
SG200A User Manual

FCC ID: NPCSG200A

Federal Communications Commission (FCC) Statement

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 against harmful interference in a residential installation. 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.

Warning:

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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.

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Chapter 1

Introduction

The S3 ViRGE/GX2 integrated graphics accelerator provides excellent graphics performance at high resolutions and at a low cost, but also provides the TV-Out function with a stand-alone integrated circuit that converts analog VGA input directly into 525-line NTSC or 625-line PAL composite video and S-Video output. This circuit integrates a digital NTSC/PAL encoder with 8-bit ADC and DAC interfaces, along with a 3-line vertical filter 24-bits per pixel. This high level of integration and performance makes the SG200A fit for a variety of stand-alone and system-level integrated solutions. The following features provide the flexibility to meet a wide range of user needs.

Features

- ◆ Full support for 66MHz Accelerated Graphics port (AGP)
- ◆ 64-bit 2D/3D engine and integrated 170MHz RAMDAC
- ◆ Simultaneous display of independent images on CRT and TV display
- ◆ Industry standard video digitizers and MPEG-2 video decoder support
- ◆ I²C bus and 8-bit Bi-directional feature connector (LPB Bus)
- ◆ 3D texture mapping, MIP-Mapping, Video texture mapping
Bi-linear and tri-linear texture filtering, Z buffering
- ◆ Provides RCA output jack(composite), and S-Video output port
- ◆ 2 or 4 Mbyte SGRAM frame buffer
- ◆ Full hardware support VESA 2.0 DPMS and DDC2B

Chapter 2 Hardware Installation

2.1 What Included in the Package

The SG200A package includes the following:

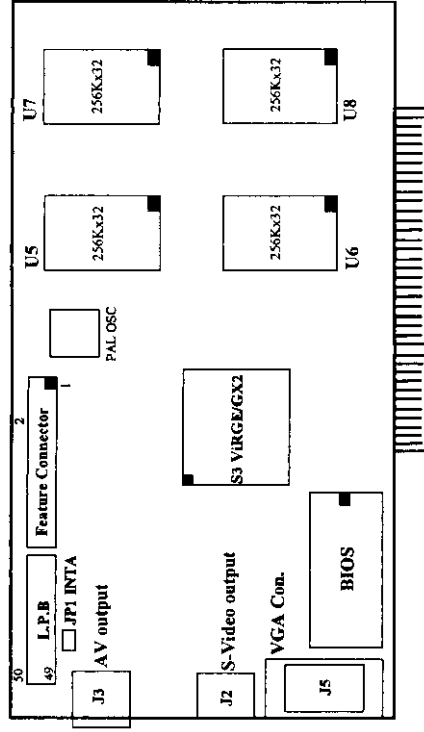
1. SG200A accelerator card
2. Software driver which contain the necessary files
3. This manual

2.2 Installing the Card

1. Power off your system and disconnect all peripherals.
2. Remove the computer cover and make sure there is a system expansion slot (AGP) available.
3. Remove your existing graphics card and insert the SG200A into an open AGP bus slot.
4. Make sure the card is correctly seated in the slot.
5. Replace and secure the computer cover. Reconnect the peripherals.
6. Plug your monitor cable into the 15-pin video output connector on your SG200A.

If the system successfully powers up and the normal DOS boot-up message appears on the screen, the SG200A is installed properly.

2.3 The SG200A(AGP) Board Layout



Chapter 3 Software Installation

The SG200A is 100% VGA compatible and as such needs no special display drivers to run application software correctly at standard VGA resolutions and color depths. However, enhanced display drivers are supplied with the SG200A because they provide accelerated performance, higher color depths and higher resolutions for software applications. The SG200A supports resolutions as high as 1600x1200 pixels, and color depths of up to 24 bits per pixel. Higher graphics resolutions and higher color depths provide greater clarity and detail when using the supplied drivers for graphics programs. When configuring your software to work with the board, it may help to bear in mind that the drivers compatible with the SG200A fall into four categories.

3.1 Installing on Windows 95

Microsoft Windows

After installing the enhanced display drivers for Microsoft Windows, you can switch among supported display modes in the conventional manner. The way of installing it is to run "D:\SG200A\WIN95\SETUP.EXE" on CD-ROM disk or "A:\SETUP.EXE" on floppy disk program. When Windows notifies you that the requested display driver is already present on the system, and asks if you want to use the current driver or install a new one, answer [Current].

3.2 Installing on Windows NT4.0

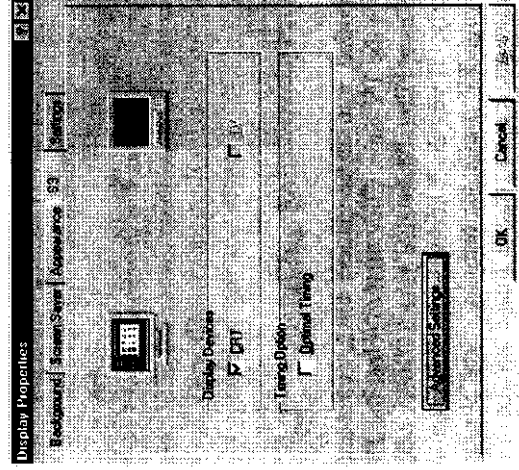
To install enhanced display drivers for Windows NT4.0, you must be running Windows NT. Please follow Microsoft standard display driver installation procedure as documented in the NT user manual.

1. From the NT Program Manager, double-click on the NT Control Panel program in the Main program folder.

2. Then select the Display applet in the Control Panel to change the display driver. Select a supported display mode from the drive and directory containing the NT drivers, e.g., D:\SG200A\WINT40.

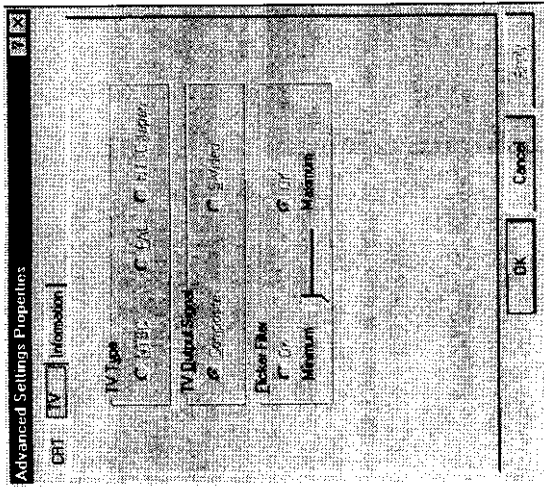
3.3 TV Utility

After the supplied VGA driver has been installed on the Windows 95/NT, the CRT/TV screen utility will be built into the Display Properties control panel. From the Display Properties control panel, click on the "S3" page to show the following:



1. From this window, you can select the CRT, TV, or both options from the Display Devices group box, depending upon your needs. For example, if you want the image to appear on both the CRT and TV screens, you have to click the CRT and TV checkmarks at the same time. (You have to install the TV out connector to TV if you want to select TV check marks).

- To adjust the controls on this function, click on the Advanced Settings button. Your screen should look similar to the following:



The advanced settings are divided into three pages: CRT, TV, and Information. Please take notice of the TV page. Click on it to select the TV Type, TV Output Signal, and Flicker Filter. Make sure your SG200A card is connected with the TV properly. If you don't know the specification of your hardware, please contact your TV dealer for technical data. Wrong settings let your display have no picture or twisted image on the TV screen.

Chapter 4 Software MPEG Player

4.1 Introduction

Software Requirements

- ◆ Microsoft Windows 95
- ◆ S3 Windows driver

Hardware Requirements

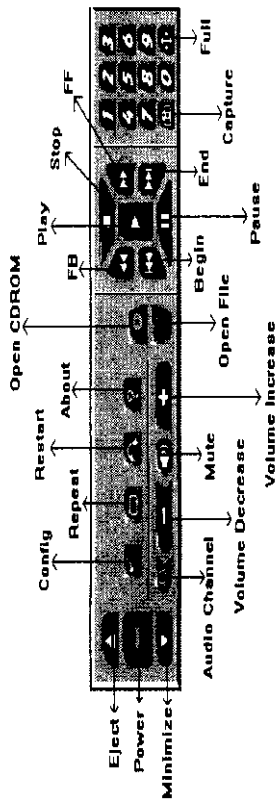
- ◆ Pentium-133MHz (Cyrix 6x86-P120+) or above
- ◆ At least 2MB of free hard disk space, 4x speed or above CD-ROM drive
- ◆ Sound card with a Windows wave audio driver installed
- ◆ 256 (or above) color VGA card is required. A VGA card with DCI or DirectDraw support is recommended
- ◆ 8MB of system memory is required

4.2 Installing Software MPEG Player

Installing on Windows 95

1. Start Windows 95.
2. Insert the VCD PowerPlayer setup disk into drive A (or CD-ROM drive).
3. Choose Run from the Start menu.
4. In the Run dialog, type "A:\Setup" (or D:\Mplay\Setup) and click the "OK" button.
5. The VCD PowerPlayer setup program will begin the execution.
6. Follow the on-screen prompts until the installation is complete.

The control panel of the software MPEG Player is shown in the following diagram:



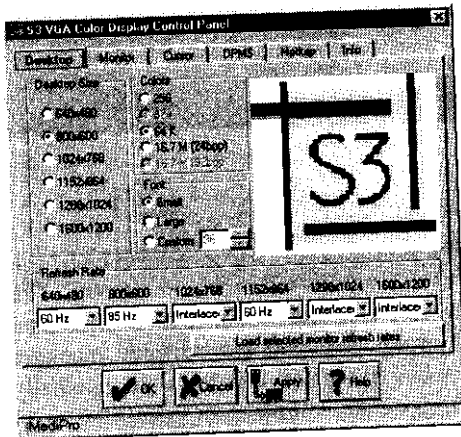
The some important buttons which deserve greater detail are as follows:

- Config:** Set up the device options.
- Repeat:** Repeat the playback continuously.
- Restart:** Resume the playback from the beginning
- Number:** Choose a particular track.
- Capture:** Clicking on this icon will capture the image on the video screen into the Clipboard. To get the image, you can save it as a .BMP file or use the typical Windows cut/copy/paste features.
- Full:** Switch the playback screen at 1x, Maximize, Full screen.
- Audio Channel:** Select the left and/or right audio channel.

QUICK INSTALL

Installing On Windows 95

To install the display driver support files, run D:\SG200A\WIN95\SETUP.EXE" (on CD-ROM disk) or A:\SETUP.EXE" (on floppy disk) from the Start menu. The Setup program will copy the Windows driver and support files to your hard disk, create a Program Manager group, and add the display manager program to the section of the WIN.INI file which Windows automatically loads each time it starts. The Setup program will place an uninstaller' icon on the program group which you can run to un-install this package. The Display Control Panel presents its information in a tabbed dialog box. On each page, a miniature computer screen shows you the changes before you actually apply them.



NOTE!
Load PnP Monitor Refresh Rates
(for Windows 95 only)
 This button will load maximum refresh rates for all resolutions detected DDC monitor or by the monitor you selected. In general, these refresh by rates will work fine. These refresh rates are only as a suggestion, you are allowed to choose a different refresh rate if you like.

Desktop

Allows you to configure your desktop size, color depth, font size, and refresh rate.

Monitor

Selects monitor type, monitor centering, and refresh rate.

Cursor

Multi-color Cursor selection option.

DPMS

Sets VESA Display Power Management System.

Hotkey

Provides for Zoom-in, Zoom-out, Desktop size, and Screen-off.

Info

Views the desktop driver, chipset information.

Help

Multi-language support, including English, Chinese, Japanese, Korean, French, German, Italian, and Spanish.