TNT2 M64/VANTA

VGA Card User Manual

V4.1

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Technical Support

If you have any idea, suggestion or problem when using this device, please query http://www.pinegroup.com, http://www.pine-support.com or e-mail to: pinesupport@pinegroup.com.cn

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- There are Chinese and English editions，and the Chinese one is yardstick
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FCC Compliance

Federal Communications Commission Statement

This device complies with FCC Rules Part 15. Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired 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 manufacturer's 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:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to 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 !

The use of shielded cables for the connection of the monitor to the graphics card is required to assure compliance with FCC regulations changes or modifications to this authority to operate this equipment.

Table of Contents

1. Introduction

The RIVA TNT2/M64/VANTA Series VGA cards offer industry leading 2D and 3D performances meeting all the requirements of its mainstream PC graphics market and Microsoft's PC'98 and DX6 initiatives. It supports significant advances in Direct 3D and OpenGL acceleration and delivers leadership VGA, 2D and Video performance, enabling a range of applications from 3D games through to DVD and video conferencing.

1.1 Packing Check List

- A piece of PT-5988 /PV-T01A VGA card
- A piece of Driver CD
- One User Manual

1.2 Minimum System Requirements

- PII-300 or compatible CPU
- 32M memory
- 40M free space for hard disk
- One available AGP slot

1.3 File List of Driver CD

Directory Structures:

- DIRECTX7 ----------> DIRECTX 7.0A
- DIRECTX8 ----------> DIRECTX 8.0
- OSR2.1 ----------> OSR 2.1 WINDOWS950B Patch
- NT40 ----------> WINDOWSNT 4.0 Driver
- NT4_SP5 ----------> WINDOWSNT 4.0 Service Patch 5
- VIA4X ---------->VIA AGP4X Mainboard Register Patch
- WIN2000 ----------> WINDOWS2000 Driver
- WIN9X ----------> WINDOWS95/98/ME Driver
- RELEASE_NOTE-XXX.PDF ->Note of Driver Version

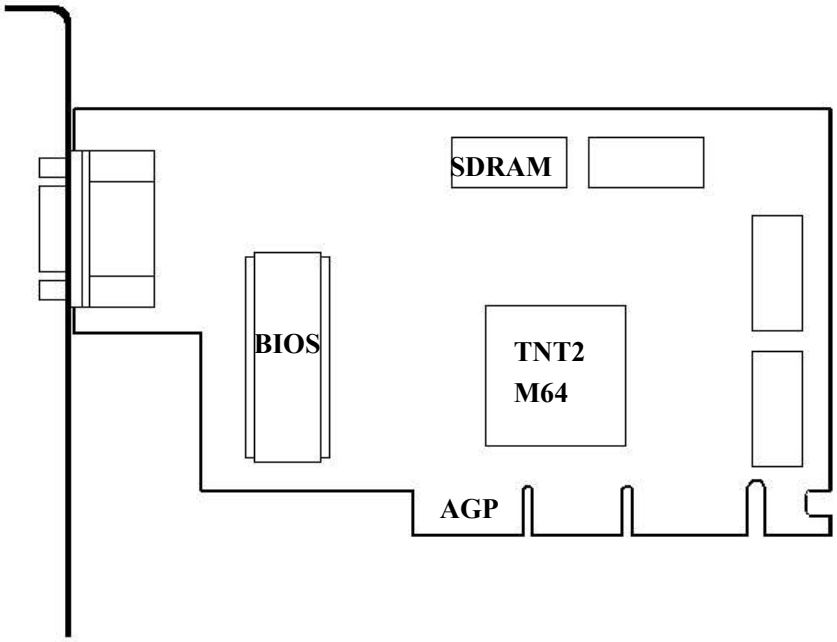
2. Features

2.1 Key Features

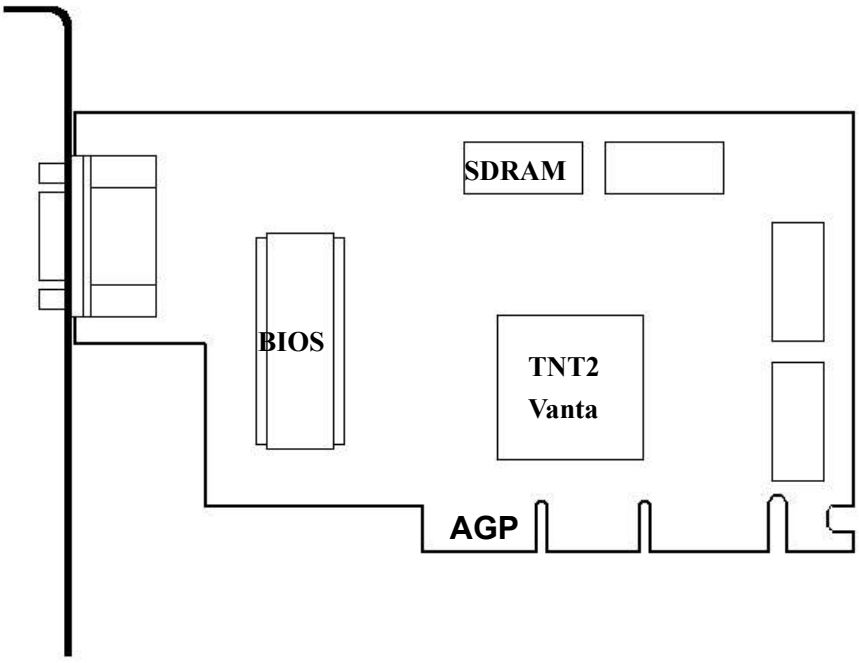
- ☞ NVIDIA TNT2 Graphics Core
- ☞ NVIDIA TNT2 M64/VANTA /VANTA-LT Graphic Processing Unit (GPU)
- ☞ Single chip solution in 0.25 micron technology
- ☞ M64 5 million triangles per second / VANTA 4 million
- ☞ Up to 250 million pixel-full capacities at peak rates
- ☞ 100% hardware triangles acceleration
- ☞ 28-bit 3D Rendering
- ☞ AGP 4X/2X
- ☞ Two pixels with pipelines
- ☞ Dual texture pixel-full capacities
- ☞ Second Generation Transform and Lighting (T& L) Engine
- ☞ NSR (NVIDIA Shading Rasterizer) Engine
- ☞ Digital Vibrance Control
- ☞ Integrated Dual-Link TMOS Transmitters
- ☞ High –Define Video Processor (HDVP)
- ☞ Optimized for Open GL acceleration with complete support for DirectX7 Direct X8 features
- ☞ Optimized for OpenGL acceleration
- ☞ 32-bit color, Z/stencil buffer
- ☞ Multi-buffering (double, triple, quad buffering0for sooth animation and video playback
- ☞ Full Screen DVD Playback
- ☞ Video acceleration for Direct show, MPEG-1, MPEG-2 and Indeo Video

3. Installation Guide

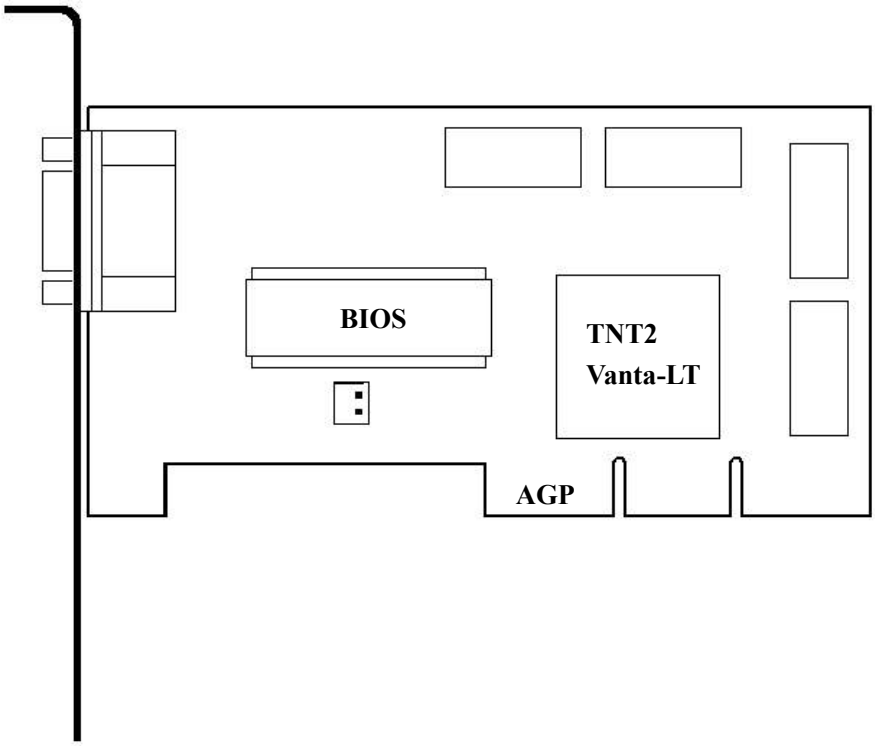
3.1 VGA Card Layout



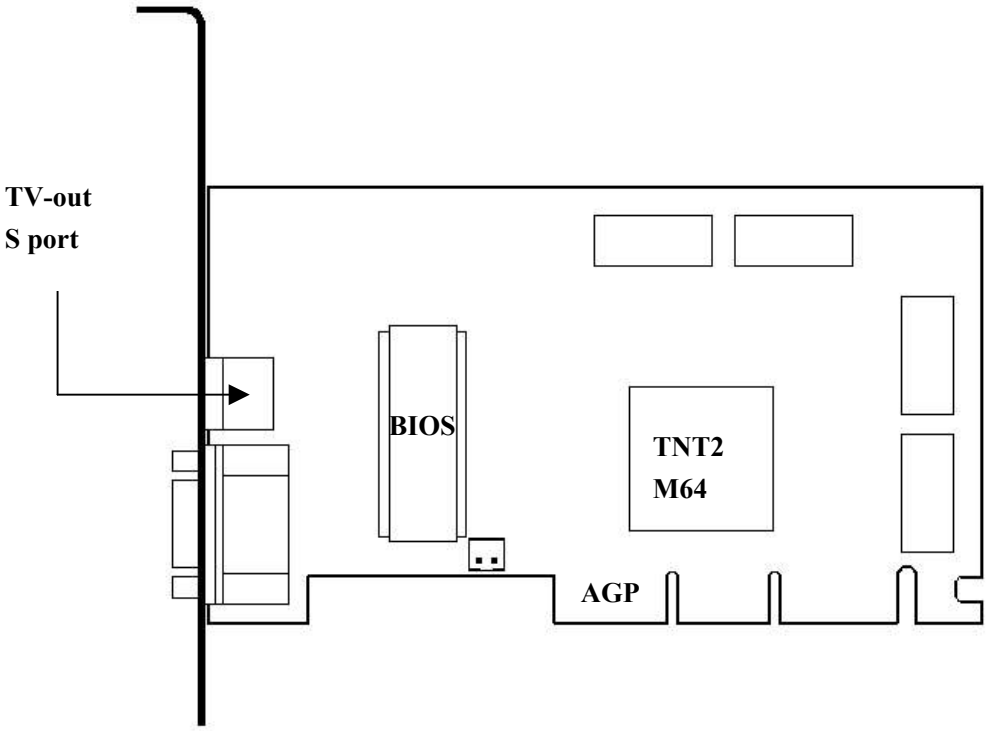
PT-5988-2



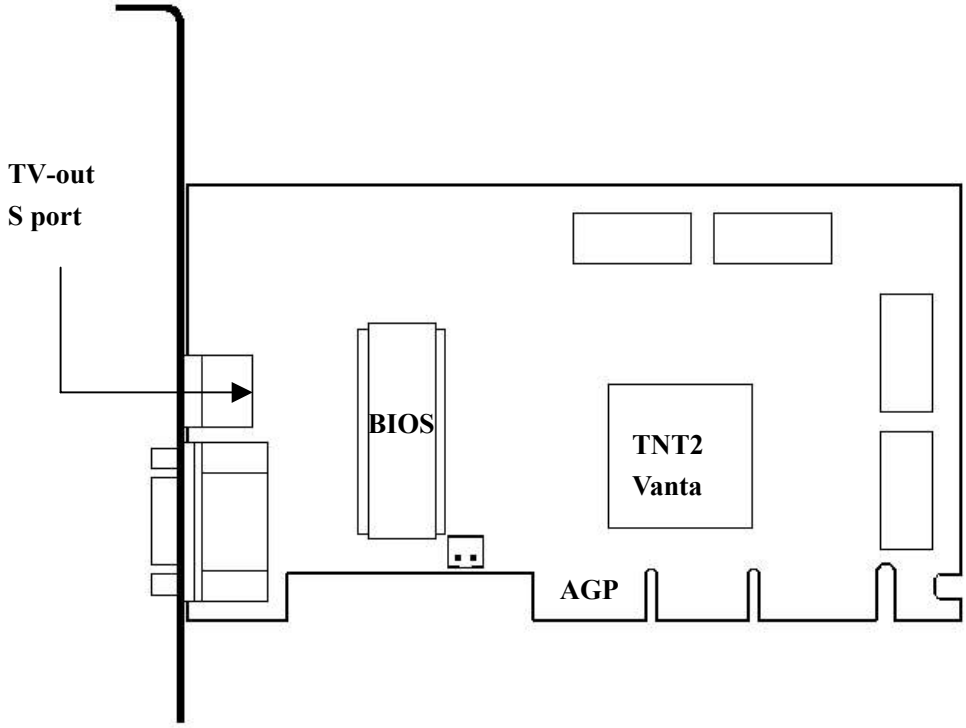
PT-5988-3



PV-T01A



PV-T02A



PV-T02F

TNT2 Series VGA cards list:

Product	Chipset	Video Memory	TV-out	Remark
PT-5988-2A/2B	TNT2 M64	16M/32M	NO	-2A 16M(100Mhz), -2B 32M(100Mhz)
PT-5988-2R/2S	TNT2 M64	16M/32M	NO	-2R 16M(143 Mhz) -2S 32M(143 Mhz)
PT-5988-38/A	TNT2 Vanta	8M/16M	NO	-3B 8M(100Mhz), -3A 16M(100Mhz)
PT-5988-3P/Q	TNT2 Vanta	8M/16M	NO	-3P 8M(125 Mhz) -3Q 16M(125 Mhz)
T01A	TNT2 Vanta-LT	8M	NO	
T02A-A-B	TNT2 M64	16M/32M	Optional	-A 16Mm(143 Mhz) -B 32(143Mhz)
T02F-A/8	TNT2 Vanta	8M/16M	Optional	-8 8M(125 Mhz) -A 16M(125Mhz)

Comparison list with other models:

e.g. PV-T02A-XX

Model	Vidio memory	TV-out
-AR	16M SDRAM	×
-AT	16M SDRAM	√
-BR	32M SDRAM	×
-BT	32M SDRAM	√
-8R	8M SDRAM	×
-8T	8M SDRAM	√

Following is the installation of PT-5988-2 for Windows 98 and Windows 2000.The installation of PT-5988-1, PT-5988-3 and PV-T01A are the same: as PT-5988.

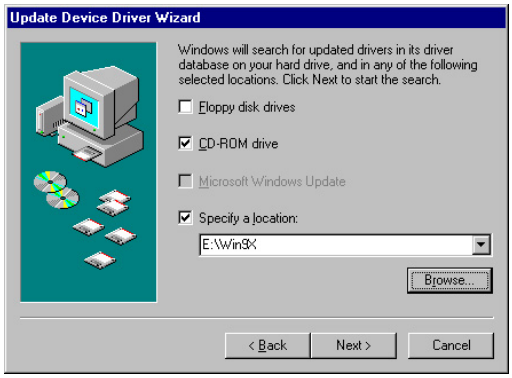
3.2 Driver Installation

A: Installation for Windows 98

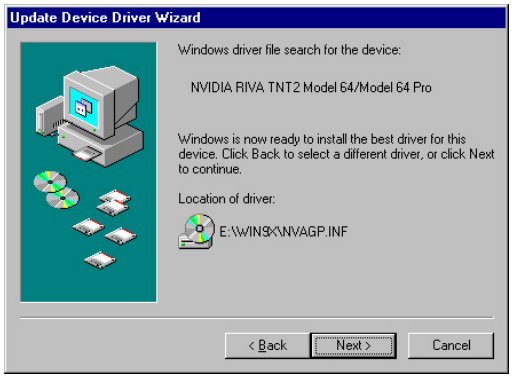
1. Turn off the PC, insert the new card into AGP slot, and connect the machine then power on, system find the new hardware, click “Next”.

2. Click “Next”.

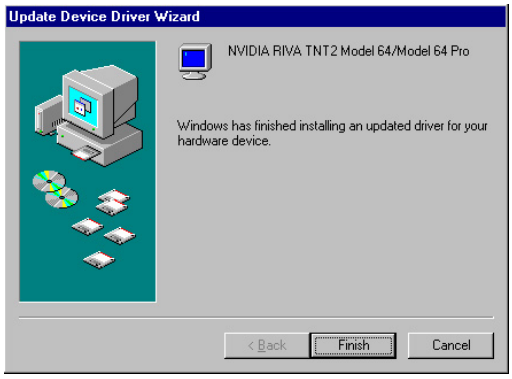
3. Select “Specify the Location”, put the driver CD into the CD-ROM, enter the path: E: \win9x, click “Next”.



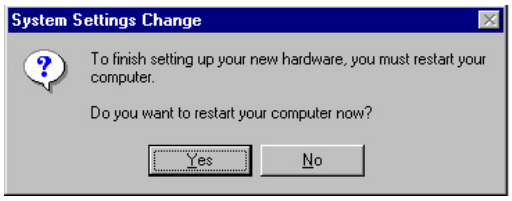
4. When the driver is searching, click “Next”.



5. System completed install the driver, click “Finish”.



6. Click “Yes” to reboot the computer, the driver installation finished.

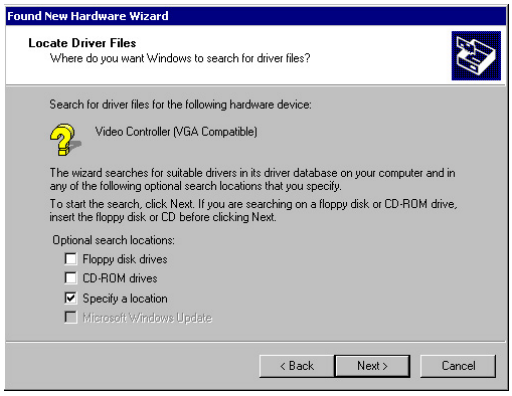


B: Installation for Windows2000

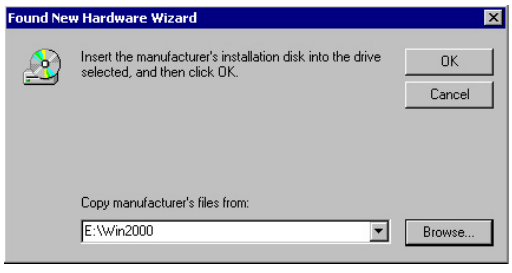
1. Enter into the updated device driver, click “Next”.

2. Click “Next”.

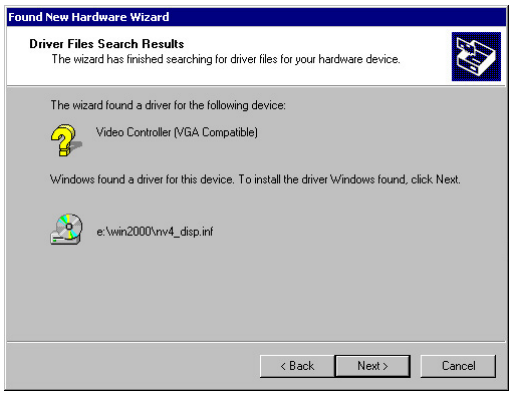
3. Select “Specify a Location”, click “Next”.



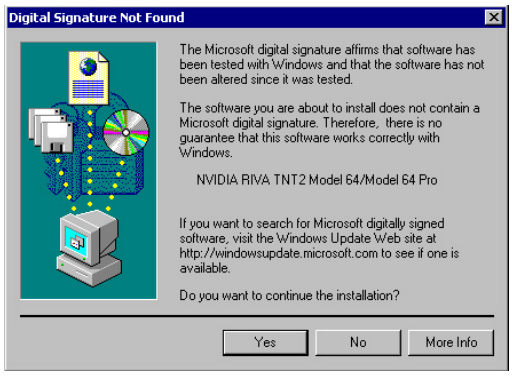
4. Insert the driver CD into CD-ROM, enter E:\win2000, click “OK”.



5. Click “Next”.

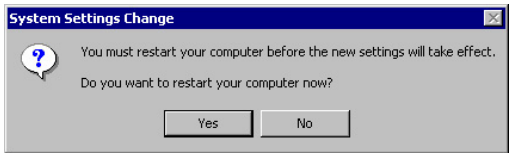


6. Click “Yes”.



7. The installation finished, click “Finish”.

8. Click “Yes”, restart the computer, finish the driver installation.



4. Troubleshooting

4. 1 Troubleshooting

Description	Recommended Action
After installation and restarting, Windows 95 / 98 informs me that the display setting is still incorrect.	- Make sure the "Assign IRQ to VGA" option is enabled in the BIOS. - Check if there is enough IRQ for VGA. - Uninstall the driver, restart, and reinstall the driver.
My monitor is not capable of high resolution(over 640 x 480) or color depth over 256 bit.	- Make sure the driver installation is correct, or please reinstall the driver in "Control Panel/Monitor/ setup" - Install the driver of monitor, if there is no driver for monitor, please try to select compatible driver from monitor driver libraries
The monitor could not set to high refresh rate	- It depends on the display characteristics of your monitor. Consult your monitor documentation for the proper configuration.
DirectX or other applications report no AGP memory available.	- Windows 95 is not OSR2.1 or later. - DirectX version is not 7.0 or later. - You have not installed appropriate drivers for the AGP chipset. - Incorrect BIOS setting. BIOS must support at least 64MB for AGP aperture size.
Games or applications report "No 3D acceleration hardware found"	- 3D works only in 16 or 32 bit color depth. Switch your color depth display mode to 16 bit (high color) or 32 bit (true color). - Check necessary libraries such as DirectX or OpenGL. - Try to switch to a lower solution.
The PC will freeze when operating some 3D Games (tiny minority)	- Due to the update of driver, it is not compatible with the game, please download the driver of previous version (such as V191) and full installed.
My MPEG player displays bad quality video clips	- You must install DirectX 7 or newer so that your player can take advantage of the hardware acceleration mode (DirectDraw). - Try to switch to a lower resolution, color depth, or refresh rate. Switching to a lower mode allows your player to use hardware acceleration mode.

4.2 Technical Support

Pinegroup website: http://www.pinegroup.com
Support website: http://www.pine-support.com
Support E-mail: pinesupport@pinegroup.com.cn

P / N：73-59881041-000