



Intel® Graphics Drivers

Production Version 5.1

Release Notes

August 2000

Supported Chipsets:

- Intel® 810 chipset
- Intel® 810E chipset
- Intel® 815 chipset
- Intel® 815E chipset

Supported Operating Systems:

- Windows* 95
- Windows* 98
- Windows* Millenium Edition*
- Windows* NT* 4.0
- Windows* 2000

NOTICE

DISCLAIMER: Information in this document is provided in connection with Intel products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty relating to sale and/or use of Intel products, including liability or warranties relating to fitness for a particular purpose, merchantability or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, lifesaving, or life-sustaining applications.

Intel may make changes to specifications and product descriptions at any time, without notice.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

* Other brands and names are the property of their respective owners.

Copyright © Intel Corporation 1999-2000



Contents

Revision History	1
Preface	2
Summary Table of Resolved Issues	3
Resolved Driver Issues (Windows* 95, Windows* 98, Windows* Millenium Edition* Release)	4
Resolved Driver Issues (Windows* NT 4.0 Release)	12
Resolved Driver Issues (Windows* 2000 Release)	13
Resolved VBIOS Issues (Video BIOS Release)	15
Additional Driver Changes	16
Driver Utility Changes	16
Documentation Changes	16



Revision History

Rev.	Document Description	Date
Intel® 810 and Intel® 810E Chipset Software Kit Windows* 95 and Windows* 98 Production Version 1.1 Windows NT 4.0 Production Version 1.1	Resolved/known issues since Production Version 1.0 release	July 2, 1999
Intel® 810 and Intel® 810E Chipset Software Kit Windows* 95 and Windows* 98 Production Version 2.0 Windows NT 4.0 Production Version 2.0	Resolved/known issues since Production Version 1.1 release	August 7, 1999
Intel® 810 and Intel® 810E Chipset Software Kit Windows* 95 and Windows* 98 Production Version 2.1 Windows NT 4.0 Production Version 2.1	Resolved/known issues since Production Version 1.1 release	October 11, 1999
Intel® 810 and Intel® 810E Chipset Software Kit Windows* 95 and Windows* 98 Production Version 2.5 Windows NT 4.0 Production Version 2.5	Resolved/known issues since Production Version 2.1 release	November 11, 1999
Intel® 810 and Intel® 810E Chipset Software Kit Windows* 95 and Windows* 98 Production Version 3.0 Windows NT 4.0 Production Version 3.0	Resolved/known issues since Production Version 2.5 release	December 8, 1999
Intel® 810 and Intel® 810E Chipset Software Kit Windows* 95 and Windows* 98 Production Version 3.2 Windows NT 4.0 Production Version 3.2	Resolved issues since Production Version 3.0 release	February 11, 2000
Intel® 810 and Intel® 810E Chipset Software Kit Windows* 95 and Windows* 98 Production Version 3.3 Windows NT 4.0 Production Version 3.3 Windows 2000 Production Version 3.3	Resolved issues since Production Version 3.2 release	March 7, 2000
Intel® 810 and Intel® 810E Chipset Software Kit Windows* 95 and Windows* 98 Production Version 4.1 Windows NT 4.0 Production Version 4.1 Windows 2000 Production Version 4.1	Resolved issues since Production Version 3.3 release	April 21, 2000
Intel® Graphics Drivers Production Version 5.1	Resolved issues since Production Version 4.1 and Production Version 4.2 releases	August 28, 2000

Preface

This document contains records of resolved software issues and changes affecting the Microsoft Windows* 95, Windows* 98, Windows* Millenium Edition*, Windows* NT 4.0, and Windows* 2000 graphics driver releases that use the Intel® 810, Intel® 810E, Intel® 815, and Intel® 815E chipset graphics accelerators. This document is intended for end users of these chipsets.

Summary Table of Resolved Issues

The following table lists the resolved software issues that apply to recent Intel® Graphics Driver releases. This table uses the following codes:

Codes Used in Summary Table

X:	Issue pertains to a particular software release and may pertain to releases previous to the indicated release.
Fixed:	This issue is fixed in the current software release.
NDR:	Not related to the Intel® Graphics Drivers.
N/A:	Not applicable

Resolved Driver Issues (Windows* 95, Windows* 98, Windows* Millenium Edition* Release)

Windows* 95 Windows* 98, and Windows* Me* 3D Applications and Games									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Monster Truck Madness* intro corruption
2	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Corruption running Twist*, Donut* and FoxBear* applications simultaneously
3	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Some non-H/W-accelerated OpenGL* applications hang with the DOS prompt when at least two are running simultaneously.
4	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Atlantis* and Heretic II* freeze when maximizing and exiting the applications.
5	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Hangs occur when exiting GLQuake* (at 800x600 display resolution) or GLHexen* (at 640x480 display resolution).
6	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Quake II* application runs very slowly with 32 MB of system memory.
7	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Unable to restore/awaken system from S1 and S3 power states when running OGL Tunnel*.
8	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Starsiege TRIBES* application blacks out when launched at 640x480 display resolution.
9	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	A general protection fault (GPF) occurs when exiting G-Nome* game application.
10	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Motocross Madness* application fails to load under Windows* 95.
11	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Screen corruption occurs in Half-Life* game application when it is run in D3D mode display configuration, at all resolutions lower than 800x600.
12	x	x	NDR	NDR	NDR	NDR	NDR	NDR	Thief * and System Shock* 2,D3D application hangs under Windows 98 when game play is attempted.
13	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	3DFlip Cube* application fails under Windows 98 or 95 with DX5 installed, when attempting to change to 1280x1024x16 bpp.
14	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Textures disappear when running Hyberblade* application with Rearview Mirror displayed under Windows 98 with DX6.1 installed.
15	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Severe Corruption in Tomb Raider 3 Game Application
16	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Tunnel & Sphere D3D Applications Corrupted when Restoring S3 State
17	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	3D Mark Max99 Application Hangs
18	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Alt-Tab Fails on Quake Engine Games
19		x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Monster Truck Madness II Corruption (multi-colored diagonal patches) During Game Play in Direct3D mode.
20		x	x	Fixed	Fixed	Fixed	Fixed	Fixed	"Busy" Cursor remains on for 5-10 seconds after an OpenGL application starts

Windows* 95 Windows* 98, and Windows* Me* 3D Applications and Games									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
21		x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Screen Corruption (blinking lines & color changing) occurs with Flight Simulator* 98
22		x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Delayed display response to mouse movement while playing Unreal* or Half- Life*
23	x	x	x	x	Fixed	Fixed	Fixed	Fixed	GPF in Homeworld* during resource collection or when ships are a certain eye distance away.
24	x	x	x	x	Fixed	Fixed	Fixed	Fixed	In Gamepack 2000 - roulette, a garbage rectangle is seen around the ball.
25	x	x	x	x	x	x	Fixed	Fixed	Screen corruption in Rogue Squadron 3D* game
26	x	x	x	x	x	x	Fixed	Fixed	Screen flickering when a Direct Draw* hardware overlay is displayed.
27	x	x	x	x	x	x	Fixed	Fixed	Madden 2000* game has the wrong color field due to missing textures.
28	x	x	x	x	x	x	Fixed	Fixed	Corruption on left side of main menu screen in Driver game, Lunatik*, Grand Theft Auto 2* and Demolition Race* games
29	x	x	x	x	x	x	Fixed	Fixed	In Boarder Zone* game, short white horizontal lines appear during gameplay.
30	x	x	x	x	x	x	Fixed	Fixed	3D Mark Max* 99 hangs during benchmark test.
31	x	x	x	x	x	x	Fixed	Fixed	3D Winbench 2000* - many problems seen in tests.
32	x	x	x	x	x	x	Fixed	Fixed	3D Winbench 98* - Colorkey quality transparency tests displays the sky texture in place of the color key textures that should be on the trees and the fence.
33	x	x	x	x	x	x	Fixed	Fixed	GLQuake* shows screen corruption when using Alt-Tab to switch out of the game and back in twice.
34	x	x	x	x	x	x	Fixed	Fixed	The Z-Buffer is not being enabled correctly in DirectX* 7 applications.
35	x	x	x	x	x	x	Fixed	Fixed	Prince of Persia* - the mouse pointer disappears on the main menu.
36	x	x	x	x	x	x	Fixed	Fixed	Missing textures in Direct3D* sample applications.
37	x	x	x	x	x	x	Fixed	Fixed	Unreal Tournament* - texture corruption in OpenGL* mode.
38	x	x	x	x	x	x	Fixed	Fixed	Blood 2* - main menu shows flickering
39	x	x	x	x	x	x	Fixed	Fixed	Dark Stone* game - main menu shows flickering
40	x	x	x	x	x	x	Fixed	Fixed	Drakan* game - main menu shows flickering
41	x	x	x	x	x	x	Fixed	Fixed	Motocross Madness* - main menu has text cut off
42	x	x	x	x	x	x	Fixed	Fixed	OpenGL* 3D screensavers do not work in Windows* 95C with the version of DirectX* that comes with the OS.
43	x	x	x	x	x	x	Fixed	Fixed	OpenGL* 3D screensavers show blank screen when a full-screen DOS box is activated.
44	x	x	x	x	x	x	Fixed	Fixed	Unreal Tournament* - on several deathmatch levels, the scene is corrupted and the background shows through in front of objects

Windows* 95 Windows* 98, and Windows* Me* 3D Applications and Games									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
45	x	x	x	x	x	x	Fixed	Fixed	S3TC* compressed textures in OpenGL* have incorrect subimage.
46	x	x	x	x	x	x	Fixed	Fixed	Forsaken* game hangs with DirectX* 5.0 runtimes.
47	x	x	x	x	x	x	Fixed	Fixed	3D WinBench 98 Triangle Tests hang with DirectX 6.1 runtimes.
48	x	x	x	x	x	x	Fixed	Fixed	Lego* Island game - When the user clicks the mouse anywhere on the main menu, the game quits to the desktop.
49	x	x	x	x	x	x	Fixed	Fixed	Gamepack 2000* - In draw poker, the image is broken when clicking on some of the cards.
50	x	x	x	x	x	x	Fixed	Fixed	Gemini benchmarks - the OpenGL* part of the tests shows the top section of the screen, however the rest is all white when the desktop is in 16 bit color depth.
51	x	x	x	x	x	x	x	Fixed	3DMark99 Max* with DirectX* 7 runtimes hangs during the benchmark with a black screen.
52	x	x	x	x	x	x	x	Fixed	Artifacts are seen in 3D Winbench* 2000 - quality tests.
53	x	x	x	x	x	x	x	Fixed	3D Winbench 2000* - WinMark* scene 1 page faults.
54	x	x	x	x	x	x	x	Fixed	Deer Hunter 3D* game locks up or exits to the desktop when trying to go to the hunting area.
55	x	x	x	x	x	x	x	Fixed	Missing textures on 3D website.
56	x	x	x	x	x	x	x	Fixed	Sega* Rally* 2 game - the textures are not applied in 640x480 mode.
57	x	x	x	x	x	x	x	Fixed	Dark Stone* game - 3D black boxes appear around the trees.
58	x	x	x	x	x	x	x	Fixed	3D Winbench* 2000 shows a performance degradation.
59	x	x	x	x	x	x	x	Fixed	3DMark2000* demo scene flashes.
60	x	x	x	x	x	x	x	Fixed	Redline* game exits to the desktop when loading a mission.
61	x	x	x	x	x	x	x	Fixed	Final Fantasy* VIII game - Black boxes show up around text and the cursor.
62	x	x	x	x	x	x	x	Fixed	EPO CAD 98* - Objects are not re-drawn.
63	x	x	x	x	x	x	x	Fixed	NBA* Inside Drive 2000* game - The paint in the free throw lanes will either go black or will tear.
64	x	x	x	x	x	x	x	Fixed	Color corruption after Alt-Tab out and back in again with Direct3D* games and sample applications .
65	x	x	x	x	x	x	x	Fixed	Dark Omen* game - When starting the game, a window pops up saying "out of date display drivers", then the game exits.
66	x	x	x	x	x	x	x	Fixed	Winstone* 99 - High end test for Microstation* SE locks up.

Windows*95, Windows*98, and Windows* Me* 2D Applications									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Flickering and flashing occur when both software DVD and TV-out are enabled in a multi-monitor configuration in the 720x480x8-bpp color mode.
2	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	The screen of the Compton's '97 Interactive Encyclopedia darkens when maximizing the Bears movie, at 8-bpp color depth.
3	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Screen corruption occurs when running the Freel97.prz sample file of Lotus* Freelance '97.
4	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Corruption occurs when running a slide show in PowerPoint* (Japanese version).
5	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Overlay ColorKey corruption (pink lines at the bottom of a windowed video) occurs on a flat panel when using software DVD.
6	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	AVIs play upside down (full screen) when switching from 640x480x16 bpp to 640x480x8 bpp, with both Intel Indeo® and Duck* TrueMotion* 2.0 codecs installed.
7	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Under Windows 95, AVI corruption occurs when launching the FoxBear* application and the MS-DOS* window in the full-screen mode using Alt-Enter.
8	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Under the Japanese version of Windows 95, playing a full-screen AVI causes a GPF.
9	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Under Windows 95 with TV-out enabled, the screen shifts to the left when the Fine Tuning applet is selected and adjusted.
10	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	A pink stripe appears at the right edge of the overlay window, when switching the display from TV-out to CRT.
11		x	NDR	NDR	NDR	NDR	NDR	NDR	When both CRT and flat-panel displays are connected, the system is unable to detect the CRT after boot-up (3.00.2019 VBIOS resolves this Issue).
12	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Software DVD Video Jitter when Downscaling
13	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Color Pattern Does not Match using Borland Delphi4.0 Application
14	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Red Line Appears on the Right of Software DVD Playback
15	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	System Hangs When MPEG Ends while Monitor is Sleep
16	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Lotus Approach '97 has Line Corruption
17	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Quick Time for Windows* version2.02 can not Play Movie File
18	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Software DVD Video Shakes in Multimonitor Configuration
19	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	MPEG Movie Black Screens
20	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Software DVD Green Line Screen Corruption

Windows*95, Windows*98, and Windows* Me* 2D Applications									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
21	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	GPF Occurs When Running "Home" Application and attempting to print a pie diagram
22		x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fullscreen DOS Box at 640x480 black screens when using alt+Enter in a TV Configuration under Windows* 98
23	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Characters overwritten in notepad (screen corruption)
24	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	A second mouse cursor appears in a multimonitor configuration with the Intel® 810 as the primary
25		x	x	Fixed	Fixed	Fixed	Fixed	Fixed	GPF occurs when changing display modes on some software DVD players
26	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Video corruption and lockups after playing an AVI file followed by a reboot.
27	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	SYSTEST.EXE has line of white pixels above the progress indicator.
28	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Playing a certain Indeo* 5 AVI file with MPLAYER2.EXE results in video corruption.
29	x	x	x	x	Fixed	Fixed	Fixed	Fixed	Software DVD has shadows in the subpicture when bobbing.
30	x	x	x	x	Fixed	Fixed	Fixed	Fixed	Software DVD is corrupted with DVD player that comes with Microsoft Windows* 98 after downscaling the video window to zero and then up to below 2:1 downscale.
31	x	x	x	x	Fixed	Fixed	Fixed	Fixed	When Macrovision* protection is enabled, brightness does not stay the same in software DVD.
32	x	x	x	x	x	x	Fixed	Fixed	Screen flickering when a Direct Draw* hardware overlay is displayed.
33	x	x	x	x	x	x	Fixed	Fixed	The graphics driver causes a GPF (General Protection Fault) when loading.
34	x	x	x	x	x	x	Fixed	Fixed	Screen is not refreshed in a Direct Draw* application when the system is resumed from suspend mode.
35	x	x	x	x	x	x	Fixed	Fixed	Winbench 98 and 99 - Corruption is seen in the Direct Draw* tests.
36	x	x	x	x	x	x	Fixed	Fixed	Microsoft* Word 2000* and Microsoft* Excel* 2000 Toranomaki* - voice does not sync with animated screen.
37	x	x	x	x	x	x	Fixed	Fixed	RealPlayer* 7 shows garbage when playing a Media File.
38	x	x	x	x	x	x	Fixed	Fixed	Excel* 2000 - Garbage sometimes appears when the Excel client area is scrolled.
39	x	x	x	x	x	x	Fixed	Fixed	QuarkXPress* - A band of horizontal black dashes appears when opening or scrolling through a document.
40	x	x	x	x	x	x	x	Fixed	Roulette in Gamepack 2000* shows garbage around a ball.
41	x	x	x	x	x	x	x	Fixed	When playing a video file in Media Player*, then entering suspend mode, the system hangs.
42	x	x	x	x	x	x	x	Fixed	AVI files are corrupt during playback.

Windows*95, Windows*98, and Windows* Me* 2D Applications									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
43	x	x	x	x	x	x	x	Fixed	When playing a DVD movie, green horizontal lines appear.
44	x	x	x	x	x	x	x	Fixed	Age of Empires* 2: The Age of Kings* - Dotted lines appear in the fog.
45	x	x	x	x	x	x	x	Fixed	Internet Explorer* shows character corruption when scrolling a web page if a software cursor is used, such as 3D mouse pointers or large mouse pointers.
46	x	x	x	x	x	x	x	Fixed	Skipping and jittering seen in DVD movies.
47	x	x	x	x	x	x	x	Fixed	QuickTime* 4.1 movies turn green or show corruption when dragged across the screen.

Windows*95, Windows*98, and Windows* Me* Display Modes/Settings									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Watermark corruption at 1280x1024x24 bpp, at 75-Hz display setting
2	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Watermark at 720x480x16 bpp, in a multi-monitor configuration with TV-out and the Intel® 810 and Intel® 810E chipsets as the primary display adapter
3	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Positioning fails when running in PAL mode, in the TV-out configuration.
4	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Hsync and Vsync Polarities out of Vesa Specifications
5	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Full Screen DOS Box Centered with Flat Panel Connected
6	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Video Corruption Visible on Some Monitors
7	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	720x480 Mode Disappears from Slider
8	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Flat Panel DOS Screen does not Scale
9	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Flat Panels are not Enabled when Power is Off
10		x	x	Fixed	Fixed	Fixed	Fixed	Fixed	System enters sleep without warning or informing the user that they are still logged on to the network
11	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Memory leak after each resume from suspend mode.
12	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	System boots into NTSC TV Out mode even if the PAL jumper setting is set on the Chrontel* 7007 daughtercard.
13	x	x	x	x	Fixed	Fixed	Fixed	Fixed	TV out display does not wake up after monitor blanks out from a power saving time-out.
14	x	x	x	x	Fixed	Fixed	Fixed	Fixed	In Microsoft Windows* 98 SE, selecting then deselecting the monitor while in NTSC mode causes the TV out display to switch to PAL mode.

Windows*95, Windows*98, and Windows* Me* Display Modes/Settings									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
15	x	x	x	x	Fixed	Fixed	Fixed	Fixed	Screen corruption appears when returning from hibernation when the Intel® 810 chipset is used as the secondary display in a multimonitor configuration and is set to 8 bpp color depth.
16	x	x	x	x	Fixed	Fixed	Fixed	Fixed	When using a multi-resolution flat panel set at 640x480 resolution, exiting to MS-DOS* Mode will result in a blank display.
17	x	x	x	x	Fixed	Fixed	Fixed	Fixed	When connecting a TV after boot, an invalid signal appears on the TV. There should be no signal and the encoder chip should be in the off or no DAC state.
18	x	x	x	x	Fixed	Fixed	Fixed	Fixed	Suspend using power button in Microsoft Windows* 95 while monitor is in stand-by mode causes buttons on some windows to be corrupted after resuming.
19	x	x	x	x	Fixed	Fixed	Fixed	Fixed	The flatpanel display will not scale to the full size of the screen after restarting in MS-DOS* mode or switching to 16 color mode.
20	x	x	x	x	x	x	Fixed	Fixed	Gamma range incorrect for overlay color controls
21	x	x	x	x	x	x	Fixed	Fixed	In the properties page for TV-out and flat panel devices, the TV and flat panel can't be disabled or enabled.
22	x	x	x	x	x	x	Fixed	Fixed	Switching TV-out setting from overscan to underscan (large picture to small picture) mode shifts the desktop down and to the left.
23	x	x	x	x	x	x	Fixed	Fixed	In the properties page for TV-out devices, the TV checkbox gets unchecked after monitor enters power saving mode.
24	x	x	x	x	x	x	Fixed	Fixed	Blank screen on TV when PAL mode or NTSC J is selected.
25	x	x	x	x	x	x	Fixed	Fixed	PAL-G TV-out mode is not listed in the PAL drop-down menu.
26	x	x	x	x	x	x	Fixed	Fixed	The system does not resume correctly from S3 (Suspend to RAM) suspend when multi-monitor is enabled.
27	x	x	x	x	x	x	Fixed	Fixed	With any PCI graphic card installed, the system will not resume from standby (ACPI S1).
28	x	x	x	x	x	x	Fixed	Fixed	In 1280x1024 24bpp mode, after several wake-ups from standby (ACPI S1), a normal screen doesn't show.
29	x	x	x	x	x	x	Fixed	Fixed	After physically switching from a TV-out display to a standard monitor, the monitor doesn't display a picture, but the TV-out signal is still active.
30	x	x	x	x	x	x	Fixed	Fixed	A flat panel display connected to the onboard graphics does not function when a PCI graphics card is used as the primary display.
31	x	x	x	x	x	x	Fixed	Fixed	In Windows* 95 OSR 2.1, while the monitor is in power off mode, suspending the system using the power button and resuming using the keyboard or mouse causes the system to hang up.

Windows*95, Windows*98, and Windows* Me* Display Modes/Settings									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
32	x	x	x	x	x	x	Fixed	Fixed	Can't shutdown the machine on multi monitor environment. The system stops at the "Windows is shutting down" screen instead of powering off.
33	x	x	x	x	x	x	Fixed	Fixed	Blinking screen when disk or mouse activity occurs if a flat panel is connected with a Si1154Tx chip.
34	x	x	x	x	x	x	x	Fixed	Black screen when switching from a CRT monitor to TV-out
35	x	x	x	x	x	x	x	Fixed	Flat Panel will not scale after a reboot to MS-DOS* mode or a switch to 16 colors
36	x	x	x	x	x	x	x	Fixed	After resuming from suspend, the buttons on all windows are broken.
37	x	x	x	x	x	x	x	Fixed	When multi-monitor is enabled, S3 suspend to RAM does not resume correctly.
38	x	x	x	x	x	x	x	Fixed	Driver does not load on Windows* 95 retail or OSR 1 versions.
39	x	x	x	x	x	x	x	Fixed	Low resolution video modes below 640x480 show screen corruption.
40	x	x	x	x	x	x	x	Fixed	The system locks while changing icon sizes.
41	x	x	x	x	x	x	x	Fixed	Hardware cursors (mouse pointers) smaller than 32x32 are corrupted. Those greater than 32x32 cause the system to hang.

Resolved Driver Issues (Windows* NT 4.0 Release)

Windows* NT 4.0 3D Applications and Games									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Helicops* game application stops responding during game play, when the user crashes or completes a game level.
2	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	When the desktop resolution is set to 1024x768 and the GLQuake* game application is set to 640x480, the desktop resolution configures at 1024x768 after exiting GLQuake*.
3	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	3D Screensavers do not Work at 65K Color Depth
4	x	x	x	x	Fixed	Fixed	Fixed	Fixed	In Microsoft* Golf 98, the grid and red/white pole are not shown.
5	x	x	x	x	x	x	Fixed	Fixed	Indy 3D* demo doesn't run. Only the background color is displayed in the window.
6	x	x	x	x	x	x	x	Fixed	3D Maze OpenGL* screen saver causes an application error when the Display Properties window is left open.
7	x	x	x	x	x	x	x	Fixed	Quake* 2 game runs very slowly after doing an Alt+Tab out and back in.

Windows* NT 4.0 3D Applications and Games									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
8	x	x	x	x	x	x	x	Fixed	GLQuake* - Alt+Tab out of the game and back in causes corruption, spontaneous reboots, or slowness in the game.
9	x	x	x	x	x	x	x	Fixed	Winstone* 99 - High end test for Microstation* SE locks up.

Windows* NT 4.0 2D Applications									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Full-screen Windows DOS box disappears with TV-out enabled.
2	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	NetMeeting Application has Corrupt Cursor
3		x	NDR	NDR	NDR	NDR	NDR	NDR	When dragging Display Properties page over Oasys* v7 application window, the image is corrupted.
4	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Playing a certain Indeo* 5 AVI file with MPLAYER2.EXE results in video corruption.
5	x	x	x	Fixed	Fixed	Fixed	Fixed	Fixed	Blue Screen when running Midas View Point* for 48-96 hours.
6		x	NDR	NDR	NDR	NDR	NDR	NDR	Garbage on the blue bootup screen after first reboot following installation of the OS.
7	x	x	x	x	Fixed	Fixed	Fixed	Fixed	When Macrovision* protection is enabled, brightness does not stay the same in software DVD movies.
8	x	x	x	x	x	x	Fixed	Fixed	Screen garbage in Lotus* Freelance* 2000 screen show

Windows* NT 4.0 Display Modes/Settings									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	x	x	x	x	x	x	Fixed	Fixed	Blue screen corruption on reboot when TV-out is set for PAL or NTSC_J mode
2	x	x	x	x	x	x	Fixed	Fixed	When both a monitor and a TV are connected and the monitor has been de-selected, after a reboot, Windows* should boot on the TV only, however it boots up on both.
3	x	x	x	x	x	x	x	Fixed	Driver properties incorrectly shows the Intel® 815 chipset as being an Intel® 810 chipset.
4	x	x	x	x	x	x	x	Fixed	Hardware cursors (mouse pointers) smaller than 32x32 are corrupted. Those greater than 32x32 cause the system to hang.

Resolved Driver Issues (Windows* 2000 Release)

Windows* 2000 2D Applications									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	x	x	x	x	x	x	Fixed	Fixed	Overlay not working with third party video capture drivers
2	x	x	x	x	x	x	Fixed	Fixed	Third party video capture drivers will not load.
3	x	x	x	x	x	x	Fixed	Fixed	Winbench 98 and 99 - Corruption is seen in the Direct Draw* tests.
4	x	x	x	x	x	x	Fixed	Fixed	OASYS* viewer - document is not scrolled up correctly.
5	x	x	x	x	x	x	Fixed	Fixed	Ichitaro* - Horizontal garbage lines appear when running a slide in the autoplay mode.
6	x	x	x	x	x	x	Fixed	Fixed	Excel* 97 - screen corruption when zooming in to 400% and then opening and closing the clip gallery.
7	x	x	x	x	x	x	Fixed	Fixed	Text in Notepad is corrupted when its client area is scrolled.
8	x	x	x	x	x	x	Fixed	Fixed	Lotus Word Pro* - Screen corruption occurs when a figure object is duplicated to another place.
9	x	x	x	x	x	x	x	Fixed	DVD* movies hang after playing for a couple of minutes
10	x	x	x	x	x	x	x	Fixed	With a software DVD player that uses HVA, menus show corruption on some DVD discs
11	x	x	x	x	x	x	x	Fixed	Skipping and jittering seen in DVD movies.

Windows* 2000 3D Applications and Games									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	x	x	x	x	x	x	Fixed	Fixed	Final Reality* application has visual anomalies/missing textures.
2	x	x	x	x	x	x	Fixed	Fixed	Mipmap corruption problems
3	x	x	x	x	x	x	Fixed	Fixed	Madden 2000* game has the wrong color field due to missing textures.
4	x	x	x	x	x	x	Fixed	Fixed	Corruption on left side of main menu screen in Driver game, Lunatik*, Grand Theft Auto 2* and Demolition Race* games
5	x	x	x	x	x	x	Fixed	Fixed	In Boarder Zone* game, short white horizontal lines appear during gameplay.
6	x	x	x	x	x	x	Fixed	Fixed	3D Winbench 2000* - many problems seen during tests.
7	x	x	x	x	x	x	Fixed	Fixed	Homeworld* game - screen becomes blank after Alt-Tab out and then back in.
8	x	x	x	x	x	x	Fixed	Fixed	Descent: Freespace* game has missing text on the logon screen.

Windows* 2000 3D Applications and Games									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
9	x	x	x	x	x	x	Fixed	Fixed	Prince of Persia* - the mouse pointer disappears on the main menu.
10	x	x	x	x	x	x	Fixed	Fixed	Blood 2* game - black screen on main menu.
11	x	x	x	x	x	x	Fixed	Fixed	Dark Stone* game - main menu has missing text
12	x	x	x	x	x	x	Fixed	Fixed	Drakan* game - main menu shows flickering
13	x	x	x	x	x	x	Fixed	Fixed	Motocross Madness* - main menu has text cut off
14	x	x	x	x	x	x	Fixed	Fixed	System reboots itself when resizing the display window of DirectX* 7 Direct3D* sample applications
15	x	x	x	x	x	x	Fixed	Fixed	Star Wars: Episode 1 Racer* - main menu flickers and a page fault error occurs when playing the game
16	x	x	x	x	x	x	x	Fixed	Trophy Bass 3D* hard hangs with severe corruption when starting a game.
17	x	x	x	x	x	x	x	Fixed	3D Winbench 2000* - quality tests fail.
18	x	x	x	x	x	x	x	Fixed	Blood 2* - main menu shows flickering
19	x	x	x	x	x	x	x	Fixed	GLQuake* - Alt+Tab out of the game and back in causes corruption, spontaneous reboots, or slowness in the game.
20	x	x	x	x	x	x	x	Fixed	NBA* Inside Drive 2000* game - The paint in the free throw lanes will either go black or will tear.
21	x	x	x	x	x	x	x	Fixed	Color corruption after Alt-Tab out and back in again with Direct3D* games and sample applications .
22	x	x	x	x	x	x	x	Fixed	Dark Omen* game - When starting the game, a window pops up saying "out of date display drivers", then the game exits.
23	x	x	x	x	x	x	x	Fixed	Motocross Madness* game shows texture junction gaps.

Windows* 2000 Display Modes/Settings									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
1	x	x	x	x	x	x	Fixed	Fixed	When both a monitor and a TV are connected and the monitor has been de-selected, after a reboot, Windows* should boot on the TV only, however it boots up on both.
2	x	x	x	x	x	x	Fixed	Fixed	Flat panel scaling doesn't work after a resume from standby (S1) or suspend (S3).
3	x	x	x	x	x	x	Fixed	Fixed	A flat panel display connected to the onboard graphics does not function when a PCI graphics card is used as the primary display.
4	x	x	x	x	x	x	x	Fixed	TV-out refuses to wake up after timing out from power saving mode.

Windows* 2000 Display Modes/Settings									
NO.	PV2.0	PV2.1	PV2.5	PV3.0	PV3.2	PV3.3	PV4.1	PV5.1	Issue
5	x	x	x	x	x	x	x	Fixed	Nothing is displayed on the DFP/DVI (using onboard AGP) under a multi-monitor environment when the PCI video card is specified as the primary device in the BIOS setup.
6	x	x	x	x	x	x	x	Fixed	The screen content is scrambled when a crash dump is initiated.
7	x	x	x	x	x	x	x	Fixed	Hardware cursors (mouse pointers) smaller than 32x32 are corrupted. Those greater than 32x32 cause the system to hang.

Resolved VBIOS Issues (Video BIOS Release)

Video BIOS Issues								
NO.	VB024	VB1.11	VB2.01	VB2.11	VB2.50	VB3.00.2019	VB3.1	Issue
VBIOS issues have been moved to a separate release notes document at the following location: http://developer.intel.com/design/software/drivers/platform/810.htm								

Additional Driver Changes

No.	Ver.	Additional Driver Change
1	PV1.1	Ability to uninstall the end-user diagnostics utility
2	PV1.1	Removed resolution modes (1280x720, 1280x960, 1600x900) from Win 9X slider.
3	PV2.1	Support for Scaling Flat Panels in Windows
4	PV2.1	Limited DOS Scaling Support
5	PV2.1	Software Monitor Controls for Win9x
6	PV2.1	I2C on DDC Bus Interface
7	PV2.1	Added Multi-res Flat Panel Support
8	PV3.3	Added Windows* 2000 driver
9	PV4.1	Software DVD* HWMC (Hardware Motion Compensation) support via Microsoft* HVA (Hardware Video Acceleration) interface for Windows* 2000
10	PV4.1	DirectX* 7 support for Windows* 98, and Windows* 95, and Windows* 2000
11	PV4.1	PAL-G TV-out mode added.
12	PV5.1	Added 1280x768 @ 60 Hz mode for flat panels
13	PV5.1	Added 1280x1024 @ 60 mode for flat panels
14	PV5.1	Removed two screen resolutions - 720x480 and 720x480

Driver Utility Changes

No.	Ver.	Driver Utility Change
1	PV2.0	The End-User Diagnostics Utility has been updated from Version 1.18 to Version 1.2.0 within the PV2.0 (version 1272) driver. Previously, the 1.18 version of the EUD within the PV1.1 driver did not function under Windows NT 4.0.
2	PV5.1	An updated driver interface has been added with quick links to Intel® Web Sites and Online Support
3	PV5.1	A "schemes" feature has been added to save and later recall graphics settings and to launch games and applications.
4	PV5.1	A desktop context menu has been added that allows a quick change of graphics settings or a recall of a saved scheme.
5	PV5.1	The integrated diagnostic tool allows viewing of all video modes supported by the display adapter.

Documentation Changes

NO.	Ver.	Documentation Change
1	PV3.0	A Driver Utilities Change section has been added to this document.
2	PV3.2	Issues that are not resolved by current drivers have been removed from the document. As a result, the numbering of the issues in most of the summary tables has shifted from previous versions.
3	PV3.2	The Future Plans column has been removed from the summary tables.
4	PV3.3	Sections for Windows* 2000 issues have been added.
5	PV4.1	Removed all issues that were resolved prior to PV 2.0.
6	PV4.1	Moved VBIOS resolved issues to a separate document and added a link to new location in the VBIOS section.
7	PV5.1	Added Intel® 815 chipset family as a supported chipset.
8	PV5.1	Added Windows* Millenium Edition* as a supported operating system.