SIS 6326

3D GRAPHIC ACCELERATOR

MANUAL

SIS 6326

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1. SIS 6326
Memory Size: 4M or 8M
SP6326: Use 512K*32, 1M*32 SGRAM or 1M*16 SDRAM on Board

1.1 SIS 6326 Features

AGP Interface (6326A/6326D only)
- Supports AGP 1.0 compliant configuration setting
- Supports AGP 133MHz

PCI Bus Interface (6326i only)
- Supports 32-bit PCI local bus standard Revision 2.1 compliant
- Supports PCI bus master for 3D texture fetch
- Built-in 128 bits read cache to enhance frame buffer read performance

High Performance & High Quality 3D Accelerator
- Built-in a high performance 3D engine
- Built-in a high quality 3D engine

High Performance 2D Accelerator
- Built-in 42 double-words hardware command queue
- Built-in Direct Draw Accelerator
- Supports burst frame buffer read/write for SDRAM/SGRAM
- Built-in 64x64x2 bit-mapped hardware cursor
- Maximum 8M Bytes frame buffer with linear addressing
- Built-in 4 stages engine write-buffer
- Built-in 64x32 CRT FIFO to support super high resolution graphics modes

Complete TV-OUT Solution(6326A/6326i optional only)
- Built-in complete NTSC/PAL video encoder
- Supports NTSC/PAL interlaced display in
- Supports under-scan and over-scan scaling

Video Accelerator
- Supports single frame buffer architecture
- Supports bi-linear video interpolation with integer increments of 1/64
- Supports Direct Draw Drivers

Display Memory Interface
- Supports SDRAM, and SGRAM timing
- Supports 8MB memory configurations
- Supports up to 1Mx16 SDRAM and 1Mx32 SGRAM types up to 90 MHz

High Integration
- Built-in programmable24-bit true-color RAMDAC up to 175MHz pixel clock
- Built-in two 196x64 video line buffers for MPEG video playback

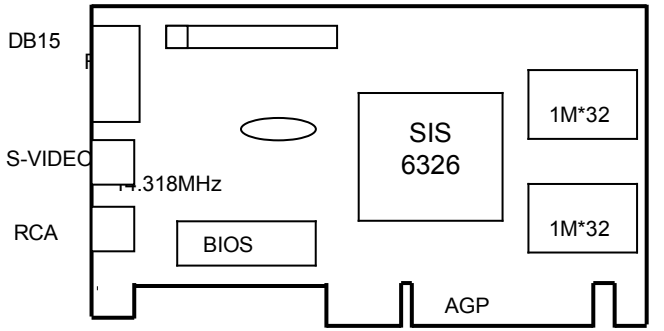
Full Software Support
- Windows2000,WindowsNT4.0/5.0,WindowsMe,Windows98 and Windows95

2. SIS 6326 Board Outline

2.1 SP6326A

8M on board use 1Mx32x2 or 1Mx16x4

4M on board use 512kx32x2 or 1Mx32x1 or 1Mx16x2

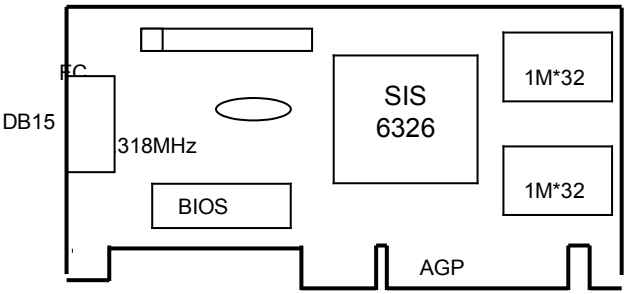


NOTE: TV output connector and encoder are reserved for optional.

2.2 SP6326D

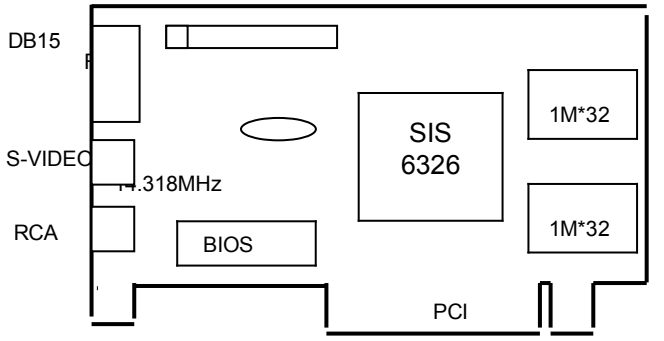
8M on board use 1Mx32x2

4M on board use 512kx32x2 or 1Mx32x1



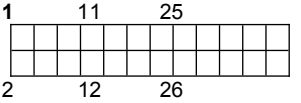
2.3 SP6326i

8M on board use 1Mx32x2 or 1Mx16x4
4M on board use 512kx32x2 or 1Mx32x1 or 1Mx16x2



NOTE: TV output connector and encoder are reserved for optional.

2.4 Feature Connector Pin Out (26 Pin)



Pin [1,3,5,7,9,11,13,15]: VID [0-7]
Pin [8,10]: HAD [0-1]
Pin [12]: HCTL
Pin [14]: SCL
Pin [26]: SDA
Pin [2,4,6,16,18,20,22,25]: Ground
Pin [17]: PIXCLK
Pin [19]: VIPCLK
Pin [21,23,24]: NC

3. Resolutions and colors supported:

	Bits Per pixel	Memory Req. (MB)	Refresh Rates (HZ)
640*480	8	1MB	60/72/75/85/100/120
	16	1MB	60/72/75/85/100/120
	32	2MB	60/72/75/85/100/120
800*600	8	1MB	56/60/72/75/85/100/120
	16	1MB	56/60/72/75/85/100/120
	32	2MB	56/60/72/75/85/100/120
1024*768	8	1MB	43i/60/70/75/85/100
	16	2MB	43i/60/70/75/85/100
	32	4MB	43i/60/70/75/85/100
1280*1024	8	2MB	43i/60/75/85
	16	4MB	43i/60/75/85
	32	8MB	43i/60/75/85
1600*1200	8	2MB	60/65
	16	4MB	60/65
	32	8MB	60/65

4. Hardware Installation

4.1 Package Contents

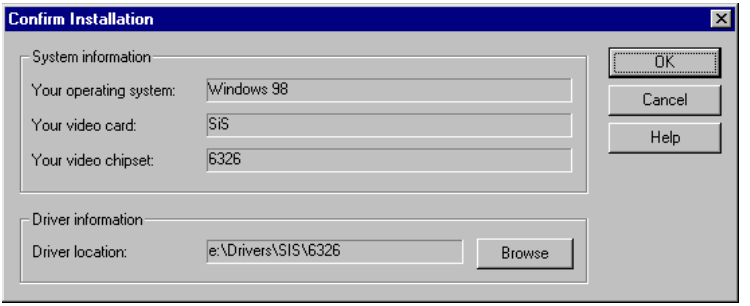
1. SIS 6326 3D Accelerator card.
2. CD title or Software diskettes
3. This manual.

4.2 Installing the Card

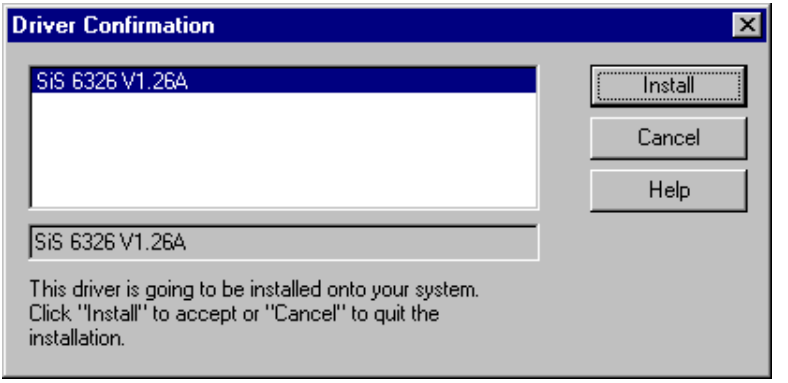
1. Turn off your computer.
2. Remove the cover of the computer per the owner's manual.
3. Install the card in the AGP bus slots.
4. Replace the cover.

5. Smart Installation
For Windows 95 OSR2.1, Windows 98, Windows ME
5.1 Put the DRIVERS CD in your CD-ROM
5.2 Click the **Driver installation**

5.3 If everything fine, screen will show **Confirm Installation** window.
Then Select the **OK**



5.4 Now appears the Driver Confirmation window
Select the Install



5.5 Then restart your computer.

6. Manually install Windows 95 & Windows 98 & Windows Me drivers

6.1 Installation and Setup

6.1.1 Windows95

If you can find E:\drivers\sis\6326\win9X\setup.exe, this is the sis standard drivers install program; this setup program will install VGA drivers and utilities.
If there is no such "setup.exe" file, please follow these steps below to install VGA drivers.

- Insert the DISC (CD Title Driver).
- Select **Control Panel** from **My Computer** group.
- Select the **Display** icon
- Double-click on the **Display** icon in the Setting -> **Control Panel** folder. You can also click the right mouse button anywhere on the desktop and select the Properties option form the pop-out menu.
- Click the **Settings** tab.
- Click the **change** Display Type button.
- Click the **Have Disk** button.
- Change directories and Select **6326M.inf**
  Disc (CD Title) is **E:\drivers\SIS\6326\WIN9X**

Note: "E:"-> CD Drive **"SIS"->** VGA chip brand name **"6326"->** VGA model name

- Select AGP driver form the list and click the **OK** button. If a message stating that one or more driver files is older than the files on the system respond **YES** to overwrite the files.
- Click the Close button and Apply button, and restart your computer.

6.1.2 Windows98 & Windows ME

If you can find E:\drivers\sis\300_305\win9X\setup.exe, this is the sis standard drivers install program; this setup program will install VGA drivers and utilities.
If there is no such "setup.exe" file, please follow these steps below to install VGA drivers.

- Insert the DISC (CD Title Driver).
- Select **Control Panel** from **My Computer** group.
- Select the **Display** icon
- Double-click on the **Display** icon in the Setting -> **Control Panel** folder. You can also click the right mouse button anywhere on the desktop and select the Properties option form the pop-out menu.
- Click the **Settings** tab.
- Then show **[Unknown Device.] Properties** tab
  Select **Adapter**
- Then show **Standard PCI Graphics….** tab
  Select **Change**
- Then show **Update Device ….** tab
  Select **Next**
- Then show **Update Device ….** tab
  Select **Search for a better……**
  Then select **next.**
- Then show **Update Device ….** tab
  If the **Specify a location** is wrong
  Please select **Brows**
- Then show **Browse for Folder** tab

Select **E:\drivers\SIS\6326\WIN9X or WINME**

Note: "E:"-> CD Drive **"SIS"->** VGA chip brand name **"6326"->** VGA model name
Then select **OK**

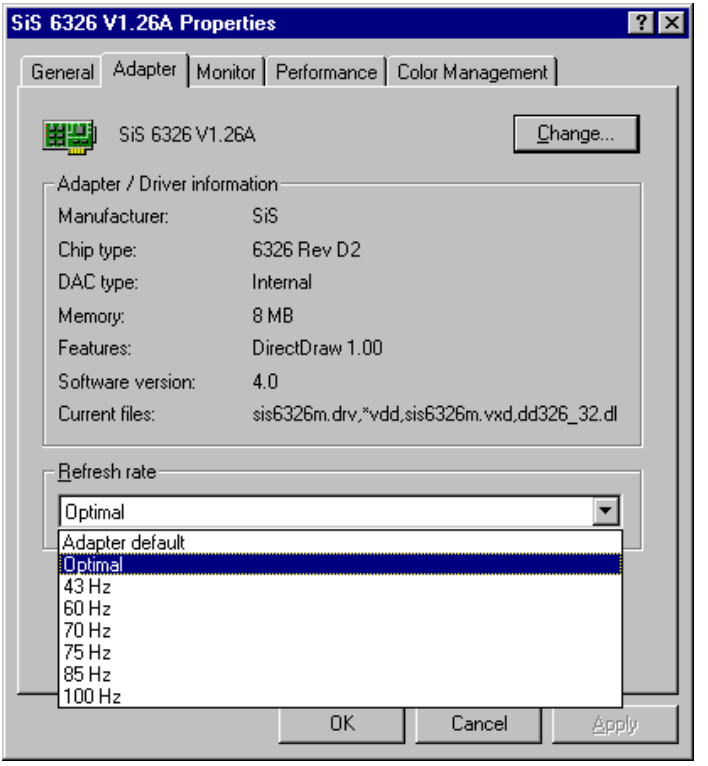
- Then show **Update Device Driver Wizard** tab
  Select **CD-ROM driver**
  Click the **Specify a locator,** if right
  Then select **next**
- Then show **Update Device Driver Wizard** tab
  Select **Next**
- Then show **Update Device Driver Wizard** tab
  Select **Finish**
- Then show **System Settings Change** tab
  Select **OK**

6.2 How to Change Color Depth and Resolution

1. Make sure that you have installed windows95/98 Driver.
2. Click on the **Start** box in the lower left corner and proceed to **Control Panel**.
3. Inside the **Control panel** group, click on **Display** icon to open the **Display Properties** folder and select the **Setting table**
4. Click on the pull-down arrow from the **Color** palette area to select color depth or adjust the sliding bar to either **Less** or **More** from the **Desktop area**
5. Select **OK** to restart **WINDOWS95** and new color depth or the new resolution takes effect.

6.3 How to Change Refresh Rate

1. Make sure that you have installed windows95/98 Driver. Click on the **Start** box in the lower left corner and proceed to Setting, **Control Panel**
2. Inside the **Control panel** group, click on **Display** icon to open the **Display Properties** folder and choose **Settings** click the **Advance Settings** choose **Adapter**
3. Click on the **Refresh Rate** sub window to change refresh rate
4. Select **OK** and new refresh rate takes effect



Note: If your monitor is not Branded or Plug&Play, you will only see Adapter default and optimal. Please contact your monitor supplier to get right or compatible drivers for your monitor. Otherwise you cannot select the refresh rate you wanted.

- Refresh Rate default is Optimal.
- If you change Refresh Rate from Optimal to another, you must be to restart WINDOWS 95 or 98 or ME

7. Windows NT 4.0

The following steps describe how to install Windows NT4.0 display drivers

1. Select **Control Panel** from the **Main** group.
2. Select the **Display** icon.
3. Select C**hange Display Type**.
4. Select Change from the **Adapter Type** area.
5. Select **Other**.
6. Place the Disc (CD Title) into Driver. Click **OK**.
7. Select I**nstall** and click "**YES**" when the Installing Driver dialog box appears.
8. When the Windows NT **Setup** dialog box appears select CDROM, and click "**Continue**".

8. Windows 2000
First time install drivers under windows2000

1. When system boot up, system will prompt find new device. Suppose the device is VGA, now system will find the default drivers for you.
2. If you want to install our drivers along with the SP6326 pack. Please put the drivers CD in your CDROM drive. If now shows SmartInstall window, please click **EXIT** button to quit.
3. Drivers for windows2000 are located at \2000drv\sis\6326\win2000 or \drivers\sis\6326\win2000
4. If the drivers is very new may not certified by Microsoft, if so, system will prompt you the drivers do not have "digital signature", still you can force to install.
5. Follow on screen instructions will finish the installation.

The following steps describe how to update Windows2000 display drivers
1. Place the Disc (CD Title) into CDROM Drive. If now shows SmartInstall window, please click **EXIT** button to quit
2. Right click mouse button on Desktop Area, now shows a sub menu window. Please select **Properties**.
3. Now come up **Display Properties** window, please select **Settings** on the top.
4. Select **Advanced**
5. Select **Adapter**.
6. Select **Change**
7. Now comes up an update driver's wizard window. Please follow the on screen instruction.
8. Please specify the drivers location at your CDROM letter: \2000drv\sis\6326\ win2000 or \drivers\sis\6326\win2000 or the directory where you put your drivers
9. Select **Install** and click "**YES**" when the Installing Driver dialog box appears. If the drivers is very new may not certified by Microsoft, if so, system will prompt you the drivers do not have "digital signature", still you can force to install.

A message appears stating that drivers were successfully installed. Click **OK**. Another message appears stating that the driver could not be restarted dynamically. Restart Windows2000 to run the new driver. Click **OK.**

FCC Statement

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. (2). This device must accept any interference received, including interference that may cause undesired operation

Warning:
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, used and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference in to radiate 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 form that to which the receiver in connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice:
(1) An Unshielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception. It is essential that only the supplied power cord by used.
(2) Use only shielded cables to connect I/O devices to this equipment.3
(3) Changes or modifications not expressly approved by the party responsible for compliance could void the use's authority to operate the equipment.

Trademark Acknowledgments

All brand names and trademarks are the property of their owners.