18G PRO/ KM18G PRO II User Manual x 1

Dimensions (Micro ATX form-factor):

- 244 mm x 244 mm (WxL)

Operating System:

- Supports Windows® 98/ 2000/ ME/ XP

Contents

Chapter 1. Getting Started

Introduction

Congratulations on choosing the KM18G series mainboard! The KM18G series includes KM18G PRO and KM18G PRO II. These are based on the nForce^{TM}2 IGP Northbridge chipset and either the MCP or MCP-T Southbridge chipset. It supports AMD$^{®}$ Athlon^{TM}XP/ Athlon^{TM}/ Duron^{TM}/ Barton^{TM} Processors with a FSB (Front Side Bus) frequency of 200/ 266/ 333 MHz.

The KM18G series provides 3 DIMM sockets using 184 pin DDR SDRAM with a total capacity of up to 3 GB. You can install unbuffered & non-ECC DDR333/ 266 (PC2700/ 2100) SDRAM. It supports 128 bit dual channel memory bus with a total capacity of up to 2 GB.

The KM18G series provides one 8X/4X AGP Slot that use 1.5V AGP cards only.

The KM18G series include built in IDE facilities that support Ultra DMA 66/100/133 Ultra 6-0/ DMA 2-0 and PIO 4-0 modes. The KM18G series also comes with an AC'97 Sound Codec (ALC650) which supports high quality 6 channel audio (super 5.1 Channel Audio Effect).

The KM18G series also comes with six USB 2.0 ports and the KM18G PRO II comes with two IEEE 1394 ports (optional).

The KM18G series also include CPU Over Temperature Protection (OTP). When CPU temperature rises above normal values, the system will automatically shut down to protect your system from overheating. But the OTP is only functional when using an Athlon XP^{TM} CPU.

The KM18G series comes with a TV-Out header, you can use a TV as a monitor.

The KM18G series include an infrared header. The KM18G series also provides a back panel LAN port that the south bridge chipset support.

Specification

CPU:
- Supports Socket 462 AMD® Athlon™XP/ Athlon™/ Duron™/ Barton™ processors

Speed:
- 200/ 266/ 333 MHz Front Side Bus frequency
- 33MHz, 32 bit PCI interface (PCI 2.2 compliant)
- 66MHz AGP 3.0 compliant interface that supports 4X/8X data transfer modes (1.5V only)

Chipset:
- Northbridge Chip – NVIDIA nForce™2 IGP
- Southbridge Chip– NVIDIA nForce™2 MCP or MCP-T (only for KM18G PRO II)
- I/O Controller – Winbond W83627HF
- AC'97 Codec – ALC650
- LAN PHY Chip – ICS1893AF
- 1394 Controller – TI TSB41AB2

DRAM Memory:
- Supports DDR333 (PC2700)/ DDR266 (PC2100) SDRAM
- Supports DDR400 without using onboard graphics engine
- Supports 64 MB/ 128 MB/ 256 MB/ 512 MB/ 1 GB unbuffered & non-ECC DIMM modules
- Supports memory modules with a total capacity of 3 GB (see memory installation section for more details)
- Supports 128 bit DualDDR Memory Architecture that with a total capacity of 2 GB
- Supports only x8, x16 DRAMs DDR DIMMs

Green Functionality:
- Supports Phoenix-Award BIOS ™ power management functionality
- Wakes from power saving sleep mode with any keyboard or mouse activity

Shadow RAM:
- This mainboard is equipped with a memory controller providing shadow RAM and support for ROM BIOS

BUS Slots:
- 1 AGP slot (1.5V only)
- Three 32-bit PCI bus slots

Flash Memory:
- Supports flash memory functionality
- Supports ESCD functionality

Hardware Monitor Function:
- Monitors CPU and System fan Speeds
- Monitors System Voltage

Infrared:
- Supports IrDA Version 1.0 SIR Protocol with a maximum baud rate of up to 115.2 Kbps
- Supports SHARP ASK-IR Protocol with maximum baud rate of up to 57600 bps

Universal Serial Bus:
- Supports USB 2.0 Enhanced Host Controller Interface (EHCI) and dual USB 1.1 Open Host Controller Interface (OHC1)
- Supports up to six USB ports for USB interface devices

IEEE 1394 Serial Bus (for KM18G PRO II only):
- Supports two IEEE 1394 ports for 1394 interface devices
- Supports 400/ 200/ 100 Mbps serial date rates

I/O facilities:
- One multi-mode Parallel Port capable of supporting the following specifications:
     1. Standard & Bi-direction Parallel Port
     2. Enhanced Parallel Port (EPP)
     3. Extended Capabilities Port (ECP)
- Supports two serial ports, 16550 UART (one on back panel and one on front panel)
- Supports Infrared Data Transmission using IrDA
- Supports PS/2 mouse and PS/2 keyboard and one Game port
- Supports 360 KB, 720 KB, 1.2 MB, 1.44 MB, and 2.88 MB floppy disk drives

LAN PHY Chip:
- Supports 100/ 10 Mb/ sec

Integrated TV-Out:
- Supports display resolutions up to 1024 x 768

IDE Facilities:
- Supports Ultra ATA 133/ 100/ 66/ 33 Ultra 6-0/ DMA 2-0 and PIO 4-0 modes
- Supports IDE interface with CD-ROM
- Supports high capacity hard disk drives
- Supports installation of up to 4 drives, with separate IDE connections for Primary and Secondary connectors

BIOS:
- Phoenix-Award™ BIOS
- Supports APM1.2
- Supports ACPI power management

Integrated Graphics Processing Unit:
- 256-bit 3D and 2D graphics accelerator
- Supports analog VGA monitors up to 1920 X 1440 @ 75 Hz

Power Management:
- Power On Suspend (POS) or ACPI S1 support
- Suspend to DRAM (STR) or ACPI S3 support
- Suspend to Disk (STD) or ACPI S4/ S5 support
- ACPI 2.0 compliant

Hyper Transport Interface:
- Supports up to 800 MBps transfer rates
- Supports operates at 200 MHz dual edge clock mode

Sophisticated OTP (Over Temperature Protection):
- Special design for CPU Over Temperature Protection
- OTP is functional when using an Athlon^{TM} XP CPU

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＊ Optional

Configuration

Layout of KM18G PRO II
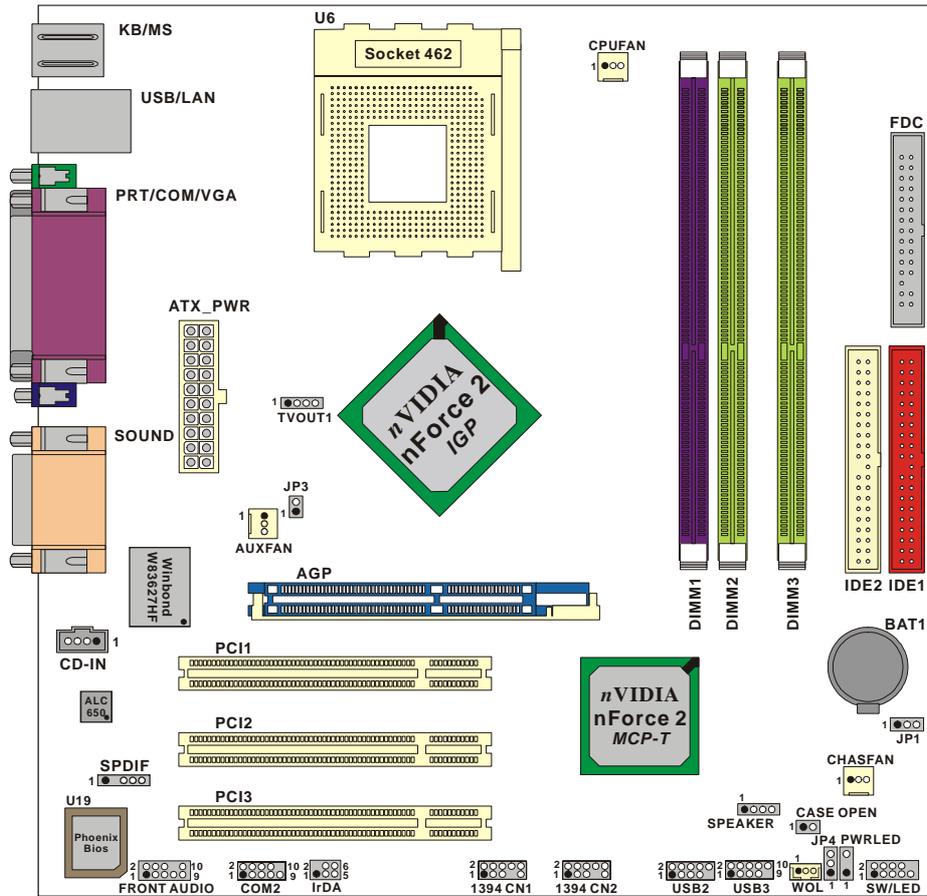
Layout of KM18G PRO
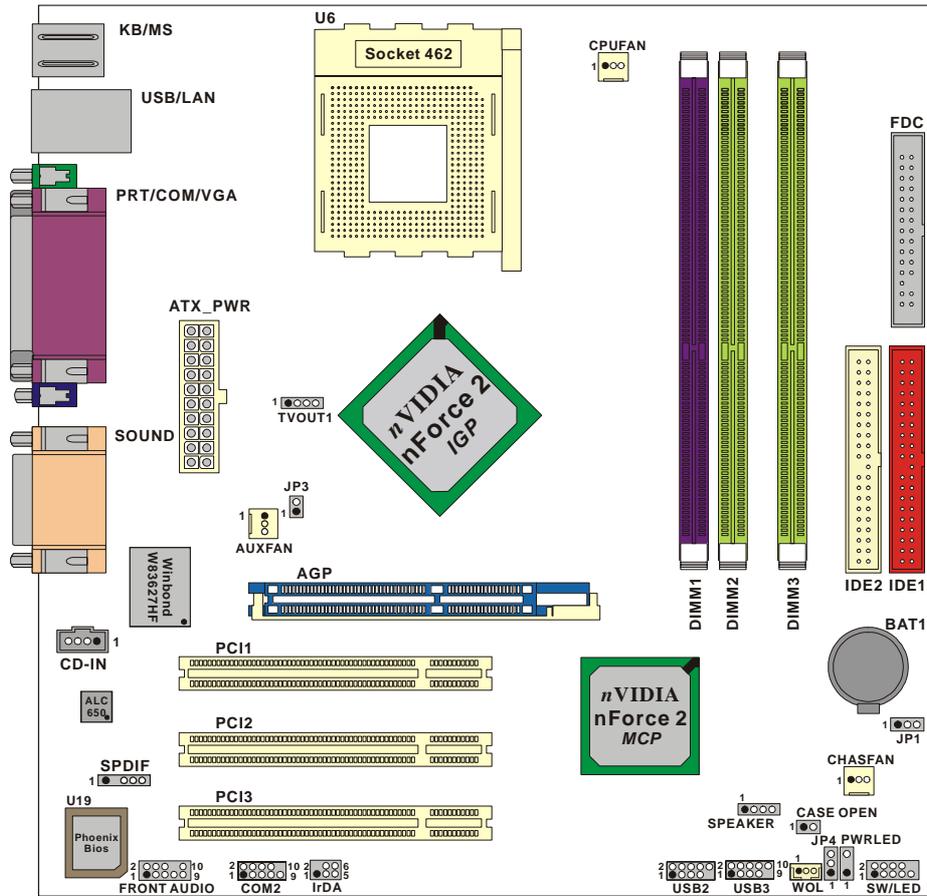
Hardware Installation

This section will assist you in quickly installing your system hardware. Wear a wrist ground strap before handling components. Electrostatic discharge may damage your system components.

CPU Processor Installation

This mainboard supports AMD® processors using a Socket A. Before building your system, we suggest you visit the AMD website and review the processor installation procedures. http://www.amd.com

CPU Socket A Configuration Steps:

1. Locate the CPU socket on your mainboard and nudge the lever away from the socket. Then lift the lever to a 90-degree angle.

2. On the socket, locate the corner that has the pin-1 receptor. This corner will be near to the end of the lever. Match the corner on the CPU with the pin-1 receptor on the socket and lower the CPU onto the socket. The bottom of the CPU should be flush with the face of the socket.

Pin-1 receptor   Corner
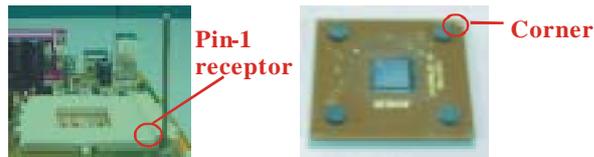
3. Lower the lever until it snaps back into position. This will lock down the CPU.
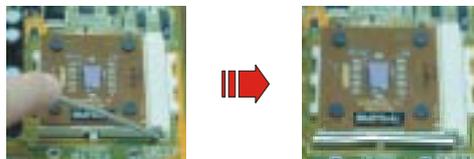
4. Smear thermal grease on top of the CPU. Lower the CPU fan onto the CPU and use the clasps on the fan to attach it to the socket. Finally, extend the power cable from the fan and insert it onto the CPUFAN adapter.
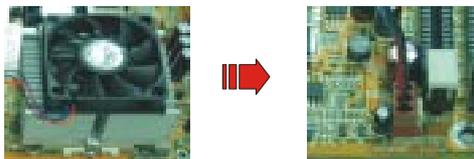
Attention: Before starting the system
Please check the installation completely before starting the system. Verify that the heatsink is properly installed and make sure the CPU fan is working. Overheating can damage the CPU and other sensitive components.

FAN Headers

Three power headers are available for cooling fans, which play an important role in maintaining the ambient temperature in your system.

CPUFAN

AUXFAN

CHASFAN
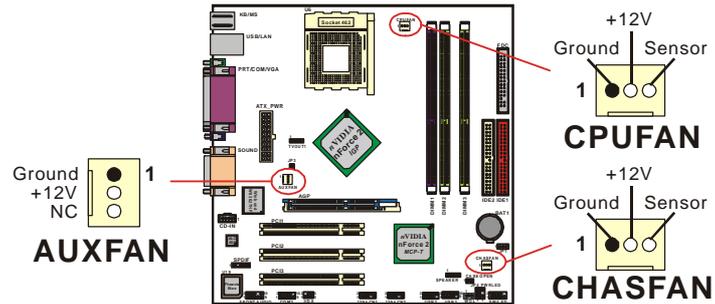
Attention
We strongly recommend you attach the CPU fan to the CPUFAN Header.

Memory Installation

The mainboard contains 3 sockets, which use 184 pin DDR SDRAM with a total memory capacity of up to 3 GB. You can install unbuffered & non-ECC DDR333/ 266 (PC2700/ 2100) SDRAM. The series also supports DDR400 when you install an extra AGP card.

KM18G series supports 128 bit dual-channels memory bus with a total memory capacity of up to 2 GB. The DIMM1 and DIMM2 share one channel and the DIMM3 use the other channel. If you enable dual-channels you can increase data access rates.
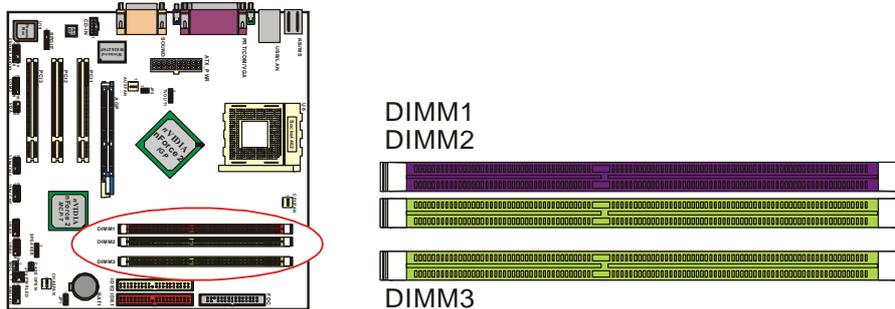
DIMM1
DIMM2

DIMM3

Enabling Dual-Channel DDR

To enable Dual-Channel DDR functionality, your system must meet certain configuration conditions. First, you can only use two of the three DIMM slots. You can use DIMM1 and DIMM3 together, or you can use DIMM2 and DIMM3 together. Second, the DIMM modules that you use must be identical (capacity, manufacturer and model). See the table below for clarification of DIMM module options.

Refer to the list below to install the DDR SDRAM memory modules to enable dual-channels facility:

(the ✓ means that a DIMM module is present)

DIMM1	DIMM2	DIMM3
✓	-	✓
-	✓	✓

RAM Module Installation:

1. Pull the white plastic tabs on each side of the slot away from the slot.

2. Match the notch on the button of the RAM module with the corresponding pattern in the DIMM slot. This ensures that the module is inserted properly.

3. Lower the RAM module into the DIMM Slot and press firmly using both thumbs until the module snaps into place.

4. Repeat steps 1 & 2 for the remaining RAM modules.

＊The pictures above are for reference only.

Back Panel Configuration
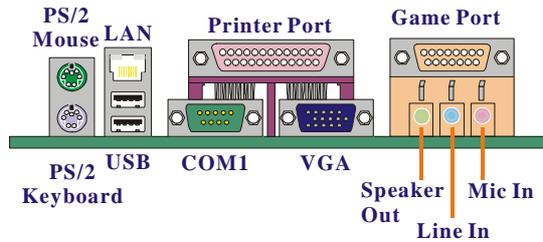
PS/2 Mouse & PS/2 Keyboard Connectors: KB/MS

This mainboard provides a standard PS/2 mouse connector and PS/2 Keyboard connector. The pin assignments are described below:

PS/2 Mouse
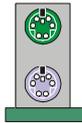
PS/2 Keyboard

Pin	Assignment	Pin	Assignment
1	Data	4	+5 V (fused)
2	No connect	5	Clock
3	Ground	6	No connect

USB & LAN Connectors: USB/LAN

There are two USB connectors on the back panel. These USB connectors are used to attach to USB devices such as: keyboards, mice and other USB devices. You can plug the USB devices directly into this connector. The mainboard also provides a LAN port. You can plug LAN devices directly into this connector.

LAN

USB
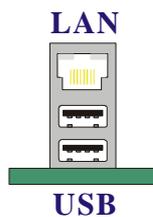
Pin	Assignment	Pin	Assignment
1	TDP	7	NC
2	TDN	8	NC
3	RDP	9	VCC3 SBY
4	NC	10	ACT LED
5	NC	11	VCC3 SBY
6	RDN	12	Speed LED

Pin	Assignment	Pin	Assignment
1/5	+5 V (fused)	3/7	USBP0+/P1+
2/6	USBP0-/P1-	4/8	Ground

Serial and Parallel Interface Ports

The mainboard comes equipped with one serial port, one VGA port and one parallel port on the back panel. These interface ports will be explained below.

Printer Port

COM1   **VGA**
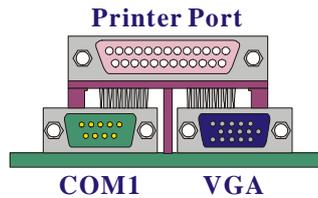
Parallel Interface Port: PRT

The parallel port on your system has a 25-pin, DB25 connector and is used to interface with parallel printers and other devices using a parallel interface.

The Serial Interface: COM1

The serial interface port is sometimes referred to as an RS-232 port or an asynchronous communication port. Mice, modems and other peripheral devices can be connected to a serial port.

Video Graphics Array Conn.: VGA

The KM18G series has built in video facilities. Your monitor attaches directly to the VGA connector on this mainboard.

Audio Port Connectors

Game Port

Speaker Out   **Line In**   **Mic In**
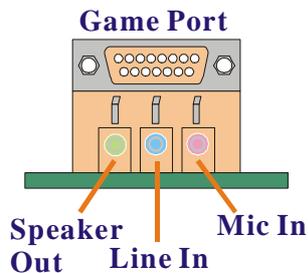
1. Speaker Out is used to connect to speakers or headphones. If the Super 5.1 driver is enabled the Speaker Out becomes the Front Speaker.
2. Line In can be connected to an external CD player, Tape player or other audio devices for audio input. If the Super 5.1 driver is enabled Line In becomes the Rear Speaker.
3. Mic In is used to connect to a microphone. If the Super 5.1 driver is enabled the Mic In becomes the Subwoofer/ Center out.

> This mainboard supports Super 5.1 Channel Audio effects which turns your standard Speaker Out, Lin In, Mic In audio connectors into a 6 channel audio system. See Appendix I for more information.

Front Panel Indicator: SW/LED & PWRLED
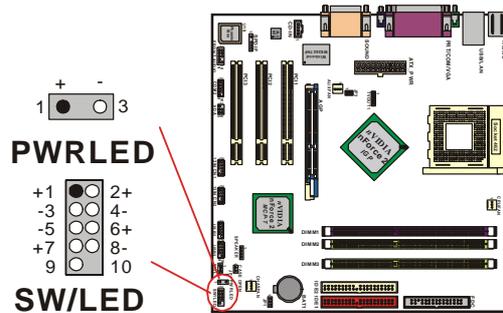
Pin	Assignment	Function	Pin	Assignment	Function
1	HD LED (+)	Hard Drive	2	Power LED (+)	POWER
3	HD LED (-)	LED	4	Power LED (-)	LED
5	Reset Control (-)	Reset	6	Power Button(+)	Power-on
7	Reset Control(+)	Button	8	Power Button(-)	Button
9	NC	NC	10	NC	NC

HD LED (Hard Drive LED Connector)

This connector can be attached to an LED on the front panel of a computer case. The LED will flicker during disk activity. This disk activity only applies to those IDE drives directly attached to the system board.

RST (Reset Button)

This connector can be attached to a momentary SPST switch. This switch is normally left open. When closed it will cause the mainboard to reset and run the POST (Power On Self Test).

PWR-LED (2-Pin Power LED Connector)

The mainboard provides two power LED connectors. If there is a 2-pin power LED cable on the front panel of a computer case. You can attach it to the 2-pin power LED connector. The LED will illuminate while the computer is powered on.

PWR ON (Power Button)

This connector can be attached to a front panel power switch. The switch must pull the Power Button pin to ground for at least 50 ms to signal the power supply to switch on or off (the time required is due to internal debounce circuitry on the system board). At least two seconds must pass before the power supply will recognize another on/off signal.

PWRLED (3-Pin Power LED Connector)

The mainboard provides two power LED connectors. If there is a 3-pin power LED cable on the front panel of a computer case. You can attach it to the 3-pin power LED connector.

Connectors

Floppy Disk Connector: FDC

This mainboard provides a standard floppy disk connector (FDC) that supports 360K, 720K, 1.2M, 1.44M and 2.88M floppy diskettes. This connector supports the floppy drive ribbon cables provided in the packaging.

Hard Disk Connectors: IDE1-2

This mainboard has a 32-bit Enhanced PCI IDE Controller that supports Ultra 6-0/ DMA 2-0 and PIO 4-0 modes, Ultra ATA 133/ 100/ 66/ 33. It has two IDE connectors, IDE1 (primary) and IDE2 (secondary).

IDE1 (Primary IDE Connector)

You can connect up to two hard drives to IDE1. If you attach two drives, you must use a ribbon cable with three connectors. You must also configure one drive as the master and one drive as the slave, using the jumpers located on each drive.

IDE2 (Secondary IDE Connector)

The IDE2 controller can also support a Master and a Slave drive. The configuration is similar to IDE1. The second drive on this controller must be set to slave mode.

FDC

IDE2
IDE1
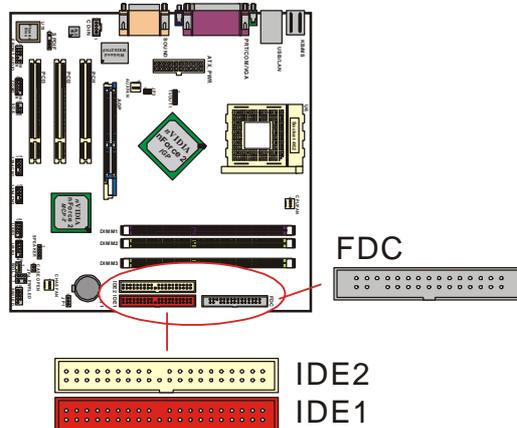
Headers & Jumpers

Front USB Headers: USB2/ USB3

You can connect the USB Bracket to the USB2/ USB3 header. There will be has USB port on the USB Bracket which means you can connect USB device to the USB prot. The mainboard supports up to six USB devices including two on the back panel.


```
        1 2
  5VSB  ●○  5VSB
DATA_A-  ○○  DATA_B-
DATA_A+  ○○  DATA_B+
Ground  ○○  Ground
    NC  ○○  NC
        9 10
      USB2/3
```
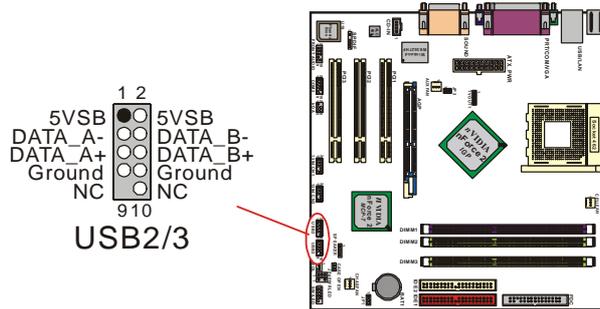
USB Bracket (optional)

You can connect the USB bracket to the USB2/ USB3 header.

* If you are using USB 2.0 devices with Windows XP, and your Windows XP has never been updated with a Service Pack, you will need to install the USB 2.0 driver from the Microsoft® website.

IEEE 1394 Headers: 1394 CN1/ 1394 CN2 (for KM18G PRO II only)

The IEEE 1394 high-speed serial bus provides enhanced PC connectivity for consumer electronics audio/video (A/V) appliances, storage peripherals, other PCs, and portable devices. The KM18G PRO II supports up to two IEEE 1394 devices. You can connect the IEEE 1394 bracket (optional) to the 1394 CN1/ 1394 CN2 header.


```
          1 2
  TPAP  ●○  TPAM
Ground  ○○  Ground
  TPBP  ○○  TPBM
    NC  ○ ○  Chasis Ground
   PWR  ○○  PWR
          9 10
    1394 CN1/CN2
```
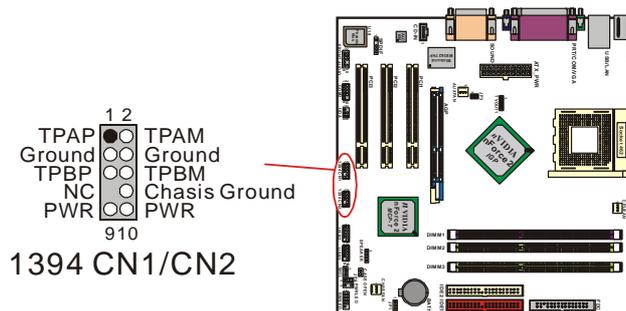
Speaker Header: SPEAKER

A front panel speaker can be connected to this connector. When you boot your computer, the speaker sounds a short "beep" under normal circumstances. If there is a problem during the Power On Self-Test, the speaker will sound an "irregular beep".

PC_BEEP ● 1
NC ○ 2
Ground ○ 3
+5V ○ 4

SPEAKER
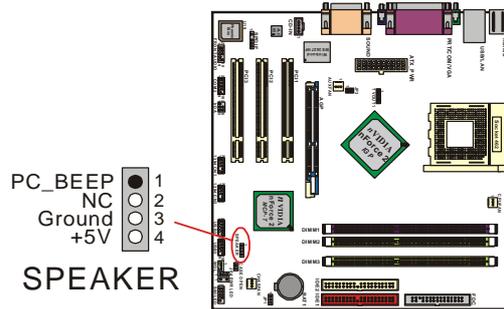
Infrared Header: IrDA

This IrDA connector can be configured to support wireless infrared and is used to attach to an infrared sensing device. After the IrDA interface is configured, you can use this connector for connectionless data transfer to and from portable devices such as laptops and PDAs.

1 2
NC ● ○ NC
+5V ○ ○ Ground
IR_TX ○ ○ IR_RX
5 6

IrDA
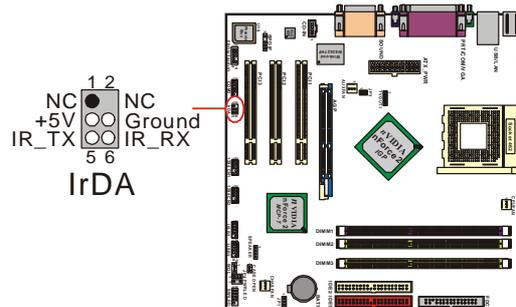
Case Open Warning Jumper: CASE OPEN

This connector is used to notify the user when the computer case has been previously opened. To configure this functionality, your computer case must be equipped with a " case open" cable which you need to attach to the CASE OPEN jumper. Also, you must enable CASE OPEN warning functionality in the BIOS setup utility. When your computer case is opened, your system will display alert messages upon boot up. Note that your computer case must be equipped with a "case open" cable.

Caseop- ● 1
Ground ○ 2

CASE OPEN
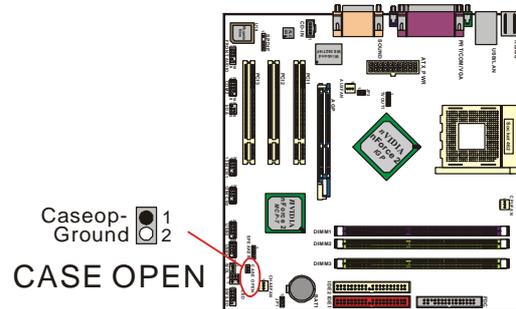
Front Serial Port Header: COM2

This mainboard supports a front serial header. To use this header, you can install a back panel bracket (optional) with a wire extending to this header. You can then attach your serial device to the serial port on the bracket.

1 2

DCD-	● ○	SIN-
SOUT	○ ○	DTR-
Ground	○ ○	DS6-
RTS-	○ ○	CTS-
RINGW	○	NC

COM2
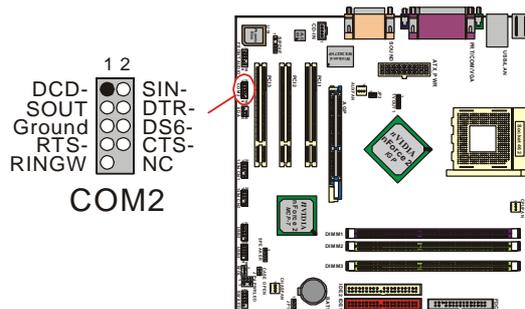
TV-Out Header: TVOUT1

The KM18G Series includes a TV-Out header (TVOUT1) that allows you to connect a TV-Out bracket and use it to attach to a TV to use as a monitor. This feature supports display resolutions up to 1024 x 768. It also can support display with MS-DOS.   (See Appendix II for more details.)
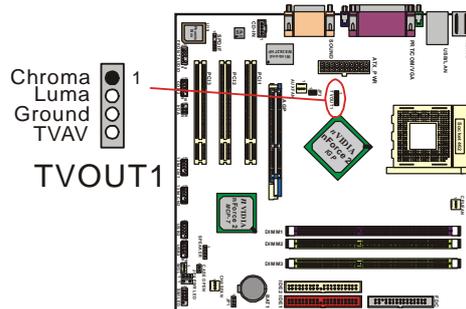
OTP (Over Temperature Protection) Jumper: JP4

The mainboard supports a special design for CPU Over Temperature Protection. If this function is "Enabled" and the CPU temperature rises above the normal range, the system will automatically shut down and you have to unplug the ATX_PWR connector. Remove and reinstall the CPU heat sink also check to make sure the CPU fan is working properly.

*OTP is only functional when using an Athlon XP^{TM} CPU.
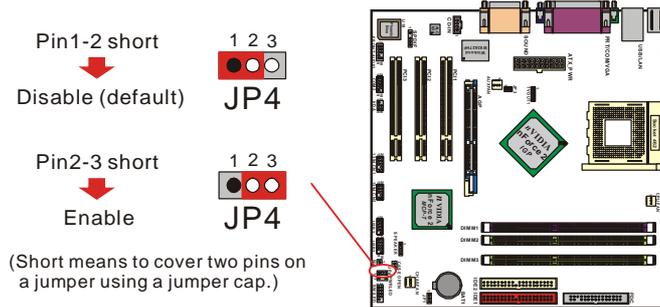
Clear CMOS Jumper: JP1

The "Clear CMOS" jumper is used when you cannot boot your system due to some CMOS configuration problem such as a forgotten password. This jumper allows you to reset the CMOS configurations, and then reconfigure.

Pin1-2 short
↓
Normal (default)
JP1

Pin2-3 short
↓
Clear CMOS data
JP1

(Short means to cover two pins on a jumper using a jumper cap.)
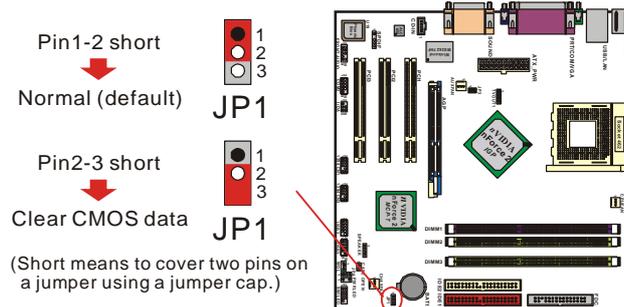
The following procedures are for resetting the BIOS password. It is important to follow these instructions closely.

1. Turn off your system and disconnect the AC power cable.
2. Set JP1 to OFF (2-3 Closed).
3. Wait several seconds.
4. Set JP1 to ON (1-2 closed).
5. Connect the AC power cable and turn on your system.
6. Reset your desired password or clear CMOS data.

Audio Connectors

This mainboard provides three connectors as part of its audio Subsystem.
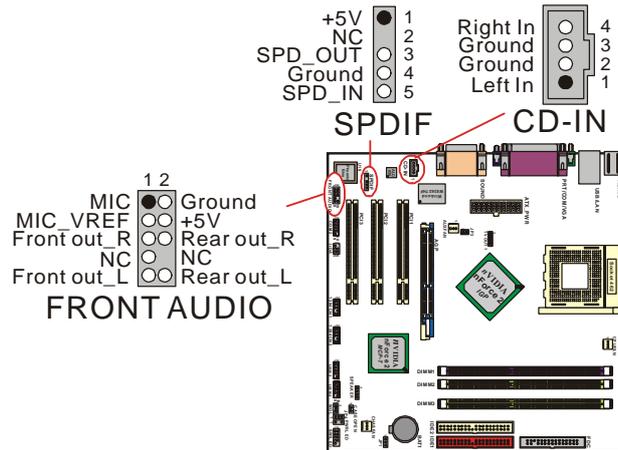
CD-ROM Audio-In Header: CD-IN

This header is used to connect to a CD-ROM / DVD audio cable.

S/PDIF Header: SPDIF

S/PDIF (Sony/Philips Digital Interface) is an audio transfer file format, which provides high quality audio using optical fiber and digital signals. This mainboard is capable of delivering audio output through the SPDIF header. One way you would use this header is by using an SPDIF bracket attached to your computer. This bracket will have a cable that you can attach to the SPDIF header. Note that the SPDIF bracket is optional in the packaging that comes with this mainboard.

Front Panel Audio Header: FRONT AUDIO

If your computer case has been designed with embedded audio equipment. You can attach these components to the FRONT_AUDIO panel of the mainboard. First remove the jumper caps covering the FRONT_AUDIO pins. Use pins 1, 3 to connect to the case microphone. Use pins 9,5 to connect to the earphone. If you do not intend to use the FRONT_AUDIO panel, do not remove the jumper caps.

> If the jumper caps are in place, jumper cap 1 is on pin 5, pin 6 and jumper cap 2 is on pin 9, pin 10.

Slots

The slots in this mainboard are designed for expansion cards used to complement and enhance the functionality of the mainboard.

PCI Slots   AGP Slot
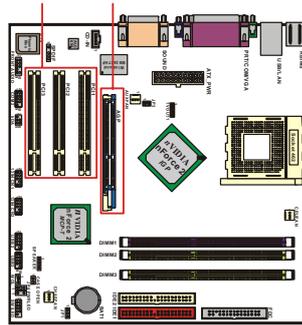
AGP Slot: AGP

The KM18G series is equipped with an Accelerated Graphics Port (AGP) that supports 4X/ 8X and 1.5V AGP cards only.

PCI Slots: PCI1-3

The KM18G series is equipped with 3 standard PCI slots. PCI stands for Peripheral Component Interconnect and is a bus standard for expansion cards. This PCI slot is designated as 32 bit.

Power Supply Attachments

ATX Power Connector: ATX_PWR

This ATX power supply uses a 20-pin connector. Make sure the connector is properly inserted before applying power.

ATX_PWR
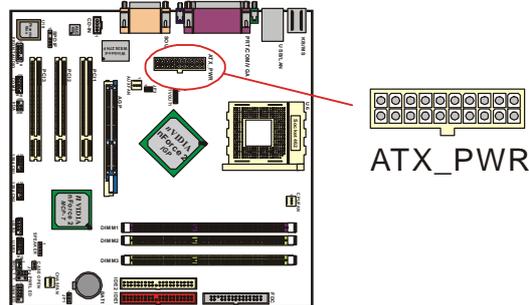
Chapter 2. BIOS Setup

Introduction

This section describes PHOENIX-AWARD™ BIOS Setup program which resides in the BIOS firmware. The Setup program allows users to modify the basic system configuration. The configuration information is then saved to CMOS RAM where the data is sustained by battery after power-down.

The BIOS provides critical low-level support for standard devices such as disk drives, serial ports and parallel ports. As well, the BIOS controls the first stage of the boot process, loading and executing the operating system.

The PHOENIX-AWARD^{TM} BIOS installed in your computer system's ROM is a custom version of an industry standard BIOS. This means that it supports the BIOS of AMD$^®$ based processors.

This version of the PHOENIX-AWARD^{TM} BIOS includes additional features such as virus and password protection as well as special configurations for fine-tuning the system chipset. The defaults for the BIOS values contained in this document may vary slightly with the version installed in your system.

Plug and Play Support

This PHOENIX-AWARD™ BIOS supports the Plug and Play Version 1.0A specification as well as ESCD (Extended System Configuration Data) write.

APM Support

This PHOENIX-AWARD™ BIOS supports Version 1.1 & 1.2 of the Advanced Power Management (APM) specification. These features include system sleep and suspend modes in addition to hard disk and monitor sleep modes. Power management features are implemented using the System Management Interrupt (SMI).

PCI Bus Support

This PHOENIX-AWARD™ BIOS also supports Version 2.2 of the Intel PCI (Peripheral Component Interconnect) local bus specification.

Supported CPUs

This PHOENIX-AWARD™ BIOS supports the AMD$^®$ Athlon^{TM} XP/ Athlon^{TM}/ Duron^{TM}/ Barton^{TM} CPUs.

Key Function

In general, you can use the arrow keys to highlight items, press <Enter> to select, use the <PgUp> and <PgDn> keys to change entries, press <F1> for help and press <Esc> to quit. The following table provides more detail about how to navigate within the BIOS Setup program.

Keystroke	Function
Up arrow	Move to previous item
Down arrow	Move to next item
Left arrow	Move to the item on the left (menu bar)
Right arrow	Move to the item on the right (menu bar)
Esc	Main Menu: Quit without saving changes
	Submenus: Exit Current page to the next higher level menu
Move Enter	Move to the item you desire
PgUp key	Increase the numeric value or enter changes
PgDn key	Decrease the numeric value or enter changes
+ Key	Increase the numeric value or enter changes
- Key	Decrease the numeric value or enter changes
Esc key	Main Menu – Quit and do not save changes into CMOS
	Status Page Setup Menu and Option Page Setup Menu – Exit
	Current page and return to Main Menu
F1 key	General help on Setup navigation keys
F5 key	Load previous values from CMOS
F6 key	Load the fail-safe defaults from BIOS default table
F7 key	Load the optimized defaults
F10 key	Save all the CMOS changes and exit

Main Menu

When you enter the PHOENIX-AWARD™ BIOS Utility, the Main Menu will appear on the screen. The Main menu allows you to select from several configuration options. Use the left/right arrow keys to select a particular configuration screen from the top menu bar or use the down arrow key to access and configure the information below.
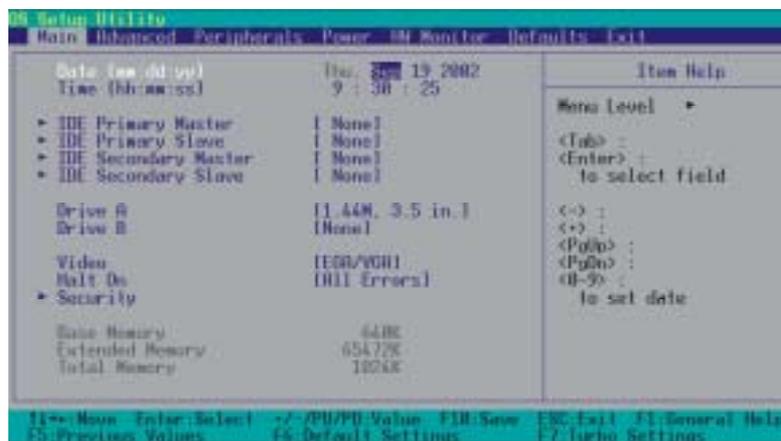
Main Menu Setup Configuration Options

Item	Options	Description
Date	mm dd yyyy	Set the system date. Note that the 'Day' automatically changes when you set the date.
Time	Hh: mm: ss	Set the current time of the system.
IDE Primary Master	Options contained in sub menu.	Press <Enter> to enter the sub menu.
IDE Primary Slave	Options contained in sub menu.	Press <Enter> to enter the sub menu.
IDE Secondary Master	Options contained in sub menu.	Press <Enter> to enter the sub menu.
IDE Secondary Slave	Options contained in sub menu.	Press <Enter> to enter the sub menu.
Drive A **Drive B**	360K, 5.25 in 1.2M, 5.25 in 720K, 3.5 in 1.44M, 3.5in 2.88M, 3.5 in None	Select the type of floppy disk drive installed in your system.
Video	EGA/VGA CGA 40 CGA 80 MONO	Select the default video device.
Halt On	All Errors No Errors All, but Keyboard All, but Diskette All, but Disk/ Key	Select the situation in which you want the BIOS to stop the POST process and notify you.
Security	Options contained in sub menu.	Press <Enter> to enter the sub menu.
Base Memory	N/A	Displays the amount of conventional memory detected during boot up.
Extended Memory	N/A	Displays the amount of extended memory detected during boot up.
Total Memory	N/A	Displays the total memory available in the system.

Advanced BIOS Features

First /Second/Third/ Boot Device

Select the order in which devices will be searched in order to find a boot device.

Options: Floppy、LS120、CDROM、ZIP100、USB-FDD、USB-ZIP、USB-CDROM、USB-HDD、LAN、Disabled

Boot Other Device

The setting allows the system to try to boot from other devices if the system fails to boot from the 1st/ 2nd/ 3rd boot devices. Options: Enabled (default)、Disabled

Boot Up Floppy Seek

When "Enabled" the BIOS tests (seeks) floppy drives to determine whether they have 40 or 80 tracks. Only 360-KB floppy drives have 40 tracks. Drives with 720 KB, 1.2 MB, and 1.44 MB capacity all have 80 tracks. Because very few modem PCs have 40-track floppy drives, we recommend that you set this field to "Disabled". Options: Disabled (default)、Enabled

Advanced BIOS Features
Virus Warning

This item allows you to choose the VIRUS warning feature for IDE Hard Disk boot sector protection. If this function is enabled and someone attempts to write data into this area, BIOS will display a warning message on the screen and sound an audio alarm (beep).

Options: Disabled (default), Enabled

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CPU Internal Cache

Make CPU internal cache active or inactive. System performance may degrade if you disable this item. Options: Enabled (default)、Disable.

External Cache

This item allows you to enable or disable "Level 2" secondary cache on the CPU to enhance performance. Options: Disabled (default)、Enabled

Quick Power On Self Test

Allows the system to skip certain tests while booting. This will speed up the boot process.

Options: Enabled (default)、Disabled.

Swap Floppy Driver

If the system has two floppy drivers, choose "Enabled" to assign physical drive B to logical drive A and vice-versa. Options: Disabled (default)、Enabled

Boot Up NumLock Status

Selects the power on state for NumLock.

Options:　On (default)　　　Numpad keys are number keys.

　　　　　Off　　　　　　　Numpad keys are arrow keys.

Typematic Rate Setting

When "Enabled", the "typematic rate" and "typematic delay" can be configured. Typematic Rate determines the keystroke repeat rate used by the keyboard controller..

Options: Disabled (default)、Enabled

Typematic Rate (Chars/Sec)

The rate at which a character repeats when you hold down a key.

Options: 6 (default)、8、10、12、15、20、24、30

Typematic Delay (Msec)

The delay before keystrokes begin to repeat. Options: 250 (default)、500、750、1000

APIC Mode

By enabling this option, "MPS version control for OS" can be configured.

Options: Disabled、Enabled (default)

MPS Version Control For OS

The 1.1 version is the older version that supports 8 more IRQs in the Windows NT environment. Choose the new 1.4 version for Windows 2000 and Windows XP.

Options: 1.4 (default) 、1.1

OS Select For DRAM > 64MB

Select "OS2" only if you are running the OS/2 operating system with greater than 64MB of RAM. Options: Non-OS2 (default) 、OS2

HDD S.M.A.R.T. Capability

Self Monitoring Analysis and Reporting Technology is a technology that enables a PC to attempt to predict the possible failure of storage drives. Options: Disabled (default) 、Enabled

Small LOGO (EPA) Show

This item allows you to show or hide the small LOGO EPA.

Options: Disabled (default) 、Enabled

Advanced Chipset Features
System Performance

This item allows you select the system performance which you want.

Options: Optimal   Use the most stable settings

Aggressive/Turbo Use over clocked settings for higher performance but with higher risk of instability

Expert   Allows full customization of performance options. Advanced user only.

FSB Frequency

This item allows you to select the FSB Frequency. The mainboard can detect the CPU FSB Frequency as long as the BIOS can identify the ID number for the CPU you have installed. Otherwise the CPU FSB Frequency will be set to safe values that you can manually adjust in the item.

Options: 100 、102 ~ 200 MHz

CPU Interface

This item allows you to set the CPU/FSB parameters.

Options: Optimal   Use most stable CPU/FSB parameters

Aggressive   Use overclocked CPU/FSB parameters

DDR:CPU Ratio

This item allows you to adjust your "DDR:CPU Ratio" and overclock the DDR speeds of the system.
Options: 1、1.2、1.33、1.50、1.60、1.66、2、2.4、2.5、2.66、3、3.33、4、Auto

DDR Speed (Strobe/Sec)

This item shows the DDR Speed.

Memory Timings

This item determines DRAM clock/ timing using SPD or manual configuration. Make sure your memory module has SPD (Serial Presence Data), if you want to select the "Optimal".
Options: Optimal (default)、Aggressive、Turbo、Expert

T (RAS)

When the "Memory Timings" set to "Expert" then the item allows you to select DRAM active to Precharges Delay. Row-active delay => set system performance to "Optimal" to use the delay recommend by the DIMM's manufacturer. Options: 1~15

T (RCD)

When the "Memory Timings" set to "Expert" then the item allows you to select the DRAM delay time when begin read. RAS-to-CAS delay => set system performance to "Optimal" to use the delay recommend by the DIMM's manufacturer.Options: 1~7

T (RP)

When the "Memory Timings" set to "Expert" then the item allows you to set the time to precharge. Row-precharge delay => set system performance to "Optimal" to use the delay recommend by the DIMM's manufacturer. Options: 1~7

CAS Latency Time

This item determines CAS Latency. When synchronous DRAM is installed, the number of clock cycles of CAS latency depends on the DRAM timing. Do not reset this field from the default value specified by the system engineer. This field is adjustable only when "DRAM Timing Selectable" is set to "Manual". Options: 2、2.5、3 and By SPD (default)

FSB Speed Spectrum

This item allows you to enable/ disabled the FSB speed spectrum. We recommend you to disabled this item before overclocking. Options: 0.50% (default)、1.00%、Disabled

AGP Spread Spectrum

When you installed a AGP card this item will allow you to enable/ disable the AGP speed spread spectrum. We recommend you to disabled this item before overclocking.

Options: 0.50% (default) 、 Disabled

Frame Buffer Size

When you use the onboard VGA port this item will allow you to select memory size for video frame buffer. Options: 8M 、 16M 、 32M 、 64M 、 128M 、 Disabled

AGP Aperture Size (MB)

Select the size of the Accelerated Graphics Port (AGP) aperture. The aperture is a portion of the PCI memory address range dedicated for graphics memory address space. Host cycles that hit the aperture range are forwarded to the AGP without any translation.

Options: 32M 、 64M 、 128M 、 256M 、 512M

AGP Frequency

This item allows you to select the AGP frequency.

Options: Auto (default) 、 50 MHz 、 66~87 MHz 、 90 MHz 、 93 MHz 、 95 MHz 、 97 MHz 、 100 MHz

AGP 8X Support

This item allows you to enable or disable the AGP 8X. Options: Enabled (default) 、 Disabled

AGP Fast Write

The AGP Fast Write technology allows the CPU to write directly to the graphics card bypassing the system AGP 4X speed. Choose "Enabled" only when you used with AGP card support. Options: Disabled (default) 、 Enabled

System BIOS Cacheable

When enabled, accesses to system BIOS ROM addressed at F0000H-FFFFFH are cached, provided that the cache controller is enabled. Options: Enabled (default), Disabled

Video RAM Cacheable

Select "Enabled" to allow caching of the video RAM which may improve performance. If any other program writes to this memory area, a system error may result. Options: Enabled, Disabled (default)

PnP/PCI Configurations
Reset Configuration Data

Select "Enabled" to reset the Extended System Configuration Data (ESCD) if you have installed a new add-on card and the system reconfiguration has caused such a serious conflict that the OS cannot boot. Options: Disabled (default)、Enabled

Resources Controlled By

BIOS can automatically configure all the boot and Plug and Play compatible devices. If you choose Auto, you will not be able to manually assign IRQ DMA and memory base address fields, since BIOS automatically assigns them. Options: Auto (ESCD) (default)、Manual

IRQ Resources

When resources are controlled manually, you can assign each system interrupt a type, depending on the type of device using the interrupt. This is only configurable when "Resources Controlled By" is set to "Manual".

Options: IRQ-3/ 4/ 5/ 7/ 9/ 10/ 11/ 12/ 14/ 15   assigned to   PCI device

PCI / VGA Palette Snoop

Some graphic controllers that are not VGA compatible take the output from a VGA controller and map it to their display as a way to provide boot information and VGA compatibility.
Options: Disabled (default)、Enabled

PCI Latency Timer (CLK)

This item allows you to set up the PCI Latency Time (0-255). If you select the "32" it will optimize PCI speeds. Options: 0-255、32 (default)

Integrated Peripherals
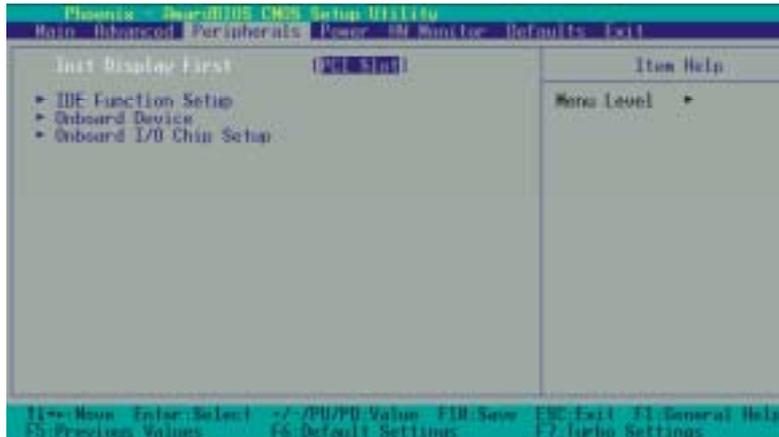
Init Display First

With systems that have multiple video cards, this option determines whether the primary display uses a PCI slot or an AGP slot. Options: Onboard/AGP (default)、PCI Slot

IDE Function Setup

If you highlight the "IDE Function Setup" label and then press the enter key, it will take you to a submenu with the following options:

OnChip IDE Channel 0/1

The mainboard chipset contains a PCI IDE interface with support for two IDE channels. Select "Enabled" to activate the first and/or second IDE interface. Select "Disabled" to deactivate an interface if you are going to install a primary and/or secondary add-in IDE interface.

Options: Enabled (default)、Disabled

IDE Primary/Secondary/Master/Slave PIO

The IDE PIO (Programmed Input / Output) fields let you set a PIO mode (0-4) for each of the IDE devices that the onboard IDE interface supports. Modes 0 to 4 will increase performance incrementally. In Auto mode, the system automatically determines the best mode for each device. Options: Auto (default)、Mode0、Mode1、Mode2、Mode3、Mode4.

IDE Primary / Secondary /Master / Slave UDMA

Ultra DMA 100 functionality can be implemented if it is supported by the IDE hard drives in your system. As well, your operating environment requires a DMA driver (Windows 95 OSR2 or a third party IDE bus master driver). If your hard drive and your system software both support Ultra DMA 100, select "Auto" to enable BIOS support. Options: Auto (default)、Disabled

IDE Prefetch Mode

The "onboard" IDE drive interfaces supports IDE prefetching for faster drive access. If you install a primary and/or secondary add-in IDE interface, set this option to "Disabled" if the interface does not support prefetching. Options: Enabled (default)、Disabled

IDE HDD Block Mode

Block mode is otherwise known as block transfer, multiple commands, or multiple sector read/write. Select the "Enabled" option if your IDE hard drive supports block mode (most new drives do).   The system will automatically determine the optimal number of blocks to read and write per sector. Options: Enabled (default)、Disabled

Onboard Device

If you highlight the "Onboard Device" label and then press the enter key, it will take you to a submenu with the following options:

OnChip USB

This option should be enabled if your system has a USB port installed on the system board. You will need to disable this feature if you add a higher performance controller.

Options: V1.1+V2.0 (default)、Disabled、V1.1

USB Keyboard Support

Enables support for USB attached keyboards. Options: Disabled (default)、Enabled

AC97 Audio

This option allows you to control the onboard AC'97 audio.

Options: Enabled (default)、Disabled

MAC Lan (NVIDIA)

This option allows you to control the onboard LAN device.

Options: Enabled、Disabled (default)

OnChip 1394 (only for KM18G PRO II)

This item allows you to enable or disabled the 1394 Device. Options: Enabled (default)、Disabled

Onboard I/O Chip Setup
PWRON After PWR-Fail

This field will determine whether your system will boot after restoring power after a power failure. If you select "On", the system will boot whether or not the system was on before power failure. If you select "Former-Sts", the system will be restored to the status before the power failure.

Options: Off (default)、On、Former-Sts

Power On Function

This option allows you to select a way to power on your computer. Options: Hot KEY、Mouse Left、Mouse Right、Any KEY、BUTTON ONLY (default), and Keyboard 98

Hot Key Power ON

This option allows you to use the Ctrl key along with a hot key (function key) to power on your system. This field is only configurable when "Power On Function" is set to "Hot Key".

Options: Ctrl-F1、Ctrl-F2…… Ctrl-F12

Onboard FDC Controller

Select "Enabled" if your system has a floppy disk controller (FDC) installed on the system board and you wish to use it. If you install an add-in FDC or the system has no floppy drive, select "Disabled".

Options: Enabled (default)、Disabled

Onboard Serial Port 1/ Port 2

Select an address and corresponding interrupt for the first/ second serial port.

Options: Disabled、3F8/IRQ4 (default for port1)、2F8/IRQ3(default for port2)、3E8/IRQ4、2E8/IRQ3、Auto

UART Mode Select

This item allows you to select the Infra Red (IR) standard to be used.

Options: Normal (default)、ASKIR、IrDA

RxD, TxD Active

This item determines the RxD and TxD frequencies. This field only configurable if "UART Mode Select" is set to "ASKIR" or "IrDA". Options: Hi / Lo (default)、Hi / Hi、Lo / Hi、Lo / Lo

IR Transmission Delay

This item allows you to enable/disable IR transmission delay. This field only configurable if "UART Mode Select" is set to "ASKIR" or "IrDA". Options: Enabled (default)、Disabled

UR2 Duplex Mode

Select the transmission mode used by the IR interface. Full-duplex mode permits simultaneous bi-directional transmission. Half-duplex mode permits transmission in only one direction at a time. This field only configurable if "UART Mode Select" is set to "ASKIR" or "IrDA".

Options: Half (default)、Full

Use IR Pins

Consult your IR peripheral documentation to select the correct setting of the TxD and RxD signals. This field is only configurable if "UART Mode Select" is set to "ASKIR" or "IrDA".

Options: Full、Half (default)

Onboard Parallel Port

Select an address and corresponding interrupt for the onboard parallel port.

Options: 378/IRQ7 (default)、278/IRQ5、3BC/IRQ7、Disabled

Parallel Port Mode

This option allows you to select a parallel port mode for the onboard parallel port.

Options: ECP(default)　　Extended Capabilities Port.

EPP　　Enhanced Parallel Port.

SPP　　Standard Printer Port.

ECP+EPP　　ECP & EPP mode.

Normal

EPP Mode Select

Select EPP port type 1.7 or 1.9. This field is only configurable if "Parallel Port Mode" is set to "EPP" or "ECP+EPP". Options: EPP 1.9(default)、EPP 1.7

ECP Mode Use DMA

Select a DMA Channel for the parallel port when using the ECP mode. This field is only configurable if "Parallel Port Mode" is set to "ECP". Options: 3 (default)、1

Game Port Address

Game Port I/O Address. Options: 201 (default)、209、Disabled

Midi Port Address

Midi Port Base I/O Address. Options: 330、300 (default)、290、Disabled

Midi Port IRQ

This determines the IRQ that the Midi Port will use. Options: 5、10 (default)

Power Management

The Power Management Setup Menu allows you to configure your system to utilize energy conservation features as well as power-up/ power-down options.
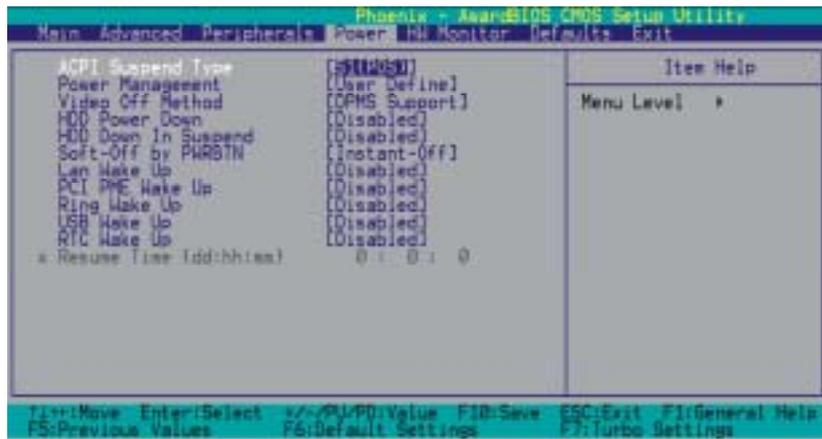
ACPI Suspend Type

The item allows you to select the suspend type using the ACPI operating system.

Options: S1 (POS) (default)   Power on Suspend

S3 (STR)   Suspend to RAM

S1 & S3   POS and STR

Power Management

There are three options of Power Management:

1. Min. Power Saving

Minimum power management

HDD Power Down = 15 minutes

2. Max. Power Saving

Maximum power management (only available for sl CPUs).

HDD Power Down = 1 minute

3. User Defined (default)

Allows you to set each mode individually.

When this option is enabled, each of the ranges are from 1 minute to 1 hour except for HDD Power Down, which ranges from 1 minute to 15 minute and includes a "disable" option.

Note: If you select Min. or Max. Power Saving modes, the "HDD Power Down" value will fixed.

Video Off Method
This option determines the manner in which the monitor goes blank.

Options:

V/H SYNC+Blank   This selection will cause the system to turn off the vertical and horizontal synchronization ports and write blanks to the video buffer.

Blank Screen(default) This option only writes blanks to the video buffer.

DPMS Support   Initial display power management signaling.

HDD Power Down
When enabled, the hard disk drive will power down after a certain configurable period of system inactivity. All other devices remain active.

Options: Disabled (default)、1 Min、2 Min、3 Min、4 Min、5 Min、6 Min、7 Min、8 Min、9 Min、10 Min、11 Min、12 Min、13 Min、14 Min、15Min

HDD Down In Suspend
This allows you to enable/ disable the hard driver power down in the suspend state.

Options: Disabled (default)、Enabled

Soft-Off by PWRBTN
In situations where the system enters a "hung" state, you can configure the BIOS so that you are required to pre the power button for more than 4 seconds before the system enters the Soft-Off state.

Options: Delay 4 Sec, Instant-Off (default).

LAN Wake Up
To use this function, you need a LAN add-on card which supports power on functions. As well as the wake-up on LAN jumper. Options: Disabled (default)、Enabled

PCI PME Wake Up
This option will also cause the system to wake up with any onboard LAN activity.

Options: Disabled (default)、Enabled

Ring Wake Up
This option allows you to awaken the system upon receiving an incoming call to modem device.
Options: Disabled (default)、Enabled.

USB Wake up

This item allows you to awaken the system from suspend mode using a USB devices.

Options: Enabled 、 Disabled (default)

* This option is configurable only when the ACPI Suspend Type is set to S3.

RTC Wake Up

When "Enabled", you can set the date and time at which the RTC (real-time clock) alarm awakens the system from Suspend mode. Options: Enabled 、 Disabled (default).

Resume Time (dd:hh:mm)

You can choose the day, hour and minute the system will boot up.

Hardware Monitor
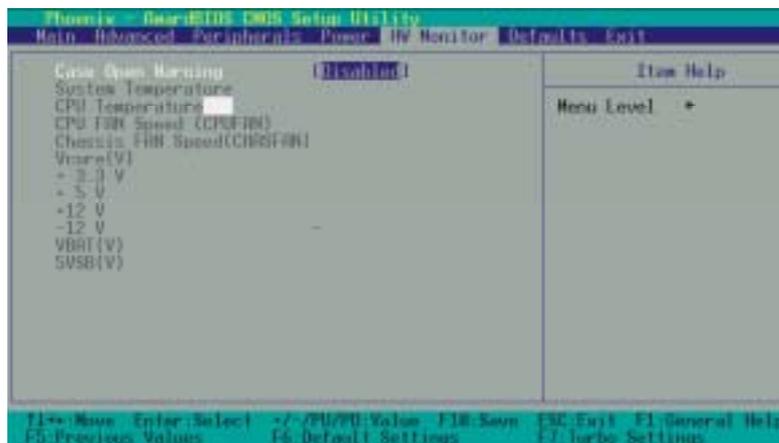
Case Open Warning

If this function is set to "Enabled" and the case had been previously opened, the system will automatically display alert messages on the screen when you power on your computer. If this function is set to "Disabled", the system will not show alert messages when you power on your computer even if the case had been previously opened. Options: Disabled (default) 、 Enabled

Load Defaults
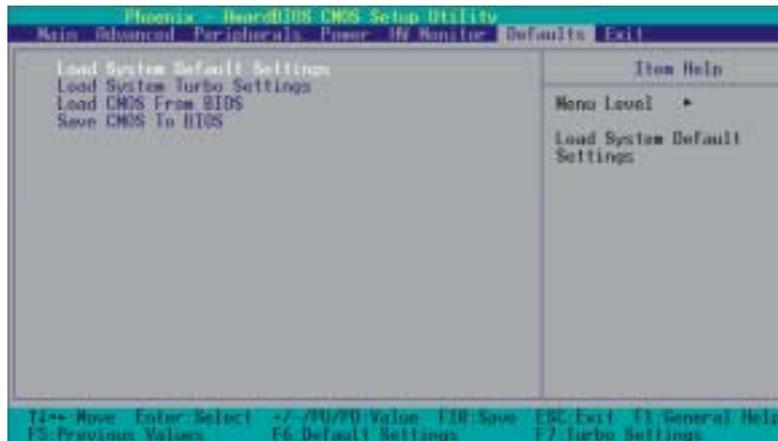
Load System Default Settings

Load System Default Settings.

Load System turbo Settings

Load System Turbo Settings.

Load CMOS From BIOS

Load defaults from flash ROM for systems without batteries.

Save CMOS To BIOS

Save defaults to flash ROM for systems without batteries.

Exit Menu
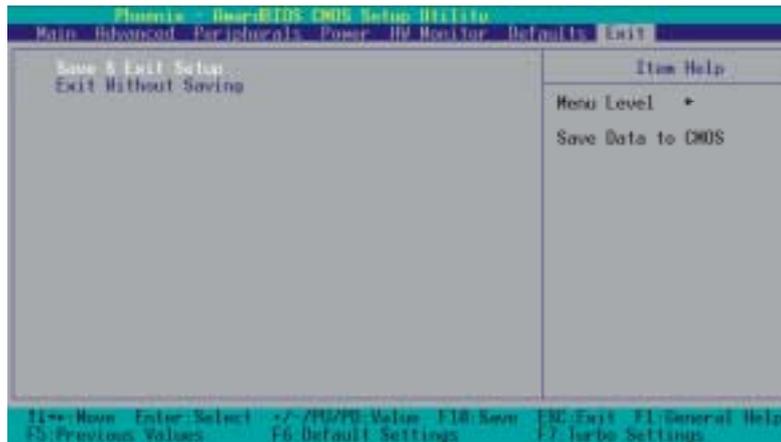
Save & Exit Setup

Save all configuration changes to CMOS (memory) and exit setup. A confirmation message will be displayed before proceeding.

Exit Without Saving

Abandon all changes made during the current session and exit setup. A confirmation message will be displayed before proceeding.

Chapter 3: Software Setup

Software Installation

◎ The screen and images are only for general reference. The version of the screens
   you received with your software may vary slightly.

Place the Driver CD into the CD-ROM drive and the Installation Utility will auto-run. You can also launch the Driver CD Installation Utility manually by executing the **launch.exe** program on the Driver CD. For example: the driver CD with a Windows 2000 operating system. Follow the steps below: (For more details, please refer to the Readme.txt files that in each folder of the Driver CD.)

1. On the first screen (Main Screen), click "KM18G Pro/ KM18G Pro II".
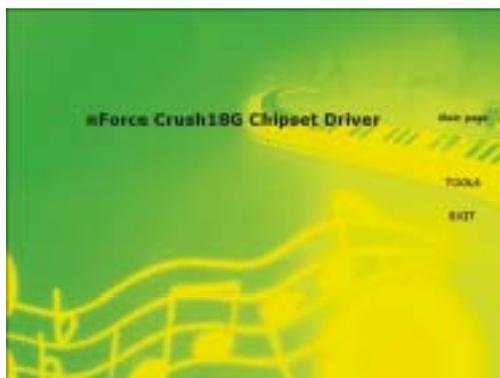
2. On the "KM18G Pro/ KM18G Pro II" screen, click "nForce Crush18G Chipset Driver".

Note: When you install it with Windows® 98, always use your original Windows® 98 OS CD-ROM when prompted to locate Windows drivers – otherwise, it could result in procedural problems during the setup.

3. By clicking "Tools" from the screen in step 1or step 2, the screen to the left will be displayed with options to install several programs. Follow the instructions on the screen after clicking the buttons.
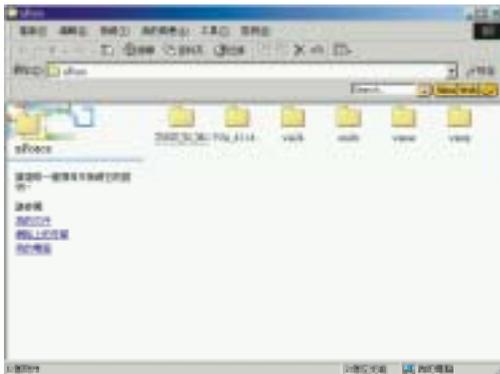
4. If you click the "Browse CD" button from the screen in step 1 or step 3, you can browse all the files in the Driver CD.

Note: You can click the "Exit" button on any screen to exit the Driver CD utility.

Note: **For Windows 98 systems using the onboard VGA facilities.**

If your system is a Windows 98 system, there will be an "nForce 2 Crush18G VGA Driver" button on the screen in step 2. You must install this driver if you want to enable the onboard VGA facilities.

Also note that this configuration (Windows 98/onboard VGA) does not support nVIDIA nView (dual monitors) functionality even though two monitors display in the "**Display Setup**" screen (**Start**->**Settings**->**Control Panel**->**Display**). The second monitor will not be configurable.

Chapter 4: Troubleshooting

Problem 1:

No power to the system. Power light does not illuminate. Fan inside power supply does not turn on. Indicator lights on keyboard are not lit.

Causes:

1. Power cable is unplugged.

2. Defective power cable.

3. Power supply failure.

4. Faulty wall outlet; circuit breaker or fuse blown.

Solutions:

1. Make sure power cable is securely plugged in.

2. Replace cable.

3.Contact technical support.

4.Use different socket, repair outlet, reset circuit breaker or replace fuse.

Problem 2:

System inoperative. Keyboard lights are on, power indicator lights are lit, hard drive is active but system seems "hung"

Causes: Memory DIMM is partially dislodged from the slot on the mainboard.

Solutions:

1. Power Down

2. Using even pressure on both ends of the DIMM, press down firmly until the module snaps into place.

Problem 3:

System does not boot from the hard disk drive but can be booted from the CD-ROM drive.

Causes:

1. Connector between hard drive and system board unplugged.

2. Damaged hard disk or disk controller.

3. Hard disk directory or FAT is corrupted.

Solutions:

1. Check the cable running from the disk to the disk controller board. Make sure both ends are securely attached. Check the drive type in the standard CMOS setup.

2. Contact technical support.

3. Backing up the hard drive is extremely important. Make sure your periodically perform backups to avoid untimely disk crashes.

Problem 4:

System only boots from the CD-ROM. The hard disk can be read and applications can be used but booting from the hard disk is impossible.

Causes: Hard Disk boot sector has been corrupted.

Solutions: Back up data and applications files. Reformat the hard drive. Re-install applications and data using backup disks.

Problem 5:

Error message reading "SECTOR NOT FOUND" displays and the system does not allow certain data to be accessed.

Causes: There are many reasons for this such as virus intrusion or disk failure.

Solutions: Back up any salvageable data. Then performs low level format, partition, and then a high level format the hard drive. Re-install all saved data when completed.

Problem 6:

Screen message says "Invalid Configuration" or "CMOS Failure."

Causes: Incorrect information entered into the BIOS setup program.

Solutions: Review system's equipment. Reconfigure the system.

Problem 7:

The Screen is blank.

Causes: No power to monitor.

Solutions: Check the power connectors to the monitor and to the system.

Problem 8:

Blank screen.

Causes:

1. Memory problem.

2. Computer virus.

Solutions:

1. Reboot computer. Reinstall memory. Make sure that all memory modules are securely installed.

2. Use anti-virus programs to detect and clean viruses.

Problem 9

Screen goes blank periodically.

Causes: Screen saver is enabled.

Solutions: Disable screen saver.

Problem 10:

Keyboard failure.

Causes: Keyboard is disconnected.

Solutions: Reconnect keyboard. Replace keyboard if you continue to experience problems.

Problem 11:

No color on screen.

Causes:

1. Faulty Monitor.

2. CMOS incorrectly set up.

Solutions:

1. If possible, connect monitor to another system. If no color appears, replace monitor.

2. Call technical support.

Problem 12:

The screen displays "C: drive failure."

Causes: Hard drive cable not connected properly.

Solutions: Check hard drive cable.

Problem 13:

Cannot boot the system after installing a second hard drive.

Causes:

1. Master/slave jumpers not set correctly.

2. Hard drives are not compatible / different manufacturers.

Solutions:

1. Set master/slave jumpers correctly.

2.Run SETUP program and select the correct drive types. Call drive manufacturers for possible compatibility problems with other drives.

Problem 14:

Missing operating system on hard drive.

Causes: CMOS setup has been changed.

Solutions: Run setup and select the correct drive type.

Problem 15:

Certain keys do not function.

Causes: Keys jammed or defective.

Solutions: Replace keyboard.

Appendix I: 5.1 Channel Setup

This appendix describes the installation procedures for 5.1 Channel Setup. Note that if your operating system is Windows 98/ ME/ 2000, go directly to step 3.

1. Beginning with the "Start" button, select **Setting → Control Panel → Sounds, Speech, and Audio Devices → Sounds and Audio Devices**. The screen below will display. First check the "Place volume icon in the taskbar" in the Device volume block. Then press the "Advanced…" button to configure the speaker settings.
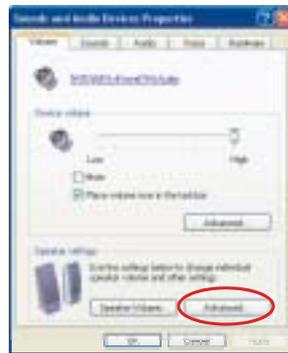
2. At the "Advanced Audio Properties" screen use the drop-down box to select the "5.1 surround sound speakers". Click "Apply" to enable the 5.1 channel audio effect.
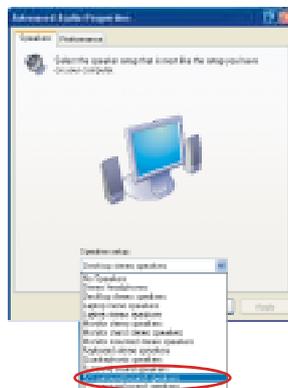

3. On your desktop, double click the volume icon that is on the desk bar.

(Note: As described earlier, begin with this step if your system is Windows 98/ ME/ 2000)

4. On the "Master Volume" screen, select "Options → Advanced Controls".

5. Next, click the "Advanced" button.
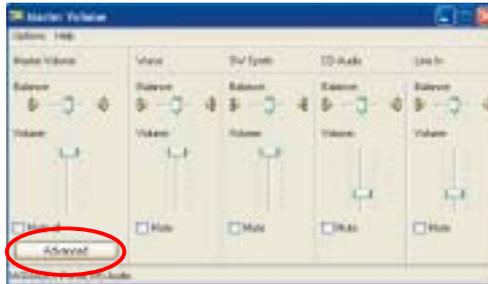
6. In the "Other Controls" section of the "Advanced Controls of Master Volume" screen, check the "Rear Speaker connected to Line In" and "Center speaker and subwoofer connected to Microphone". This is the final step in configuring "Super 5.1 Channel Audio Effect".

Appendix II: TV-Out Bracket Installation

Hardware Installation

After connecting a display monitor to the onboard VGA port:

1. Connect the TV-Out bracket to the TVOUT1 header on the mainboard.

2. Attach the TV-Out bracket to the rear panel of the case.

3. Finally, connect a TV to the TV-Out bracket.

S-Video output Connector

The white line means Pin-1

AV-Video output Connector
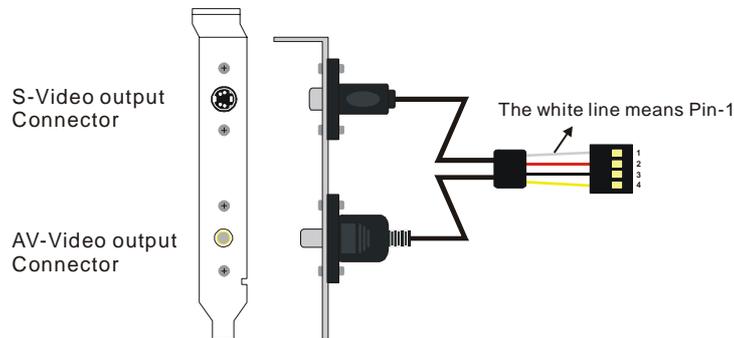
Dual monitor software setup for TV-Out

This section will describe the display configurations using a Windows® XP operating system. After you install the Driver CD that is included in the packaging. Restart the computer after which the NVIDIA nView Setup screen will appear. Follow the instructions on the screens to complete the NVIDIA nView setup and then proceed with the instructions below.

1. Beginning with the "Start" button, select → Setting → Control Panel → Display. The setup screen will display (fig 1). Press the "Settings" tab.

2. When the "Settings" page appears (fig. 2), adjust the screen resolution, color quality, and other options as needed. Then press the "Advanced" button to proceed to the next step.

(fig 1.)   (fig 2.)

3. On the next screen, press the "GeForce 4 MX Integrated GPU" tab which will display the screen below (fig 3.) along with a side-menu (Media Center Menu). By clicking the options in the side-menu you can access to other configuration settings for such utilities as Direct3D, OpenGL, etc.
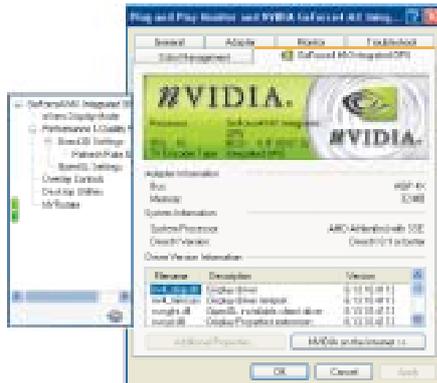
(fig 3.)   (fig 4.)

4. Next, click the "nView Display Mode" item in the side-menu. On the main screen (fig 4.), there will be two pictures, labeled "1" & "2". Move your mouse over picture "2" and click. Next, click the "Device Settings" button.
Note: In Windows ME/98, only the "Clone" and "Standard" radio buttons will be selectable in the "nView Display Mode"screen.

5. Click "Select Output Device". In the "Device Settings" screen (fig 5), click the "Change Format…" button which will then display the "Change TV Format" screen. This screen will allow you to select the appropriate TV format.

(fig 5.)