SIGMA TNT II PRO / TM 64

User's manual Ver.1.0

- All specifications described in this manual are subject to change without prior notice.
- This manual is not allowed to copy or print in whole or in part without a written permission of SIGAMCOM CO., LTD.
- If you find any omission or misprinted part, please let us know in witting.
- SIGMA TNT II PRO is a registered trademark of SIGAMCOM CO., LTD.
- Other trademarks and names are the property of their respective owner
- Copyright©2000 SIGAMCOM CO.,LTD.

FCC NOTICE

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITION: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDERSIRED OPERATION.

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

communication. 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 difference from that to which the receiver is connected.
- Consult the dealer of an experienced radio/TV technician for help.

NOTE : The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Table of contents

Chapter1 Before getting started

Features of SIGMA TNT 2 board

System configuration and each part description

Chapter2 Installation

Display driver installation Microsoft Windows 95 Microsoft Windows 98 Microsoft Windows Me Microsoft Windows NT4.0 Microsoft Windows 2000

Installation of application programs

Chapter 3 Using programs

How to use Sigma TNT 2 utilities Color management DirectX 3D settings OpenGL settings Overlay color control Gamma Correction Other options

Watching video CD

Listening to MP3 files

Chapter 1 Before getting started

- Features of SIGMA TNT 2 board
- System configuration and each part description

Features of SIGMA TNT 2 board

- The latest NVIDIA RIVA TNT2 (Pro/TM 64) chip built-in
- 143MHz Core clock /166MHz memory clock
- 6ns 32MB SDRAM standard
- Real 128bit 2D/3D acceleration
- AGP 4X support
- Twin-texel acceleration engine integrated
- 100% hardware triangle setup engine
- 32bit true color 3D rendering
- Anti-aliasing in full modes
- MP3 file player and Sigma MP3 player provided
- Integrated hardware BIOS for DDC monitor information and VESA timing

System configuration and each part description

Figure 1. TNT 2 Pro 32 (32MB)



• Monitor connector

Is connected to the monitor and outputs video signals of VGA board.

Video Capture Port

Connects to other multimedia products.

Refer to a corresponding manual of each multimedia product.

B ROM BIOS

Sets up to control VGA in your system.

O Video Memory

Is a storage place to have the contents to be displayed on the screen. It is called as Frame Buffer or Video Buffer.

Sigma TNT 2 Pro 32 VGA board provides high speed SDRAM 32MB as a default.

Chapter 2 Installation

• Display driver installation

Microsoft Windows 95 Microsoft Windows 98 Microsoft Windows Me Microsoft Windows NT 4.0 Microsoft Windows 2000

Installation of application programs

Display driver installation

Windows 95

Note

In order to install the SIGMA TNT 2 under Windows NT4.0, Windows 95 OSR 2.1 or higher version needs to have been installed. If not, download OSR2.1 patch program at www.microsoft.com.

- Insert the installation CD into CD-ROM drive when Windows 95 starts.
- Select "Properties" when Pop-up menu appears by clicking the right mouse button.
- S Click "Settings" in "Display Properties" dialog box.
- O Click "Advanced Properties" and "Change" in "Adapter".
- Click "Have Disk" when "Select Device" dialog box appears.
- O Click "Browse" in "Install from disk" dialog box and install "WIN9X" directory in "TNT2" folder of CD-ROM drive when "Open" dialog box displays. Click "OK".
- Click "OK" in "Install From Disk" dialog box.
- If it recognizes "Sigma TNT 2 (x.xx)" in "Select device" dialog box and click "OK" again. (TM 64 board recognizes 'Sigma TNT2-TM64' and TNT 2 PRO boards recognizes 'Sigma TNT 2 Pro'.) Follow the instruction displayed.
- If a dialog box appears asking if you want to restart your system, select "Yes".

Windows 98

In case of installing Sigma TNT 2 board and Windows 98 together

If you have installed Windows 98 newly, your system recognizes the video card as "standard PCI graphics adapter". If it has not been set correctly, switch display to "standard PCI graphics adapter" and proceed with the following procedures.

- Insert the installation CD into CD-ROM drive when Windows 98 starts.
- O Click the right mouse button and select "Properties" when Pop-up menu appears.
- Select "Settings" in "Display Properties".
- G Click "Advanced", "Adapter" then "Change".
- "Update Device Driver Wizard" appears then click "Next". Select "Search for a better driver than the one your device is using now (Recommended)" and click "Next".
- Select "Specify a location" and "Browse..."

Update Device Driver W	/izard
	Windows will search for updated drivers in its driver database on your hard drive, and in any of the following selected locations. Click Next to start the search.
	< <u>B</u> ack Next > Cancel

- Select "WIN9X" directory on "TNT" folder of CD-ROM drive then click "OK".
- When it turns back to the "Update Device Driver Wizard", click "Next".
- If it recognizes "Sigma TNT2 (x.xx)" in "Device to Find Driver", click "Next" and "Finish".
- If a dialog box appears asking if you want to restart your system, select "Yes".

In case of exchanging the VGA card to Sigma TNT 2 board

- When Windows begins, VGA board is recognized by PnP BIOS and "Add New Hardware Wizard" dialog box will appear on the screen then click "Next".
- O Click "Search for the best driver for your device [Recommended]" and then click "Next".
- Insert the installation CD into CD ROM drive and select "Browse" in the "Add New Hardware Wizard".
- When "Browse for Folder" dialog box appears, select "WIN9X" directory in "TNT2" folder. Click "OK " and "Next".

Install Fr	om Disk	×
_	Insert the manufacturer's installation disk into the drive selected, and then click OK.	OK Cancel
	Copy manufacturer's files from:	Browse

If it recognizes "Sigma TNT 2 (x.xx.xx)" in "Update Device Driver Wizard" dialog box then click "Next" and "Finish"

Select D	evice	×
	Display adapters: The following models are compatible with your hardware. Click the one you want to set up, and then click OK. If your model is not on the list, click Show All Devices. This list shows only what was found on the installation disk.	
Models:		
📮 Sigm	a TNT2 Pro (v3.53) [5-18-2000]	
G. Chan	a new still to de door	
C Show	v compatible devices	
• Shice	Val devices	
	OK Cancel	
		_

The appropriate drivers will be copied. If a dialog box appears asking if you want to restart your system, click "Yes".

Windows Me

TNT 2 driver for Windows Me is installed automatically. However, if you want to use a driver we provide on CD, install the driver as follows.

- Insert the installation CD into CD-ROM drive when Windows Me starts.
- Click the right mouse button on the background and select "Properties" when Pop-up menu appears.
- Select "Settings" in "Display Properties".
- Olick "Advanced" and "Adapter" then "Change".
- "Update Device Driver Wizard" appears. Select "Specify the location of the driver (Advanced)" and click "Next".
- Select "Search for a better driver than the one your device is using now (Recommended) and "Specify a location" and "Browse..."
- Select "WIN 98_ME" folder on "TNT 2" folder of CD-ROM drive by using "Browse" button then click "OK".
- When it turns back to the "Update Device Driver Wizard", choose "Install one of the other drivers" then click "Next".
- Select "TNT 2 (vX.XX)" in "Select Other Driver", click "OK".

When "Update Device Driver Wizard" appears, choose "Install one of the other drivers" then click "Next".

Click "Next" then "Finish".

`If a dialog box appears asking if you want to restart your system, select "Yes".

Windows NT 4.0

Note

In order to install the SIGMA TNT2 under Windows NT4.0, the service pack 3 or higher version needs to have been installed.

- Run Windows NT 4.0.
- Insert the installation CD into the CD-ROM Drive.
- O Click the right mouse button on the initial display and select "Properties".
- "Display Properties" appears then click "Setting" and "Display Type".
- Select "Change" in "Display type" then "Change Display" box appears. Click "Have Disk".
- G Click "Browse..." when "Install from disk" dialog box appears and locate the NT4.0 directory from "TNT2" folder of CD-ROM drive then "Open".
- Select "Yes" if a dialog box that asks to install a third party drivers.
- The message "The drivers will successfully installed" appears. Run "Window NT 4.0" again.

Windows 2000

TNT 2 driver for Windows 2000 is installed automatically. However, if you want to use a driver we provide on CD, install the driver as follows.

- Insert the installation CD into CD-ROM drive when Windows 2000 starts.
- Click the right mouse button on the background and select "Properties" when Pop-up menu appears.
- Select "Settings" in "Display Properties".
- O Click "Advanced" and "Adapter" then "Properties".

When "nVidia Vanta Properties" appears click "Update Driver...".

- "Upgrade Device Driver Wizard" appears then click "Next". Select "Search for a suitable driver than for my device (Recommended)" and click "Next".
- Select "Specify a location" and "Browse..."
- Select "WIN2000" folder on "TNT 2" folder of CD-ROM drive by using "Browse" button then click "OK".
- When it turns back to the "Upgrade Device Driver Wizard", choose "Install one of the other drivers" then click "Next".
- Select "TNT 2 (vX.XX)" in "Driver Files Found", click "Next".

If a dialog box appears "Digital Signature Not Found", select "Yes" and click "Finish".

When it turns back to the "TNT 2 Properties", click "Close".

If a dialog box appears asking if you want to restart your system, select "Yes".

Installation of application programs

- Insert the installation CD into CD-ROM Drive.
- Select the CD-ROM Drive at "TNT2" foler.
- S Run "SETUP.EXE" at "SIGMACOM" folder.
- Click "Next" in the installation procedure.
- Installation directory and method are shown in the dialog box. Click "Next".

If you want to change the installation directory, click "Browse..." and place a directory you want. If you want to install user-defined items, select "Custom" then "Next".

Selete setup type			×
	Click the type (of Setup you prefer, then click Next.	
	 Typical 	Program will be installed with the most common options. Recommended for most users.	
	C Compact	Program will be installed with minimum required options.	
er.	C Custom	You may choose the options you want to install Recommended for advanced users.	L
* >	Destination E C:\SIGMA\	Bjowse	
		< <u>B</u> ack <u>N</u> ext> Cancel	

• The "Select Program Folder" dialog box appears, then click "Next".

If you want to change the name of the program folder, enter a name in the white blank.

Select Program Folder		×
	Setup will add program icone to the Program Folder listed below. You may type a new folder name, or belect one from the existing Folders list. Click Next to continue. Brogram Folders: Storma Mutanastic Egisting Folders: Accessories Online Services StartUp	
	< Back Next > Cancel	

- The applications will be copied and folders and icons will be created.
- The "Setup Complete" dialog box appears.

Select "Yes, I want to restart my computer now" and click "Finish".

Setup Complete	
	Setup has finished copying files to your computer. Before you can use the program, you must restart Windows or your computer. (* [Yes, I want to restart my computer now.] (* No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.
	c (Biodic Finish

Chapter 3 Using programs

• How to use SIGMA TNT 2 utilities

Color management DirectX 3D settings OpenGL settings Overlay color control Other options

- Watching video CD
- Listening to MP3 files

How to use Sigma TNT 2 Utility

This is a utility program that sets display properties and 3D functions.

When clicking "Display properties", "Settings", "Advanced" and "RIVA TNT2", the following dialog box that shows hardware information, driver version, and memory size appears.

And for more detailed settings of Gamma correction, 3D feature setting, OpenGL, and DirectX, click "additional properties" in the below part of the dialog box.

igma TNT2 Pro	(v3.53) Properties	? ×
General Color Manager	Adapter Monit ment 🥺 RIVA TNT2	or Performance Output Device
Display Adapter Graphics Proce Bus Type: BIOS Version: On-Board Merr IRQ: TV Encoder Ty System Informat System Proces Total Physical Free Physical 1	Information essor: NVIDIA TNT2 Pro AGP 2.05.19.03 hory: 32 MB 11 ype: Brooktree 868 ion esor: AMD Memory: Memory:	Athlon(tm) with 3DNow!(tm) 130,524 KB 67,212 KB
Filename nvdisp.drv nvdd32.dll nvopengl.dll nvcore.vxd nvarch16.dll	Description Display driver DirectDraw driver OpenGL installable client driver Resource Manager kernel Resource Manager 16 bit client Additional Properties	Version 4.12.01.0353 4.12.01.0353 4.12.01.0353 4.12.01.0353 4.12.01.0353 i 4.12.01.0353 via the internet >

Color management

This is a utility to adjust a color (Gamma value) and contrast value.

Additional RIVA TNT2 Pr	operties		? ×
OpenGL Settings Color Correction	Overlay Color C	Control Direct3D S	Other Options
	Brightness	Active Co	o <u>r</u> Channel: annels
Custo <u>m</u> color settings:	Automatically	i v apply these sel ive As Restore <u>H</u> ardu	tings at startup Delete ware Defaults
	OK	Cancel	Apply

DirectX 3D settings

This is a utility to optimize your system performance for 3D acceleration.

Additional RIVA TNT2 Properties
OpenGL Settings Overlay Color Control Other Options Color Correction Direct3D Settings
Direct3D
Performance and Compatibility Options
 Lenable fog table emulation Adjust Z-buffer depth to rendering depth if unequal Enable alternate depth buffering technique Display logo when running Direct3D applications
Mipmapping
Automatically generate 0 📻 mipmap levels.
Auto-mipmap method: Bilinear
Mipmap detail Jevel: Best image quality
Custom Direct3D settings:
Save As Delete
More Direct <u>3</u> D <u>R</u> estore Defaults
OK Cancel Apply

OpenGL Settings

This is to set the buffer and video memory for the use of OpenGL.

Additional RIVA TNT2 Propertie	es			? ×
Color Correction OpenGL Settings Ove	rlay Color C	Direct3 ontrol	D Settings Other Options	5
OpenGL.				
Performance and Compatibility Op	otions ——			
Enable buffer region extension Allow the dual planes extension Use fast linear-mipmap-linear Enable anisotropic filtering	ion to use la filtering	ocal video n	nemory	
Default <u>c</u> olor depth for textures:	Use des	ktop color d	lepth 💌	
<u>B</u> uffer flipping mode:	Auto-sel	ect	•	
⊻ertical sync:	Always o	off	-	
∐se up to 14 🚆 MB of syste	em memory	for textures	in PCI mode.	
Custom OpenGL settings:				
	-] <u>_S</u> a	ve As	Delete	
		E	estore Defaults	
	OK	Cance	el <u>Appl</u> y	,

Overlay color control

This is to control an overlay color when watching TV or VCD.

ditional RIVA TNT2 Pro	operties	?
Color Correction	Direc	ct3D Settings
OpenGL Settings	Overlay Color Control	Other Options
H. A		
Video Overlay Controls -		
<u>B</u> rightness:		100%
	—_J	
<u>C</u> ontrast:		100%
Hue:	, in the second s	, Π*
<u></u>		
	Y	
Saturation:		100%
	Y	
		Restore Defaults
	OK Car	ncel <u>Apply</u>

Other options

This sets a timing of monitor or icon images.

IONAL RIVA INTZ P	roperties	
Color Correction	Direct	3D Settings
OpenGL Settings	Overlay Color Control	Other Options
opitor Timina	NVIDIA	
Select the proper tin	ning mode for your monitor	
 Auto-Detect (let 	Windows determine the prop	er mode)
C General Timing I	Formula (GTF)	
C Discrete Monitor	Timings (DMT)	
Display the QuickTo	weak icon in the taskbar	
☑ Display the QuickTo	weak icon in the taskbar	
Display the QuickTo Select taskbar jcon:	weak icon in the taskbar	
☑ Display the QuickTu Select taskbaricon:	weak icon in the taskbar	Voard (Rhue)
☑ <u>D</u> isplay the QuickTu Select taskbar įcon:	weak icon in the taskbar NVidia Logo NVidia Logo Monitor with Graphics B Monitor with Graphics B	Coard (Blue)
☑ <u>D</u> isplay the QuickTu Select taskbar jcon:	weak icon in the taskbar NVidia Logo NVidia Logo NVidia Logo Monitor with Graphics E Monitor with Graphics E	Coard (Blue)
☑ <u>D</u> isplay the QuickTu Select taskbar icon:	weak icon in the taskbar NVidia Logo NVidia Logo Monitor with Graphics E Monitor with Graphics E	Coard (Blue)
☑ <u>D</u> isplay the QuickTu Select taskbarjcon:	weak icon in the taskbar NVidia Logo NVidia Logo Monitor with Graphics E Monitor with Graphics E	Coard (Blue)
☑ Display the QuickTu Select taskbar icon:	weak icon in the taskbar	Coard (Blue) Coard (Red)

Watching video CD

Note

Make sure that sound card is installed properly before running application programs (Sigma VCD Player, Sigma MP3 Player). The installed sound card in system is detected when application program runs. If sound driver is not installed properly, the application program does not run.

Sigma VCD player is a S/W MPEG player for video, audio CD and Midi files. This multimedia program performs various functions such as subtitle display and still image capture.



Listening to MP3 files

Sigma MP3 Player is a high quality MP3 player that runs in Windows environment. It supports easy player pannel and play list function to record songs to be desired.

7.Future world 8.Hetel california 9.One	10.\\hysky 8888_4<+
10.Whysky	
REPEAT OPEN PLAYLIST	

Repeat

"V" sign appears on the button and repeats MP3 file when clicking the icon.

Open

Opens MP3 file or list to be played. One or several files can be opened.

Play list

Makes a playable list of MP3 files.

Help

Shows the on line help of the Sigma MP3 player.

About

Shows the information (production co., version etc) on the Sigma Mp3 player.

Exit

Quits the Sigma MP3 player.

SIGMACOM CO., LTD. 1588-9 Anyang Nonghyup B/D 4F Kwanyang-dong Dongan-gu Anyang city Kyunggi-do 431-060 Republic of Korea Phone +82-31-384-1010 Fax +82-31-382-8506 http://www.sigmaM.com