● C8000~CBFFF Shadow:	*Enabled*	Optional ROM will be copied to RAM by 16K bytes per unit.
DC000-DFFFF Shadow:	*Disabled*	The shadow function is disabled.
● Show Bootup Logo	*Enabled*	Enables the logo when system boots up.
	Disabled	Logo will not be shown when system boots up.

Chipset Features Setup

Figure-4 Chipset Features Setup Menu

The following indicates the options of each item and describes their meaning.

Item	Option	Description
● Auto Configuration	*Enabled*	Automatically configures DRAM Timing according to the value of "DRAM Speed Selection".
	Disabled	Manually configure. ***Note: It is recommended that the "Enabled" option be chosen by common users.**
● EDO DRAM Speed Selection	*50ns, 60ns*	This item is of selected EDO DRAM read/write timing. You must ensure that your DIMMs are as fast as 50ns, otherwise 60ns should be selected .
● EDO CASx# MA Wait State	*2*	One additional wait state is inserted before the assertion of the first CASx# for page hit cycles. This allows one additional clock of MA setup time to the CASx# for the leadoff page hit cycle. Page miss and row miss timing are not affected by this bit.
	1	Without additional wait state.

● EDO RASx# Wait State	*2*	One additional wait state is inserted before RASx#is asserted for row misses. This provides one clock of additional MAX[13:0] setup time to RASx# assertion. This bit does not affect page misses since the MAX[13:0] lines are setup several clocks in advance of RASx# assertion for page misses.
	1	Without additional wait state.
● SDRAM CAS Latency Time	*2*	Defines the CLT timing parameter of SDRAM. Latency Time=2x system clocks.
	3	Latency Time=3x system clocks.
● SDRAM Percharge Control	*Enabled*	Default setting is suggested.
	Disabled	
● DRAM ECC Select	*ECC*	Provides ECC (Error Checking and Correction) function.
	Non-ECC	Disables ECC function.
● Video BIOS Cacheable	*Enabled*	Beside conventional memory, video BIOS area is also cacheable.
	Disabled	Video BIOS area is not cacheable.
● Video RAM Cacheable	*Enabled*	Besides conventional memory, video BIOS area is also cacheable.
	Disabled	Video BIOS area is not cacheable.
● 8 Bit I/ O Recovery Time.	*1~ 8*	Defines the ISA Bus 8 bit I/O operating recovery time.
	NA	8 bit I/O recovery time does not exist.
● 16 Bit I / O Recovery Time	*1~ 4*	Defines the ISA Bus 16 bit I/O operating recovery time.
	NA	16 bit I/O recovery time does not exist.
● Memory hole at 15M-16M	*Enabled*	Memory hole at 15-16M is reserved for expanded ISA card
	Disabled	Does not set this memory hole.
● Passive Release	*Enabled*	Default setting is suggested.
	Disabled	
● Delayed Transaction	*Enabled*	Default setting is suggested.
	Disabled	
● AGP Aperture Size (MB)	*4~256*	Sets the effective size of the Graphics Aperture to be used in the particular PAC Configuration.
● Clock Spread Spectrum	*Enabled*	Enables Clock Spread Spectrum to reduce EMI.
	Disabled	Disables Clock Spread Spectrum.
● Close Empty DIMM/PCI Clk	*Enabled*	Closes empty DIMM clock or PCI clock to reduce EMI.
	Disabled	Does not close empty DIMM or PCI clock.

Power Management Setup

```
                    ROM PCI/ISA BIOS (2A69EQ1E)
                  POWER MANAGEMENT SETUP
                  AWARD SOFTWARE, INC.

ACPI function          : Disabled          IRQ 8 Break Suspend  : Disabled
Power Management       : Min Saving        ** Reload Global Timer Events **
PM Control by APM      : Yes               IRQ[3-7,9-15],NMI    : Disabled
Video Off Method       : V/H SYNC+Blank    Primary IDE 0        : Disabled
Video Off After        : Standby           Primary IDE 1        : Disabled
MODEM Use IRQ          : NA                Secondary IDE 0      : Disabled
Doze Mode              : Disable           Secondary IDE 1      : Disabled
Standby Mode           : Disable           Floppy Disk          : Disabled
Suspend Mode           : Disable           Serial Port          : Enabled
HDD Power Down         : Disable           Parallel Port        : Disabled
HDD Down When Suspend: Enabled
Throttle Duty Cycle    : 50.0%
VGA Active Monitor     : Disabled
Soft-Off by PWR-BTTN : Instant-Off
CPUFAN Off In Suspend: Enabled
Resume by Ring         : Disabled          ESC : Quit          ↑↓→← : Select Item
Resume by Alarm        : Disabled          F1  : Help          PU/PD/+/- : Modify
                                           F5  : Old Values    (shift)F2 : Color
                                           F7  : Load Setup Defaults
Wake Up On LAN         : Disabled
```

Figure-5 Power Management Setup Menu

The following indicates the options of each item and describes their meaning.

Item	Option	Description
● ACPI function	*Disabled*	Invalidates ACPI function.
	Enabled	Validates ACPI function.
● Power Management	*User Define*	Users can configure their own Power Management Timer.
	Min Saving	Pre - defined timer values are used. All timers are in their MAX values.
	Max Saving	Pre - defined timer values are used. All timers are in their MIN values.
● PM Control by APM	No	System BIOS will ignore APM when Power Management is enabled.
	Yes	System BIOS will wait for APM' s prompt before it enters any PM mode e.g. Standby or Suspend. **Note: If APM is installed, and there is a task running, even when the timer is time out, the APM will not prompt the BIOS to put the system into any power saving mode. But if APM is not installed, this option has no effect.**
● Video Off Method	*Blank Screen*	The system BIOS will only blank off the screen when disabling video.
	V / H SYNC + Blank	In addition to Blank Screen, BIOS will also turn

		off the V-SYNC & H - SYNC signals from VGA cards to monitor.
	DPMS	This function is enabled only for the VGA card supporting DPMS. **Note: When the green monitor can't detect the V/H-SYNC signals, the electron gun will be turned off.**
● Video Off After	*N/A*	System BIOS will never turn off the screen.
	Suspend	Screen blanks after the system enters Suspend mode.
	Standby	Screen blanks after the system enters Standby mode.
	Doze	Screen blanks after the system enters Doze mode.
● MODEM Use IRQ	*3,7,5,7,9, 10,11*	Special wake-up event for Modems.
	NA	Invalidates this feature.
● Doze mode	*Disabled*	The system never enters Doze mode.
	1Min ~ 1 Hr	Defines the continuous idle time before the system enters Doze mode. If any items defined in "Reload Global Timer Events" are On and activated, the system will be woken up.
● Standby Mode	*Disabled*	The system never enters Standby mode.
	1 Min ~ 1Hr	Defines the continuous idle time before the system enters Standby mode. If any items defined in "Reload Global Timer Events" are On and activated, the system will be woken up.
● Suspend Mode	*Disabled*	The system never enters Suspend mode.
	Min ~ 1Hr	Defines the continuous idle time before the system enters Suspend mode. If any items defined in " Reload Global Timer Events " is On and activated, the system will be woken up.
● HDD Power Down	*Disabled*	HDD's motor remains on.
	1 ~15 Min	Defines the continuous HDD idle time before the HDD enters the power saving mode (motor off)
● HDD Down When suspend	*Enabled*	HDD's motor will be off when the system enters suspend mode.
	Disabled	HDD's motor remains on.
● Throttle Duty Cycle	*12.5%*	Selects the duty cycle of the STPCLK# signal, slowing down the CPU speed when the system enters the green mode.
	25%	
	37.5%	
	50 %	
	62.5%	

	75%	
● VGA Active Monitor	*Enabled*	VGA active reloads global timer.
	Disabled	VGA active has no influence to global timer.
● Soft-Off by PWR-BTTN	*Instant-Off*	The system will power off immediately once the "Power" button is pressed.
	Delay 4 Secs	The system will not power off until the "Power" button is pressed continuously for more than 4 seconds.
● CPUFAN Off In Suspend	*Enabled*	CPU FAN will be automatically turned off when the system enters suspend mode.
	Disabled	CPU FAN remains on when the system enters suspend mode.
● Resume by Ring	*Enabled*	Allows the system to be powered on when a Ring Indicator signal comes up to UART1 or UART2 from external modem or comes up to WOM# from an internal modem card.
	Disabled	Does not allow Ring Power-On.
● Resume by Alarm	*Enabled*	RTC alarm can be used to generate a wake event to power up the system which is in power-off status. You can set any time or any date to power up the system.
	Disabled	RTC has no alarm function.
● Wake Up On LAN	*Enabled*	Allows the system to be powered on when a remote wake-up signal comes up to the WOL header from LAN adapter .
	Disabled	Does not allow wake-up on LAN.
● IRQ 8 Break Suspend	*Enabled*	Generates a clock event.
	Disabled	Does not generate a clock event.
● IRQ [3-7, 9-15], NMI	*Enabled*	Reload global timer.
	Disabled	Does not influence the global timer.
.....		
Parallel Port		

PNP/PCI Configuration Setup

Figure-6 PNP/PCI Configuration Setup Menu

The following indicates the options of each item and describes their meaning.

Item	Option	Description
● PNP OS Installed	*Yes*	Device resources assigned by PnP OS.
	No	Device resources assigned by BIOS.
● Resources Controlled by	*Manual*	Assigns the system resources (IRQ and DMA) manually.
	Auto	Assigns system resources (IRQ and DMA) automatically by BIOS.
● Force Update ESCD	*Enabled*	The system BIOS will force updating ESCD once, then automatically set this item as Disabled.
	Disabled	Disables the forced update ESCD function.
● IRQ-3~IRQ-15 assigned to	*Legacy ISA*	The specified IRQ-x will be assigned to Legacy ISA.
	PCI/ISA PnP	The specified IRQ-x will be assigned to ISA or PCI.
● DMA-0~DMA-7 assigned to	*Legacy ISA*	The specified DMA-x will be assigned to Legacy ISA.
	PCI/ISA PnP	The specified DMA-x will be assigned to ISA or PCI.
● PCI Slot 1/2 use IRQ No.	*Auto,3,4,5,7,9 10,11,12,14,15*	Assigns an IRQ for PCI slot1/2 manually or automatically.
● Used MEM base	*C800/8 ~ 64K*	Claims a memory space to be occupied by legacy ISA card. The memory address and the memory size (8/16/32/64K) can be chosen from this option.
	N/A	Invalidates this feature.
● Assign IRQ for USB	*Enabled*	Assigns an IRQ for USB. If an USB device is used, Enable this item.
	Disabled	Does not assign any IRQ for USB. If no USB device is used, disabling this item can release the IRQ.

Integrated Peripherals

Figure-7 Integrated Peripherals Menu

The following indicates the options of each item and describes their meaning.

Item	Option	Description
● IDE HDD Block Mode	*Enabled*	Allows IDE HDD to read/write several sectors at once.
	Disabled	IDE HDD only reads/writes a sector once.
● IDE Primary/ Secondary Master/Slave PIO	*Mode 0 - 4*	Defines the IDE primary/secondary master/ slave PIO mode.
	Auto	The IDE PIO mode is defined by auto -detection.
● IDE Primary/ Secondary Master/Slave UDMA	*Auto*	Ultra DMA mode will be enabled if ultra DMA device is detected.
	Disabled	Disables this function.
● On-chip Primary/Secondary PCIIDE	*Enabled*	On-chip primary/secondary PCI IDE port is enabled.
	Disabled	On-chip primary/secondary PCI IDE port is disabled.
● USB Keyboard Support	*Enabled*	USB Keyboard Support is enabled.
	Disabled	USB Keyboard Support is disabled.
● Init Display First Support	*PCI Slot*	Initializes the PCI VGA first. If a PCI VGA is installed and the onboard AGP is enabled on the system, the first one initialized functions.
	AGP	Initializes the AGP first.
● POWER ON Function	*BUTTON Only*	Uses the power button to power up the system.
	Password	Enables the Keyboard Password Power-on

		function and disables the power button' s power-on function. Other than choosing this option, the password should be entered to implement this function.
	Mouse Left	The system can be powered up by double clicking the left mouse button.
	Mouse Right	The system can be powered up by double clicking the right mouse button. **Note: If the option (Password/Mouse Left/ Mouse Right) is chosen, the jumper JP3 must be set as PIN1&PIN 2 closed, or it will prevent you from powering up your system.**
● Onboard FDC Controller	*Enabled*	Onboard floppy disk controller is enabled.
	Disabled	Onboard floppy disk controller is disabled.
● Onboard Serial 1/2	*3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3, Auto*	Defines the onboard serial port address and required interrupt number.
	Disabled,	Onboard serial port is disabled.
● Serial Port 2 Mode	*Normal*	Defines Serial Port 2 as standard serial port.
	ASKIR	Supports SHARP ASK-IR protocol with maximum baud rate up to 57600bps.
	IrDA	Supports IrDA version1.0 SIR protocol with maxiumum baud rate up to 115.2Kbps.
● Onboard Parallel Port	*378/IRQ7, 278/IRQ5, 3BC/IRQ7*	Defines onboard parallel port address and IRQ channel.
	Disabled	Onboard parallel port is disabled.
● Parallel Port Mode	*SPP*	Defines the parallel port mode as
	EPP	Standard Parallel Port (SPP), Enhanced
	ECP,	Parallel Port (EPP), or Extended
	ECP+EPP	Capabilities Port (ECP).
● PWRON After PWR-Fail	*Off*	The system remains OFF when the AC power supply resumes.
	On	The system will be powered up when the AC power supply resumes.
	Former-Sts	Whatever the system status is, before the AC power supply cuts off, the system resumes in the previous status (ON/OFF) when the AC power supply resumes.

System Monitor

Figure-8 System Monitor Menu

The following describes the meaning of each item.

Item	Current Data Shown	Description
● Current System Temp.	*30⁰C/ 86⁰C*	The temperature inside the chassis.
Current CPU Temperature	*39⁰C/ 102⁰C*	The temperature of the CPU core.
● Current CPUFAN Speed	*4320RPM*	RPM(Revolution Per Minute)-speed of fan
Current PSFAN Speed	*2150RPM*	connected to the fan header CPUFAN or
Current CHSFAN Speed	*2010RPM*	CHSFAN. Fan speed value is based on an assumption that tachometer signal is two pulses per revolution; In other cases, you should regard it relatively.
● VCCVID(CPU) Voltage	*1.98V*	Displays current Voltage values including all
VTT (+1.5) Voltage,	*1.37V*	significant voltages of the mainboard.
+ 3.3V Voltage	*3.32V*	+3.3V, +5V, +12V, -12V, -5V are voltages
+ 5V	*4.83V*	from the ATX power supply, VTT (+1.5)
+12V	*11.79V*	Voltage is GTL Termination Voltage from
-12V	*-13.50V*	the on-board regulator, and VCCVID (CPU)
- 5V	*-5.85V*	Voltage is CPU Core Voltage from the on board switching Power Supply.

Password Setting

When this function is selected, the following message appears at the center of the screen to assist you in creating a password.

ENTER PASSWORD

Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password. Type the password again and press <Enter>. You may also press <Esc> to abort the selection.

To disable password, just press <Enter> when you are prompted to enter password. A message will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter CMOS Setup freely.

PASSWORD DISABLED

If you have selected ' **System**' in ' Password Setting' of ' BIOS Features Setup' menu, you will be prompted for the password every time the system reboots or any time you enter CMOS Setup.

If you have selected ' **Setup**' at ' Password Setting' from ' BIOS Features Setup' menu, you will be prompted for the password only when you enter CMOS Setup.

IDE HDD Auto Detection

The Enhanced IDE features are included in all Award BIOS. Below is a brief description of these features.

ROM PCI/ISA BIOS (2A69KQ10)
CMOS SETUP UTILITY
AWARD SOFTWARE, INC.

HARD DISKS	TYPE	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
Primary Master:								

Select Primary Master Option (N=Skip): N

OPTION	SIZE	CYLS	HEAD	PRECOMP	LANDZ	SECTOR	MODE
2(Y)	541	525	32	0	1049	67	LBA
1	541	1050	16	65535	1049	63	NORMAL
3	541	525	32	65535	1049	63	LARG

Note: Some OSes (like SCO-UNIX) must use "NORMAL" for installation

ESC: Skip

Figure-9 IDE HDD Auto Detection Menu

1. Setup Changes

With auto-detection

- BIOS setup will display all possible modes supported by the HDD including NORMAL, LBA and LARGE.
- If HDD does not support LBA modes, no 'LBA' option will be shown.
- If number of physical cylinder is less than or equal to 1024,' LARGE' option may not be shown.
- Users can select their appropriate mode .

With Standard CMOS Setup

	CYLS	HEADS	PRECOMP	LAND ZONE	SECTOR	MODE
Drive C: User(516MB)	1120	16	65535	1119	59	Normal
Drive D: None(203MB)	684	16	65535	685	38	--------

When HDD type is in 'user' type, the 'MODE' option will be available for users to select their own HDD mode.

2. **HDD Modes**

The Award BIOS supports 3 HDD modes: NORMAL, LBA and LARGE, also Auto detect.

NORMAL

Generic access mode in which neither the BIOS nor the IDE controller will make any transformation during accessing. The maximum number of cylinders, heads and sectors for NORMAL mode are 1024,16 and 63.

If the user sets his HDD to NORMAL mode, the maximum accessible HDD size will be 528 megabytes even though its physical size may be greater than that.

LBA (Logical Block Addressing) mode

A new HDD accessing method to overcome the 528 Megabyte bottleneck. The number of cylinders, heads and sectors shown in setup may not be the number physically contained in the HDD.

During HDD accessing, the IDE controller will transform the logical address described by sector, head and cylinder number into its own physical address inside the HDD. The maximum HDD size supported by LBA mode is 8.4 Gigabytes.

LARGE mode

Some IDE HDDs contain more than 1024 cylinder without LBA support (in some cases, users do not want LBA). The Award BIOS provides another alternative to support these kinds of HDD.

BIOS tricks DOS (or other OS) into recognizing the number of cylinders is less than 1024 by dividing it by 2. At the same time, the number of heads is multiplied by 2. A reverse transformation process will be made inside INT13h in order to access the right HDD address.

Auto detect

If using Auto detect, the BIOS will automatically detect the IDE hard disk mode and set it as one of the three modes.

3. **Remark**

To support LBA or LARGE mode of HDDs, there must be some softwares involved which are located in Award HDD Service Routine(INT13h).It may fail to access a HDD with LBA (LARGE) mode selected if you are running under an Operating System which replaces the whole INT 13h.

Boot with BIOS defaults

If you have made all the changes to CMOS values and the system can not boot with the CMOS values selected in setup, clear CMOS after power-down, then power on again. System will boot with BIOS default settings.

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Chapter 4
ATI Rage IIC/Pro AGP Graphics Description

The onboard AGP VGA is based on ATI Rage IIC/Pro Graphics Accelerator which brings excellent 2D graphics acceleration, high 3D performance and superior video quality for business and multimedia applications.

Features :

- AGP Bus, AGP V1.0 compliant.
- ATI Rage IIC/Pro 2D/3D/ Video acceleration chip.
- 2MB/4MB SGRAM on board and a SO-DIMM socket for extension use (manufacturing option).
- Excellent 2D Graphics for business applications.
- 3D performance unmatched in its class.
- High quality full screen and full speed video playback.
  Supports multi-stream video for video conference.
- Integrated 200 MHz internal DAC, supports resolutions up to 1600x1200 at 76 Hz, true color operation up to 1280x1024 at 85 Hz(depend on vedio memory size).
- VGA Fully compatible, DPMS for power management support.
- DDC2B for monitoring plug and play support.
- Drivers for major operation systems and APIs including Windows 95/98, Windows NT /4.0, Direxts 5.0, etc.
- Drivers meet Microsoft rigorous WHQL criteria.
- Driver Auto-installation for Windows 95/98/NT.
- Popular games supported.

System Requirements:

Please refer to Chapter2 for information on connecting the VGA monitor on page 10, and how to disable/enable the onboard VGA on page 7. The system requirements are as stated below:

Monitor:	Standard VGA monitor. For receiving all benefits from the graphics card, a high resolution multi-frequency monitor is needed.
Operating: System	Windows 95; Windows 98, Windows NT 4.0 etc.

Installation of ATI Rage IIC Display Drivers for Windows 95/98/NT

Before you begin

Note: If your onboard VGA is based on ATI Rage Pro, from the QDI motherboard utility CD, manually direct the path to DevDrv\VGA\Rage Pro for installation.

For all AGP features benefits, use Windows 95 OSR2.1 or the later version. To install Windows 95 OSR2.1, first install OSR2.0 then upgrade to OSR2.1 by installing USB supplement which is provided by Microsoft. You can contact the distributor of Windows 95 OSR2 for USB supplement. If your OS is Windows NT 4.0, Service Pack 3 should be installed before the actual installation of the AGP driver.

1. Installing Standard VGA Driver

It is recommended that you first install Windows 95/98/NT with this motherboard. After the installation of Windows 95/98/NT, the default standard VGA driver should have been installed.

If Windows 95(OSR2) has been installed previously on another system, when you first start up Windows 95 with this motherboard, the **Update Device Driver Wizard** window appears, click **next** (Do not click **Cancel**, or your system will hang!). Then click **finish** to install the standard VGA driver, direct the installation path to your \windows\system directory if Windows 95 CD is requested. Follow the prompt, it is not necessary to restart Windows 95, then proceed to step 2. Under Windows 98/NT, this incident will not occur.

2. Installing the AT1200 driver

Insert the QDI Motherboard Utility CD into the CD-ROM drive, run Auto.exe in the CD directory\DevDrv\VGA\Rage2C, a dialog box pops up as shown below:

Select '**Install Display Driver'**, the ATI Rage IIC driver will be automatically installed. When completed, a message box pops up, prompting you to restart the computer. Press OK to restart the computer.

3. Installing DirectX

Under Windows 95, run auto.exe in the CD-ROM directory \DevDrv\VGA\Rage2C and select ‘**Install DirectX’** from the dialog box, then follow the prompts to install DirectX.

Note: *If you try to install DirectX under Windows 98 or NT, a message box will popup, informing you that it is unnecessary to install them in these two operation systems. Please take note that the DirectX can only be auto-installed in Windows English, Simplified and Tradition Chinese versions. For the other language versions, please direct the path to* ***\DevDrv\VGA\Rage2C*** *and install the correspondent language version manually. You can read the Readme file in this path to receive the name of corresponding installation program.*

Configuring Windows 95 Driver

To receive optimum visual display and performance, configure your Windows 95 driver once it is installed.

Click the right mouse button while the mouse is pointing at an empty area of Windows 95 desktop and select **Properties** from **Display Properties** Window, you can adjust screen resolution, color depth, monitor setting, refresh rate, etc.

Refer to the sections below for a complete description of what options are available for each configuration tab. After making your changes, follow the on-screen prompts to complete the configuration.

If you want to change the screen resolution or color depth, click on the **Settings** tab at the top of the screen. The below panel will now be displayed. Change the screen resolution using the "Desktop area" slider on the right side of the window. To change the color depth of the screen use the "Color palette" selector on the left side of the window.

If you are unable to choose a resolution supported by your monitor, you may need to change your monitor settings by clicking the **Advanced Properties** button and clicking the **Monitor** tab. Click **Change** button for Monitor Type. Click the Manufacturer and Model that matches your monitor. If your monitor brand is not available, choose Standard monitor and VGA model.

If you want to change the refresh rate, click **Advanced Properties** button in the **Setting** panel, click the down arrow button on the Adapter active screen and click the number of refresh rate you hope to select, then click **OK** button. In general, the higher the refresh rate, the better the display quality. Be sure your monitor can support the refresh rate you choose!

Configuring Windows NT 4.0 Driver

To configure your Windows NT 4.0 driver once it is installed, follow the procedures listed below.

1. Right click on the Windows NT desktop and select **Properties**.

2. From the Display Properties dialog box, you can change your driver and monitor configurations. Click on the **Settings** tab located at the top of the dialog box, adjust the settings using the drop-down boxes and slider bars.

3. Follow the on-screen prompts for completing configuration.

Note: If your motherboard is shipped with QDI Motherboard Utility CD V1.1, the ATI Enhanced Drivers may be installed from the CD directory \DevDrv\VGA\Rage2C, according to your OS. This provides you with higher performance, additional resolution and special features.

Chapter 5
Creative Audio Description

On-board audio system is based on the high performance Creative ViBRA™16XV CT2511 chip that integrates 3D stereo enhancement technology. It incorporates the best features of Sound Blaster™, Sound Blaster™Pro, Microsoft Windows Sound System and MPU-401 for all multimedia applications, entertainment, educational sound and business audio.

Features

Analog Audio

- Analog mixing of 7 audio sources: Digital Audio (Stereo), CD Audio (Stereo), Synthesised Music (Stereo), Line Level Audio (Stereo), Microphone Level Audio (Mono) and Mono Audio (Mono).
- Individual software programmable volume controls.

Digital Audio

- Variable sampling rates from 5KHz to 48KHz.
- Full-duplex record and playback.
- 8/16 bit stereo/mono digital audio playback and recording.
- FIFO' s for digital audio playback and recording for optimum Windows operations.

Mixer

- 32-level volume control mixer.

Music Synthesizer and DAC

- Creative Music synthesizer.

Stereo Enhancement

- Built-in Creative Stereo Enhancement.
- Supports enhancement effect on all inputs to the mixer.
- CD audio, Line-in, Midi, Mic or Mono.

PnP Support

- Built-in PnP interface.
- Supports direct connection to ISA bus.

Joystick Port

- Built-in Analog Joystick quad timer.