

EUT:VGA Card

FCC ID:ICUVGA-GW723

GAINWARD CO., LTD.

USER'S MANUAL

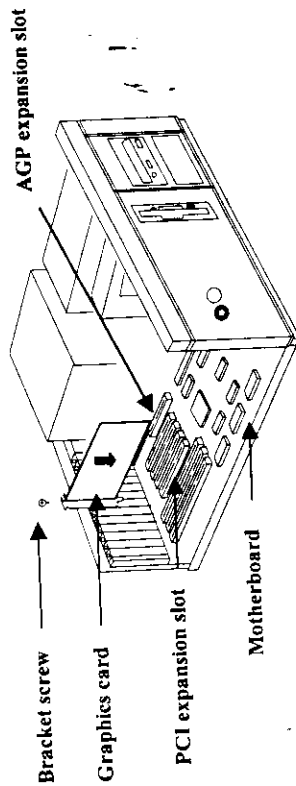
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2 Hardware Installation

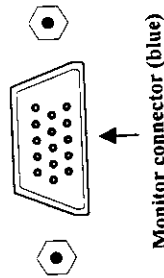
Insert your Graphic Card

Remove the cover for the slot you intend to use and save the screw for the mounting bracket. Then, pick up the Graphic card and position it over the expansion slot you've chosen. Push the card with firmly and evenly until it's fully seated in the slot. Replace the screw to secure the bracket of the Graphic card to the computer chassis.



Connect the monitor

Plug your monitor cable into the monitor connector on your Graphic card. Make sure the other end of the monitor cable is properly connected to your monitor.



3 Microsoft Windows 95 Drivers

CAUTION!

- Before installing the Display driver, make sure your Windows 95 is installed in VGA mode and work fine.
- Please install the DirectX before you want to play the MPEG Movie Player.
- If DirectDraw™ or Direct 3D™ has previously been installed on your system, the Windows 95 driver will ready to run after you finish the installation. If DirectDraw™ or Direct3D™ has not been installed, you will need to reboot your system again to initialize the driver.

SETUP VGA MODE

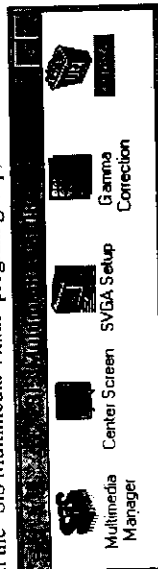
Click the right mouse button anywhere on the Windows 95 desktop and select Properties from the pop-up menu that appears on screen. Select Settings | Change Display Type and then click the [Change] button for Adapter Type. When the Select Device dialog box appears on the screen, please select [Standard display types] from the manufactures and select Standard Display Adapter (VGA) from the Models then click OK button.

SETUP DRIVER

1. Turn on your computer and start Windows 95.
2. Insert the Driver CD into your CD-ROM driver.
3. Click the Start button on the task bar.
4. In Windows 95 "Start" screen, click Run | Browse to select win95 driver source as D:\win95, D is the letter of your CD-ROM drive.
5. Select "Setup.exe" file, click "OK", then Win95 would perform driver installation.
6. After completing installation, Win95 would go back to "Restarting Windows" Screen, select "Yes" icon. And there are some items will be created after restarting.

6 Display Utility for Windows

In the "SIS Multimedia Vx.xx" program group, there would be five icons:



- 1) **Multimedia Manager:** To create a small "SIS Multimedia" icon on the corner of the screen.
- 2) **Center Screen:** An utility to adjust the position of display on the screen.
- 3) **SVGA Setup:** SIS VGA graphics configuration system allows you to set resolution, colors, frame rate, font, power saver, zooming, and so on.
- 4) **Gamma Correction:** Dialog for you to adjust the screen color and brightness to your preference.
- 5) **Uninstall:** To uninstall all the installed driver files and utilities.

Graphics Setup

1. In "SIS Multimedia Vx.xx" program group, choose "SVGA Setup" icon to enter "SIS VGA Configuration System" screen.
2. In "SIS VGA Configuration System" Screen, choose which options you would like to use.
3. After completing your selections, choose "OK" to make all your selections effective.
4. Choose "Restart Windows" to re-boot Windows using new settings. Or choose "Continue" to continue your current Windows processes.

Power Saving Setup

1. In "SIS VGA Configuration System" screen, choose "power saver" item to enter "Power Saver" screen.
2. In "Power Saver" Screen, choose which options you would like to use.
3. After completing the selections, choose "OK" to make all your selections effective.
4. After complete setup, the power_saver would take effect as you request when time up and you may continue your normal process.

Zoom Key Setup

1. In "SIS VGA Configuration System" screen, choose "zooming" item to define "hot keys" for zoom-in or zoom-out screen without entering setup program. To use this feature, please follow the following procedures.
2. In "SIS VGA Configuration System" screen, choose "zooming" item to enter "Zooming Hotkey" screen.
3. In "Zooming Hotkey" Screen, choose which "hotkey" you would like to use and enable it.
4. After completing the selections, choose "OK" to make all your selections effective.
5. After complete setup, you may use your own defined hot key to zoom-in or zoom-out screen.

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6 Display Utility for Windows

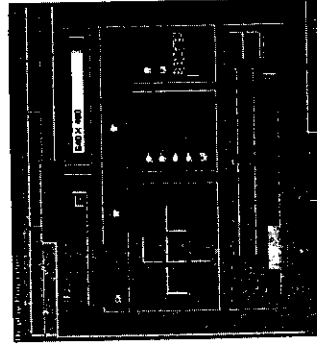
Video Operations

DCI Function
SIS6326 supports DCI driver for software MPEG playback and other media player programs which could take advantage of DCI. The SIS6326 DCI driver is automatically loaded during "Windows Installation" process. Therefore it should be transparent to the end-user and any media players could take advantage of it.

Win95

Using "SIS TV-OUT"

1. Go to "Display Properties" Screen and you will find that "SIS TV-OUT" item had been added.
2. First select "SIS TV-OUT" item and you may
 - > Use "Color Calibration Turning" to tune your color TV to get color if it appears black/white.
 - > For NTSC, use "NTSC" to select "640x480 60Hz" to get full TV display but some information would be invisible. Or select "560x420 60Hz" to get a small display screen on your TV.
 - > For PAL, use "PAL" to select "800x600 50Hz" to get full TV display but some information would be invisible. Or select "720x540 50Hz" to get a small display screen on your TV.
 - > Use "Screen Position" to adjust your TV display position.
 - > Use "AntiFlicker Mode" to adjust the anti-flicker effect.
 - > Use "Y Filter" to turn Y-filter on (image would be softer) or off (image would be sharper).
 - > Use "TV-Mode" to turn TV output on or off.
3. After completing selection, select "OK" or "Apply" to complete the whole setting.
4. Two cases happen:
 - > If you did not change "NTSC" selection, you may continue your job.
 - > If you change "NTSC" selection, program would refresh the screen and ask if you want to keep it. Click "Yes" or click "No" if you want to change or not.



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3D Studio Version 3.0 Setup

1. The following procedures assume that
 - (1) You have complete "unpack & copy" procedure.
 - (2) Your SIS ADI4.2 drivers are located in C:\DOS\ADI42.
2. Create your own 3D Studio V3.0 batch file (say 3DS3.BAT) and add the following settings to it, or add the following settings to your "AUTOEXEC.BAT" file.
 - (1) SET RCPADI=C:\ADI42\RCPADIS.EXP
 - (2) SET RDPADI=C:\ADI42\RCPADIS.EXP
3. Execute the new 3DS batch file or reboot the computer using the new "AUTOEXEC.BAT" as to make the new settings effective.
4. Change your current working directory to \3DS3 (Where your 3D Studio V3.0 usually resides).
5. Delete original configuration file "3DADLCFG", and type 3DS VIBCGF<Enter> to configure your display environment.
6. After the "Company Register Screen" appears, press <Enter> to continue.
7. The "Video Environment Configuration Screen" will appear. Please follow the following procedures to configure your video display environment.
 - (1) In "Main-Display" item, press <Enter> to appear the selection menu.
 - (2) In selection menu, move cursor to "RCPADI", press <Enter> to select.
 - (3) In "Material-Display" item, press <Enter> to appear the selection menu.
 - (4) In selection menu, move cursor to "RCPADI", press <Enter> to select.
 - (5) In "Render-Display" item, press <Enter> to appear the selection menu.
 - (6) In selection menu, move cursor to "RCPADI" or "RDPADI", press <Enter> to select.
 - (7) Complete the other selections and exit configuration.
8. After exit configure, 3DS will boot automatically using the environment you just select.
9. If your previous configuration is OK, 3DS will ask you to make detail configuration for SIS 6215 drivers.
10. In the detail configuration for SIS 6326 drivers, just follow the instructions appear on the screen and make your own choice.
11. After detail configuration, you will enter the 3DS main display screen and you may begin your 3D Studio work in the environment you make before.
12. Once completing the detail configuration, you may enter 3D Studio in the same configuration simply by type \3DS3\3DS <Enter> next time.
13. If you want to change your video configuration, just follow the procedures mentioned before to re-configure.

CAUTION!

- Before install SIS6326 OS/2 drivers, make sure:
- Install your OS/2 system using "VGA display" option (i.e. standard VGA).
 - Start your OS/2 system.

OS/2 V2.1 & V3.0 Setup

1. Enter "OS/2 windows" or "OS/2 full screen".
2. Change directory to which holds the SIS6326 OS/2 2.1 or 3.0 display drivers and type SISINST <Enter>. For example, A:\OS2\SBCS.21 (or SBCS.30) >SISINST
3. All the Driver Files will be copied to a sub-directory C:\SISDRV and the "Select Screen parameters for SIS SVGA" menu appears and all the resolution (and color) and frame rate supported would be shown on the screen.
4. Choose which one you would like to use and click "OK".
5. Then installation program would complete all installation process and create a "SIS Setup" for future change mode usage.
6. Shutdown and re-boot OS/2 to make your selection effectively.

Problem: After installing the driver, Windows 95 doesn't prompt me for restarting and the driver still doesn't work after I reboot it by myself.
You may have installed similar drivers before. Try the following steps to install:

Solution:

- (1) Use right button of mouse to click on "My Computer" icon on desktop.
- (2) Select "Properties" and "System Properties" box appears
- (3) Click on "Device Manager" tab
- (4) You will see a list of devices on your computer.
- (5) If "Display adapters" appears in the list, click it.
If "Display adapters" doesn't appear, jump to step 9 and continue.
- (6) The name of your card will be listed in the box. Double click it.
- (7) The properties box of your card appears. Select "Driver" tab.
- (8) Click "Change Driver.." and follow the installation steps.
- (9) Click "Other devices" you will see your card is listed.
- (10) Click on the name of card, the properties box appears.
Select "Driver" tab.
- (11) Click "Change Driver.." and follow the installation steps.

When you need advanced technique service, please Complete this form and FAX to your dealer.

Your name: _____ Phone: _____
Product S/N: _____ PCB NO: _____

HARDWARE CONFIGURATION

Mainboard Chipset:	CPU Clock:	MHz
Mainboard CPU:	VGA Memory Type:	
Mainboard Memory:	MB	VGA Memory MB
Mainboard Brand:	VGA Memory Brand:	
Cache Memory:	KB	FDD/HDC Card:
Monitor:		Horizontal Freq.: kHz to kHz Vertical Freq.: HZ to HZ

Other Cards on Mainboard:

Note:

12 Troubleshooting

SOFTWARE CONDITION
CONFIG.SYS:
AUTOEXEC.BAT:
Operation System or Test Program:
Application Software or Test Program:
Problem Description:
Note:

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Display Memory Configuration Memory-Resolution/Color

	4MB		
	256 color	64K color	16.7M color
640x480	85Hz	85Hz	85Hz
800x600	85Hz	85Hz	85Hz
1024x768	85Hz	85Hz	85Hz
1280x1024	75Hz	75Hz	-
1600x1200	65Hz	65Hz	-

Monitor Connector Pin Assignments

Pin no.	Function	Pin no.	Function
1	Red Video	9	NC
2	Green Video	10	Ground
3	Blue Video	11	NC
4	NC	12	Ground
5	DDC Clock	13	Horizontal Sync
6	Ground	14	Vertical Sync
7	NC	15	DDC CLOCK
8	DDC DATA		

Problem: Software programs will not run with the drivers.

Solution:

1. Try running the software with standard VGA drivers supplied with the application program. Most software programs have standard IBM VGA drivers. If the program still does not work it may be a problem with the application software.
2. Removed all TSR (Terminate and Stay Resident) programs from your system (specially in DOS system) and try the program again.

Problem: How do I get the latest drivers for the card?

Solution: You can check with the relative web site to download them.

Problem: When I boot the computer the display is not black. It is a different color, such as blue.

Solution:

Check the monitor connection. Generally blue, or other color screens are related to improper connections between the video card and monitor cable.

Problem: After installation and restarting, Windows 95 informs me that display setting is still incorrect. What can I do?

There may be conflict between previous and current display drivers. This is caused by not complete removal of previous display driver. Try the following steps to remove it:

Solution:

- (1) Use right button of mouse to click on "My Computer" icon on desktop.
- (2) Select "Properties" and "System Properties" box appears
- (3) Click on "Device Manager" tab
- (4) You will see a list of devices on your computer.
- (5) Open "Display adapters" in the list (double click it).
- (6) You will find two (or more) conflicted adapters listed here.
- (7) Remove all previous adapters by selecting them and press "Remove"
- (8) Close Device Manager and restart Windows 95.
- (9) Now display driver will work correctly.

7 AutoCAD R11, R12 Drivers

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AutoCAD R11 Setup

The following procedures assume that

- (1) You have complete "unpack & copy" procedure.
- (2) Your SIS ADI4.2 drivers are located in D:\DOS\ADI42.
- Add the following setting to your own batch file for AutoCAD R11 (say ACADR11.BAT) or to your "AUTOEXEC.BAT" file:
SET DSPADI=\ADI42\RCPSPIS.EXP <Enter>
- Delete the configure file ACAD.CFG resides in \ACAD directory.
- Type ACADR11 <Enter> to configure your AutoCAD R11 system.
- In "Select Display Device:" item, choose "ADIP386 V4.0/4.1 display."
- In "Select Display Resolution" screen, choose which display driver you want to use.
- Go through the whole instructions, and the system would start with the desired display setting.

AutoCAD R12 Setup

- (1) The following procedures assume that
- (1) you have complete "unpack & copy" procedure.
- (2) Your SIS ADI4.2 drivers are located in D:\DOS\ADI42.
- (3) Your AutoCAD R12 program is located in C:\ACADR12.
- (4) Your AutoCAD R12 default drivers are located in C:\ACADR12\DRV.
- (5) Your AutoCAD R12 configure file ACAD.CFG is located in C:\ACADR12.
- (5) Your AutoCAD R12 configure file ACAD.CFG: RCPSPIS.EXP
- Copy the following driver file to C:\ACADR12\DRV: RCPSPIS.EXP
- Delete your original ACAD.CFG file, restart your AutoCAD R12 program as usual.
- AutoCAD R12 will ask you to complete the configuration procedures since it can't find the configure file ACAD.CFG.
- Follow the instructions of AutoCAD R12 to proceed configuration.
- In "Available Video Displays:" item, choose the "SIS super VGA ADI v4.2 Display and Rendering driver" item.
- In "Select Display Resolution" screen, choose which display driver you want to use.
- Go through the whole instructions, and the system would start with the selected display setting.

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8 AutoShade R2.0 Drivers

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AutoShade R2.0 Setup

- The following procedures assume that
- (1) You have complete "unpack & copy" procedure.
- (2) Your SIS ADI4.2 drivers are located in D:\DOS\ADI42.
- Add the following settings to your batch file or AutoShade R2.0 (say SHADE2.BAT) or to your "AUTOEXEC.BAT" file.
SET DSPADI=\ADI42\RCPSPIS.EXP
- (a) For display driver setting,
SET RDPADI=\ADI42\RCPSPIS.EXP
- (b) For rendering driver setting,
SET RDPADI=\ADI42\RCPSPIS.EXP
- Delete the configure file SHADE.CFG, and type SHADE2 <Enter> to re-configure the AutoShade.
- While prompting "Select display device:", choose "P386 AutoDesk Device Interface display driver."
- While prompting "Select rendering display driver:", choose "P386 AutoDesk Device Interface rendering driver."
- Go through all the instructions, the system would start with the desired display setting.

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4 Microsoft Windows NT Drivers

CAUTION!

- Before installing the video driver, make sure your Windows NT is installed in VGA mode and work fine.

If you are running Windows NT, please note that drivers for NT are not compatible with earlier releases of NT, and vice versa. Consult your dealer, local user support groups or on-line services from time to time to ensure you have the latest release for the version of NT you are running.

To install the optimized display drivers for Windows NT, you must be running NT and follow Microsoft standard display driver installation procedure as documented in the NT user manual. Note the somewhat different installation procedures between NT and earlier release below.

SETUP DRIVER

1. Turn on your computer and start Windows NT.
2. Insert the Driver CD into your CD-ROM driver, and select "My Computer" icon.
3. In "My Computer" Screen, select Control Panel | Display icon.
4. In "Display Properties" Screen, select "Settings" item.
5. In refreshed "Display Properties" Screen, select Display Type | Change button in "Adapter Type".
6. In "Change Display" Screen, select [Have Disk] button and enter the path to the driver installation diskette. (e.g., D:\winnt\winnt40 or winnt35, D is the letter of your CD-ROM drive.)
7. In new Screen, "SiS 6326" would appear change display and select "OK". Then Win NT would perform driver installation.
8. After completing installation, Win NT would go back to "Display Type" Screen, select "Close" item.
9. Win NT would go back to "Display Properties" Screen, select "Close".
10. In "System Setting Change" Screen, select "Yes" item to restart your computer.

Windows 95/NT Display Properties - Windows 95/NT allows you to select resolution, color depth, refresh frequency and font size using the standard Windows 95/NT Display Properties sheet, which can be accessed by right clicking anywhere on the Windows 95/NT desktop, and then selecting Properties from the pop-up menu that appears on screen.

5 Microsoft Windows 3.1 Drivers

CAUTION!

- If you are performing a driver and utility upgrade, first configure Windows for a standard Windows display driver and ensure that the Display Control Panel is not running before continuing.

SETUP VGA MODE

1. Change directory to Windows 3.1 and type "SETUP".
2. Select "DISPLAY" [ENTER].
3. Change to "VGA" [ENTER].
4. Click ENTER button to save the result.

SETUP DRIVER

1. Start your Windows 3.1 program by typing "WIN" at DOS prompt.
2. Insert the CD into the CD-ROM drive and run the Setup program by selecting File | Run from the Windows Program Manager. (Figure 5-1)
3. Type D:\WIN31\SETUP.EXE [Enter] in the Run dialog box. (D is the letter of your CD-ROM drive). (Figure 5-2)
4. Follow the instruction on the screen to finish the installation.
5. When all necessary files are copied and a group name is selected, the SETUP program will create five icons as Figure 5-3

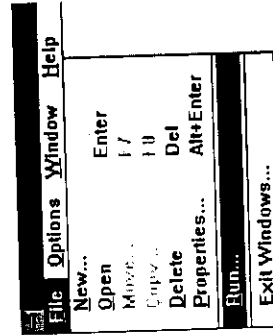


Figure 5-1

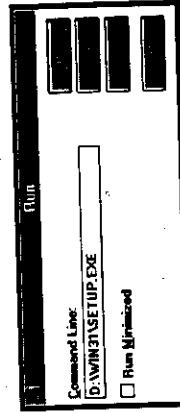


Figure 5-2



Figure 5-3

1 Overview

targeting the emerging PC market, SiS6326 is the first member of the new SiS63x6 family, which consists of high integration, super performance, and feature-rich 3D/2D graphics & video accelerators.

Being a 208-pin PQFP package, SiS6326 integrates AGP/PCI VGA controller, 3D/2D graphics accelerator, NTSC/PAL TV-OUT solution, MPEG-2/I video decoder, and video accelerator. The target of SiS6326 is to meet all the emerging PC requirements which includes 3D acceleration, output to TV, DVD/VCD player, and video acceleration in one chip and in a market acceptable price.

As the first member of 63x6 family, totally new pin-outs and application circuits are developed. However the definition of the registers are designed as backward compatible with previous SiS62x5 as possible as to shorten the product-to-market time.

DRIVER SUPPORT

- Microsoft Windows NT3.5
- Microsoft Windows NT4.0
- Microsoft Windows 95
- Microsoft Windows 3.1
- AutoCAD/386 Release 11.12
- AutoShade/386 Ver2.0
- 3D Studio Ver3.0

2 Hardware Installation

CAUTION!

Static electricity can severely damage electronic parts. Take these precautions:

- Before touching any electronic parts, drain the static electricity from your body. You can do this by touching the internal metal frame of your computer while it's unplugged.
- Don't remove a card from the anti-static container it shipped in until you're ready to install it. When you remove a card from your computer, place it back in its container.
- Don't let your clothes touch any electronic parts.
- When handling a card, hold it by its edges, and avoid touching its circuitry.

Before You Begin

Before you proceed further, make sure your computer system meets the peripheral requirements and switch to the standard VGA display driver.

Prepare Your Computer for Installation

Prior to working on your computer, make sure the power of the computer and any related equipment is turned off.

Select a Vacant Expansion PCI (AGP) Slot

Most AGP (PCI) bus computers have a combination of AGP (PCI) and ISA expansion slots. AGP (PCI) are usually made with plastic of a contrasting brown color (beige color), and are shorter than other slots in your computer. Your system manual should identify the AGP (PCI) slots. Plugging your Graphic card into a non-AGP (PCI) slot could damage the card, your computer, or both.



AGP vs. PCI vs. ISA expansion slots

FEDERAL COMMUNICATIONS COMMISSION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient or relocate the receiving antenna.

- increase the separation between the equipment and receiver.

- connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Shielded interface cables (except AV cable) must be used in order to comply with emission limits.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.