7VT880-RZ / 7VT880-RZ-C

 $\mathsf{AMD}\ \mathsf{Sempron}^{\scriptscriptstyle \mathbb{M}}\ /\ \mathsf{Athlon}^{\scriptscriptstyle \mathbb{M}}\ \mathsf{XP}\ /\ \mathsf{Athlon}^{\scriptscriptstyle \mathbb{M}}\ /\ \mathsf{Duron}^{\scriptscriptstyle \mathbb{M}}\ \mathsf{Socket}\ \mathsf{A}\ \mathsf{Processor}\ \mathsf{Motherboard}$

User's Manual

Rev. 1002 12ME-7VT880RZ-1002

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Notice

Please do not remove any labels on motherboard, this may void the warranty of this motherboard.

Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.

The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to update the information contained herein.

	Name : Timmy Huang	Date : Dec. 28, 2004	(Stamp)
Date: Dec. 28 ,2004	Signature: Timmy Huang	Manufacturer/Importer	
Signature: <u>Eric Lu</u>	General and Safety requirements for uninterruptible power systems (UPS)	afety of household and similar EK 50091-1 ectrical appliances	EN 60335
Representative Person's Name: ERIC LU	Safety for information technology equipment including electrical business equipment	afety requirements for mains operated EN 60950 ectronic and related apparatus for susehold and similar general use	□ EN 60065
including that may cause undesired operation.	e mentioned product e with LVD 73/23 EEC	The manufacturer also declares the conformity of abo with the actual required safety standards in accordan	
subject to the following two conditions: (1) This device may not	conformity marking)	C (EC	⊠ CE marking
This device complies with part 15 of the FCC Rules. Operation is		und and television signals	part 12
Supplementary Information:		abled distribution systems; Equipment	DIN VDE 0855
(a), Class B Digital Device		mits and methods of measurement radio disturbance characteristics of formation technology equipment	I EN 55022
FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109	power systems (UPo)	uppment	
Conforms to the following specifications:	EMC requirements for uninterruptible	munity from radio interference of EN 50091- 2	EN 55020
Model Number: 7VT880-RZ	Immunity requirements for household appliances tools and similar apparatus	mits and methods of measurement radio disturbance characteristics of porescent lamps and luminaries	EN 55015
Product Name: Motherboard	Generic immunity standard Part 2: Industrial environment	prable tools and similar electrical EN 50082-2 paratus	
hereby declares that the product	Generic immunity standard Part 1: Residual, commercial and light industry	mits and methods of measurement radio disturbance characteristics of susehold electrical appliances.	EN 55014-1
Phone/Fax No: (818) 854-9338/ (818) 854-9339	characteristics-Limits and methods of measurement	uipment	
City of Industry, CA 91748	Information Technology equipment-Immunity	mits and methods of measurement radio disturbance characteristics of	C EN 55013
Address: 17358 Railroad Street	by household appliances and similar electrical equipment "Voltage fluctuations"	gh frequency equipment	
Responsible Party Name: G.B.T. INC. (U.S.A.)	Disturbances in supply systems caused	radio disturbance characteristics of Set 61000-3-2 (Institute characteristics of Set 61000-3-2 (Institute characteristics) Set 61000-3-3	EN 55011
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Per FCC Part 2 Section 2.1077(a)	Germany	Ausschlager Weg 41, 1F 20537 Hamburg, declare that the product	
DECLARATION OF CONFORMITY		We, Manufacturer/Importer (full address)	
	hitv	Declaration of Conforr	

Preparing Your Computer

Computer motherboards and expansion cards contain very delicate Integrated Circuit (IC) chips. To protect them against damage from static electricity, you should follow some precautions whenever you work on your computer.

- 1. Unplug your computer when working on the inside.
- Use a grounded wrist strap before handling computer components. If you do not have one, touch both of your hands to a safely grounded object or to a metal object, such as the power supply case.
- 3. Hold components by the edges and try not touch the IC chips, leads or connectors, or other components.
- 4. Place components on a grounded antistatic pad or on the bag that came with the components whenever the components are separated from the system.
- 5. Ensure that the ATX power supply is switched off before you plug in or remove the ATX power connector on the motherboard.



Installing the motherboard to the chassis

If the motherboard has mounting holes, but they don't line up with the holes on the base and there are no slots to attach the spacers, do not become alarmed you can still attach the spacers to the mounting holes. Just cut the bottom portion of the spacers (the spacer may be a little hard to cut off, so be careful of your hands). In this way you can still attach the motherboard to the base without worrying about short circuits. Sometimes you may need to use the plastic springs to isolate the screw from the motherboard PCB surface, because the circuit wire may be near by the hole. Be careful, don't let the screw contact any printed circuit write or parts on the PCB that are near the fixing hole, otherwise it may damage the board or cause board malfunctioning.

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Chapter 1 Introduction

Features Summary

CPU	 Socket A for AMD Sempron[™] / Athlon[™] XP / Athlon[™] / Duron[™] processor
	 Supports 200/266/333/400MHz FSB
	 Supports 2.2GHz and faster
Chipset	North Bridge:VIA KT880
	South Bridge: VIA VT8237R
Memory	 3 DDR DIMM memory slots (supports up to 3GB memory)
	 Supports dual channel DDR 400/333/266 DIMM
	Supports 2.5V DDR DIMM
Slots	 1 AGP slot supports 8X/4X(1.5V) mode
	5 PCI slots
IDE Connections	2 IDE connection (UDMA 33/ATA 66/ATA 100/ATA 133), allows connection
	of 4 IDE devices
Onboard SATA	2 Serial ATA ports (Note 1)
FDD Connections	 1 FDD connection, allows connection of 2 FDD devices
Peripherals	 1 parallel port supporting Normal/EPP/ECP mode
	 2 serial ports (COMA, COMB)
	 8 USB 2.0/1.1 ports (rear x 4, front x 4 via cable)
	1 front audio connector
	1 IR connector
	 1 PS/2 keyboard port
	 1 PS/2 mouse port
Onboard LAN	 RTL8100C*
	 1 RJ45 port*
Onboard Audio	ALC655 CODEC
	 Supports Line In ; Line Out ; MIC In
	 Supports 2 / 4 / 6 channel audio
	Supports SPDIF In/Out connection
	CD In/AUX In/Game connector
BIOS	Use of licensed AWARD BIOS
	 Supports Q-Flash

to be continued.....

(Note 1) It is recommended to use SATA (1.5Gb/s) hard disks.

"*" For 7VT880-RZ only.

I/O Control	• IT8705F	
Hardware Monitor • CPU / System fan speed detection		
	System voltage detection	
	CPU temperature detection	
	CPU / System fan fail warning	
Onboard SATA RAID	Onboard VT8237R chip	
	 supports data striping (RAID 0) or mirroring (RAID 1) 	
	 supports JBOD function 	
	 supports data transfer rate of up to 150 MB/s 	
	- supports a maximum of 2 SATA connections	
Additional Features • Supports EasyTune 4		
	Supports @BIOS	
Form Factor	ATX form factor; 30.5cm x 21.0cm	



Please set the CPU host frequency in accordance with your processor's specifications. We don't recommend you to set the system bus frequency over the CPU's specification because these specific bus frequencies are not the standard specifications for CPU, chipset and most of the peripherals. Whether your system can run under these specific bus frequencies properly will depend on your hardware configurations, including CPU, Chipsets, Memory, Cards....etc.

7VT880-RZ Series Motherboard Layout



"#" For 7VT880-RZ-C only. "*" For 7VT880-RZ only.

Block Diagram



Hardware Installation Process

To set up your computer, you must complete the following steps:

- Step 1- Set System Clock Jumper (JP1)
- Step 2- Install the Central Processing Unit (CPU)
- Step 3- Install Memory Modules
- Step 4- Install Expansion Cards
- Step 5- Install I/O Peripherals Cables



Step 1: Set System Clock Jumper (JP1)

The system bus frequency can be switched at 100/133/166/200MHz by adjusting JP1. (The internal frequency depends on CPU.)



Step 2: Install the Central Processing Unit (CPU)

Before installing the CPU, please comply with the following conditions:

- 1. Please make sure that the motherboard supports the CPU.
- Please take note of the one indented corner of the CPU. If you install the CPU in the wrong direction, the CPU will not insert properly. If this occurs, please change the insert direction of the CPU.
 - 3. Please add an even layer of heat sink paste between the CPU and heatsink.
 - 4. Please make sure the heatsink is installed on the CPU prior to system use, otherwise overheating and permanent damage of the CPU may occur.
 - 5. Please set the CPU host frequency in accordance with the processor specifications. It is not recommended that the system bus frequency be set beyond hardware specifica tions since it does not meet the required standards for the peripherals. If you wish to set the frequency beyond the proper specifications, please do so according to your hardware specifications including the CPU, graphics card, memory, hard drive, etc.

Step 2-1: CPU Installation



Figure 1. Pull the rod to the 90-degree directly.



Figure 2.

Locate Pin 1 in the socket and look for a cut edge on the CPU upper corner. Insert the CPU into the

socket. (Do not force the CPU into the socket.) Then move the socket lever to the locked position while holding pressure on the center of the CPU.

Step 2-2: CPU Cooling Fan Installation



Figure 1. Apply the thermal tape(or grease) to provide better heat conduction between your CPU and cooling fan.



Figure 2. Fasten the cooling fan supporting-base onto the CPU socket on the motherboard.



Figure 3. Make sure the CPU fan is

plugged to the CPU fan connector, than the install completely.

Step 3: Install Memory Modules



Before installing the memory modules, please comply with the following conditions: 1. Please make sure that the memory used is supported by the motherboard. It is recommended that memory of similar capacity, specifications and brand be used.

2. Before installing or removing memory modules, please make sure that the computer power is switched off to prevent hardware damage.

3. Memory modules have a foolproof insertion design. A memory module can be installed in only one direction. If you are unable to insert the module, please switch the direction.

The motherboard has 3 dual inline memory module (DIMM) sockets. The BIOS will automatically detects memory type and size. To install the memory module, just push it vertically into the DIMM socket. The DIMM module can only fit in one direction due to the notch. Memory size can vary between sockets.



Fig.1

The DIMM socket has a notch, so the DIMM memory module can only fit in one direction. Insert the DIMM memory module vertically into the DIMM socket. Then push it down.



Fig.2

Close the plastic clip at both edges of the DIMM sockets to lock the DIMM module.

Reverse the installation steps when you wish to remove the DIMM module.



Dual Channel DDR

The 7VT880-RZ series supports the Dual Channel Technology. After operating the Dual Channel Technology, the bandwidth of Memory Bus will double.

7VT880-RZ series includes 3 DIMM sockets as following:

- ✤ Channel A : DDR 1, DDR 2
- ➡ Channel B : DDR 3

If you want to operate the Dual Channel Technology, please note the following explanations due to the limitation of the chipset.

- 1. Dual channel memory cannot be used if one or three DDR memory modules are installed.
- 2. If two DDR memory modules are installed (same storage capacity), one must be added to the Channel A slot and the other in the Channel B slot in order to use dual channel memory. You can simply install the two memory modules into slots of the same color. Dual channel memory cannot function if both DDR memory modules are installed on the same channel.

The following table is for Dual Channel Technology combination: (DS: Double Side, SS: Single Side)

	DDR1	DDR2	DDR3
2 memory modules	DS/SS	Х	DS/SS

Step 4: Install Expansion Cards

- 1. Read the related expansion card's instruction document before installing the expansion card into the computer.
- 2. Please make sure your AGP card is AGP 4X/8X (1.5V).



3. Please carefully pull out the small white- drawable bar at the end of the AGP slot when you try to install/ Uninstall the AGP card. Please align the AGP card to the onboard AGP slot and press firmly down on the slot .Make sure your AGP card is locked by the small white- drawable bar.



AGP Card

Step 5: Install I/O Peripherals Cables

Step 5-1: I/O Back Panel Introduction



PS/2 Keyboard and PS/2 Mouse Connector

To install a PS/2 port keyboard and mouse, plug the mouse to the upper port (green) and the keyboard to the lower port (purple).

Parallel Port

The parallel port allows connection of a printer, scanner and other peripheral devices.

Oserial Port (COMA, COMB)

Devices like mouses, modems, and etc. can be connected to Serial port.

USB port

Before you connect your device(s) into USB connector(s), please make sure your device(s) such as USB keyboard, mouse, scanner, zip, speaker...etc. have a standard USB interface. Also make sure your OS supports USB controller. If your OS does not support USB controller, please contact OS vendor for possible patch or driver upgrade. For more information please contact your OS or device(s) vendors.

LAN Port *

The LAN port provides Internet connection.

"*" For 7VT880-RZ only.

English

Line In

Connect the stereo speakers, earphone or front surround channels to this connector.

Line Out (Front Speaker Out)

Devices like CD-ROM, walkman etc. can be connected to Line In jack.

MIC In

Microphone can be connected to MIC In jack.

Step 5-2: Connectors Introduction



1)	ATX_12V	12)	F_AUDIO
 2)	ATX	13)	SUR_CEN
 3)	CPU_FAN	14)	SPDIF_IO
 4)	SYS_FAN	15)	CD_IN
 5)	FDD	16)	AUX_IN
 6)	IDE1 / IDE2	17)	F_USB1 / F_USB2
 7)	SATA0 / SATA1	18)	IR
 8)	F_PANEL	19)	CI
 9)	BAT	20)	GAME
 10)	PWR_LED	21)	CLR_CMOS
 11)	RAM_LED		

1/2) ATX_12V/ATX (Power Connector)

With the use of the power connector, the power supply can supply enough stable power to all the components on the motherboard. Before connecting the power connector, please make sure that all components and devices are properly installed. Align the power connector with its proper location on the motherboard and connect tightly.

The ATX_12V power connector mainly supplies power to the CPU. If the ATX_12V power connector is not connected, the system will not start. Caution!

Please use a power supply that is able to handle the system voltage requirements. It is recommended that a power supply that can withstand high power consumption be used (300W or greater). If a power supply is used that does not provide the required power, the result can lead to an unstable system or a system that is unable to start.



3) CPU_FAN (CPU Fan Connector)

Please note, a proper installation of the CPU cooler is essential to prevent the CPU from running under abnormal condition or damaged by overheating. The CPU fan connector supports Max. current up to 600 mA.





Pin No.	Definition
1	GND
2	+12V
3	Sense

4) SYS_FAN (System Fan Connector)

This connector allows you to link with the cooling fan on the system case to lower the system temperature.

: [1



Pin No.	Definition
1	GND
2	+12V
3	Sense

5) FDD (Floppy Connector)

Please connect the floppy drive ribbon cables to FDD. It supports 360K,720K,1.2M,1.44M and 2.88Mbytes floppy disk types.

The red stripe of the ribbon cable must be the same side with the Pin1.





6) IDE1/ IDE2 (IDE1/IDE2 Connector)

Please connect first harddisk to IDE1 and connect CDROM to IDE2. The red stripe of the ribbon cable must be the same side with the Pin1.





7) SATA0/SATA1 (Serial ATA Connector, Controlled by VT8237R)

Serial ATA can provide up to 150MB/s transfer rate. Please refer to the BIOS setting for the Serial ATA and install the proper driver in order to work properly.



S_ATA	
(Controlled by VT8237R)	

Pin No.	Definition
1	GND
2	TXP
3	TXN
4	GND
5	RXN
6	RXP
7	GND

For more detailed Serial ATA RAID setup information, please visit our website at http://www.gigabyte.com.tw.

8) F_PANEL (2x10 pins connector)

Please connect the power LED, PC peaker, reset switch and power switch etc. of your chassis front panel to the F_PANEL connector according to the pin assignment above.





HD (IDE Hard Disk Active LED)	Pin 1: LED anode(+)
	Pin 2: LED cathode(-)
SPEAK (Speaker Connector)	Pin 1: VCC(+)
	Pin 2- Pin 3: NC
	Pin 4: Data(-)
RES (Reset Switch)	Open: Normal Operation
	Close: Reset Hardware System
PW (Soft Power Connector)	Open: Normal Operation
	Close: Power On/Off
MSG (Message LED/Power/	Pin 1: LED anode(+)
Sleep LED)	Pin 2: LED cathode(-)
NC	NC

9) BAT (Battery)





- Danger of explosion if battery is incorrectly replaced.
- Replace only with the same or equivalent type recommended by the manufacturer.
- Dispose of used batteries according to the manufacturer's instructions.

If you want to erase CMOS ...

1. Turn OFF the computer and unplug the power cord.

 Take out the battery gently and put it aside for about 10 minutes. (Or you can use a metal object to connect the positive and negative pins in the battery holder to makethem short for one minute.)

- 3. Re-install the battery.
- 4. Plug the power cord and turn ON the computer.

10) PWR_LED

PWR_LED is connected with the system power indicator to indicate whether the system is on/off. It will blink when the system enters suspend mode. If you use dual color LED, power LED will turn to another color.





Pin No.	Definition
1	MPD+
2	MPD-
3	MPD-

11) RAM_LED

Do not remove memory modules while RAM_LED is on. It might cause short or other unexpected damages due to the stand by voltage. Remove memory modules only when AC power cord is disconnected.



- +

12) F_AUDIO (Front Audio Panel Connector)

If you want to use Front Audio connector, you must remove jumpers on pins 5-6, 9-10. In order to utilize the front audio header, your chassis must have front audio connector. Also please make sure the pin assigments on the cable are the same as the pin assignents on the MB header. To find out if the chassis you are buying support front audio connector, please contact your dealer. Please note, you can have the alternative of using front audio connector or of using rear audio connector to play sound.





Pin No.	Definition
1	MIC
2	GND
3	MIC_BIAS
4	POWER
5	FrontAudio(R)
6	Rear Audio (R)/ Return R
7	NC
8	No Pin
9	FrontAudio (L)
10	Rear Audio (L)/ Return L

13) SUR_CEN (Surround Center Connector)

Please contact your nearest dealer for optional SUR_CEN cable.



1	•	•	2
	Œ		
5	Œ	•	6

Pin No.	Definition
1	SUROUTL
2	SUROUTR
3	GND
4	No Pin
5	CENTER_OUT
6	BASS_OUT

14) SPDIF_IO (SPDIF In/Out Connector)

The SPDIF output is capable of providing digital audio to external speakers or compressed AC3 data to an external Dolby Digital Decoder. Use this feature only when your stereo system has digital input function. Use SPDIF IN feature only when your device has digital output function.Be careful with the polarity of the SPDIF_IO connector. Check the pin assignment carefully while you connect the SPDIF_IO cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional SPDIF_IO cable, please contact your local dealer.





Pin No.	Definition
1	VCC
2	No Pin
3	SPDIF
4	SPDIFI
5	GND
6	GND

15) CD_IN (CD In Connector)

Connect CD-ROM or DVD-ROM audio out to the connector.



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Pin No.	Definition
1	CD-L
2	GND
3	GND
4	CD-R

16) AUX_IN (AUX In Connector)

Connect other device (such as PCI TV Tunner audio out) to the connector.



Pin No.	Definition
1	AUX-L
2	GND
3	GND
4	AUX-R

17) F_ USB1 / F_USB2 (Front USB Connector)

Be careful with the polarity of the F_USB connector. Check the pin assignment carefully while you connect the F_USB cable, incorrect connection between the cable and connector will make the device unable to work or even damage it. For optional F_USB cable, please contact your local dealer.



2	_	_	_	_	_	10
4	•	•	•	•		
	Ŀ	Ŀ	Ŀ	Ŀ	L	9

Pin No.	Definition
1	Power
2	Power
3	USB DX-
4	USB Dy-
5	USB DX+
6	USB Dy+
7	GND
8	GND
9	No Pin
10	NC

18) IR

Make sure the pin 1 on the IR device is aling with pin one the connector. To enable the IR function on the board, you are required to purchase an option IR module. Be careful with the polarity of the IR connector. For optional IR cable, please contact your local dealer.



1 • • • • 5

Pin No.	Definition
1	VCC(+5V)
2	No Pin
3	IR Data Input
4	GND
5	IR Data Output

19) CI (Chassis Intrusion, Case Open)

This 2-pin connector allows your system to detect if the chassis cover is removed. You can check the "Case Open" status in BIOS.



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1	

Pin No.	Definition
1	Signal
2	GND

20) GAME (Game Connector)

This connector supports joystick, MIDI keyboard and other relate audio devices. Check the pin assignment while you connect the game cables. Please contact your nearest dealer for optional game cables.



2 16 •••••• 1 15

Pin No.	Definition
1	VCC
2	GRX1_R
3	GND
4	GPSA2
5	VCC
6	GPX2_R
7	GPY2_R
8	MSI_R
9	GPSA1
10	GND
11	GPY1_R
12	VCC
13	GPSB1
14	MSO_R
15	GPSB2
16	No Pin

21) CLR_CMOS (Clear CMOS)

You may clear the CMOS data to its default values by this header. To clear CMOS, temporarily short pins 1-2. Default doesn't include a jumper on pins 1-2 to prevent improper use of this header.



Open: Normal
 Short: Clear CMOS

Chapter 2 BIOS Setup

Chapter 2 provides an overview of the BIOS Setup Program, which allows users to modify the basic system configurations. This type of information is stored in battery-backed CMOS RAM so that it retains the Setup information when the power is turned off.

ENTERING BIOS Setup

Turning on the computer and pressing immediately allow you to enter BIOS Setup. If you need more advanced BIOS settings, please press **Ctrl** and **F1** keys on the BIOS main screen to access the the advanced BIOS settings.

CONTROL KE

$\overline{<\!\!\uparrow\!\!>\!\!<\!\!\downarrow\!\!>\!\!<\!\!\leftrightarrow\!\!>\!\!\!\rightarrow\!\!\!>}$	Move to select item
<enter></enter>	Select Item
<esc></esc>	Main Menu - Quit and not save changes into CMOS Status Page Setup Menu
	and Option Page Setup Menu - Exit current page and return to Main Menu
<+/PgUp>	Increase the numeric value or make changes
<-/PgDn>	Decrease the numeric value or make changes
<f1></f1>	General help, only for Status Page Setup Menu and Option Page Setup Menu
<f2></f2>	Item Help
<f5></f5>	Restore the previous CMOS value from CMOS, only for Option Page Setup Menu
<f6></f6>	Load the file-safe default CMOS value from BIOS default table
<f7></f7>	Load the Optimized Defaults
<f8></f8>	Q-Flash utility
<f9></f9>	System Information
<f10></f10>	Save all the CMOS changes, only for Main Menu

Main Menu

The on-line description of the highlighted setup function is displayed at the bottom of the screen.

Status Page Setup Menu / Option Page Setup Menu

Press F1 to pop up a small help window that describes the appropriate keys to use and the possible selections for the highlighted item. To exit the Help Window, press <Esc>.

The Main Menu (For example: BIOS Ver. : F2b)

Once you enter Award BIOS CMOS Setup Utility, the Main Menu (as figure below) will appear on the screen. The Main Menu allows you to select from eight setup functions and two exit choices. Use arrow keys to select among the items and press <Enter> to accept or enter the sub-menu.

Standard CMOS Features	Load Fail-Safe Defaults
 Advanced BIOS Features 	Load Optimized Defaults
 Integrated Peripherals 	Set Supervisor Password
 Power Management Setup 	Set User Password
 PnP/PCI Configurations 	Save & Exit Setup
PC Health Status	Exit Without Saving
MB Intelligent Tweaker(M.I.T.)	
Esc: Quit	↑↓→←: Select Item
F8: Q-Flash	F10: Save & Exit Setup
Time, Date, Ha	rd Disk Type

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software



> If you can't find the settings you want, press Ctrl and F1 in BIOS main menu to access the hidden advanced options.

• Standard CMOS Features

This setup page includes all the items in standard compatible BIOS.

- Advanced BIOS Features This setup page includes all the items of Award special enhanced features.
- Integrated Peripherals

This setup page includes all onboard peripherals settings.

Power Management Setup

This setup page includes all the items of Green function features.

• PnP/PCI Configurations

This setup page includes all the configurations of PCI & PnP ISA resources.

PC Health Status

This setup page includes the information of the system auto-detected temperature, voltage, and fan speed.

- MB Intelligent Tweaker (M.I.T.) This setup page allows to control CPU clock and frequency ratio.
- Load Fail-Safe Defaults

Fail-Safe Defaults indicates the value of the system parameters with which the system would be in safe configuration.

· Load Optimized Defaults

Optimized Defaults indicates the value of the system parameters which the system would be in best performance configuration.

• Set Supervisor Password

Change, set, or disable password. It allows you to limit access to the system and BIOS Setup, or just to BIOS Setup.

- Set User Password
 Change, set, or disable password. It allows you to limit access to the system.
- Save & Exit Setup

Save CMOS value settings to CMOS and exit BIOS Setup.

Exit Without Saving

Abandon all CMOS value changes and exit BIOS Setup.

Standard CMOS Features

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software

	Standard Chos reacures	
Date (mm:dd:yy) Time (hh:mm:ss)	Fri, Jan 9 2004 22:31:24	Item Help
 IDE Channel 0 Master IDE Channel 0 Slave IDE Channel 1 Master IDE Channel 1 Slave IDE Channel 2 Master IDE Channel 3 Master Drive A Drive B Floopy 3 Mode Support 	[None] [None] [None] [None] [None] [1.44M, 3.5"] [None] [Disabled]	<pre>change the day, month, year <week> Sun. to Sat. <month> Jan. to Dec. <day></day></month></week></pre>
Halt On	[All, But Keyboard]	allowed in the month)
Base Memory Extended Memory Total Memory	640K 127M 128M	<year> 1999 to 2098</year>
↑↓→←: Move Enter: Select F5: Previous Values	+/-/PU/PD: Value F10: Save ESC F6: Fail-Safe Defaults F7:	Exit F1: General Help Optimized Defaults

ං Date

The date format is <week>, <month>, <day>, <year>.

- Week From Sun. to Sat., determined by the BIOS and for display only.
- ➡ Month From Jan. to Dec.
- ➤ Day From 1st to 31st (or the maximum allowed in the month).
- → Year From Year 1999 to 2098.

ං Time

The format used to express time is hours:minutes:seconds. The time is calculated based on the 24-hour military-time clock. For example, 1 p.m. is 13:00:00.

○ IDE Channel 0 Master, Slave / IDE Channel 1 Master, Slave

▶ IDE HDD Auto-Detection Press "Enter" to select this option for automatic device detection.

 IDE Channel0/Channel 1 Master(Slave) setup You can use one of the three methods below: Auto Allows BIOS to automatically detect IDE devices during POST. (Default value) None Select this if no IDE devices are used and the system will skip the automatic detection step and allow for faster system start up.
 Manual User can manually input the correct settings

Access Mode Use this to set the access mode for the hard drive. The four options are: CHS/LBA/Large/Auto (Default:Auto)

☞ IDE Channel 2 Master/ IDE Channel 3 Master

>> IDE HDD Auto-Detection Press "Enter" to select this option for automatic device detection.

- >> Extended IDE Drive setup You can use one of the two methods below:
 - Auto Allows BIOS to automatically detect IDE devices during POST. (Default value) None Select this if no IDE devices are used and the system will skip the automatic detection step and allow for faster system start up.
- ➤ Access Mode Use this to set the access mode for the hard drive. The two options are: Large/Auto (Default:Auto)
- ➤ Capacity Capacity of currently installed hard disk.

Hard drive information should be labeled on the outside drive casing. Enter the appropriate option based on this information.

- ✤ Cylinder Number of cylinders
- ➡ Head Number of heads
- ▶ Precomp Write precomp
- ➡ Landing Zone Landing zone
- ➡ Sector Number of sectors

ー Drive A / Drive B

The category identifies the types of floppy disk (drive A and drive B) installed in the computer.

- ► None No floppy disk is installed
- ▶ 360K, 5.25" 5.25 inch PC-type standard drive; 360K byte capacity.
- ▶ 1.2M, 5.25" 5.25 inch AT-type high-density drive; 1.2M byte capacity
- (3.5 inch when 3 Mode is Enabled).
- ▶ 720K, 3.5" 3.5 inch double-sided drive; 720K byte capacity
- ▶ 1.44M, 3.5" 3.5 inch double-sided drive; 1.44M byte capacity.
- ▶ 2.88M, 3.5" 3.5 inch double-sided drive; 2.88M byte capacity.

∽ Floppy 3 Mode Support (for Japan Area)

- Disabled Normal Floppy Drive. (Default value)
- Drive A Enable Drive A 3 Mode support.
- Drive B Enable Drive B 3 Mode support.
- ➡ Both Enable both Drive A and B 3 Mode support.

つ Halt on

The category determines whether the computer will stop if an error is detected during power up.

- ► All Errors Whenever the BIOS detects a non-fatal error the system will stop.
- ► No Errors The system boot will not stop for any error that may be detected and you will be prompted.
- ➡ All, But Keyboard The system boot will not stop for a keyboard error; it will stop for all other errors. (Default value)
- ▶ All, But Diskette The system boot will not stop for a disk error; it will stop for all other errors.
- ➡ All, But Disk/Key The system boot will not stop for a keyboard or disk error; it will stop for all other errors.

ං Memory

The category is display-only which is determined by POST (Power On Self Test) of the BIOS.

The POST of the BIOS will determine the amount of base (or conventional) memory installed in the system.

The value of the base memory is typically 512K for systems with 512K memory installed on the motherboard, or 640K for systems with 640K or more memory installed on the motherboard.

Extended Memory

The BIOS determines how much extended memory is present during the POST. This is the amount of memory located above 1 MB in the CPU's memory address map.

This item displays the memory size that used.

Advanced BIOS Features

CMOS	Setup	Utility-Copyright	t (C)	1984-2004	Award	Software
		Advanced B	SIOS 1	Peatures		

Hard Disk Boot Priority	[Press Enter]	Item Help
First Boot Device	[Floppy]	Menu Level 🕨
Second Boot Device	[Hard Disk]	Select Hard Disk Boot
Third Boot Device	[CDROM]	Device Priority
Password Check	[Setup]	
↑↓→←: Move Enter: Se	elect +/-/PU/PD: Value F10: Save	ESC: Exit F1: General Help

∽ Hard Disk Boot Priority

Select boot sequence for onboard (or add-on cards) SCSI, RAID, etc. Use <1> or <1> to select a device, and then press <+> to move it up, or <-> to move it down the list. Press <ESC> to exit this menu.

∽ First / Second / Third Boot Device

- ➡ Floppy Select your boot device priority by Floppy.
- ▶ LS120 Select your boot device priority by LS120.
- Hard Disk Select your boot device priority by Hard Disk.
- ► CDROM Select your boot device priority by CDROM.
- ➡ ZIP Select your boot device priority by ZIP.
- ➡ USB-FDD Select your boot device priority by USB-FDD.
- ➡ USB-ZIP Select your boot device priority by USB-ZIP.
- ▶ USB-CDROM Select your boot device priority by USB-CDROM.
- ▶ USB-HDD Select your boot device priority by USB-HDD.
- ➡ Legacy LAN Select your boot device priority by LAN.
- Disabled Select your boot device priority by Disabled.

Password Check

- Setup The system will boot but will not access to Setup page if the correct password is not entered at the prompt. (Default value)
- System The system will not boot and will not access to Setup page if the correct password is not entered at the prompt.

Integrated Peripherals

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software Integrated Peripherals

	OnChip IDE Channel0	[Enabled]	Item Help
	OnChip IDE Channell	[Enabled]	
	OnChip Serial ATA	[Enabled]	Menta Level
	SATA Mode	[RAID]	If a hard disk
	AC97 Audio	[Auto]	controller card is
	USB 1.1 Controller	[Enabled]	used, set at Disabled
	USB 2.0 Controller	[Enabled]	[Paph] od]
	USB Keyboard Support	[Disabled]	Enable onboard IDE
	USB Mouse Support	[Disabled]	FORT
	Onboard H/W LAN *	[Enabled]	
	OnBoard LAN Boot ROM *	[Disabled]	[Disabled]
	Onboard Serial Port 1	[3F8/IRQ4]	Disable onboard IDE
	Onboard Serial Port 2	[2F8/IRQ3]	TOR
	UART Mode Select	[Normal]	
x	UR2 Duplex Mode	Half	
	Onboard Parallel Port	[378/IRQ7]	
	Parallel Port Mode	[SPP]	
	Game Port Address	[201]	
	Midi Port Address	[Disabled]	
х	Midi Port IRQ	5	
↑	↓→←: Move Enter: Select	+/-/PU/PD: Value F10: Save ESC	: Exit F1: General Help
	F5: Previous Values	F6: Fail-Safe Defaults F7:	Optimized Defaults

∽ OnChip IDE Channel 0

➡ Enabled	Enable onboard 1st channel IDE port. (Default value)
N. Disablad	Disable subserved databaseral IDE work

Disabled Disable onboard 1st channel IDE port.

∽ OnChip IDE Channel 1

➡ Enabled	Enable onboard 2nd channel IDE port. (Default value)
Disabled	Disable onboard 2nd channel IDE port.

∽ OnChip Serial ATA

Enabled	Enable onchip Serial ATA function (Default Value)
Disabled	Disable onchip Serial ATA function.

☞ SATA Mode

► RAID	Set onchip SATA to RAID mode. (Default Value)
DE	Set onchip SATA to IDE mode.

☞ AC97 Audio

► Auto	Autodetect onboard AC'97 audio function. (Default value)
Disabled	Disable this function.

☞ USB 1.1 Controller

- ➡ Enabled Enable USB 1.1 Controller. (Default value)
- ➡ Disabled Disable USB 1.1 Controller.

[&]quot;*" For 7VT880-RZ only.

☞ USB 2.0 Controller

- ➡ Enabled Enable USB 2.0 Controller. (Default value)
- Disabled Disable USB 2.0 Controller.

☞ USB Keyboard Support

Enabled Enable USB Keyboard Support.
 Disabled Disable USB Keyboard Support. (Default value)

☞ USB Mouse Support

Enabled	Enable USB Mouse Support.
Disabled	Disable USB Mouse Support. (Default value)

∽ Onboard H/W LAN *

Enabled Enabled onboard LAN function. (Default value)
 Disabled Disable this function

∽ Onboard LAN Boot ROM *

- Enabled Enable to invoke the boot ROM of the onboard LAN chip.
- Disabled Disable this function. (Default value)

∽ Onboard Serial Port 1

- Disabled Disable onboard Serial port 1.
- ➡ 3F8/IRQ4 Enable onboard Serial port 1 and address is 3F8/IRQ4. (Default value)
- ▶ 2F8/IRQ3 Enable onboard Serial port 1 and address is 2F8/IRQ3.
- ➡ 3E8/IRQ4 Enable onboard Serial port 1 and address is 3E8/IRQ4.
- ▶ 2E8/IRQ3 Enable onboard Serial port 1 and address is 2E8/IRQ3.
- Auto BIOS will automatically setup the Port 1 address.

○ Onboard Serial Port 2

- Disabled Disable onboard Serial port 2
- ➡ 3F8/IRQ4 Enable onboard Serial port 2 and address is 3F8/IRQ4.
- ▶ 2F8/IRQ3 Enable onboard Serial port 2 and address is 2F8/IRQ3. (Default value)
- ➡ 3E8/IRQ4 Enable onboard Serial port 2 and address is 3E8/IRQ4.
- ▶ 2E8/IRQ3 Enable onboard Serial port 2 and address is 2E8/IRQ3.
- ✤ Auto BIOS will automatically setup the Port 2 address.

UART Mode Select

This item allows you to determine which infrared (IR) function of onboard I/O chip.

- ▶ Normal Set onboard I/O chip using standard serial port. (Default Value)
- ▶ IrDA Set onboard I/O chip UART to IrDA Mode.
- ➤ ASKIR Set onboard I/O chip UART to ASKIR Mode.

☞ UR2 Duplex Mode

This function will be available when "UART Mode Select" isn't set to Normal.

- Half IR Function Duplex Half. (Default Value)
- ▶ Full IR Function Duplex Half.
- "*" For 7VT880-RZ only.

Onboard Parallel Port

- Disabled Disable onboard LPT port.
- ▶ 378/IRQ7 Enable onboard LPT port and address is 378/IRQ7. (Default Value)
- >> 278/IRQ5 Enable onboard LPT port and address is 278/IRQ5.
- ▶ 3BC/IRQ7 Enable onboard LPT port and address is 3BC/IRQ7.

☞ Parallel Port Mode

- ▶ SPP Use Parallel port as Standard Parallel Port. (Default Value)
- ► EPP Use Parallel port as Enhanced Parallel Port.
- ➡ ECP Use Parallel port as Extended Capabilities Port.
- ➡ ECP+EPP Use Parallel port as ECP & EPP mode.

Game Port Address

- Disabled Disable this function
- ▶ 201 Enable this function and set gameport address to 201. (Default value)
- ▶ 209 Enable this function and set gameport address to 209.

Midi Port Address

- >> Disabled Disable this function. (Default value)
- ▶ 330 Enable this function and set midiport address to 330.
- ▶ 300 Enable this function and set midiport address to 300.

ー Midi Port IRQ

This option is available when the Midi Port Address is not set to "Disabled."

- ➡ 5 Set midiport IRQ to 5. (Default value)
- ▶ 10 Set midiport IRQ to 10.

Power Management Setup

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Power Management Setup

ACPI Suspend Type	[S1 (POS)]	Item Help
x USB Device Wake-Up From S3	Disabled	Menu Level 🕨
Power LED in S1 state	[Blinking]	[51]
Soft-Off by PWRBIN AC BACK Function Keyboard Power On	[Instant-Off] [Soft-Off] [Disabled]	Set suspend type to Power On Suspend under
Mouse Power On PME Event Wake Up ModemRingOn/WakeOnLan	[Disabled] [Enabled] [Enabled]	[53]
Resume by Alarm	[Disabled]	Set suspend type to
x Date (of Month) Alarm	Everyday	Suspend to RAM under
x Time (hh:mm:ss) Alarm	0 : 0 : 0	ACPI OS
↑↓→←: Move Enter: Select F5: Previous Values	+/-/PU/PD: Value F10: Save F6: Fail-Safe Defaults	ESC: Exit Fl: General Help F7: Optimized Defaults

ACPI Suspend Type

- ➡ S1(POS) Set ACPI suspend type to S1. (Default Value)
- ➡ S3(STR) Set ACPI suspend type to S3.

→ USB Device Wake-Up From S3

- Disabled Disable this function. (Default value)
- ➡ Enabled Enable USB device wake up system from S3 suspend type.

Power LED in S1 state

- ▶ Blinking The Power LED will be blinking during S1 state. (Default value)
- Dual/OFF The Power LED will be turned off or change color.

∽ Soft-Off by PWRBTN

- Instant -Off Once a user presses the power button, the system will be turned off instantly. (Default Value)
- Delay 4 Sec Press power button for 4 seconds to turn off the system. System enters suspend mode if the power button is pressed for less than 4 seconds.

AC BACK Function

➡ Soft-Off	When AC-power back to the system, the system will be in "Off" state.
	(Default value)
➡ Full-On	When AC-power back to the system, the system always in "On" state.
➡ Memory	When AC-power back to the system, the system will return to the Last state
	before AC-power off.

∽ Keyboard Power On

- Keyboard 98 If your keyboard has a "Power" button, enable this function to press the button to turn off the system.
- Password Input password (from 1 to 8 characters) and press Enter to set the Keyboard Power On Password.
- ✤ Disabled Disable this function. (Default Value)

Mouse Power On

- Enabled Enable to power on system by mouse event.
- ➡ Disabled Disable this function. (Default Value)

☞ PME Event Wake Up

- Disabled Disable this function.
- ➡ Enabled Enable PME Event Wake up. (Default Value)

ModemRingOn/WakeOnLan (When AC Back Function set to [Soft-Off])

- Disabled Disable Modem Ring On/Wake On LAN function.
- ➡ Enabled Enable Modem Ring On/Wake On LAN function. (Default Value)

Resume by Alarm

- You can enable Resume by Alarm and key in month/date/time to turn on system.
- Disabled Disable this function. (Default Value)
- Enabled Enable alarm function to POWER ON system.
- If Resume by Alarm is Enabled.
- Date (of Month) Alarm: Everyday, 0~31

Time (hh: mm: ss) Alarm: (0~23) : (0~59) : (0~59)

PnP/PCI Configurations

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software PnP/PCI Configurations

PCI1/5 IRQ Assignment	[Auto]	Item Help
PCI2 IRQ Assignment	[Auto]	Menu Level 🕨
PCI3 IRQ Assignment	[Auto]	
PCI4 IRQ Assignment	[Auto]	Device(s) using this
		INT:
		USB 1.1 Host Cntrlr
		-Bus 0 Dev16 Func 3
		USB 1.1 Host Chtrir
		-Bus 0 Devi6 Func 2
↑↓→←: Move Enter: Select	+/-/PU/PD: Value F10: Save ES	C: Exit F1: General Help
F5: Previous Values	F6: Fail-Safe Defaults F7	7: Optimized Defaults

☞ PCI1/5 IRQ Assignment

► Auto	Auto assign IRQ to PCI 1/5. (Default value)
▶ 3,4,5,7,9,10,11,12,14,15	Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 1/5.

☞ PCI2 IRQ Assignment

	▶ Auto▶ 3,4,5,7,9,10,11,12,14,15	Auto assign IRQ to PCI 2. (Default value) Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 2.
Ċ	PCI3 IRQ Assignment	
	► Auto	Auto assign IRQ to PCI 3. (Default value)
	▶ 3,4,5,7,9,10,11,12,14,15	Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 3.
☞ PCI4 IRQ Assignment		
	➡ Auto	Auto assign IRQ to PCI 4. (Default value)
	▶ 3,4,5,7,9,10,11,12,14,15	Set IRQ 3,4,5,7,9,10,11,12,14,15 to PCI 4.

PC Health Status

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software PC Health Status

Reset Case Open Status	[Disabled]	Item Help
Case Opened	No	Menu Level 🕨
Voore DDR 2.5V +3.3V +12V Current CPU Temperature Current CPU FAN Speed Current SYSTEM FAN Speed CPU FAN Fail Warning System FAN Fail Warning	CK CK CK 27°C 4821 RFM 0 RFM [Disabled] [Disabled]	[Disabled] Don't reset case open status [Enabled] Clear case open status and set to be Disabled at next boot
↑↓→←: Move Enter: Select	+/-/PU/PD: Value F10: Save ESC:	Exit F1: General Help

🗢 Reset Case Open Status

- ➡ Disabled Don't reset case open status. (Default value)
- Enabled
 Clear case open status at next boot.

∽ Case Opened

If the case is closed, **Case Opened** will show "No." If the case is opened, **Case Opened** will show "Yes." If you want to reset **Case Opened** value, enable **Reset Case Open Status** and save the change to CMOS, and then your computer will restart.

∽ Current Voltage (V) Vcore/+3.3V/DDR 2.5V /+12V

>> Detect system's voltage status automatically.

∽ Current CPU Temperature

▶ Detect CPU Temp. automatically.

∽ Current CPU/SYSTEM FAN Speed (RPM)

▶ Detect CPU/System fan speed status automatically.

∽ CPU/SYSTEM FAN Fail Warning

- Disabled Disable fan warning function . (Default value)
- ➡ Enabled Enable fan warning function. Alarm occurs when FAN stops.

MB Intelligent Tweaker (M.I.T.)

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software MB Intelligent Tweaker(M.I.T.)

	DRAM Timing	[Auto By SPD]	Item Help	
x	Bank Interleave	3 4 Bank		
x	Precharge to Active (Trp)	3T	Menu Lever /	
x	Active to Precharge (Tras)	TB	Set CPU Ratio if CPU	
x	Active to CMD (Trcd)	31	Ratio is unclocked	
X	RET to ACT/REF to REF(Trfc)	14T		
X	ACT(0) to ACT(1) (Trrd)	21		
	CPU Ratio Control	[Normal]		
	CPU Wort Clock Control	Dicabled		
	CPU Host Frequency (MHZ)	122		
	PCT/AGP Frequency (Mhz)	33/66		
	DRAM Clock	[BV SPD]		
	CPU Voltage Control	Normal		
	Normal CPU Vcore	1.600V		
	AGP Voltage Control	Normal		
	DDR Voltage Control	Normal		
↑	↓→←: Move Enter: Select F5: Previous Values	+/-/PU/PD: Value F10: Save ESC F6: Fail-Safe Defaults F7:	2: Exit F1: General Help Optimized Defaults	
CAUTR	▲ Incorrect using these features may cause your system broken. For power users only. → DRAM Timing → Auto By SPD BIOS will automatically setup the DRAM Timing by DRAM SPD data			
	▶ Manual	This item allows user to set DRAM Tin	ning Manually	
	, manual		ing manually.	
T	DRAM CAS Latency			
	► 1 5/2/2 5/3	▶ 1 5/2/2 5/3 Set DRAM CAS Latency time to 1 5/2/2 5/3(Default value:3)		
~	Bank Interleave			
0-	Dalin IllicitedVe			
	This feature allows user to select the DRAM access method. → 4 Bank /2 Bank /Disabled Set DRAM access method to 4Bank/2Bank/Disabled(Default value: 4 Bank)			
T	The Precharge to Active(Trn)			
		Cot Drocharge to Active(Trp) to 27/27/	T/FT/Default value 2T)	
	PP 21/31/41/31	Set Frecharge to Active(Trp) to 21/31/		
œ	Active to Precharge/Tra	e)		
0	Active to Flechalge(IIa	91 Cat Astive to Descharge (Tree) to CT/77		
	▶ 01//1/81/91	Set Active to Precharge(Iras) to 61//1	/oi/oi(Detault value:ol)	
œ	Active to CMD(Tred)			
0				
	▶ 21/31/41/51	Set Active to CMD(Ircd) to 21/31/41/5	I (Default value:31)	
~	PET to ACT/REE to REE	(Trfc)		
~	NET TO ACTIVET TO REP			
	▶ 121/131/141/151	Set RET to ACT/REF to REF(Trtc) to 12T/1	31/141/151(Default Value:14T)	
\sim				
0.				
	This feature allows user to	o select the ACT(0) to ACT(1) (Trrd), wh	ien any DRAM DIMM	
	installed.			
	N 27/3T	Sat ACT(A) to ACT(A) (Tred) to OT(OT)	ofault Value 2T	
	FF 21/31	Set ACT(0) to ACT(1) (1110) to 21/31(D	eiault value.21)	
\mathcal{T}	CPII Ratio Control			
0	This seties will set be the	una an ant ha anallable 16 a ann a'		
	inis option will not be sho	own or not be available if you are using	a GPU with the locked ratio.	
	➡ 5X~22X,Normal	It depends on CPU Clock Ratio.(Defaul	t Value:Normal)	

∽ Spread Spectrum Modulated

Disabled Disable Spread Spectrum Modulated.

Enabled Enable Spread Spectrum Modulated.(Default value)

→ CPU Host Clock Control

Note: If system hangs up before enter CMOS setup utility, wait for 20 sec for times out reboot . When time out occur, system will reset and run at CPU default Host clock at next boot.

- Disable Disable CPU Host Clock Control.(Default value)
- Enable Enable CPU Host Clock Control.

→ CPU Host Frequency (MHz)

To change these settings, you must first select Enable under "CPU Host Clock Control".

- ▶ 100-132 If your CPU host frquency is 100MHz, you can choose the 100MHz-132MHz range to adjust CPU host frequency.
- ▶ 133-165 If your CPU host frquency is 133MHz, you can choose the 133MHz-165MHz range to adjust CPU host frequency.
- ▶ 166-250 If your CPU host frquency is 166MHz, you can choose the 166MHz-250MHz range to adjust CPU host frequency.
- ▶ 200-254 If your CPU host frquency is 200MHz, you can choose the 200MHz-254MHz range to adjust CPU host frequency.

☞ PCI/AGP Frequency (MHz)

➤ The values depend on CPU Host Frequency(Mhz).

· DRAM Clock

➡ By SPD	BIOS will automatically setup the DRAM clock by DRAM SPD data. (Default Value).
▶ 133	If you use DDR266 DRAM module, please set "DRAM Clock(MHz)" to "133".
▶ 166	If you use DDR333 DRAM module, please set "DRAM Clock(MHz)" to "166".

- ▶ 100 II you use DDR333 DRAM module, please set DRAM Clock(MHZ) to 100.
- ▶ 200 If you use DDR400 DRAM module, please set "DRAM Clock(MHz)" to "200".

→ CPU Voltage Control

Increase CPU voltage may get stable for Over_Clock. But it may damage to CPU when enable this feature.

▶ Supports adjustable CPU Vcore from 1.100V to 2.050V.

(Default value: Normal)

☞ Normal CPU Vcore

▶ Display your CPU Vcore voltage.

C AGP Voltage Control

Increase AGP voltage may get stable for over-clock. But it may damage to AGP card if improper setting this feature.

- ➡ Auto Supply AGP voltage as AGP required(1.5V). (Default value)
- ► +0.1V Increase AGP voltage +0.1V.
- ► +0.2V Increase AGP voltage +0.2V.
- ► +0.3V Increase AGP voltage +0.3V.

○ DDR Voltage Control

Increase DDR voltage may get stable for over-clock. But it may damage to memory module if improper setting this feature.

- ✤ Auto Supply DDR voltage as memory module required(2.5V). (Default value)
- ➡ +0.1V Increase DDR voltage +0.1V.
- ► +0.2V Increase DDR voltage +0.2V.

Load Fail-Safe Defaults

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software Standard CMOS Features Load Fail-Safe Defaults • Advanced BIOS Features • Load Optimized Defaults Integrated Peripherals Set Supervisor Password Power Mar Ho PnP/PCI Load Fail-Safe Defaults (Y/N)? N PC Healt MB Intelligent Tweaker(M.I.T.) Esc: Quit ↑↓→←: Select Item F8: Q-Flash F10: Save & Exit Setup Load Fail-Safe Defaults

Fail-Safe defaults contain the most appropriate values of the system parameters that allow minimum system performance.

Load Optimized Defaults

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software

Standard CMOS Features Advanced BIOS Features	Load Fail-Safe Defaults		
 Integrated Peripherals 	Set Supervisor Password		
Power Mar			
PnP/PCI Load Optimized I	Defaults (Y/N)? N		
PC Health States			
MB Intelligent Tweaker(M.I.T.)			
Esc: Quit	↑↓→←: Select Item		
F8: Q-Flash	F10: Save & Exit Setup		
Load Optimized Defaults			

Selecting this field loads the factory defaults for BIOS and Chipset Features which the system automatically detects.

Set Supervisor/User Password

CMOS Setup Utility-Copyright (C) 1984-2004 Award Software

 Standard CMOS Features Advanced BIOS Features Integrated Peripherals Power Manual Peripherals PnP/PCI Enter Password: PC Health Sectors 	Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password		
MB Intelligent Tweaker(M.I.T.)			
Esc: Quit	↑↓→←: Select Item		
F8: Q-Flash	F10: Save & Exit Setup		
Change/Set/Disable Password			

When you select this function, the following message will appear at the center of the screen to assist you in creating a password.

Type the password, up to eight characters, and press <Enter>. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection and not enter a password.To disable password, just press <Enter> when you are prompted to enter password. A message "PASSWORD DISABLED" will appear to confirm the password being disabled. Once the password is disabled, the system will boot and you can enter Setup freely.

The BIOS Setup program allows you to specify two separate passwords:

SUPERVISOR PASSWORD and a USER PASSWORD. When disabled, anyone may access all BIOS Setup program function. When enabled, the Supervisor password is required for entering the BIOS Setup program and having full configuration fields, the User password is required to access only basic items.

If you select "System" at "Password Check" in Advance BIOS Features Menu, you will be prompted for the password every time the system is rebooted or any time you try to enter Setup Menu.

If you select "Setup" at "Password Check" in Advance BIOS Features Menu, you will be prompted only when you try to enter Setup.you try to enter Setup.

Save & Exit Setup

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 Standa Advanc Integra 	rd CMOS Features ed BIOS Features ated Peripherals	Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password	
Power 1	Management Setup	Set User Password	
PnP/PC	[Configurations	Save & Exit Setup	
 PC Hea MB Int 	Save to CMOS and EXIT (Y/N) ? Y		
Esc: Quit		IV: Select Item	
F8: Q-Flash		F10: Save & Exit Setup	
Save Data to CMOS			

Type "Y" will quit the Setup Utility and save the user setup value to RTC CMOS. Type "N" will return to Setup Utility.

Exit Without Saving

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)))	Standard CMOS Features Advanced BIOS Features Integrated Peripherals	Load Fail-Safe Defaults Load Optimized Defaults Set Supervisor Password	
)	Power Man Quit Without Saving (Y/N)? N		
> >	PC Health Status MB Intelligent Tweaker(M.I.T.)	Exit Without Saving	
Esc	: Quit	↑↓→←: Select Item	
F8:	Q-Flash	F10: Save & Exit Setup	
Abandon all Data			

Type "Y" will quit the Setup Utility without saving to RTC CMOS. Type "N" will return to Setup Utility.

Chapter 3 Install Drivers

Install Drivers

Pictures below are shown in Windows XP



Insert the driver CD-title that came with your motherboard into your CD-ROM drive, the driver CD-title will auto start and show the installation guide. If not, please double click the CD-ROM device icon in "My computer", and execute the setup.exe.

INSTALL CHIPSET DRIVER

This page shows the drivers that need to be installed for the system. Click each item to install the driver manually or switch to the **Example** to install the drivers automatically.



Massage: Some device drivers will restart your system automatically. After restarting your system the "Xpress Install" will continue to install other drivers

The "Xpress Install" uses the "Click and Go" technology to install the drivers automatically. Just select the drivers you want then click the "GO" button. The will execute the installation for you Xor by itself.





For USB2.0 driver support under Windows XP operating system, please use Windows Service Pack. After install Windows Service Pack, it will show a question mark "?" in CAUTION "Universal Serial Bus controller" under "Device Manager". Please remove the question mark and restart the system (System will auto-detect the right USB2.0 driver).

Item Description

- VIA 4IN1 Driver
 For INF, AGP, IDE and DMA Driver
- USB Patch for WinXP
 This patch driver can help you to resolve the USB device wake up S3 hang up issue in XP
- Realtek LAN Driver * LAN driver for RTL8100C chips
- RealTek AC97 Audio Driver Audio driver for Realtek AC97 codec chipset
- VIA 8237 Serial ATA Driver
 Driver for VIA 8237 SATA controller.
- VIA USB 2.0 Controller

USB 2.0 Driver information for XP

You have completed drivers installation.

"*" For 7VT880-RZ only.

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