Declaration of Conformity

We, Manufacturer/Importer
(full address)

G.B.T. Technology Trading GMbH
Ausschlager Weg 41, 1F 20537 Hamburg, Gemany

declare that the product
(description of the apparatus, system, installation to which it refers)

VGA Card

GV-NX57128D

is in conformity with
(reference to the specification under which conformity is declared)
in accordance with 89/336 EEC-EMC Directive

☐ **EN 55011**	Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) high frequency equipment	☒ **EN 61000-3-2**	Disturbances in supply systems caused
		☒ **EN 61000-3-3**	Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations"
☐ **EN 55013**	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment	☒ **EN 55024**	Information Technology equipment-Immunity characteristics-Limits and methods of measurement
☐ **EN 55014-1**	Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus	☐ **EN 50082-1**	Generic immunity standard Part 1: Residual, commercial and light industry
		☐ **EN 50082-2**	Generic immunity standard Part 2: Industrial environment
☐ **EN 55015**	Limits and methods of measurement of radio disturbance characteristics of fluorescent lamps and luminaries	☐ **EN 55014-2**	Immunity requirements for household appliances tools and similar apparatus
☐ **EN 55020**	Immunity from radio interference of broadcast receivers and associated equipment	☐ **EN 50091- 2**	EMC requirements for uninterruptible power systems (UPS)
☒ **EN 55022**	Limits and methods of measurement of radio disturbance characteristics of information technology equipment		
☐ **DIN VDE 0855** ☐ **part 10** ☐ **part 12**	Cabled distribution systems; Equipment for receiving and/or distribution from sound and television signals		

☒ **CE marking** CE (EC conformity marking)

The manufacturer also declares the conformity of above mentioned product with the actual required safety standards in accordance with LVD 73/23 EEC

☐ **EN 60065**	Safety requirements for mains operated electronic and related apparatus for household and similar general use	☐ **EN 60950**	Safety for information technology equipment including electrical business equipment
☐ **EN 60335**	Safety of household and similar electrical appliances	☐ **EN 50091-1**	General and Safety requirements for uninterruptible power systems (UPS)

Manufacturer/Importer

Signature : *Timmy Huang*

(Stamp) Date : May 31, 2004 Name : Timmy Huang

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2.1077(a)

Responsible Party Name: **G.B.T. INC. (U.S.A.)**

Address: **17358 Railroad Street**
City of Industry, CA 91748

Phone/Fax No: **(818) 854-9338/ (818) 854-9339**

hereby declares that the product

Product Name: **VGA Card**

Model Number: **GV-NX57128D**

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109 (a),Class B Digital Device

Supplementary Information:

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 and (2) this device must accept any inference received, including that may cause undesired operation.

Representative Person's Name: ERIC LU

Signature: *Eric Lu*

Date: May 31, 2004

Declaration of Conformity

We, Manufacturer/Importer
(full address)

G.B.T. Technology Trading GMbH
Ausschlager Weg 41, 1F 20537 Hamburg, Gemany

declare that the product
(description of the apparatus, system, installation to which it refers)

VGA Card

GV-NX57128DP

is in conformity with
(reference to the specification under which conformity is declared)
in accordance with 89/336 EEC-EMC Directive

☐ **EN 55011**	Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical (ISM) high frequency equipment	☒ **EN 61000-3-2**	Disturbances in supply systems caused
		☒ **EN 61000-3-3**	Disturbances in supply systems caused by household appliances and similar electrical equipment "Voltage fluctuations"
☐ **EN 55013**	Limits and methods of measurement of radio disturbance characteristics of broadcast receivers and associated equipment	☒ **EN 55024**	Information Technology equipment-Immunity characteristics-Limits and methods of measurement
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		☐ **EN 50082-2**	Generic immunity standard Part 2: Industrial environment
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☐ **DIN VDE 0855** ☐ **part 10** ☐ **part 12**	Cabled distribution systems; Equipment for receiving and/or distribution from sound and television signals		

☒ **CE marking** CE (EC conformity marking)

The manufacturer also declares the conformity of above mentioned product with the actual required safety standards in accordance with LVD 73/23 EEC

☐ **EN 60065**	Safety requirements for mains operated electronic and related apparatus for household and similar general use	☐ **EN 60950**	Safety for information technology equipment including electrical business equipment
☐ **EN 60335**	Safety of household and similar electrical appliances	☐ **EN 50091-1**	General and Safety requirements for uninterruptible power systems (UPS)

Manufacturer/Importer

Signature : *Timmy Huang*

(Stamp) Date : Jul. 16, 2004 Name : Timmy Huang

DECLARATION OF CONFORMITY

Per FCC Part 2 Section 2.1077(a)

Responsible Party Name: G.B.T. INC. (U.S.A.)

Address: 17358 Railroad Street
City of Industry, CA 91748

Phone/Fax No: (818) 854-9338/ (818) 854-9339

hereby declares that the product

Product Name: VGA Card

Model Number: GV-NX57128DP

Conforms to the following specifications:

FCC Part 15, Subpart B, Section 15.107(a) and Section 15.109 (a),Class B Digital Device

Supplementary Information:

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 and (2) this device must accept any inference received, including that may cause undesired operation.

Representative Person's Name: ERIC LU

Signature: *Eric Lu*

Date: Jul. 16, 2004

GV-NX57128D / GV-NX57128DP

GeForce™ PCX 5750 Graphics Accelerator

User's Manual

Rev. 102

12MD-NX57128D-102

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Third-party brands and names are the property of their respective owners.

Notice

Please do not remove any labels on VGA card, this may void the warranty of this VGA card.

Due to rapid change in technology, some of the specifications might be out of date before publication of this booklet.

The author assumes no responsibility for any errors or omissions that may appear in this document nor does the author make a commitment to update the information contained herein.

English

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1. Introduction

1.1. Features

- Powered by **NVIDIA® GeForce™ PCX 5750** Graphics Processing Unit (GPU)
- Supports the newest PCI Express x 16
- Integrated with 128MB DDR memory
- Supports DirectX 9.0
- Features TV-Out and D-Sub connectors
- Supports DVI-I connector

1.2. Minimum system requirement

- IBM® or 100% PC compatible with Pentium® III 650MHz or AMD Athlon 650MHz class processor or higher
- One PCI Express x 16 slot
- Operating Systems Win® 2000 / Win® XP
- 64MB system memory
- 50MB of available disk space for full installation
- CD-ROM or DVD-ROM drive

English

2. Hardware Installation

2.1. Unpacking

The GV-NX57128D/GV-NX57128DP package contains the following:

- ☑ The GV-NX57128D or GV-NX57128DP graphics accelerator
- ☑ GV-NX57128D/GV-NX57128DP user's manual
- ☑ NVIDIA Series driver and utility CD
- ☑ PowerDVD CD
- ☑ S to AV cable
- ☑ DVI-I to D-Sub connector

Expansion cards contain very delicate Integrated Circuit (IC) chips. To protect them against damage from static electricity, you should follow some precautions whenever you work on your computer.

1. Turn off your computer and unplug power supply.
2. Use a grounded wrist strap before handling computer components. If you do not have one, touch both of your hands to a safely grounded object or to a metal object, such as the power supply case.
3. Place components on a grounded antistatic pad or on the bag that came with the components whenever the components are separated from the system.

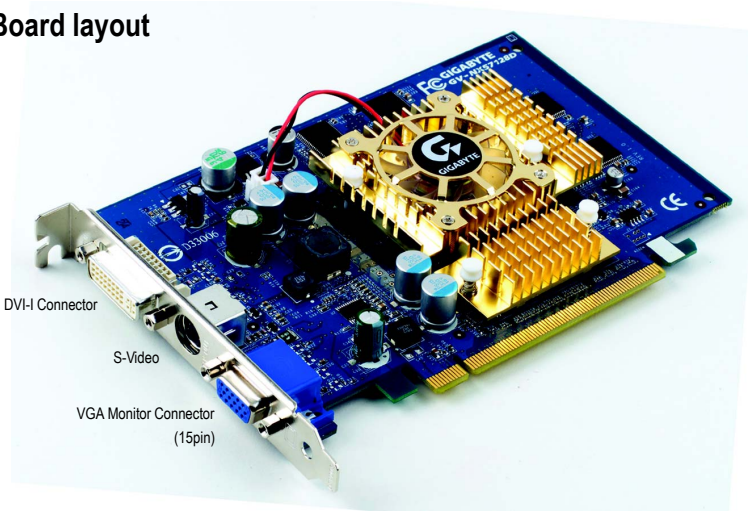
The card contains sensitive electric components, which can be easily damaged by static electricity, so the card should be left in its original packing until it is installed.

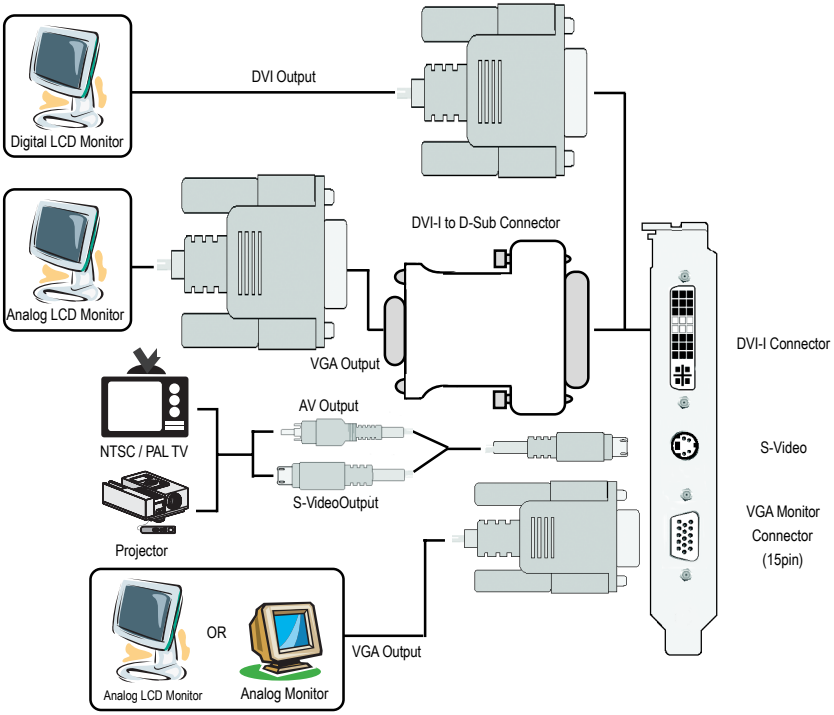
Unpacking and installation should be done on a grounded anti-static mat. The operator should be wearing an anti-static wristband, grounded at the same point as the anti-static mat.

Inspect the card carton for obvious damage. Shipping and handling may cause damage to your card. Be sure there are no shipping and handling damages on the card before proceeding.

- **DO NOT APPLY POWER TO YOUR SYSTEM IF IT HAS BEEN DAMAGED ON THE CARD.**
- **In order to ensure your graphics card working correctly, please use official Gigabyte BIOS only. Use none official gigabyte BIOS might cause problem on the graphics card.**

2.2. Board layout





2.3. Hardware installation

Installing Your graphics card.

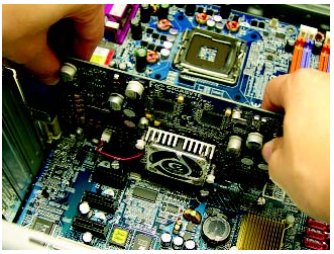
Now that you have prepared your computer, you are ready to install your graphics accelerator card.

To install your graphics accelerator card:

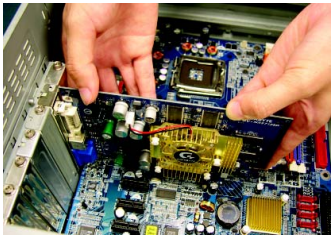
1. Power off the computer and monitor, then disconnect the display cable from the back of your computer.

2. Remove the computer cover. If necessary, consult your computer's manual for help in removing the cover.

3. Remove any existing graphics card from your computer.
   Or, if your computer has any on-board graphics capability, you may need to disable it on the motherboard. For more information, please see you computer documentation.

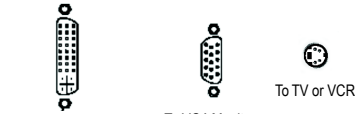


4. Locate the PCI Express x 16 slot. If necessary, remove the metal cover from this slot; then align your graphics card with the PCI Express x 16 slot, and press it in firmly until the card is fully seated.



5. Replace the screw to fasten the card in place, and replace the computer cover.

6. Plug the display cable into your card; then turn on the computer and monitor. If your graphics card came with a DVI-I connector, you can connect a flat panel display to the appropriate connector, as shown below...



You are now ready to proceed with the installation of the graphics card driver. Please refer to next chapter for detailed instructions.

3. Software Installation

In this manual, we assume that your CD-ROM Drive letter to be Drive D:

The installation of Win® 2000 / Win® XP drivers is very simple. When you insert the driver CD into your CD-ROM drive, you can see the AUTORUN window (if it does not show up, run "D:\setup.exe"). Then you can follow the guides to setup your graphics card driver. (Please follow the subsection 3.1.3 "Driver installation" to install the driver for your graphics accelerator.)

3.1. Win® XP driver and utilities installation

3.1.1. Operating system requirement

- When loading the graphics card drivers for the system, please make sure your system has installed DirectX 9 or later version.

- If you install the graphics card drivers for the motherboard, which consist of SIS or VIA chipsets, please install the appropriate driver program for that motherboard. Or please contact your motherboard nearest dealer for motherboard driver.

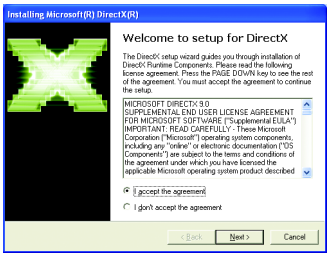
3.1.2. DirectX installation

Install Microsoft DirectX to enable 3D hardware acceleration support for Windows® 2000 or Windows® XP to achieve better 3D performence.

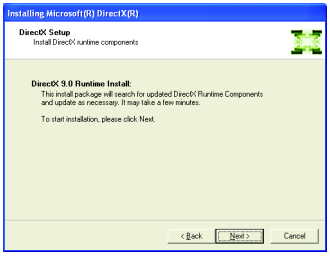
Note: For software MPEG support in Windows® 2000 or Windows® XP, you must install DirectX first.

Step 1. When autorun window show up, click **Install DirectX 9** item.

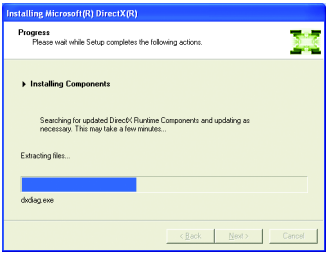
Click "Install DirectX 9" item.



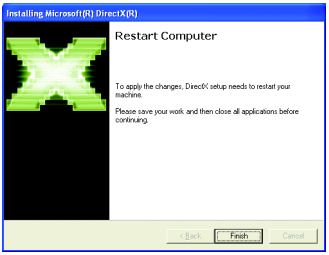
Step 2. Choose **I accept the agreement** and click "Next" button.



Step 3. Click "Next" button.



Installing the components.



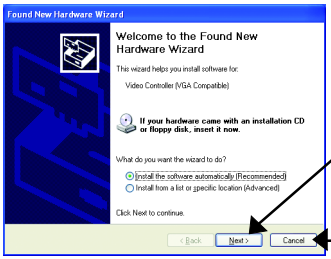
Step 4. Click "Finish" to restart computer.
Then the DirectX 9 installation is completed.

3.1.3. Driver installation

A. New hardware found

After the graphics card is inserted into your computer at the first time, the windows will automatically detect a new hardware in the system and pop out a "New Hardware Found" message. The following is the step-by-step installation guide.

Step 1: Found new hardware wizard: Video controller (VGA Compatible)

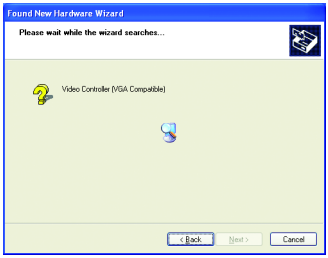


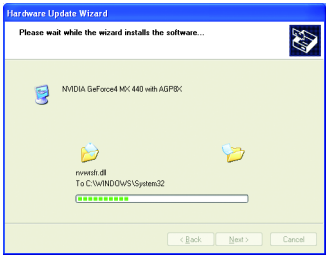
Click "Next" button to install the driver. (There is a driver CD disk that came with your graphics accelerator, please insert it now.)

Or click the "Cancel" button to install the driver from AUTORUN window.

Step 2: Found new hardware wizard: Searching and installing

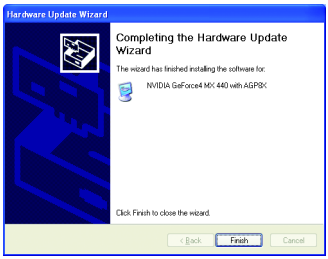
The wizard will search for the driver and install it automatically.





Step 3: Found new hardware wizard: Finish

Click the "Finish" button to finish the installation.

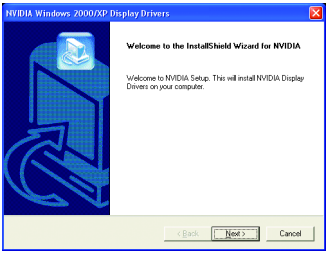


B. Driver installation (Autorun Window)

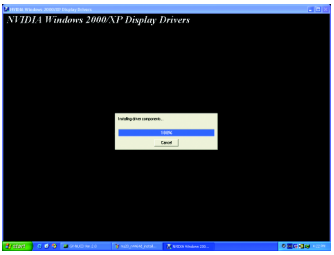
Insert the driver CD disk into your CD-ROM, and then you can see the AUTORUN window.
If it does not show up, please run "D:\setup.exe".

Step 1. When autorun window show up, click **Install Display Driver** item.

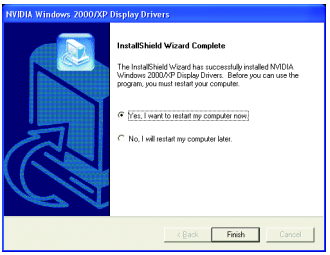
Click "Install Display Driver" item.



Step 2. Click "Next" button.



Windows installings the components.



Step 3. Click "Finish" button to restart computer. Then the driver installation is completed.

3.1.4. Utilities on driver CD

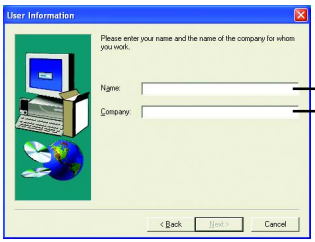
Insert the driver CD disk into your CD-ROM, and then you can see the AUTORUN window. If it does not show up, please run "D:\setup.exe".

- Install V-Tuner 2:

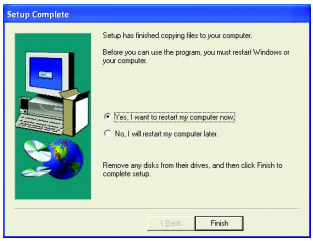
Step 1. When autorun window show up, click **V-Tuner 2** item.

Click "V-Tuner 2" item.

Step 2. Click "Next" button.



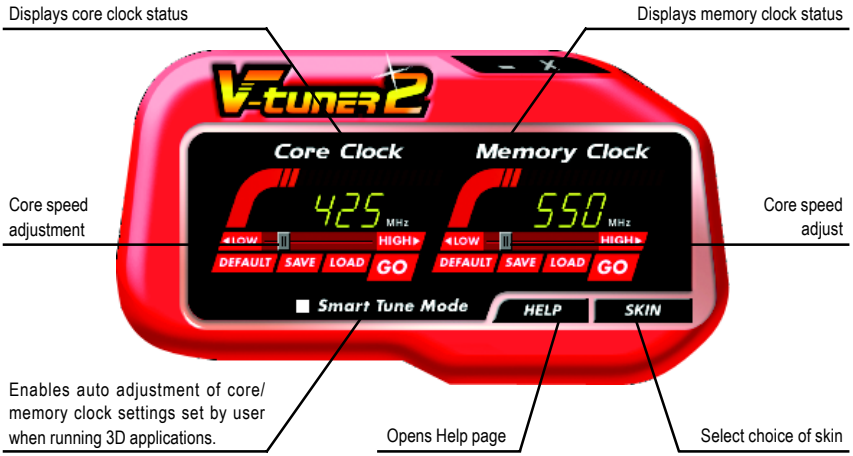
Step 3. Enter your name and company.



Step 4. Click "Finish" button to restart computer. Then the V-Tuner 2 installation is completed.

V-Tuner 2 (Overclock Utility)

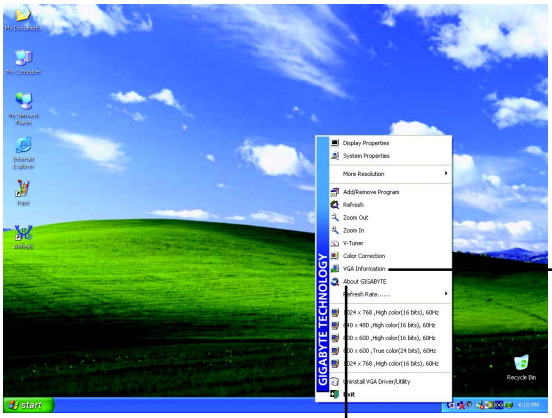
V-Tuner 2 lets you adjust the working frequency of the graphic engine and video memory (Core Clock and Memory Clock).



3.1.5. Taskbar icon

After installation of the display drivers, you will find a GBT icon on the taskbar's status area. Right-clicking this icon opens the GBT control panel, showing a menu composed of shortcut of the graphics card's enhanced and other functions.
You may click the "Display Properties" item, and then click Settings. Click "Advanced" after clickng Settings. Click the appropriate tab to change your display settings.

Right click the icon.

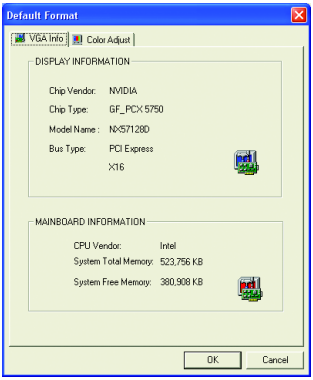


Click "VGA Information" item into the "VGA Info" and "Color Adjust"tabs.

You can link to GBT website for updated information about the graphics accelerator, latest drivers, and other information.

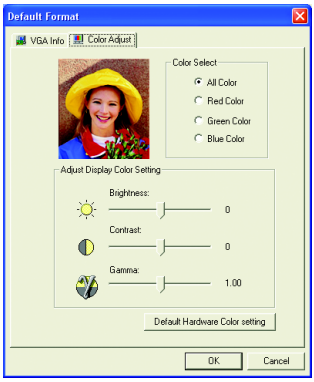
VGA Information

VGA Info lists the relevant information about your card.



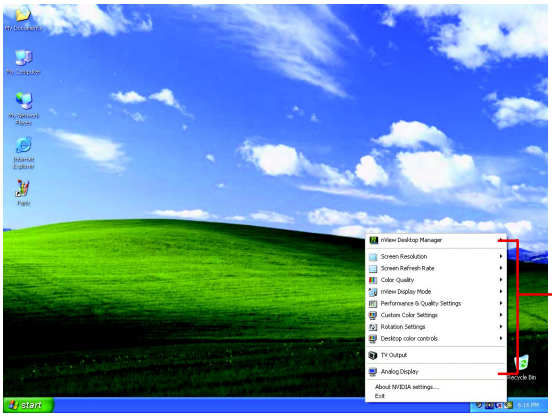
Color Adjust

Color Adjust allows you to make color adjustments, such as brightness, contrast and gamma values for each or all of RGB colors.



After installation of the display drivers, you will find a NVIDIA icon on the taskbar's status area. Clicking this icon open the control panel.

Right click the icon.



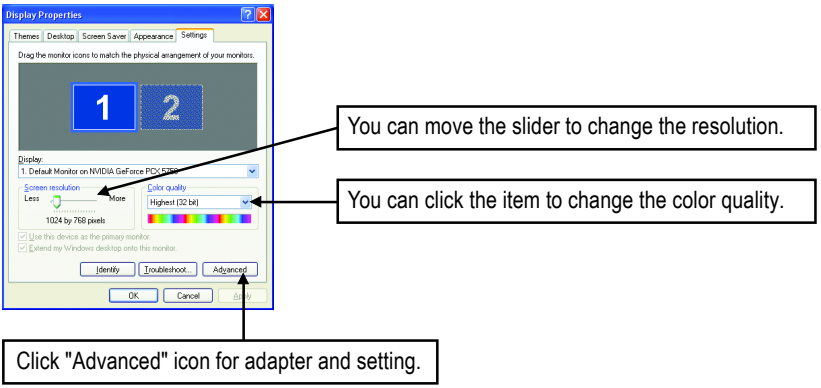
You can adjust the properties of the graphics accelertaor from here.

3.1.6. Display Properties Pages

The screen shows the information of display adapter, color, the range of display area and the refresh rate.

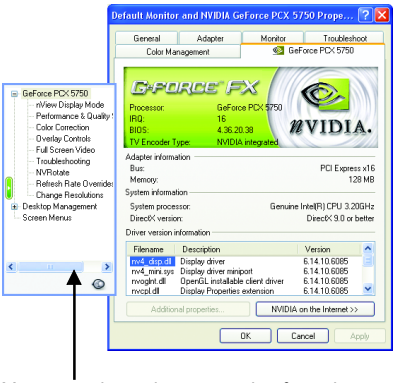
Settings (Resolutions and Color depth for windows)

The Setting properties page allows you to adjust the screen resolution, color quality and advanced settings.



Click "Advanced", into details settings:

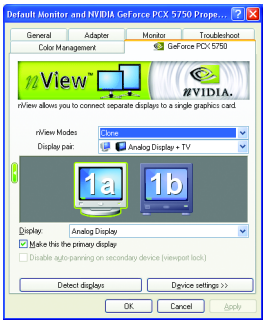
GeForce PCX 5750 properties



- This page shows the Adapter, System and Driver version information.

You can select other properties from the pop-out menu.

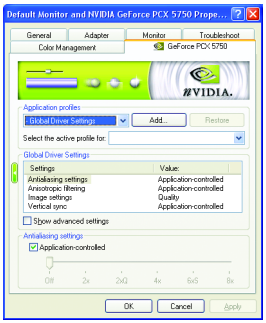
nView Display Mode properties



- nView allows you to connect separate displays to single graphics card.
  - nView modes: select your preferred nView display modes here. Options: Single display/ Clone/ Horizontal span/ Vertical span/ Dualview
  - Display pair: select a single display or display pair. The selected display combination will appear in the graphical representation below.
  - Display: select the primary display device
  - Click Apply to apply settings or click OK to save settings.
- If TV is chosen as the display, you will need to select the proper TV format. To do this, click "Device Setting" followed by "Select TV format". Select the format for your television and then click "Apply" followed by "OK".

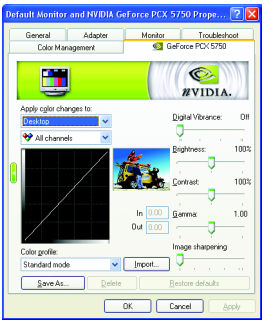
Display Matrix	Model	GV-NX57128D	GV-NX57128DP
	CRT+TV	Yes	Yes
	CRT+DVI	Yes	Yes
	DVI+TV	Yes	Yes

Performance and Quality Settings properties



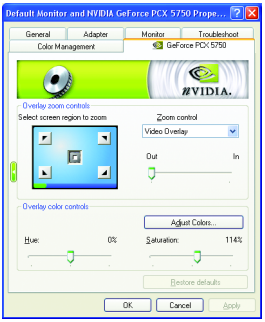
- The sliders lets to decide whether your application should use qulity or high performance texture.
  - Application profiles: Select the application profile from the list of profiles.
  - Global Driver Settings: Slect the Settings item and move the slider below to set the degree of antialiasing to used in Direct3D and OpenGL applications.
  - Antialiasing settings: alows to set the degree of the Global Driver Settings.

Color Correction properties



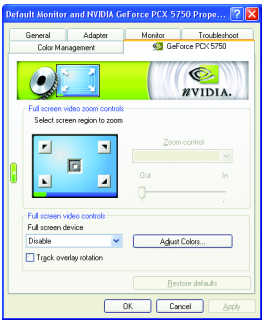
- **The Color Correction Properties** is used to compensation for variations in luminance between a source image and its output on a display device. Adjust the color correction settings to provide more accurate color reproduction of images(such as photographs) on your display device. Also, many 3D-accelerated games may appear too dark to play. Increasing the brightness and/or the gamma value equally across all channels makes these games appear brighter and more playable.

Overlay Controls properties



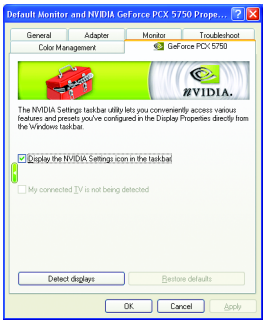
- **The Overlay Controls Properties** can adjust Overlay zoom contorls and Overlay color controls. There is only one video overlay, which is only available on the **Primary** display**.** The video overlay controls are automatically activated during playback of any video file type that supports overlay adjustments. The "Adjust Colors" button will access "Color Correction" properties page.

Full Screen Video properties



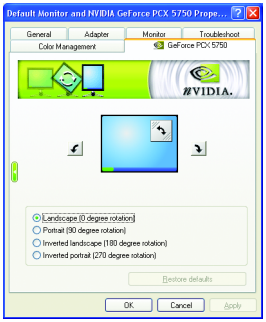
- **The Full Screen Video Properties** can adjust the display to full screen mode when video is being played.

Troubleshooting properties



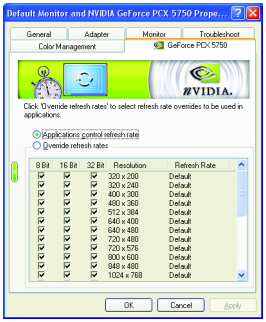
- The NVIDIA settings taskbar utility lets you conveniently access various features and presets you've configured in the Display Properties directly from the Windows taskbar.
  - Display the NVIDIA Settings icon in the taskbar
    The Desktop Manager provides enhanced nView multi-display functionality and helps you organize your applications for use with multiple displays and desktops.
  - My connected TV does not appear in this list
    This option can be used to force detection of an attached TV set which does not report its presence to the graphics card.

NV Rotate properties



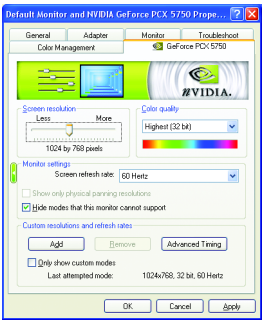
- The **NV Rotate Properties** is used to rotate the screen. If your monitor is capable of operating in either Landscape or Portrait mode, you can adjust the screen by this properties.
  - Landscape (0 degree rotation)
  - Portrait (90 degree rotation)
  - Inverted Landscape (180 degree rotation)
  - Inverted Portrait (270 degree rotation)

Refresh Rate Overrides properties



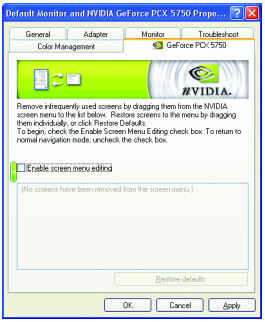
- Click "Override refresh rates" to select refresh rate overrides to be used in applications.

Change Resolutions properties



- The **Change Resolutions Properties** allows you to adjust the screen resolution, color quality and monitor settings (screen rdfresh rates). Or you can customize resolutions and refresh rates.

Screen Menus properties



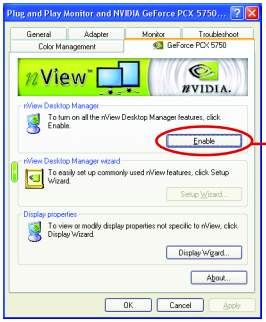
- The **Screen Menus Properties** can remove infrequently used screens by dragging them from the screen menu to the list below. Restore screens to the menu by dragging them individually, or click Restore Defaults.
  To begin, check the **Enable screen menu editing** check box. To return to normal navigation mode, uncheck the check box.

3.1.7. nView properties pages

nView is a set of desktop tools designed to help you be more productive when using your graphics card. Using **nView** you can set up multiple desktops to work with your applications. Multiple desktops give you extra desktop areas on which to run your applications so you won't have to crowd several open application windows on one desktop. You can click on the NVIDIA icon on the taskbar's to enable the **nView** or choose the Display Properties\Advanced\Desktop Management.

Enable the nView Desktop Manager features:

Choose Display Properties\Advanced\GeForce tab\Desktop Management

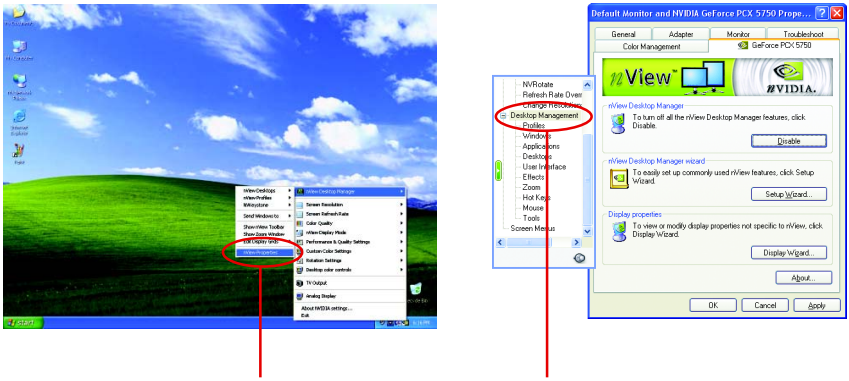


Click Enable button to turn on all the nView Desktop Manager features.

Access nView properties page:

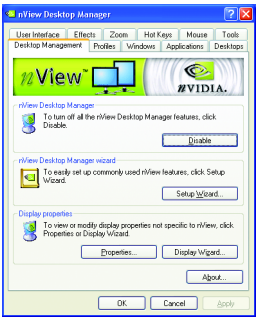
A: right click icon\nView Desktop Manager\ nView Properties

B: Choose Display Properties\Advanced\ GeForce tab\Desktop Management



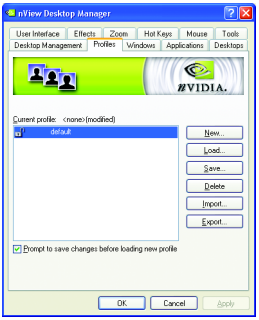
Click the item to start nView Properties.

nView Desktop Management properties



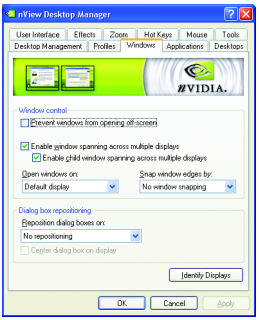
- This tab contains information about the nView Desktop Manager. The setup wizard can also be accessed from this tab.

nView Profile properties



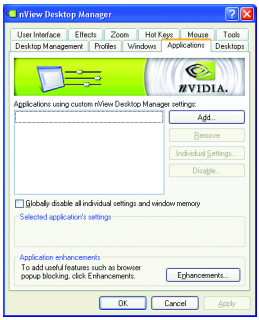
- This tab contains a record all nView display settings for easy software setup.

nView Windows properties



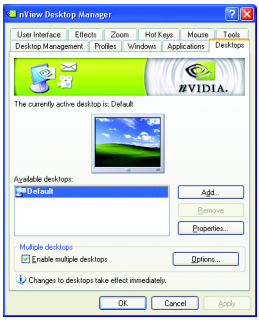
- This tab allows you to control of window and dialog box placement when using multiple monitors.

nView Applications properties



- This tab allows you to control nView settings on a per application basis.

nView Desktops properties

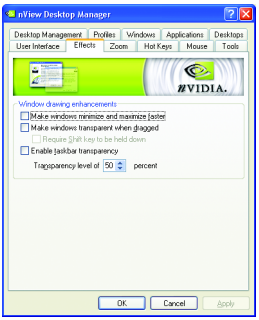


- This tab allows you to create up to 32 unique desktops.

nView User Interface properties

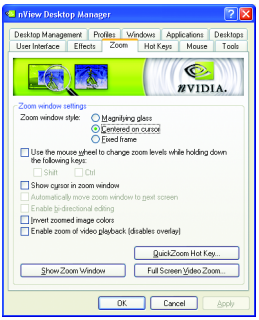
- This tab allows customization of the nView user interface.

nView Effects properties



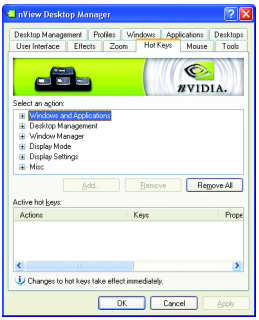
- This tab provides special windows effects that you can apply to your applications.

nView Zoom properties



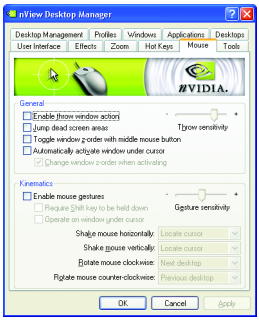
- This tab provides dynamic zoom functionality on the desktop. Also enables full screen video playback via the video mirroring control button.

nView Hot Keys properties



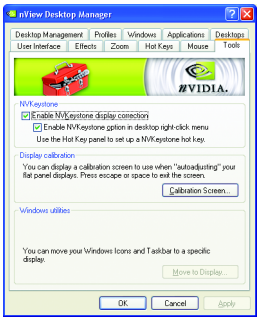
- This tab lets you perform various actions with shortcut keys or key combinations.

nView Mouse properties



- This tab can modify and extend mouse behavior with kinematic actions.

nView Tools properties



- This tab can improve nView functionality for mobile and desktop users.

3.2. Win® 2000 driver installation

With Windows running on your computer, you need to install the graphics card driver to take advantage of the higher performance, resolutions, and special graphics features of the graphics card. To ensure you install the latest driver, insert the Installation CD that shipped with your graphics card.

To install the graphics card driver for Win® 2000, please insert the Installation CD. Then the AUTORUN window will show up. Click **Install Display Driver** item, and follow the wizard to install the driver.

If Windows® does not show the CD automatically, please run following steps:

1. Click the Start button on the control bar.
2. Select Run.
3. Type the following: D:\SETUP.exe
   (If D is not your CD-ROM drive, substitute D with the correct drive letter.)
4. Click "OK".
5. Click on "Install Display Drivers" to begin the Installation Wizard.
6. Click "Next".
7. Click "Yes" to the license agreement.
8. Follow the Wizard's on-screen instructions to complete the installation.

Please make sure the Windows® 2000 have installed Windows® 2000 Service Pack (or later) before installing the graphics accelerator driver.

3.3. BIOS flash utility

BIOS update procedure:

- Note: Please download the newest BIOS from our website (www.gigabyte.com.tw) or contact your local dealer for the file.
- If you want to realize the BIOS flash information, please refer to detail on subsection 5.1. "How to reflash the BIOS".

4. Troubleshooting Tips

The following troubleshooting tips may help if you experience problems. Contact your dealer or GBT for more advanced troubleshooting information.

- Check that the card is seated properly in the PCI Express x 16 slot.
- Ensure that the display cable is securely fastened to the card's display connector.
- Make sure that the monitor and computer are plugged in and receiving power.
- If necessary, disable any built-in graphics capabilities on your motherboard. For more information, consult your computer's manual or manufacturer.

  (NOTE: Some manufacturers do not allow the built-in graphics to be disabled or to become the secondary display.)
- Make sure you selected the appropriate display device and graphics card when you installed the graphics driver.
- If you have problems during bootup, start your computer in Safe Mode. In Windows® 98 SE and Windows® Me, press and hold the CTRL key until the Microsoft® Windows® Startup Menu appears on the screen. Then select the number for Safe Mode, and press Enter. (You can also use F8 to bring up the Microsoft Windows® Startup Menu.) In Safe Mode, bring up the Device Manager and check for duplicate display adapter and monitor entries if you are only using one graphics card.
- For more assistance, use the Troubleshooting Guide located in the Windows® Help or contact your computer manufacturer.

If necessary, adjust your monitor's setting by monitor's adjust panel to make the screen looks focused, crisp, and sharp. (Please refer to the monitor's manual.)

5. Appendix

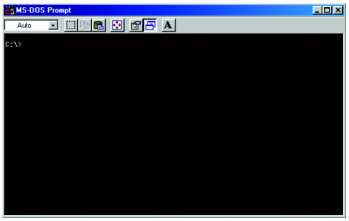
5.1. How to reflash the BIOS

NOTE **We use GV-N55128D VGA card and GVFLASH BIOS flash utility as example.**

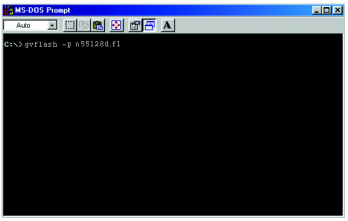
How to reflash the BIOS for your graphics card?

1. Extract the Zip file to the drive C: or A:
2. Restart your PC in MS-DOS mode.
   (This function only for Windows 98/98SE, If your OS is Windows 2000/ Windows ME/ Windows XP. Please use the bootable disk to MS-DOS mode.)

3. Change the command path to the file location C:\> or A:\>



4. Backup BIOS command : C:\> gvflash -s <filename>
5. Reflash BIOS command as below : C:\> gvflash -p <filename>



6. Reboot your PC when it's done.

5.2. Resolutions and color depth table (In Windows® XP)

GV-NX57128D/GV-NX57128DP Single Display Stardard Modes

Display Screen Resolution	Refresh Rate (Hz)	Color Depth (bpp) 8bpp(256 color) Standard mode	16bpp(65K color) High mode	32bpp(16.7M) True mode
320 x 200	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
320 x 240	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
400 x 300	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
480 x 360	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
512 x 384	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
640 x 400	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
640 x 480	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	✓
	200	✓	✓	✓
	240	✓	✓	✓

To be continued...

Display Screen Resolution	Refresh Rate (Hz)	Color Depth (bpp) 8bpp(256 color) Standard mode	16bpp(65K color) High mode	32bpp(16.7M) True mode
720 x 480	60	✓	✓	✓
720 x 576	60	✓	✓	✓
800 x 600	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	170	✓	✓	✓
	200	✓	✓	✓
	240	✓	✓	✓
848 x 480	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	170	✓	✓	✓
	200	✓	✓	✓
	240	✓	✓	✓
1024 x 768	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	✓
	200	✓	✓	✓
	240	✓	✓	X

To be continued...

Display Screen Resolution	Refresh Rate (Hz)	Color Depth (bpp) 8bpp(256 color) Standard mode	16bpp(65K color) High mode	32bpp(16.7M) True mode
1088 x 612	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	✓
	200	✓	✓	✓
	240	✓	✓	X
1152 x 864	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	✓
	200	✓	✓	X
1280 x 720	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	X

To be continued...

Display Screen Resolution	Refresh Rate (Hz)	Color Depth (bpp) 8bpp(256 color) Standard mode	16bpp(65K color) High mode	32bpp(16.7M) True mode
1280 x 768	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	X
1280 x 960	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	X
1280 x 1024	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	X

To be continued...

Display Screen Resolution	Refresh Rate (Hz)	Color Depth (bpp) 8bpp(256 color) Standard mode	16bpp(65K color) High mode	32bpp(16.7M) True mode
1360 x 768	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	✓
	144	✓	✓	✓
	150	✓	✓	✓
	170	✓	✓	X
1600 x 900	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	✓
	140	✓	✓	X
	144	✓	✓	X
	150	✓	✓	X
1600 x 1024	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	X
1600 x 1200	52	✓	✓	✓
	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	✓
	120	✓	✓	X

To be continued...

Display Screen Resolution	Refresh Rate (Hz)	Color Depth (bpp) 8bpp(256 color) Standard mode	16bpp(65K color) High mode	32bpp(16.7M) True mode
1920 x 1080	30	✓	✓	✓
	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	X
1920 x 1200	52	✓	✓	✓
	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
	100	✓	✓	X
1920 x 1440	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓
2048 x 1536	60	✓	✓	✓
	70	✓	✓	✓
	72	✓	✓	✓
	75	✓	✓	✓
	85	✓	✓	✓

* Lower maximum refresh rates at some resolutions when using lower bandwidth memory configuration.