



# Release 302 Graphics Drivers for Windows - Version 302.82

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Windows 8

## Release Notes



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# 01 INTRODUCTION TO RELEASE NOTES

This edition of *Release Notes* describes the Release 302 family of graphics drivers (versions 302.xx to 303.xx) for Microsoft® Windows® 8. NVIDIA provides these notes to describe performance improvements and bug fixes in each documented version of the driver.

## Structure of the Document

This document is organized in the following sections:

- ▶ “[Release 302 Driver Changes](#)” on page 2 gives a summary of changes, and fixed and open issues in this version.
- ▶ “[The Release 302 Driver](#)” on page 5 describes the NVIDIA products and languages supported by this driver, the system requirements, and how to install the driver.
- ▶ “[Mode Support for Windows](#)” on page 13 lists the default resolutions supported by the driver.

## Changes in this Edition

This edition of the *Release Notes* for Windows 8 includes information about NVIDIA graphics driver version 302.82 and lists changes made to the driver since the Release 295 driver version 296.17. These changes are discussed beginning with the chapter “[Release 302 Driver Changes](#)” on page 2.

## 02 RELEASE 302 DRIVER CHANGES

This chapter describes open issues for version 302.82, and resolved issues and driver enhancements for versions of the Release 302 driver up to version 302.82. The chapter contains these sections:

- ▶ “Version 302.82 Highlights” on page 3
- ▶ “Open Issues in Version 302.82” on page 4

## Version 302.82 Highlights

This section provides highlights of version 302.82 of the NVIDIA Release 302 Driver for the Microsoft Windows 8 Release Preview.

### What's New in Release 302

The section summarizes the following driver changes in Release 302:

#### 3D Vision

*Windows 8:* Updated the *NVIDIA Control Panel->Set up stereoscopic 3D* page to support Windows 8 implementation of stereoscopic 3D.

## Open Issues in Version 302.82

As with every released driver, version 302.82 of the Release 302 driver has open issues and enhancement requests associated with it. This section includes lists of issues that are either not fixed or not implemented in this version. Some problems listed may not have been thoroughly investigated and, in fact, may not be NVIDIA issues. Others may have workaround solutions.

- ▶ “Windows 8 32-bit Issues” on page 4
- ▶ “Windows 8 64-bit Issues” on page 4

### Windows 8 32-bit Issues

#### Single GPU Issues

- ▶ When installing the driver on pre-release versions of Windows 8, the installer will request a reboot to complete the installation. [992553]

*This is not an NVIDIA driver issue, but rather an interim workaround under current, pre-released versions of Windows 8 to verify successful installation of the driver without the end user being logged out in certain scenarios.*

- ▶ [GeForce GT 520]: There is flickering/shimmering within several DirectX applications when launched with FXAA turned on from the NVIDIA Control Panel. [987415]

### Windows 8 64-bit Issues

#### Single GPU Issues

- ▶ When installing the driver on pre-release versions of Windows 8, the installer will request a reboot to complete the installation. [992553]

*This is not an NVIDIA driver issue, but rather an interim workaround under current, pre-released versions of Windows 8 to verify successful installation of the driver without the end user being logged out in certain scenarios.*

- ▶ GeForce GT 520: There is flickering/shimmering within several DirectX applications when launched with FXAA turned on from the NVIDIA Control Panel. [987415]

## 03 THE RELEASE 302 DRIVER

This chapter covers the following main topics:

- ▶ “About the Release 302 Driver” on page 5
- ▶ “Hardware and Software Support” on page 6
- ▶ “Driver Installation” on page 9

### About the Release 302 Driver

This driver release is from the Release 302 family of drivers (versions 302.xx to 303.xx). This driver package supports GeForce 8, 9, 100, 200, 300, 400, 500, and 600-series desktop GPUs as well as ION desktop GPUs. See “Supported NVIDIA Desktop Products” on page 6 for the list of specific products supported in this release.



## Hardware and Software Support

- ▶ “Supported Operating Systems” on page 6
- ▶ “Supported NVIDIA Desktop Products” on page 6
- ▶ “Supported Languages” on page 9

### Supported Operating Systems

This Release 302 driver is a beta GeForce driver to be used *only* with Microsoft® Windows® 8 Release Preview, and supports both 32-bit and 64-bit versions.

This driver offers full support for the new Windows 8 display driver model WDDM 1.2.

This driver *should not* be used with Windows Vista or Windows 7.

### Supported NVIDIA Desktop Products

The following table lists the NVIDIA products supported by the Release 302 driver, version 302.82:

Table 3.1 Supported NVIDIA Desktop GPUs

Consumer Products
ION
ION LE
GeForce GTX 690
GeForce GTX 680
GeForce GTX 670
GeForce GT 645
GeForce GT 640
GeForce GT 630
GeForce GT 620
GeForce GT 610
GeForce 605
GeForce GTX 680
GeForce GTX 680
GeForce GTX 590
GeForce GTX 580
GeForce GTX 570
GeForce GTX 560 SE

Table 3.1 Supported NVIDIA Desktop GPUs

Consumer Products
GeForce GTX 560
GeForce GTX 560 Ti
GeForce GTX 555
GeForce GTX 550 Ti
GeForce GTX 480
GeForce GTX 470
GeForce GTX 465
GeForce GTX 460 SE and 460 SE v2
GeForce GTX 460 v2
GeForce GTX 295
GeForce GTX 285
GeForce GTX 280
GeForce GTX 275
GeForce GTX 260
GeForce GTS 450
GeForce GTS 250
GeForce GTS 240
GeForce GT 545
GeForce GT 530
GeForce GT 520
GeForce GT 430
GeForce GT 340
GeForce GT 330
GeForce GT 320
GeForce GT 240
GeForce GT 220
GeForce G210
GeForce 405
GeForce 210
GeForce 205
GeForce GT 140
GeForce GT 130
GeForce GT 120
GeForce G100
GeForce 9800 GX2

Table 3.1 Supported NVIDIA Desktop GPUs

Consumer Products
GeForce 9800 GTX+
GeForce 9800 GTX
GeForce 9800 GT
GeForce 9600 GT
GeForce 9600 GS
GeForce 9600 GSO
GeForce 9500 GT
GeForce 9500 GS
GeForce 9400 GT
GeForce 9400
GeForce 9300 GS
GeForce 9300 GE
GeForce 9300
GeForce 9200
GeForce 8800 Ultra
GeForce 8800 GTX
GeForce 8800 GTS 512
GeForce 8800 GTS
GeForce 8800 GT
GeForce 8800 GS
GeForce 8600 GTS
GeForce 8600 GT
GeForce 8600 GS
GeForce 8500 GT
GeForce 8400 GS
GeForce 8400 SE
GeForce 8400
GeForce 8300 GS
GeForce 8300
GeForce 8200
GeForce 8100 / nForce 720a

## Supported Languages

The Release 302 Graphics Drivers supports the following languages in the main driver Control Panel:

English (USA)	German	Portuguese (Euro/ Iberian)
English (UK)	Greek	Russian
Arabic	Hebrew	Slovak
Chinese (Simplified)	Hungarian	Slovenian
Chinese (Traditional)	Italian	Spanish
Czech	Japanese	Spanish (Latin America)
Danish	Korean	Swedish
Dutch	Norwegian	Thai
Finnish	Polish	Turkish
French	Portuguese (Brazil)	

## Driver Installation

### Minimum Hard Disk Space

The hard disk space requirement for 32-bit is minimum 200 MB for English-only, and 280 MB for International.

The hard disk space requirement for 64-bit is minimum 270 MB for English-only, and 360 MB for International.

## Before You Begin

### nTune

If you have previously installed NVIDIA nTune, NVIDIA recommends that you uninstall nTune before installing this driver. After the driver install is complete, you can reinstall NVIDIA nTune.

## Installation Instructions

- 1 Follow the instructions on the NVIDIA .com Web site driver download page to locate the appropriate driver to download, based on your hardware and operating system.
- 2 On the driver download page, if you agree to the "License For Customer Use of NVIDIA Software", click the **Agree & Download** button to begin the download.  
A dialog box appears asking if you want to run or save the download file.
- 3 Either click **Save** to save the file and then run it from your PC, or click **Run**.  
An extraction path dialog appears prompting you to specify where on your PC you want the driver files to be installed.
- 4 Click **OK** to use the default location, or click the folder icon and specify an alternate location to install the driver files.  
The files are extracted and then the NVIDIA Installer is launched automatically.
- 5 At the *License Agreement* page of the Installer, click **Agree and Continue**.
- 6 Follow the instructions in the NVIDIA Installer to complete the installation.



**Note:** The driver presents game screenshots while the driver is installing. If you are not connected to the internet during the installation, you may see a "Navigation to the webpage was cancelled" message instead. The message can be ignored and does not affect the installation. The message won't appear if the browser cache is cleared.



**Note:** The NVIDIA PhysX System Software will not be included in the installation if the same version or a later version is already installed.

# APPENDIX A MODE SUPPORT FOR WINDOWS

This chapter details the Windows modes supported by the Release 302 driver for NVIDIA products. It contains these sections:

- ▶ “General Mode Support Information” on page 14
- ▶ “Default Modes Supported by GPU” on page 15
- ▶ “Modes Supported by TV Encoders” on page 18

## General Mode Support Information

The NVIDIA graphics driver includes a standard list of display modes that are supported by default. These modes are listed in the section “[Default Modes Supported by GPU](#)” on page 15.

The actual modes available depend on the capabilities of the display. In addition, the NVIDIA graphics driver has a “dynamic EDID detection” capability and will make available *additional* modes that are listed in the display EDID, provided the graphics hardware can support it.

The NVIDIA graphics driver also supports the high resolutions available with the displays listed in [Table A.1](#) as well as the non-standard modes listed in [Table A.2](#).

Table A.1 Modes Supported for High Resolution Displays

Display	Maximum Resolution
Apple 30" Cinema HD Display (Dual link DVI)	2560x1600 @ 60 Hz
Dell WFP 3007 (Dual Link DVI)	2560x1600 @ 60 Hz
HP LP3065 dual-link DVI flat panel	2560x1600 @ 60Hz.

Table A.2 Non-standard Modes Supported

Resolution		
1680 x 1050		
1366 x 768		

## Default Modes Supported by GPU

This section lists the modes that are included by default in the driver INF for the following product families:

- ▶ “GeForce 500 and 400 , 300, 200, 100, 9 Series, and 8 Series GPUs” on page 16

## Understanding the Mode Format

Figure A.1 gives an example of how to read the mode information presented in this section.

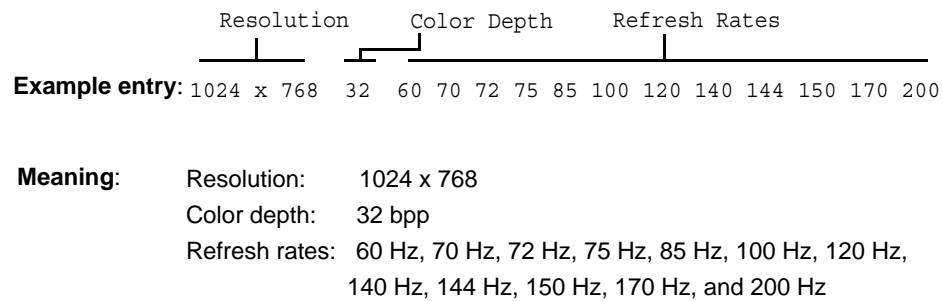


Figure A.1 Mode Format

### Note:

- Horizontal spanning modes of 3840x1080 and above, and vertical spanning modes of 1920x2160 and above generally require at least 32 MB of video memory at 32 bpp.
- An “i” next to the refresh rate indicates an interlaced refresh rate.



## GeForce 500 and 400 , 300, 200, 100, 9 Series, and 8 Series GPUs

This sections lists the supported display resolutions, color depths, and refresh rates for the products listed in “Supported NVIDIA Desktop Products” on page 6.

### Standard Modes

640 x 480	8	60 70 72 75 85 100 120 140 144 150 170 200 240
720 x 480	8	60
720 x 576	8	50
800 x 600	8	60 70 72 75 85 100 120 140 144 150 170 200 240
1024 x 768	8	60 70 72 75 85 100 120 140 144 150 170 200 240
1152 x 864	8	60 70 72 75 85 100 120 140 144 150 170 200
1280 x 720	8	60
1280 x 768	8	60 70 72 75 85 100 120 140 144 150 170
1280 x 800	8	60 70 72 75 85 100 120 140 144 150 170
1280 x 960	8	60 70 72 75 85 100 120 140 144 150 170
1280 x 1024	8	60 70 72 75 85 100 120 140 144 150 170
1360 x 768	8	60 70 72 75 85 100 120 140 144 150 170
1600 x 900	8	60 70 72 75 85 100 120 140 144 150
1600 x 1024	8	60 70 72 75 85 100 120
1600 x 1200	8	60 70 72 75 85 100 120
1680 x 1050	8	60
1920 x 1080	8	60
1920 x 1200	8	60 70 72 75 85 100
1920 x 1440	8	60 70 72 75 85
2048 x 1536	8	60
-----		
640 x 480	16	60 70 72 75 85 100 120 140 144 150 170 200 240
720 x 480	16	60
720 x 576	16	50
800 x 600	16	60 70 72 75 85 100 120 140 144 150 170 200 240
1024 x 768	16	60 70 72 75 85 100 120 140 144 150 170 200 240
1152 x 864	16	60 70 72 75 85 100 120 140 144 150 170 200
1280 x 720	16	60
1280 x 768	16	60 70 72 75 85 100 120 140 144 150 170
1280 x 800	16	60 70 72 75 85 100 120 140 144 150 170
1280 x 960	16	60 70 72 75 85 100 120 140 144 150 170
1280 x 1024	16	60 70 72 75 85 100 120 140 144 150 170
1360 x 768	16	60 70 72 75 85 100 120 140 144 150 170
1600 x 900	16	60 70 72 75 85 100 120 140 144 150
1600 x 1024	16	60 70 72 75 85 100 120
1600 x 1200	16	60 70 72 75 85 100 120
1680 x 1050	16	60
1920 x 1080	16	60

1920 x 1200	16		60 70 72 75 85 100
1920 x 1440	16		60 70 72 75 85
2048 x 1536	16		60
-----			
640 x 480	32		60 70 72 75 85 100 120 140 144 150 170 200 240
720 x 480	32		60
720 x 576	32	50	
800 x 600	32		60 70 72 75 85 100 120 140 144 150 170 200 240
1024 x 768	32		60 70 72 75 85 100 120 140 144 150 170 200 240
1152 x 864	32		60 70 72 75 85 100 120 140 144 150 170 200
1280 x 720	32		60
1280 x 768	32		60 70 72 75 85 100 120 140 144 150 170
1280 x 800	32		60 70 72 75 85 100 120 140 144 150 170
1280 x 960	32		60 70 72 75 85 100 120 140 144 150 170
1280 x 1024	32		60 70 72 75 85 100 120 140 144 150 170
1360 x 768	32		60 70 72 75 85 100 120 140 144 150 170
1600 x 900	32		60 70 72 75 85 100 120 140 144 150
1600 x 1024	32		60 70 72 75 85 100 120
1600 x 1200	32		60 70 72 75 85 100 120
1680 x 1050	32		60
1920 x 1080	32		60
1920 x 1200	32		60 70 72 75 85 100
1920 x 1440	32		60 70 72 75 85
2048 x 1536	32		60

## Modes Supported by TV Encoders

Table A.3 and Table A.4 list the NTSC, PAL, and HDTV TV-Out modes supported by the NVIDIA driver.

Table A.3 Mode Support for S-Video and Composite Out

Resolution	Bit depth	Comments
320x200	8, 16, 32	DirectDraw mode; not selectable as a Windows desktop
320x240	8, 16, 32	DirectDraw mode; not selectable as a Windows desktop
640x400	8, 16, 32	DirectDraw mode; not selectable as a Windows desktop
640x480	8, 16, 32	
720x480	8, 16, 32	Overscans (for video)
720x576	8, 16, 32	Overscans (for video)
800x600	8, 16, 32	
1024x768	8, 16, 32	Conexant 25871 only

Table A.4 Mode Support for Component YPrPb Out and DVI Out

Resolution	Comments
480i (SDTV)	Supported on graphics boards with Conexant 875 or Philips 7108 TV encoders and compatible connectors, and compatible GeForce 8 Series and later GPUs.
480p (EDTV)	
720p (HDTV)	
1080i (HDTV)	
576i (PAL)	
576p (PAL)	

The driver supports manual overscan correction for component and DVI outputs. See the online NVIDIA Control Panel Help for instructions on how to use the overscan correction features.

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