



Electronic Emission Notices

Federal Communications Commission (FCC) Statement (011898)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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 instructions contained in this manual, may cause harmful interference to radio and television communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- REORIENT OR RELOCATE THE RECEIVING ANTENNA
- INCREASE THE SEPARATION BETWEEN THE EQUIPMENT AND THE RECEIVER
- CONNECT THE EQUIPMENT INTO AN OUTLET ON A CIRCUIT DIFFERENT FROM THAT OF THE RECEIVER
- CONSULT THE DEALER OR AN EXPERIENCED AUDIO/TELEVISION TECHNICIAN

NOTE: Connecting this device to peripheral devices that do not comply with Class B requirements, or using an unshielded peripheral data cable, could also result in harmful interference to radio or television reception.

The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

To ensure that the use of this product does not contribute to interference, it is necessary to use shielded I/O cables.

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Table of Contents

HARDWARE CONFIGURATION	3
Key Features	3
Motherboard Layout	5
Jumper Settings	6
CPU Speed Selection	6
SW1, SW2 - CPU Frequency Ratio	6
SW3 - VID[0:4] Code to Voltage Definition	7
J7 - CMOS Clear	8
J2 - On Board AC97 Codec Sound	8
Pin Assignment	9
HARDWARE SETUP	10
To Install DIMMs	10
Installing a New Processor	11
To Install a Processor to ZIF Socket	11
Connect the processor Fan Connector	11
BIOS SETUP	12
Starting Setup	12
Main Menu	13
Standard CMOS Features	14
Advanced BIOS Features	16
Advanced Chipset Features	16
Integrated Peripherals	16
Power Management Setup	16
PnP/PCI Configurations	16
PC Health Status	16
Frequency/Voltage Control	16
Set Supervisor/User Password	16
Flash Update Procedure	18
APPENDIX	19
Select the Heatsink	19
Select the Power Supply	20

HARDWARE CONFIGURATION

Key Features:

Chipset

- VIA® KT133/KT133A Chipset.

Processor

- Full support for the AMD Duron™ and Athlon™ processors using Socket A.
- Supports 100MHz & 133MHz (optional) bus speed including all processors using Socket A.

VRM 9.0 (Voltage Regulator Modules) on Board

- Flexible motherboard design with on board VRM 9.0.

System Memory

- A total of three 168-pin DIMM sockets (3.3V Synchronous DRAM).
- Supports Synchronous DRAM PC100/PC133.
- Memory size up to 1.5G bytes.
- Supports SDRAM memory types.
- Supports single-density DIMMs of 1MB, 2MB, 4MB, 8MB and 16MB depth (x64).
- Supports double-density DIMMs of 2MB, 4MB, 8MB, 16MB and 32MB depth (x64).
- Supports single & double sided DIMMs.
- Banks of different DRAM types depths can be mixed.

System BIOS

- 2MB flash BIOS supporting PnP, APM, ATAPI and Windows® 95.
- Auto detects and supports LBA hard disks with capacities up to 8.4GB.
- Full support of ACPI & DMI.
- Easy to upgrade BIOS by end-user.

Dual BIOS

- As our dual BIOS use the awdf flash ver.7.83 to flash the dual BIOS, so our dual BIOS support the flash type of the awdf flash ver.7.83, such as Syncmos, ATMEL etc..
- The normal boot sequence is from main BIOS. If one BIOS is fail to boot, you can press the 'Reset' button to boot from the other BIOS (Note: no every time is success, you can try it several times or touch button time is enough long, for example 2~3 second).
- If the BIOS error that contained in compressed part of BIOS bin file, our dual BIOS can know to automatic flash, but the boot block error can not know to flash, that is: If the BIOS bin file is damage, it will auto flash BIOS, and if the bin file is OK even different with the board bin file, computer will boot normal without enter the flash screen). If the user want to flash the BIOS unconditionally, you can press the 'Alt + F2' key to flash another BIOS.

On-board I/O

- On board two PCI fast IDE ports supporting up to 4 ATA and Ultra DMA33/66/100 (optional) IDE devices.
- Supports bus master IDE, PIO mode 4 (up to 16.6M bytes/sec) and Ultra DMA33/66/100 (optional) (up to 33/66/100M (optional) bytes/sec) transfer.
- One ECP/EPP parallel port.
- Two 16550-compatible UART serial ports.

- One floppy port, supports two FDDs of 360KB, 720KB, 1.2MB, 1.44MB and 2.88MB capacity.
- Four USB ports.
- PS/2 mouse port.
- PS/2 keyboard port.
- Infrared (IrDA) is supported.
- One Line/Speaker out, one Mic in, one Line in and MIDI/Game port (optional).

Plug-and-Play

- Supports plug-and-play specification 1.1.
- Plug-and-play for DOS, Windows® 3.X, Windows® 95 as well as Windows® 98.
- Fully steerable PCI interrupts.

On-board AC97 Sound

- Integrated AC97 controller with standard AC97 codec.
- Direct Sound and Sound Blaster compatible.
- Full-Duplex 16-bit record and playback.
- PnP and APM 1.2 support.

On-board Creative Sound (optional)

- Creative ES1373 Audio controller.
- 128 voice wave table synthesizer.
- DOS game compatibility.
- PCI bus master for fast DMA.
- Fully compliant with PC97 power management specification.

(Note: If Creative PCI Sound is on board, only Primary AMR Card can be used. If Creative PCI Sound is enabled, Bus Master Device on one PCI cannot be used.)

Power Management

- Supports SMM, APM and ACPI.
- Break switch for instant suspend/resume on system operations.
- Energy star "Green PC" compliant .
- WOL (Wake-On-Lan) Header support.
- External Modem Ring-in Wake-up support.
- Support auto setting or manual setting for CPU voltage.
- Supports suspend-to-RAM (STR) (optional).

Expansion Slots

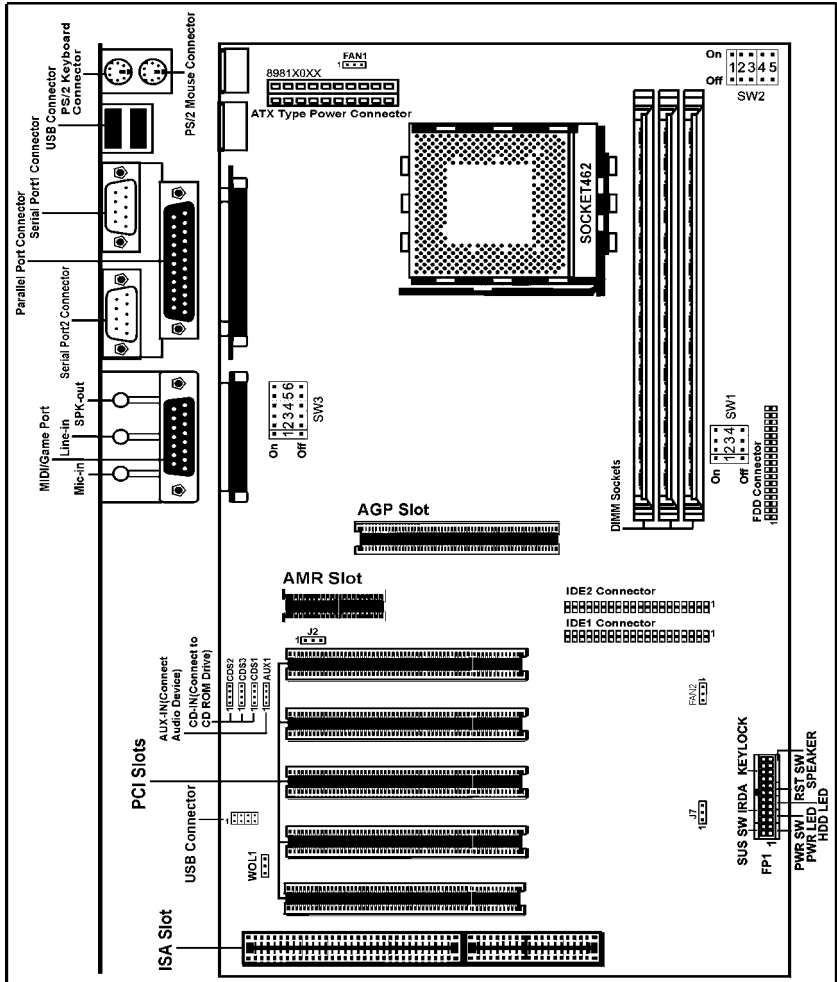
- 5 PCI bus master slots (Rev. 2.1 compliant).
- 1 Audio Modem Riser (AMR) (optional).
- 1 ISA slot (1 ISA slot share with 1 PCI slot).
- 1 universal AGP slot (AGP 2.0 compliant - 4X mode support).

CAUTION

Static electricity can harm delicate components of the motherboard. To prevent damage caused by static electricity, discharge the static electricity from your body before you touch any of the computers electronic components.

Motherboard Layout

The following diagrams show the relative positions of the jumpers, connectors, major components and memory banks on the motherboard.



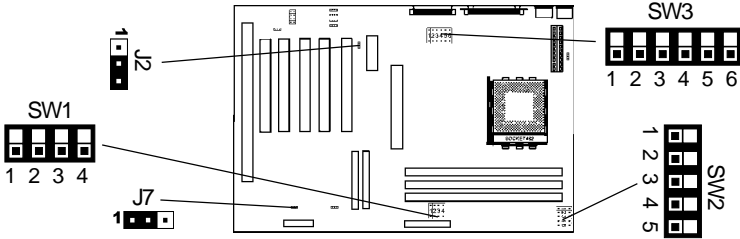
The AMR slot is optional.

NOTE

- 1) Be sure to check the cable orientation in order to match the colored strip to the pin 1 end of the connector.
- 2) When you start up the system, please wait for 5 seconds after you power on AC.

Jumper Settings

This chapter explains how to configure the motherboard's hardware. Before using your computer, make sure all jumpers and DRAM modules are set correctly. Refer to this chapter whenever in doubt.



CPU Speed Selection

In this motherboard, you can set the CPU speed by manual or auto way, but over clock isn't recommended.

SW1, SW2 - CPU Frequency Ratio

1.Auto

SW1[1:4]	SW2[1:5]	CPU FREQ MULT
*	*	Default

2.Manual

SW1[1:4]	SW2[1:5]	CPU FREQ MULT	SW1[1:4]	SW2[1:5]	CPU FREQ MULT
 1 2 3 4	 1 2 3 4 5	5	 1 2 3 4	 1 2 3 4 5	9
 1 2 3 4	 1 2 3 4 5	5.5	 1 2 3 4	 1 2 3 4 5	9.5
 1 2 3 4	 1 2 3 4 5	6	 1 2 3 4	 1 2 3 4 5	10
 1 2 3 4	 1 2 3 4 5	6.5	 1 2 3 4	 1 2 3 4 5	10.5
 1 2 3 4	 1 2 3 4 5	7	 1 2 3 4	 1 2 3 4 5	11
 1 2 3 4	 1 2 3 4 5	7.5	 1 2 3 4	 1 2 3 4 5	11.5
 1 2 3 4	 1 2 3 4 5	8	 1 2 3 4	 1 2 3 4 5	12
 1 2 3 4	 1 2 3 4 5	8.5	 1 2 3 4	 1 2 3 4 5	12.5

SW2(5) On, Manual Setting

SW2(5) Off, Auto Setting













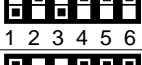



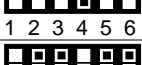
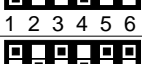
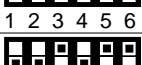
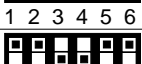
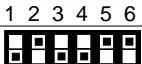
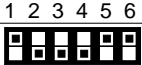
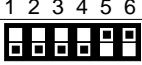
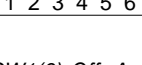
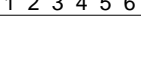
On



Off

*=Default setting.

SW3 - VID[0:4] Code to Voltage Definition

SW3[1:6] VID[0:4]	VCC_CORE	SW3[1:6] VID[0:4]	VCC_CORE
 1 2 3 4 5 6	1.850	 1 2 3 4 5 6	1.450
 1 2 3 4 5 6	1.825	 1 2 3 4 5 6	1.425
 1 2 3 4 5 6	1.800	 1 2 3 4 5 6	1.400
 1 2 3 4 5 6	1.775	 1 2 3 4 5 6	1.375
 1 2 3 4 5 6	1.750	 1 2 3 4 5 6	1.350
 1 2 3 4 5 6	1.725	 1 2 3 4 5 6	1.325
 1 2 3 4 5 6	1.700		1.300
 1 2 3 4 5 6	1.675		1.275
 1 2 3 4 5 6	1.650		1.250
 1 2 3 4 5 6	1.625		1.225
 1 2 3 4 5 6	1.600		1.200
 1 2 3 4 5 6	1.575		1.175
 1 2 3 4 5 6	1.550		1.150
 1 2 3 4 5 6	1.525		1.125
 1 2 3 4 5 6	1.500		1.100
 1 2 3 4 5 6	1.475	 *	Defaulting CPU*

SW1(6) Off, Auto Setting
SW1(6) On, Manual Setting

 On  Off

* =Default setting.