

## 第五章 驱动程序的安装

该板支持 WINDOWS2K 及以上系统，各系统软件不一，我们附带光盘里提供 2K/XP/VISTA 系统的驱动，现安装说明仅以 2K/XP 系统为例

### 4.1 芯片组驱动程序的安装

- 进入驱动光盘 MB\INF 目录,若是 945 芯片组的则鼠标左键双击 "945INF.exe"
- 鼠标点击安装界面上 "下一步" 按钮.
- 点击 "是",再点击 "下一步".
- 安装完成后,在重新启动选项中选择 "是" 然后按 "完成" 重新启动计算机,之后驱动程序自动加载.

### 4.2 板载显卡驱动的安装

- 进入驱动光盘 MB\VGA\945 目录,鼠标左键双击 "WIN2k\_xp1417.exe".
- 鼠标点击安装界面上 "下一步" 按钮.
- 点击 "是",再点击 "下一步".
- 安装完成后,在重新启动选项中选择 "是" 然后按 "完成" 重新启动计算机,之后驱动程序自动加载.

### 4.3 板载声卡驱动的安装

- 进入驱动光盘 MB\SOUND 目录,鼠标左键双击 "WDM\_A379.EXE".
- 按照提示,点击 "下一步",接着再点击 "仍然继续";
- 安装完成后,在重新启动选项中选择 "是" 然后按 "完成" 重新启动计算机,之后驱动程序自动加载.

### 4.4 USB2.0 驱动程序的安装

主机板需要安装 Windows XP 以上的版本,在您安装好 Windows XP/2003 等版本的操作系统后请更新 Microsoft 最新的补丁程序,一般此时系统就可以识别您的 USB2.0 设备了.万一不行您还可以到网站上去下载 USB2.0 驱动程序 (是一个 EXE 可执行文件),双击这个程序后就可以按提

## DVR SERIES User's Manual

Products Model:

DVR-945GC-L

DVR-T6234

DVR-9214

DVR-G31-L

Rev:1.1

Date:Apr 2009

## Safety Instructions

1. Always read the Safety Instructions carefully.
2. Keep this manual for future reference.
3. Please keep the equipment away from humidity.
4. The openings on the chassis are for air convection hence protect the equipment from overheating. Do not cover the openings.
5. Make sure the voltage of the power supply is appropriate and adjust it to 110/220V before connect the equipment to the power source.
6. Place the power cord such a way that people can not step on. Do not place anything over the power cord.
7. Always unplug the power cord before inserting any add-on card or module.
8. All cautions and warnings in the manual should be noted.
9. Before connect to the power supply, make sure there are not screws and other metal objects left to avoid electrical short circuit that can destroy other parts.
10. Never pour any liquid into the opening, or else it would make serious damage or circuit paralysis.
11. If in the following situations, please find professionals:
  - a. the power cord or plug damaged
  - b. liquid poured into the machine
  - c. The equipment exposed to moisture
  - d. The equipment does not work properly and the user can not find guidance in this manual to solve the problem
  - e. The equipment has been dropped or damaged
  - f. Obvious signs of breakage damage have been found

## Copyright Statement

All brands, products, logos, trademarks and company names are registered trademarks belong to their respective owners.

AMI<sup>®</sup> is the registered trademark of AMI.

Intel<sup>®</sup>, Celeron<sup>®</sup>, Pentium<sup>®</sup> are registered trademarks of Intel.

Netware<sup>®</sup> is the registered trademark of Novell Inc.

PS / 2 and OS / 2 are registered trademarks of International Business Machines Co.Ltd.

Windows<sup>®</sup> 98 / 2000/NT/XP and Microsoft<sup>®</sup> are registered trademarks of Microsoft.

## Contents

Safety Instructions.....	38
Copyright Statement.....	38
<b>Chapter 1 Motherboard Specifications.....</b>	<b>40</b>
1.1 Box Contents .....	40
1.2 DVR Motherboard Features.....	41
1.3 Motherboard Introduction.....	41
1.4 Motherboard Layout and Specification.....	43
<b>Chapter II Hardware Installation .....</b>	<b>55</b>
2.1 Install CPU .....	55
2.2 Install CPU fan .....	56
2.3 Install Memory.....	58
2.4 Install Video Capture Card.....	58
2.5 Motherboard Jumper.....	58
2.6 Motherboards Interfaces.....	61
<b>Chapter III BIOS Introduction.....</b>	<b>68</b>
3.1 BIOS updates.....	68
3.2 BIOS Setup.....	68
3.3 BIOS Language Switch .....	69
3.4 Power On Automatic Restore Setting.....	69
<b>Chapter IV Watchdog Introduction.....</b>	<b>71</b>
4.1 Software Function.....	71
4.2 The definition and working.....	71
4.3 software installation.....	71
<b>Chapter V Drivers Installation .....</b>	<b>73</b>
5.1 Install Chipset Driver.....	73
5.2 Install Onboard VGA Driver.....	73
5.3 Install Onboard Audio Codec Driver.....	73
5.4 Install USB2.0 Driver.....	73

# Chapter 1 Motherboard Specifications

Thank you for using the DVR series *motherboards*, in order to guarantee product quality and suit to market demand, motherboards undergo anti-aging, low voltage, various of temperature, humid environment repeated testing, they have pass the compatibility testing with various Video Capture Card in the the market,they can meet the needs of industry with the advantages of cost-effective, stability, longevity,high-quality. Meanwhile, in order to take into account most market both at home and abroad, we provide Chinese-English bilingual BIOS . The Guide introduces the installation steps of the motherboard.Please refer to the BIOS settings user manual in the CD-ROM for more detailed information.



*As motherboard and BIOS software would be update constantly, relevant content of the manual may change without further notice, all the information are for reference purposes only, please pay attention to the actual objects and the upgraded version in the Internet publication.*

## 1.1 Box Contents

- 1.DVR-945GC-L/T6234/9214/G31-Lmotherboard
2. 80 - Conductor Ultra ATA 66/100 IDE cable
3. SATA cables
4. 2x5 NC9 to COM(DB9) cable\*2 holes
5. user' s manual (optional)
6. CD-ROM
7. warranty card
8. Certification card
9. Baffle

## 1.2 DVR Motherboard Features

The development of science and technology, especially the network technology development,promoted the development of security technologies, enhanced the application level of the Security Industry. DVR monitor market experienced simulated era,Digital signal and analog signal era,signal monitoring era.It gradually develops to be networking, intelligentize, practical, professional.It is no longer a single item but comes to be video monitor, anti-theft alarm , perimeter prevention and entrance control comprehensive project. Market occupied by the industrial embedded DVR, PC-DVR and PC embedded DVR products. PC-DVR products provided with low cost, high speed and other advantages, their demand gradually increasing.As the necessary component of PC-DVR ,DVR motherboards is also growing rapidly.For a long time, the market has been in the stagnation of 865 chip times, but the 865 chipset use 1 generation DDR memory, AGP graphics card, SOCKET 478 CPU architecture,which are all old-fashioned and eventually lead to high price, poor performance, etc. In order to make up for these deficiency and meet the different needs of customers, the DVR Series motherboards use Intel G35, 945GC mainstream chip to provide a combination of various grades of products. Their main features are as follows:

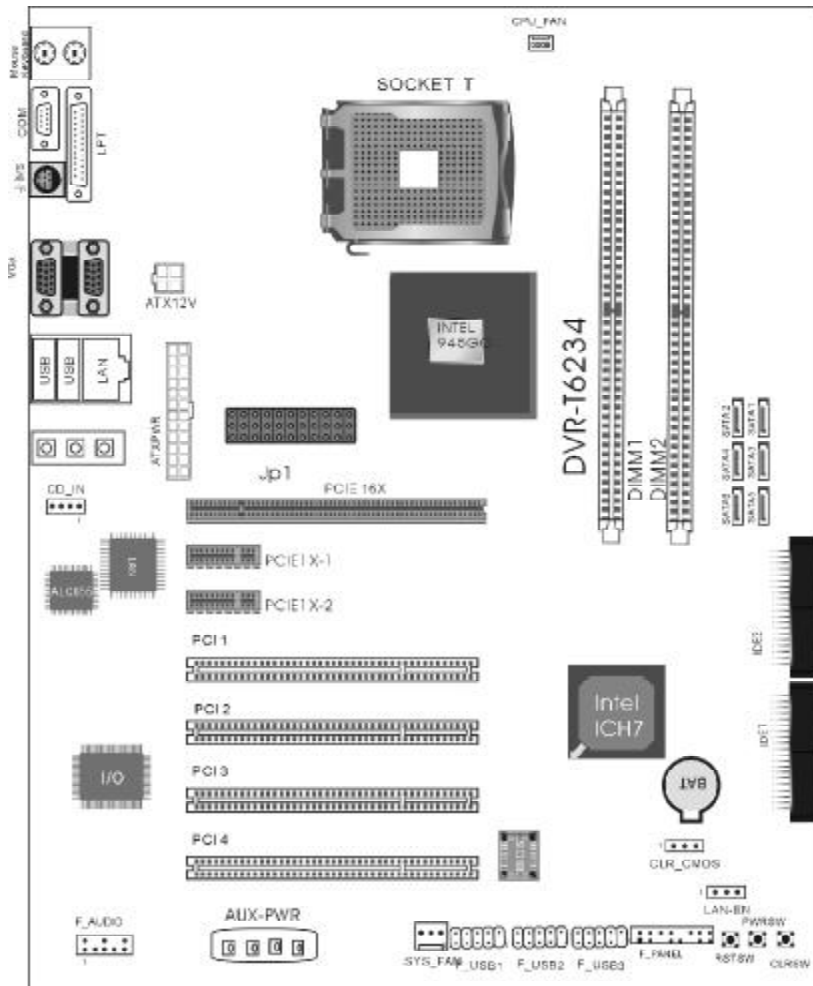
- \* Professional: All interfaces are made with EMI, static electricity, mine, wave protection, they are specialized for the DVR industry.
- \* Stability: All use “FUJITSU” military-level solid capacitance; Products undergo rigorous (temperature:-20°C - 75 °C, Humidity: 20% -95%HD)testing to ensure stable operation no matter at high temperature, dry, static electricity, cold, wet environment.
- \* Compatibility: The products are compatible with more than 90% video capture cards in the market, support 5 PCI up to 40 audio and video channel collection, 4-8 SATA , 1-3 IDE slots up to 14 hard disk to satisfy users for more than three months uninterrupted data collection.



## DVR-945GC-L Specifications:

DVR-945GC-L	
<b>CPU</b>	<ul style="list-style-type: none"> <li>* Supports 533/800/1066MHz Front Side Bus</li> <li>* Supports LGA 775 Intel® CoreTM2 Quad 6000/CoreTM 2 Duo E6000/CoreTM 2 DUO E4000/Pentium® Dual-core E2000/Celeron® Dual-core E1000/Celeron® 400/Pentium® D/Pentium® 4/Celeron® D Series.</li> </ul>
<b>Chipsets</b>	<ul style="list-style-type: none"> <li>* North Bridge: Intel® 945GC</li> <li>* South Bridge: Intel® ICH7</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>* Supports DDRII 533/667 Memory</li> <li>* Up to 2GB</li> <li>* 2*DDR2 DIMM</li> </ul>
<b>Graphics</b>	* Integrated GMA950 Graphics Card, Supports DX9.0C
<b>Audio</b>	<ul style="list-style-type: none"> <li>* Integrated ALC 655 Audio Codec</li> <li>* Supports 2/4/5.1 Channel Audio-out</li> </ul>
<b>LAN</b>	Integrated Realtek 8100C 10/100M Lan chip, supports Non-harddisk system
<b>Storage Interface</b>	<ul style="list-style-type: none"> <li>* 4*SATA 300MB/s ports</li> <li>* 1*IDE, up to 2 IDE devices</li> </ul>
<b>Expansion Slots</b>	<ul style="list-style-type: none"> <li>* 1*PCI Express 16X</li> <li>* 5*PCI</li> </ul>
<b>USB</b>	8*USB 2.0 ports(2 on the back panel, 6 connected to the internal USB header via the USB Cable)

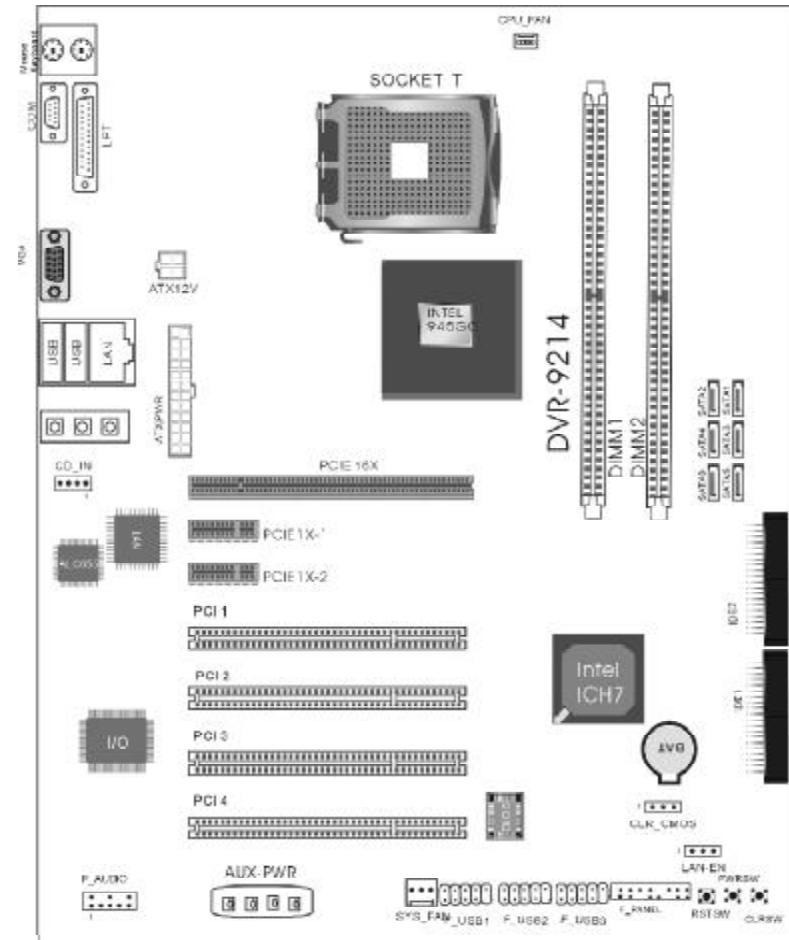
<b>Internal I/O Connectors</b>	<ul style="list-style-type: none"> <li>* 1*24 PIN main power connector, 1*4PIN 12V power connector, 1*assistant power connector</li> <li>* 4*SATA 300MB/s connectors, 1*IDE</li> <li>* 1*CPU fan header, 1*system fan header</li> <li>* 1*front panel header</li> <li>* 1*front panel Audio header</li> <li>* 3*USB 2.0 headers</li> <li>* 1*COM header</li> <li>* 1*Clearing CMOS jumper</li> <li>* 1*LAN_EN jumper</li> <li>* 3*Switchs</li> <li>* 1*FDD</li> <li>* 1*video control jumper</li> </ul>
<b>Back Panel Connectors</b>	<ul style="list-style-type: none"> <li>* 1*PS/2 keyboard port</li> <li>* 1*PS/2 mouse port</li> <li>* 1*COM port</li> <li>* 1*VGA port</li> <li>* 2*USB ports</li> <li>* 1*RJ45 port</li> <li>* 1*LPT port</li> <li>* 3*JACKs</li> </ul>
<b>I/O</b>	ITE8712F-S
<b>H/W Monitoring</b>	<ul style="list-style-type: none"> <li>* CPU/System temperature detection</li> <li>* CPU/System/Power fan speed detection</li> <li>* System voltage detection(optional)</li> </ul>
<b>BIOS</b>	<ul style="list-style-type: none"> <li>* 1*4Mbit flash</li> <li>* Provide Chinese-English bilingual BIOS interface</li> </ul>
<b>Form Factor</b>	ATX 210mm x 305mm



DVR-T6234 Layout

<b>DVR-T6234</b>	
<b>CPU</b>	<ul style="list-style-type: none"> <li>* Supports 533/800/1066MHz Front Side Bus</li> <li>* Supports LGA 775 Intel® Core™2 Quad 6000/Core™2 Duo E6000/Core™2 DUO E4000/Pentium® Dual-core E2000/Celeron® Dual-core E1000/Celeron® 400/Pentium® D/Pentium® 4/Celeron® D Series.</li> </ul>
<b>Chipsets</b>	<ul style="list-style-type: none"> <li>* North Bridge: Intel® 945GC</li> <li>* South Bridge: Intel® ICH7</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>* Supports DDRII 533/667 Memory</li> <li>* Up to 2GB</li> <li>* 2*DDR2 DIMM</li> </ul>
<b>Graphics</b>	* Integrated GMA950 Graphics Card, Supports DX9.0C
<b>Audio</b>	<ul style="list-style-type: none"> <li>* Integrated ALC 655 Audio Codec</li> <li>* Supports 2/4/5.1 Channel Audio-out</li> </ul>
<b>LAN</b>	Integrated Realtek 8100C 10/100M Lan chip, supports Non-harddisk system
<b>Storage Interface</b>	<ul style="list-style-type: none"> <li>* 6*SATA 300MB/s ports</li> <li>* 2*IDE, up to 3 IDE devices</li> </ul>
<b>Expansion Slots</b>	<ul style="list-style-type: none"> <li>* 1*PCI Express 16X</li> <li>* 2*PCI Express 1X</li> <li>* 4*PCI</li> </ul>
<b>USB</b>	8*USB 2.0 ports(2 on the back panel, 6 connected to the internal USB header via the USB Cable)

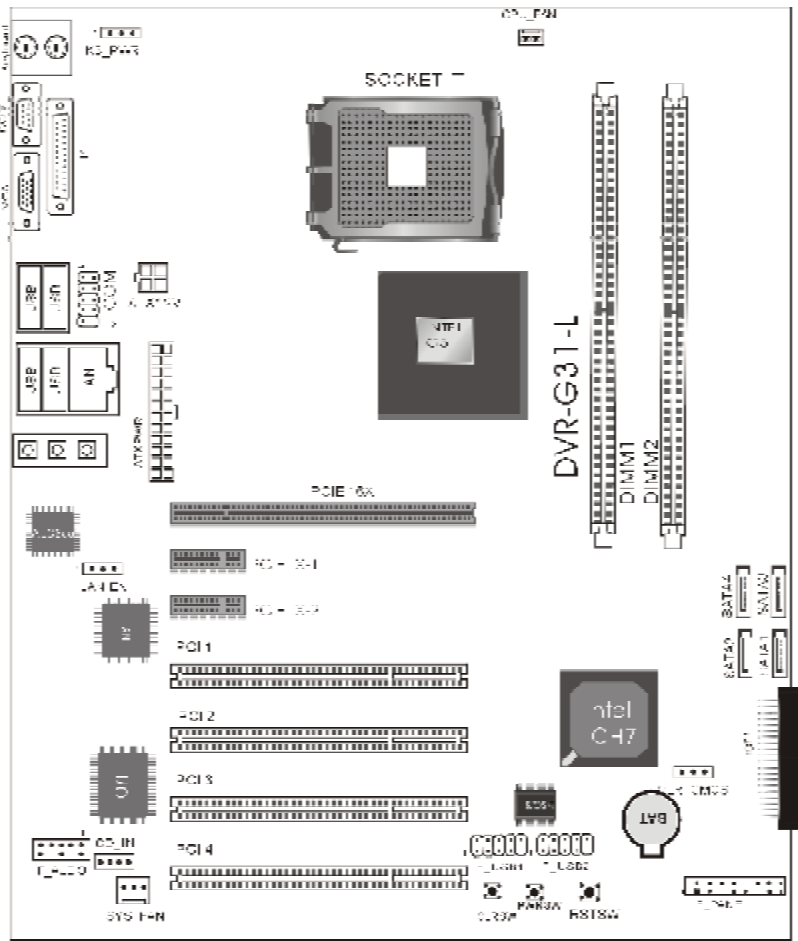
<b>Internal I/O Connectors</b>	* 1*24 PIN main power connector,1*4PIN 12V power connector,1*assistant power connector
	* 6*SATA 300MB/s connectors,2*IDE
	* 1*CPU fan header,1*system fan header
	* 1*front panel header
	* 1*front panel Audio header
	* 3*USB 2.0 headers
	* 1*Clearing CMOS jumper
	* 1*LAN_EN jumper
	* 3*Switchs
	* 1*CD-IN header
	* 1*video control jumper
	<b>Back Panel Connectors</b>
* 1*PS/2 mouse port	
* 1*COM headers	
* 1*LPT header	
* 2*VGA ports	
* 2*USB ports	
* 1*RJ45 port	
* 1*TV port	
* 3*JACKs	
<b>I/O</b>	ITE8712F-S
<b>H/W Monitoring</b>	* CPU/System temperature detection
	* CPU/System/Power fan speed detection
	* System voltage detection(optional)
<b>BIOS</b>	* 1*4Mbit flash
	* Provide Chinese-English bilingual BIOS interface
<b>Form Factor</b>	ATX 210mm x 305mm



DVR-9214 Layout

<b>DVR-9214</b>	
<b>CPU</b>	<ul style="list-style-type: none"> <li>* Supports 533/800/1066MHz Front Side Bus</li> <li>* Supports LGA 775 Intel® CoreTM2 Quad 6000/CoreTM 2 Duo E6000/CoreTM 2 DUO E4000/Pentium® Dual-core E2000/Celeron® Dual-core E1000/Celeron® 400/Pentium® D/Pentium® 4/Celeron® D Series.</li> </ul>
<b>Chipsets</b>	<ul style="list-style-type: none"> <li>* North Bridge: Intel® 945GC</li> <li>* South Bridge: Intel® ICH7</li> </ul>
<b>Memory</b>	<ul style="list-style-type: none"> <li>* Supports DDRII 533/667 Memory</li> <li>* Up to 2GB</li> <li>* 2*DDR2 DIMM</li> </ul>
<b>Graphics</b>	* Integrated GMA950 Graphics Card, Supports DX9.0C
<b>Audio</b>	<ul style="list-style-type: none"> <li>* Integrated ALC 655 Audio Codec</li> <li>* Supports 2/4/5.1 Channel Audio-out</li> </ul>
<b>LAN</b>	Integrated Realtek 8100C 10/100M Lan chip, supports Non-harddisk system
<b>Storage Interface</b>	<ul style="list-style-type: none"> <li>* 6*SATA 300MB/s ports</li> <li>* 2*IDE, up to 3 IDE devices</li> </ul>
<b>Expansion Slots</b>	<ul style="list-style-type: none"> <li>* 1*PCI Express 16X</li> <li>* 2*PCI Express 1X</li> <li>* 4*PCI</li> </ul>
<b>USB</b>	8*USB 2.0 ports(2 on the back panel, 6 connected to the internal USB header via the USB Cable)

<b>Internal I/O Connectors</b>	<ul style="list-style-type: none"> <li>* 1*24 PIN main power connector, 1*4PIN 12V power connector, 1*assistant power connector</li> <li>* 6*SATA 300MB/s connectors, 2*IDE</li> <li>* 1*CPU fan header, 1*system fan header</li> <li>* 1*front panel header</li> <li>* 1*front panel Audio header</li> <li>* 3*USB 2.0 headers</li> <li>* 1*Clearing CMOS jumper</li> <li>* 1*LAN_EN jumper</li> <li>* 3*Switchs</li> <li>* 1*CD-IN header</li> </ul>
<b>Back Panel Connectors</b>	<ul style="list-style-type: none"> <li>* 1*PS/2 keyboard port</li> <li>* 1*PS/2 mouse port</li> <li>* 1*COM header</li> <li>* 1*LPT header</li> <li>* 1*VGA ports</li> <li>* 2*USB ports</li> <li>* 1*RJ45 port</li> <li>* 3*JACKs</li> </ul>
<b>I/O</b>	ITE8712F-S
<b>H/W Monitoring</b>	<ul style="list-style-type: none"> <li>* CPU/System temperature detection</li> <li>* CPU/System/Power fan speed detection</li> <li>* System voltage detection(optional)</li> </ul>
<b>BIOS</b>	<ul style="list-style-type: none"> <li>* 1*4Mbit flash</li> <li>* Provide Chinese-English bilingual BIOS interface</li> </ul>
<b>Form Factor</b>	ATX 210mm x 305mm



DVR-G31-L Layout

<b>DVR-G31-L</b>	
CPU	<ul style="list-style-type: none"> <li>* Supports 800/1066/1333MHz Front Side Bus</li> <li>* Supports LGA 775 Intel® CoreTM2 Quad 9000/6000/CoreTM2 Duo E8000/E6000/CoreTM2 DUO E4000/Pentium® Dual-core E2000/Celeron® Dual-core E1000/Celeron® 400/Pentium® D/Pentium® 4 Series.</li> </ul>
Chipsets	<ul style="list-style-type: none"> <li>* North Bridge: Intel® G31</li> <li>* South Bridge: Intel® ICH7</li> </ul>
Memory	<ul style="list-style-type: none"> <li>* Supports DDRII 667/800 Memory</li> <li>* Up to 4GB</li> <li>* 2*DDR2 DIMM</li> </ul>
Graphics	* Integrated GMAX3100 Graphics Card, Supports DX9.0C
Audio	<ul style="list-style-type: none"> <li>* Integrated ALC 655 Audio Codec</li> <li>* Supports 2/4/5.1 Channel Audio-out</li> </ul>
LAN	Integrated Realtek 8100C 100/1000M Lan chip, supports Non-harddisk system
Storage Interface	<ul style="list-style-type: none"> <li>* 4*SATA 300MB/s ports</li> <li>* 1*IDE, up to 2 IDE devices</li> </ul>
Expansion Slots	<ul style="list-style-type: none"> <li>* 1*PCI Express 16X</li> <li>* 2*PCI Express 1X</li> <li>* 4*PCI</li> </ul>
USB	8*USB 2.0 ports (4 on the back panel, 4 connected to the

## Chapter II Hardware Installation

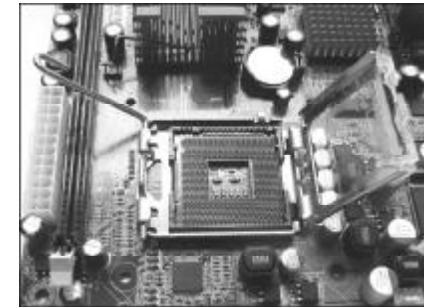
<b>Internal I/O Connectors</b>	* 1*24 PIN main power connector,1*4PIN 12V power connector
	* 6*SATA 300MB/s connectors,2*IDE
	* 1*CPU fan header,1*system fan header
	* 1*front panel header
	* 1*front panel Audio header
	* 2*USB 2.0 headers
	* 1*Clearing CMOS jumper
	* 1*LAN_EN jumper
	* 3*Switchs
	* 1*CD-IN header
	* 1*COM header
	* 1*KB_PWR jumper
	<b>Back Panel Connectors</b>
* 1*PS/2 mouse port	
* 1*COM header	
* 1*LPT header	
* 1*VGA port	
* 4*USB ports	
* 1*RJ45 port	
* 3*JACKs	
<b>I/O Controller</b>	ITE8712F-S
<b>H/W Monitoring</b>	* CPU/System temperature detection
	* CPU/System/Power fan speed detection
	* System voltage detection(optional)
<b>BIOS</b>	* 1*8Mbit flash
	* Provide Chinese-English bilingual BIOS interface
<b>Form Factor</b>	ATX 195mm x 294mm

### 2.1 Install CPU

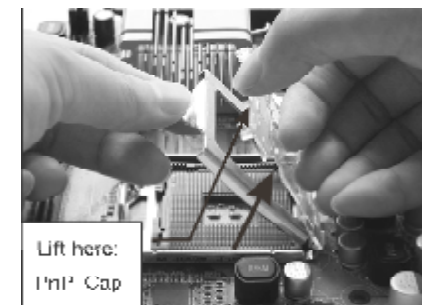
Install Intel 775-pin CPU according to the following steps.

- ~ *Before you insert the CPU into the 775-pin socket, please check whether the CPU surface is Dirty and whether there is bent pin on the socket. Do not force the CPU into the socket, otherwise CPU or the socket will be seriously damaged.*

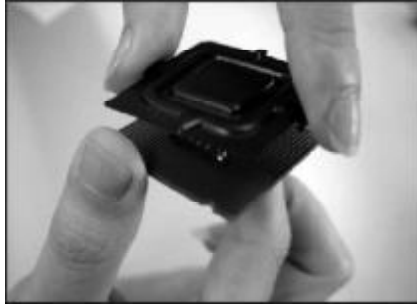
Step1 Pulling up the lever by the side of the CPU socket,turn it about 135 degrees around to the complete open position. And then turn the cover about 100 degrees around to the complete open position.



Step2 Remove the protective cover:Hold the metal frame edge by one hand,uncover the protective cover from the socket by the other hand and press the center of the cover to remove it.



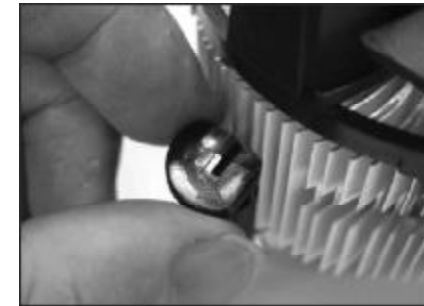
Step3 Unload CPU protective cover, there are two specially designed convex location on the Socket base and two concave location on the CPU, fit them together so that you can insert the CPU into the socket. Please do that correctly to avoid CPU-pin damage.



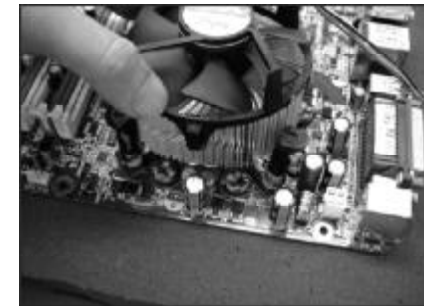
Step4 After insert the CPU, cover the protective cover. Replace the lever to fasten the cover, fix up the lever to complete the CPU installation.



Step2 Remove the power cord of the fan, point four gaps of the fasteners to the inner part.



Step3 Make sure put the fan cables on the side of the power plug, place the cooler upon the socket LGA775, align the fasteners and the four holes on the motherboard, clasp them.



## 2.2 Install CPU fan

TO keep the CPU work normally, you must chose a good quality CPU cooler. Here we take Intel' s original fan as an example to illustrate the CPU fan installation.

Step1 Before you install the fan, check whether the bottom of the cooler was coated with thermal grease (Intel' s original fans often attached with thermal interface material TIM), if not, coat the CPU surface with some thermal grease.

Step4 Plug the fan power cord to the CPU fan header (CPU\_FAN) on the motherboard.

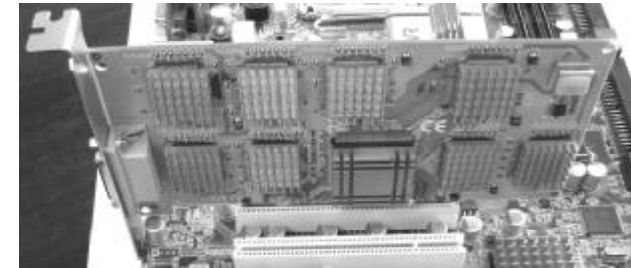
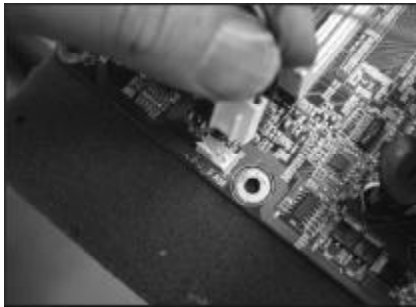


figure 1:PCI interface card insert into the PCI slot

## 2.3 Install Memory

Motherboard supports dual-channel memory,the capacity can be expanded from minimum 64MB to maximum 4GB.

Installation steps are as follows:

- Unclose the fasteners at the both sides of the memory slot.
- Insert the memory vertically into the slot,pay attention to fitting the notch to the raised point.
- If the installation is correct,the white fasteners at the both sides of the memory slot would close automatically.



*In order to make the system stable, please choose genuine memory.*



figure 2:PCI E-1X interface card insert into the PCI-E 16X slot

## 2.4 Install Video Capture Card

There are two kinds of Video capture cards: PCI and PCI E-1X interface cards.Please insert the card into the right slot vertically, otherwise it might damage the card or motherboard Slots. Note: PCI interface cards can only be received in the PCI slot which can not be inserted in the PCI E slot, so does the PCI E-1X interface card, these two kinds of cards can not be used simultaneously.

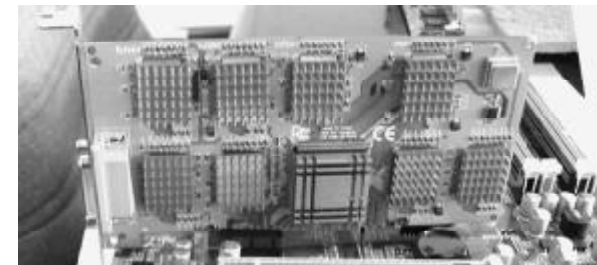




figure 3:PCI E-1X interface card insert into the PCI-E 1X slot

## 2.5 Motherboard Jumper

The first pin of all jumpers are next to the line or “r”, be sure to connect them correctly, or may damage the motherboard and devices.



### 2.5.1 Clear CMOS Jumper(CLR\_CMOS)

If there are problems with the motherboard because of BIOS setting error,you can clear the CMOS to solve the problem.Turn off the computer and unplug the power cord,move the jumper cap from pins 1-2(default) to pins 2-3,keep the cap on pins 2-3 for 5-6 seconds,then move the cap back to pins 1-2.Don't clear the CMOS when the computer is running,or else may damage your motherboard. Jumper settings as follows:

CMOS Definition	CLR_CMOS
Normal	1  3
Clear CMOS	1  3

### 2.5.2 Onboard LAN Shielding Jumper(LAN\_EN)

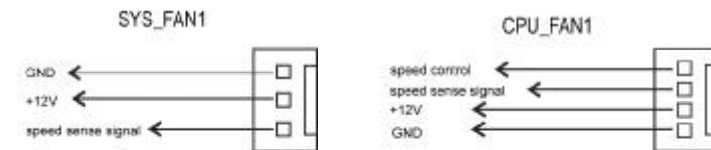
The motherboards provide onboard LAN jumper for RTL8100C chip.Users can choose whether to use the onboard LAN by the jumper.

Onboard LAN Jumper	LAN_EN
Enable	1  3
Disable	1  3

## 2.6 Motherboards Interfaces

### 2.6.1 Fan Power Connectors (CPU\_FAN1/SYS\_FAN1)

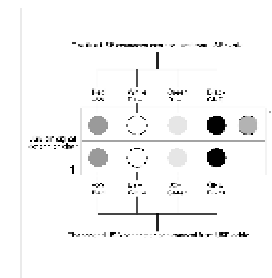
When Plug the fan power cord to the fan header,users must connect the red line to the +12V power-pin and connect the black line to ground. If you want to observe the fan work state in BIOS or hardware monitor procedures, you need use fans which have speed detection function. The fans with speed sensor produce two pulse each rotation, then the system hardware monitor make a fan speed statistical report which can be displayed in CMOS.



### 2.6.2 USB Header (F\_USB)

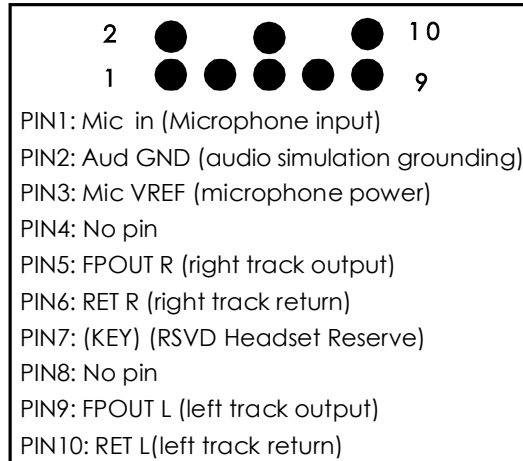
Motherboards provide 8 USB ports, 2 of which can be directly connected to USB devices ,The F\_USB1/F\_USB2/F\_USB3 need USB cables and they can provide you another 6 USB ports,you can purchase the USB cable from the motherboard dealer or the electronic market.(Note:The first pin is near by the thick white line,be sure to connect them correctly , or else may damage your motherboard.

)  
 ~ **The first pin is next to the logo “r” on the motherboard, be sure not to mistake,or may damage your devices or motherboard!**



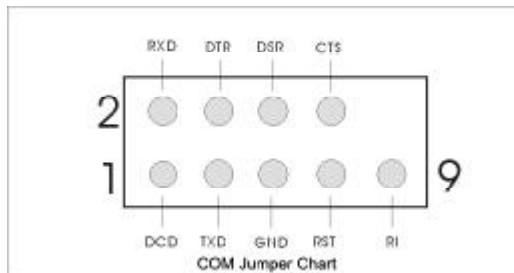
### 2.6.3 Front Panel Audio Header(F\_AUDIO)

You may connect your chassis front panel audio module to this header. It is convenient for you to listen to music and use microphone for voice input. You must connect them correctly (the following chart shows).



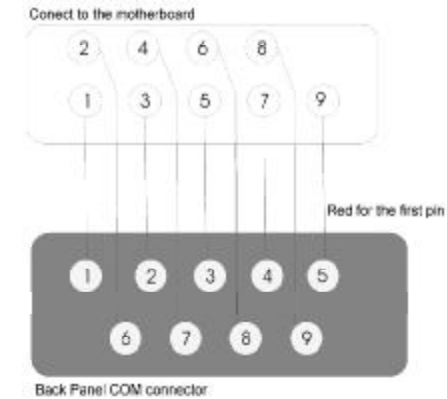
### 2.6.4 COM Header(COM1/COM2/COM3/COM4)

COM1/COM2/COM3/COM4 need USB cable for connecting, you can purchase this cable from the motherboard dealer or the electronic market. (Note: The first pin is next to the logo “r” on the motherboard, be sure not to mistake, or may damage your devices or motherboard!)



### 2.6.5 COM Header Connection

You should use the cable to connect the COM header, the cable wiring are as follows:



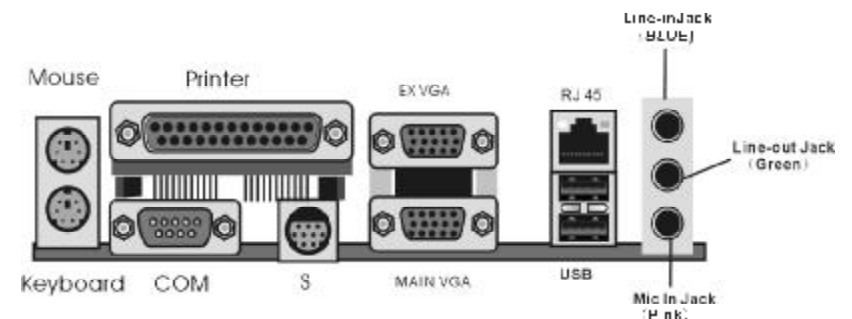
### 2.6.6 IDE Using Instructions

IDE1 is provided by the South Bridge, in order to meet the users' need for more IDE devices, we add chipset for expansion, the chipset provide the IDE2/IDE3 interface. In the BIOS, the list only shows the IDE1 device, IDE2/IDE3 devices are not shown, the main boot system need to be connected to the IDE1.

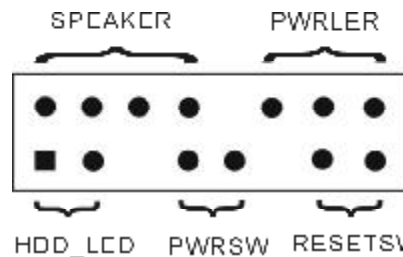
### 2.6.7 SATA Using Instructions

SATA\_DR1/DR2 are provided by the South Bridge, in order to meet the users' s need for more SATA devices, we add chipset for expansion, the chipset provide the SATA\_DR3/DR4 interface. In the BIOS, the list only shows the SATA\_DR1/DR2 devices, SATA\_DR3/DR4 devices are not shown, the main boot system need to be connected to the SATA\_DR1/DR.

### 2.6.8 Back Panel Connectors Instructions



### 2.6.9 Front Panel Header( F\_PANEL)



- a. SPEAKER Speaker Connector
- b. PWRLER Power Active LED
- c. HD-LED Hard Disk Active LED
- d. PWRSW ATX Power Switch
- e. RESETSW Reset Switch

- a. **SPEAKER Speaker Connector**  
Speaker Connector (also called buzzer) is a four-pins connector, connect the speaker to the four pins.
- b. **PWRLER Power Active LED**  
Power Active LED is a three-pin connector, it used to indicate the computer working state, once the computer connect to the power, the PWRLER keep emitting (Note: There are anode and cathode).
- c. **HD-LED Hard Disk Active LED**  
This group of two-pin connected to the computer Hard Disk Active LED, the LED can show the hard disk working state, once the hard disk reading, the LED emitting (Note: There are anode and cathode).
- d. **PWRSW ATX Power Switch**  
POWER SW is a two-pin connector, it controls the ATX main power, connect this group pins to the power switch of the computer, make the two pins short circuited can open(close) the computer.
- e. **RESETSW Reset Switch**  
This group of pins connected to the reset switch on the computer chassis hence you do not need to switch off the computer power to restart the system, it is very useful especially when the system blocks or crashes.

### 2.6.10 JP1 Jumper Setting (Introduce for T6234 model)

Due to various of display interfaces, the jumper is specially designed for setting display order priorities.

SETTINGS	Connectors		
JP1	TV connector(AV, S-Video)/ Extended VGA	PCI E 16X slot	Onboard VGA
1-2 short	Disable	PCI E X16/X1 devices	Enable
2-3 short	Enable	PCIEX1 devices	Enable

### 2.6.11 S-Video output mode setting method (Introduce for T6234 model)

Step 1 Jumper Settings: In accordance with Table 2-6-10,shot 2-3 in the 15 pin of the JP1;

Step 2 BIOS Settings: The default setting in the BIOS can use the normal S-Video, users do not need any settings.BIOS can use the default S-Video and Onboard VGA, can not be used to expand the VGA

Step 3 In a number of display devices under Windows settings:Enter the operating system,click the right mouse button in the blank space on the desktop ,choose the “Graphics Properties”(Figure1),In the pop-up window, select "Display Devices" column(Figure2)

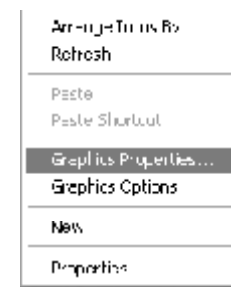


Figure1

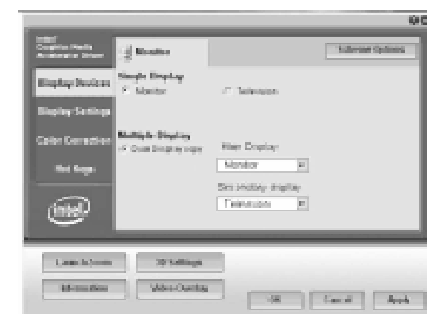


Figure2

- NOTE: 1、 Please install graphics driver, otherwise it is impossible to debug;  
2、 At the same time, if connect the television and on-board VGA, only

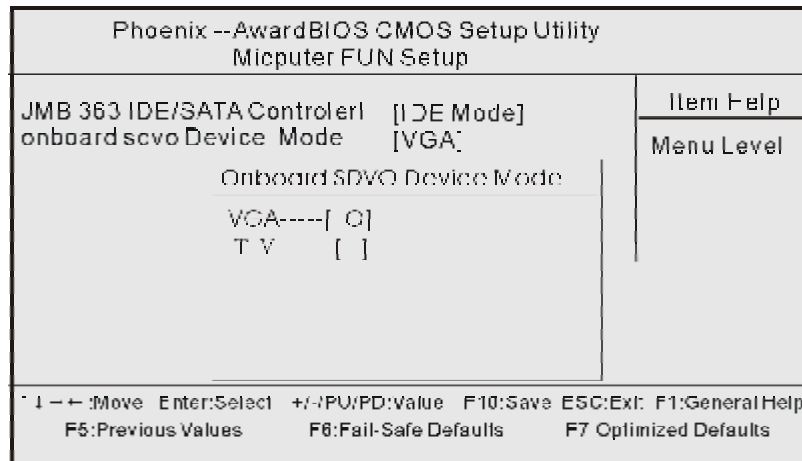
to see the same display under WINDOWS-screen display (not support Asynchronous different time show),DOS can only support under the on-board VGA display; if connect television, under the DOS in, WINDOWS under the S-Video can be displayed.

3、 S-Video support for SDTV / HDTV's 9PIN interface, this interface can not support play when plug. When your S-Video is a non-9PIN line interface, please switch to using a dedicated connection.

**2.6.12 Dual VGA output set of methods (Introduce for T6234 model)**

Step 1 Jumper Settings: In accordance with Table 2-6-10,shot 2-3 in the 15 pin of the JP1;

Step 2 BIOS Settings: According to the Delete key to enter into CMOS, to find "Micputer Fun setup" option,Set VGA to "onboard SDVO Device Mode", save and exit, two VGA can be used, S-Video and PCIE 16X is not available.



Step 3 In a number of display devices under Windows settings:Into the operating system, the blank space on the desktop click the right mouse button, choice "Graphics Properties"(Figure 1),In the pop-up window, select "Display Devices" column(Figure 2)



Figure1



Figure2

**2.6.13 PCI E 16X slots to use (Introduce for T6234 model)**

- 1、 When the JP1 group of 15 pin is set to 1-2 short, at this time PCI-E 16X slot can support PCIEX16, X8, X4, X1 equipment (such as graphics cards, network cards and card collection, and so on)
- 2、 JP1 group of 15 pin is set to 2-3 short, at this time PCI-E X16 slot can only support the PCI EX1 output, even if the devices connected to the X16, at this time can only work in PCI E X1 on the bandwidth.

## Chapter III BIOS Introduction

### 3.1 BIOS updates

In order to meet the needs of customers, we offer special WINDOWS and DOS system BIOS flashing tools, operation are as follows.

#### 3.1.1 DOS Flashing

- a. Flash tool: AFUDOS.EXE
- b. Flash operation: Prepare a DOS startup disk, it contains only three basic DOS startup files, copy AMI BIOS Flash tool and BIOS files to the U directory, boot by the guide system, after enter DOS, input: AFUDOS "BIOS file name" /P /B /N /C /X, press Enter to carry BIOS flashing process. After that there will be relevant instructs, at this time, restart the computer, press F1 to set the CMOS, select Load Optimal Defaults.

#### 3.1.2 WINDOWS Flashing

- a. Flash tool: AFUWIN.EXE
- b. Flash operation: In WINDOWS, run AFUWIN.EXE--click OPEN--choose the BIOS file--select Program ALL Blocks--click FLASH. In the writing process, the Keyboard and mouse will be locked until the writing finish, then restart the computer and press F1 to set the CMOS, select Load Optimal Defaults



There will be risks in the BIOS flashing, please do it under the guidance of professional and note the following two points:

1. BIOS file should match the product Model
2. In the writing process, Please don't shut down/restart the computer illegally

### 3.2 BIOS Setup

Because the BIOS software is constantly being updated, the following BIOS setup screens and descriptions may not exactly match what you see on your screen and they are for reference purpose only. Some of the items are not in common used, we suggest not to change them at will and keep the default value.

Enter steps:

- a. Open or restart the computer, you may see "PRESS DEL TO RUN SETUP" in the self-checking screen.
- b. Press the "DEL" key, then enter the BIOS setup screen.

BIOS Setup Program Function Keys	
Function Keys	function explanation
↑ ↓ ← →	Move the selection bar to select an item
+ -	To change option for the select items
<Tab>	To change option
<ESC>	Main Menu:Exit without saving
<F1>	Show descriptions of the function keys
<F7>	Load the Optimized BIOS default settings for the current submenus
<F8>	Load the Fail-Safe BIOS default settings for the current submenus
<F9>	Load the Optimal BIOS default settings for the current submenus
<F10>	Save all the changes and exit the BIOS Setup program

### 3.3 BIOS Language Switch

To allow more users to become familiar with the BIOS operation, we introduce Chinese-English bilingual BIOS, users only need to click "F5" after enter the CMOS to easily switch them, it makes BIOS operation No longer mysterious.

(Note: For more BIOS program details, please refer to the user's manual PDF file in the CD-ROM. )

### 3.4 Power On Automatic Restore Setting

Sometimes it comes to power cut suddenly, Once the DVR machine shuts down because of the power cut and there is no body on duty, the video surveillance will be suspended which bring to security dangers. Therefore, our company design power on automatic start-up function for the products, this function needs special hardware circuit design and BIOS software support. BIOS settings are as follows:

Turn on the DVR host and then press DEL key to get into CMOS settings interface. On the main menu, select the "advanced\SuperI/O Configuration" item, you'll see the figure below, Config them in need:

## Chapter IV

### Watchdog software using instruction and installing steps(only for DVR-T6234/9214products)

DVR machine may sometimes crash, caused by some reasons, as it is always working in the hot and dry computer room. Once the system becomes out of work accidentally, and there is nobody on duty in the DVR pc room, the monitor will stop due to the computer crash, it will bring much trouble to the security. So, our company has developed this software ,named watchdog , in order to solve this problem for users. The theory is to realize the restart function after the dead of DVR system, through working with the hardware circuits designed specially on motherboards.

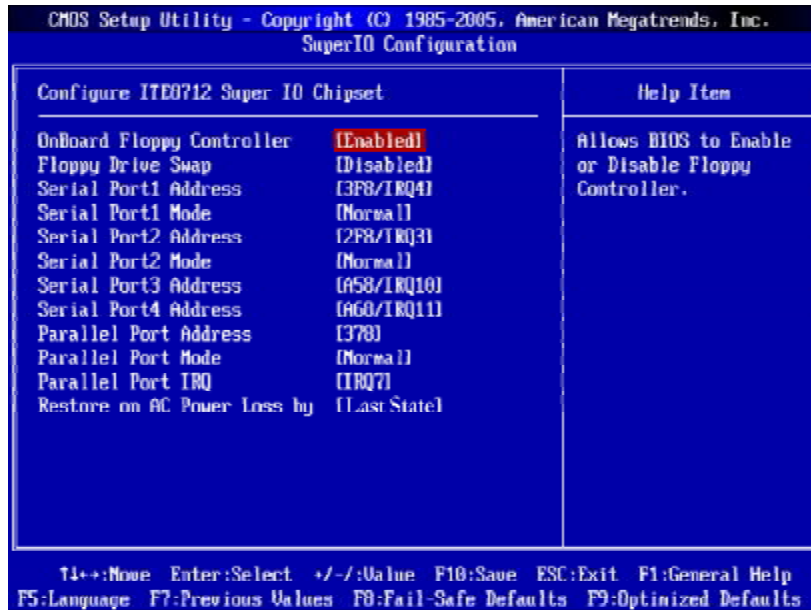
#### 4.1 Software Function

Under the inspection of system, once the system out of work, the watchdog software will send out the recover signal to stimulate all the hardware circuit to work well automatically, then computer will open again and load the video inspection software. Therefore, the monitor is still working even when nobody in the pc room and the machine goes dead, leaving no dead angle for the security.

#### 4-2 The definition and working theory of Watchdog

A clock circuit that keeps counting from a set number down to zero. If the event it is monitoring occurs before it reaches zero, it resets to the starting number and starts counting down again. If the timer reaches zero, it performs some action; for example, a diagnostic operation such as rebooting the computer or sending an error message.

Work theory: the counter of the watchdog starts when the system is operating , and it begins to count in the meantime, if you don't check the watchdog in a period, the counter of the watchdog will be full and even overflow, which can stop the watchdog working and make the system reset. So, please take care the watching dog when you use the chip.



Note: Function explanation of the three options in BIOS(Default value is "Last State" ):

(When the host power supply has been shut down suddenly)

Power On:Start-up automatically with power supply restoration

Power Off:Turn off the automatic start-up function.

Last state:Whether start-up automatically depends on the last state of the host. If it was working,it will start-up automatically with power supply restoration,otherwise,it'll not.

### 4.3 software installation

Open the disk, and enter into the MB/ WATCH DOG menu, click twice 撈 etup ? to start installation, then keep on clicking 推 ext step ? following the indication, fill click the 搨inish step? then the machine will reset, and watchdog starts to work. (Related pictures are showed in Status Bar) .

Remarks:

1. This software is operated in windows98/2000/xp/server2003 32-bit operating system
2. Please install this software in the authority of the system administrator, thanks.

## Chapter V Drivers Installation

The motherboard support WINDOWS2K and above systems, they have different software systems, we provide 2K/XP/VISTA system drivers in CD-ROM, take the 2K/XP system installation for example

### 4.1 Install Chipset Driver

- a. Enter “MB\INF” folder. For 945 series, Double-click “945INF.exe”.
- c. Select “YES”,then Click “NEXT”.
- d. After finish the installation,select “YES”,click “FINISH” to restart the computer ,then driver will be loaded automaticlly.

### 4.2 Install Onboard VGA Driver

- a. Enter “MB\VGA\945” folder, double-click “WIN2k\_xp1417.exe”.
- b. Click “NEXT”.
- c. Select “YES”,then Click “NEXT”.
- d. After finish the installation,click “FINISH” to restart the computer, then driver will be loaded automaticlly.

### 4.3 Install Onboard Auido Codec Driver

- a. Enter “MB\SOUND” folder, double-click “WDM\_A379.EXE”.
- b. According to tips,click “NEXT”,then click “CONTINUE”.
- c. After finish the installation,select “YES”,click “FINISH” to restart the computer,then driver will be loaded automaticlly.

### 4.4 Install USB2.0 Driver

Motherboard need to match Windows XP or later, after you have installed Windows XP/2003 operating system,update the latest Microsoft patch, then this system can generally identify your USB2.0 device. You can also login the relevant website to download USB2.0 Driver(It is an executable file), double-click the program to Install the driver.