



Intel® Graphics Drivers

Production Version 6.3.1

Release Notes

April 2001

Supported Chipsets:

- Intel® 810 chipset
- Intel® 810E chipset
- Intel® 810E2 chipset
- Intel® 815 chipset
- Intel® 815E chipset
- Intel® 815EM chipset

Supported Operating Systems:

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

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Revision History

Rev.	Document Description	Date
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
Intel® Graphics Drivers Production Version 6.0	Resolved issues since Production Version 5.1 release	October 12, 2000
Intel® Graphics Drivers Production Version 6.1	Resolved issues since Production Version 6.0 release	December 8, 2000
Intel® Graphics Drivers Production Version 6.2	Resolved issues since Production Version 6.1 release	February 15, 2001
Intel® Graphics Drivers Production Version 6.3.1	Resolved issues since Production Version 6.3.1 release	April 20, 2001

Preface

This document contains records of resolved software issues and changes affecting the Microsoft Windows* 95, Windows* 98, Windows* Millennium Edition*, Windows* NT 4.0, and Windows* 2000 graphics driver releases that use the Intel® 810, Intel® 810E, Intel® 810E2, Intel® 815, Intel® 815E, and Intel® 815EM chipset graphics controllers. 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.

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

Windows* 95 Windows* 98, and Windows* Me* 3D Applications and Games							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Screen corruption in Rogue Squadron 3D* game
2	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Screen flickering when a Direct Draw* hardware overlay is displayed.
3	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Madden 2000* game has the wrong color field due to missing textures.
4	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Corruption on left side of main menu screen in Driver game, Lunatik*, Grand Theft Auto 2* and Demolition Race* games
5	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	In Boarder Zone* game, short white horizontal lines appear during gameplay.
6	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	3D Mark Max* 99 hangs during benchmark test.
7	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	3D Winbench 2000* - many problems seen in tests.
8	Fixed	Fixed	Fixed	Fixed	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.
9	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	GLQuake* shows screen corruption when using Alt-Tab to switch out of the game and back in twice.
10	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	The Z-Buffer is not being enabled correctly in DirectX* 7 applications.
11	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Prince of Persia* - the mouse pointer disappears on the main menu.
12	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Missing textures in Direct3D* sample applications.
13	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Unreal Tournament* - texture corruption in OpenGL* mode.
14	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Blood 2* - main menu shows flickering
15	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Dark Stone* game - main menu shows flickering
16	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Drakan* game - main menu shows flickering
17	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Motocross Madness* - main menu has text cut off
18	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	OpenGL* 3D screensavers do not work in Windows* 95C with the version of DirectX* that comes with the OS.
19	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	OpenGL* 3D screensavers show blank screen when a full-screen DOS box is activated.
20	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Unreal Tournament* - on several deathmatch levels, the scene is corrupted and the background shows through in front of objects
21	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	S3TC* compressed textures in OpenGL* have incorrect subimage.
22	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Forsaken* game hangs with DirectX* 5.0 runtimes.
23	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	3D WinBench 98 Triangle Tests hang with DirectX 6.1 runtimes.
24	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Lego* Island game - When the user clicks the mouse anywhere on the main menu, the game quits to the desktop.
25	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Gamepack 2000* - In draw poker, the image is broken when clicking on some of the cards.
26	Fixed	Fixed	Fixed	Fixed	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.
27	x	Fixed	Fixed	Fixed	Fixed	Fixed	3DMark99 Max* with DirectX* 7 runtimes hangs during the benchmark with a black screen.
28	x	Fixed	Fixed	Fixed	Fixed	Fixed	Artifacts are seen in 3D Winbench* 2000 - quality tests.
29	x	Fixed	Fixed	Fixed	Fixed	Fixed	3D Winbench 2000* - WinMark* scene 1 page faults.
30	x	Fixed	Fixed	Fixed	Fixed	Fixed	Deer Hunter 3D* game locks up or exits to the desktop when trying to go to the hunting area.
31	x	Fixed	Fixed	Fixed	Fixed	Fixed	Missing textures on 3D website.

Windows* 95 Windows* 98, and Windows* Me* 3D Applications and Games							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
32	x	Fixed	Fixed	Fixed	Fixed	Fixed	Sega* Rally* 2 game - the textures are not applied in 640x480 mode.
33	x	Fixed	Fixed	Fixed	Fixed	Fixed	Dark Stone* game - 3D black boxes appear around the trees.
34	x	Fixed	Fixed	Fixed	Fixed	Fixed	3D Winbench* 2000 shows a performance degradation.
35	x	Fixed	Fixed	Fixed	Fixed	Fixed	3DMark2000* demo scene flashes.
36	x	Fixed	Fixed	Fixed	Fixed	Fixed	Redline* game exits to the desktop when loading a mission.
37	x	Fixed	Fixed	Fixed	Fixed	Fixed	Final Fantasy* VIII game - Black boxes show up around text and the cursor.
38	x	Fixed	Fixed	Fixed	Fixed	Fixed	EPO CAD 98* - Objects are not re-drawn.
39	x	Fixed	Fixed	Fixed	Fixed	Fixed	NBA* Inside Drive 2000* game - The paint in the free throw lanes will either go black or will tear.
40	x	Fixed	Fixed	Fixed	Fixed	Fixed	Color corruption after Alt-Tab out and back in again with Direct3D* games and sample applications .
41	x	Fixed	Fixed	Fixed	Fixed	Fixed	Dark Omen* game - When starting the game, a window pops up saying "out of date display drivers", then the game exits.
42	x	Fixed	Fixed	Fixed	Fixed	Fixed	Winstone* 99 - High end test for Microstation* SE locks up.
43	x	x	Fixed	Fixed	Fixed	Fixed	WipeoutXL* game fails to load.
44	x	x	Fixed	Fixed	Fixed	Fixed	Star Wars* - Force Commander* - system locks up at a black screen when starting a game.
45	x	x	Fixed	Fixed	Fixed	Fixed	Mouse pointer in Rainbow Six* game is corrupted.
46	x	x	Fixed	Fixed	Fixed	Fixed	Soldier of Fortune* game has missing textures on walls and character models.
47	x	x	x	Fixed	Fixed	Fixed	Load failure in Lego* Island game.
48	x	x	x	Fixed	Fixed	Fixed	Mouse pointer is broken in Tom Clancy's Rainbow Six* game.
49	x	x	x	Fixed	Fixed	Fixed	Third Dimension* application - cannot grab an object.
50	x	x	x	Fixed	Fixed	Fixed	Some DirectX* games produce black or corrupted screens on exit.
51	x	x	x	x	Fixed	Fixed	3DMark2000* benchmark hangs system in 32MB Texture Rendering Speed test after running for long time.
52	x	x	x	x	Fixed	Fixed	Madden Football 2001* has incorrect textures in the stands.
53	x	x	x	x	x	Fixed	NASCAR* 4 game - game load fails on Windows 98 and Me and reboots system using Windows 2000.
54	x	x	x	x	x	Fixed	F1 2000 game from EA shows a transparent car model, screen corruption, and exits to the desktop when starting a game.
55	x	x	x	x	x	Fixed	Airport Tycoon* / AirMogul* / Airport Inc.* game - text boxes in the game are black with no text.
56	x	x	x	x	x	Fixed	MS Flight Simulator 2000 does not appear to be 3D accelerated. Textures are low quality and performance is slow because software rendering is being used.

Windows*95, Windows*98, and Windows* Me* 2D Applications							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Screen flickering when a Direct Draw* hardware overlay is displayed.
2	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	The graphics driver causes a GPF (General Protection Fault) when loading.
3	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Screen is not refreshed in a Direct Draw* application when the system is resumed from suspend mode.
4	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Winbench 98 and 99 - Corruption is seen in the Direct Draw* tests.
5	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Microsoft* Word 2000* and Microsoft* Excel* 2000 Toranomaki* - voice does not sync with animated screen.
6	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	RealPlayer* 7 shows garbage when playing a Media File.

Windows*95, Windows*98, and Windows* Me* 2D Applications							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
7	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Excel* 2000 - Garbage sometimes appears when the Excel client area is scrolled.
8	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	QuarkXPress* - A band of horizontal black dashes appears when opening or scrolling through a document.
9	x	Fixed	Fixed	Fixed	Fixed	Fixed	Roulette in Gamepack 2000* shows garbage around a ball.
10	x	Fixed	Fixed	Fixed	Fixed	Fixed	When playing a video file in Media Player*, then entering suspend mode, the system hangs.
11	x	Fixed	Fixed	Fixed	Fixed	Fixed	AVI files are corrupt during playback.
12	x	Fixed	Fixed	Fixed	Fixed	Fixed	When playing a DVD movie, green horizontal lines appear.
13	x	Fixed	Fixed	Fixed	Fixed	Fixed	Age of Empires* 2: The Age of Kings* - Dotted lines appear in the fog.
14	x	Fixed	Fixed	Fixed	Fixed	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.
15	x	Fixed	Fixed	Fixed	Fixed	Fixed	Skipping and jittering seen in DVD movies.
16	x	Fixed	Fixed	Fixed	Fixed	Fixed	QuickTime* 4.1 movies turn green or show corruption when dragged across the screen.
17	x	x	Fixed	Fixed	Fixed	Fixed	Hauppauge* TV tuner display is corrupted.
18	x	x	Fixed	Fixed	Fixed	Fixed	Nothing is displayed during AVI playback in preview if Web Content is enabled.
19	x	x	x	Fixed	Fixed	Fixed	Software DVD players lock up after extended playback.
20	x	x	x	x	x	Fixed	Symantec* PCAnywhere* gets one of the following errors when starting a remote control session: "Explorer has caused an error in DIBENG.DLL. Explorer will now close." or "EXPLORER caused a general protection fault in module I81XDW9X.DRV at 0001:00007787."
21	x	x	x	x	x	Fixed	Microsoft* Excel* 2000 - some of the lines disappear when you scroll the spreadsheet.

Windows*95, Windows*98, and Windows* Me* Display Modes/Settings							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Gamma range incorrect for overlay color controls
2	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	In the properties page for TV-out and flat panel devices, the TV and flat panel can't be disabled or enabled.
3	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Switching TV-out setting from overscan to underscan (large picture to small picture) mode shifts the desktop down and to the left.
4	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	In the properties page for TV-out devices, the TV checkbox gets unchecked after monitor enters power saving mode.
5	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Blank screen on TV when PAL mode or NTSC J is selected.
6	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	PAL-G TV-out mode is not listed in the PAL drop-down menu.
7	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	The system does not resume correctly from S3 (Suspend to RAM) suspend when multi-monitor is enabled.
8	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	With any PCI graphic card installed, the system will not resume from standby (ACPI S1).
9	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	In 1280x1024 24bpp mode, after several wake-ups from standby (ACPI S1), a normal screen doesn't show.
10	Fixed	Fixed	Fixed	Fixed	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.
11	Fixed	Fixed	Fixed	Fixed	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.

Windows*95, Windows*98, and Windows* Me* Display Modes/Settings							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
12	Fixed	Fixed	Fixed	Fixed	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.
13	Fixed	Fixed	Fixed	Fixed	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.
14	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Blinking screen when disk or mouse activity occurs if a flat panel is connected with a Sil154Tx chip.
15	x	Fixed	Fixed	Fixed	Fixed	Fixed	Black screen when switching from a CRT monitor to TV-out
16	x	Fixed	Fixed	Fixed	Fixed	Fixed	Flat Panel will not scale after a reboot to MS-DOS* mode or a switch to 16 colors
17	x	Fixed	Fixed	Fixed	Fixed	Fixed	After resuming from suspend, the buttons on all windows are broken.
18	x	Fixed	Fixed	Fixed	Fixed	Fixed	When multi-monitor is enabled, S3 suspend to RAM does not resume correctly.
19	x	Fixed	Fixed	Fixed	Fixed	Fixed	Driver does not load on Windows* 95 retail or OSR 1 versions.
20	x	Fixed	Fixed	Fixed	Fixed	Fixed	Low resolution video modes below 640x480 show screen corruption.
21	x	Fixed	Fixed	Fixed	Fixed	Fixed	The system locks while changing icon sizes.
22	x	Fixed	Fixed	Fixed	Fixed	Fixed	Hardware cursors (mouse pointers) smaller than 32x32 are corrupted. Those greater than 32x32 cause the system to hang.
23	x	x	Fixed	Fixed	Fixed	Fixed	System locks up when no TV is connected to the TV-out connector when booting Windows* Me*.
24	x	x	Fixed	Fixed	Fixed	Fixed	White lines of corruption and/or system freeze appear during Windows* shutdown.
25	x	x	Fixed	Fixed	Fixed	Fixed	Turning off monitor, then going into stand by causes the PC to fail to wake up.
26	x	x	Fixed	Fixed	Fixed	Fixed	Preview of background JPEG images are corrupt while stretch is selected in Windows* Me*.
27	x	x	Fixed	Fixed	Fixed	Fixed	Disabling and re-enabling multimonitor causes the system to crash.
28	x	x	Fixed	Fixed	Fixed	Fixed	The refresh rate goes out of a monitor's range when set to "optimal".
29	x	x	Fixed	Fixed	Fixed	Fixed	A monitor is sometimes detected as a "Default Monitor" instead of a "Plug and Play Monitor".
30	x	x	x	Fixed	Fixed	Fixed	Black screen is seen when resuming from S1 or S3 (Suspend to RAM) when the system is set for 640x480 or 1600x1200 resolution.
31	x	x	x	Fixed	Fixed	Fixed	Refresh rate is set to 72 Hz on some flat panel displays that do not support it.
32	x	x	x	Fixed	Fixed	Fixed	The system hangs up while waking up from standby with a PCI video card installed and the integrated graphics controller disabled.
33	x	x	x	Fixed	Fixed	Fixed	TV-out fine tuning: Brightness is set to maximum instead of default value on install.
34	x	x	x	Fixed	Fixed	Fixed	The color palette is modified on a PCI video card, causing screen corruption.
35	x	x	x	Fixed	Fixed	Fixed	A full screen DOS prompt is not centered correctly on a TV.
36	x	x	x	x	Fixed	Fixed	Screen corruption appears or the display shuts off when resuming from hibernation or stand by.

Resolved Driver Issues (Windows* NT 4.0 Release)

Windows* NT 4.0 3D Applications and Games							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Indy 3D* demo doesn't run. Only the background color is displayed in the window.

Windows* NT 4.0 3D Applications and Games							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
2	x	Fixed	Fixed	Fixed	Fixed	Fixed	3D Maze OpenGL* screen saver causes an application error when the Display Properties window is left open.
3	x	Fixed	Fixed	Fixed	Fixed	Fixed	Quake* 2 game runs very slowly after doing an Alt+Tab out and back in.
4	x	Fixed	Fixed	Fixed	Fixed	Fixed	GLQuake* - Alt+Tab out of the game and back in causes corruption, spontaneous reboots, or slowness in the game.
5	x	Fixed	Fixed	Fixed	Fixed	Fixed	Winstone* 99 - High end test for Microstation* SE locks up.
6	x	x	Fixed	Fixed	Fixed	Fixed	3D pipes screen saver displays colored blocks in 24 bit color mode.

Windows* NT 4.0 2D Applications							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Screen garbage in Lotus* Freelance* 2000 screen show
2	x	x	Fixed	Fixed	Fixed	Fixed	DVD movies do not display correctly when downscaled (flip problem).
3	x	x	x	x	x	Fixed	When you open Quicktime* application and you view the sample that comes with Quicktime, an application exception error occurs when you close the window.

Windows* NT 4.0 Display Modes/Settings							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Blue screen corruption on reboot when TV-out is set for PAL or NTSC_J mode
2	Fixed	Fixed	Fixed	Fixed	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	Fixed	Fixed	Fixed	Fixed	Fixed	Driver properties incorrectly shows the Intel® 815 chipset as being an Intel® 810 chipset.
4	x	Fixed	Fixed	Fixed	Fixed	Fixed	Hardware cursors (mouse pointers) smaller than 32x32 are corrupted. Those greater than 32x32 cause the system to hang.
5	x	x	Fixed	Fixed	Fixed	Fixed	A monitor is sometimes detected as a "Default Monitor" instead of a "Plug and Play Monitor".
6	x	x	x	Fixed	Fixed	Fixed	Video adapter string shows up in Display Properties as "82815" graphics on Intel® 810 and 810E chipsets.
7	x	x	x	Fixed	Fixed	Fixed	TV-out fine tuning: Brightness is set to maximum instead of default value on install.

Resolved Driver Issues (Windows* 2000 Release)

Windows* 2000 2D Applications							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Overlay not working with third party video capture drivers
2	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Third party video capture drivers will not load.
3	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Winbench 98 and 99 - Corruption is seen in the Direct Draw* tests.
4	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	OASYS* viewer - document is not scrolled up correctly.
5	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Ichitaro* - Horizontal garbage lines appear when running a slide in the autoplay mode.
6	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Excel* 97 - screen corruption when zooming in to 400% and then opening and closing the clip gallery.
7	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Text in Notepad is corrupted when its client area is scrolled.
8	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Lotus Word Pro* - Screen corruption occurs when a figure object is duplicated to another place.
9	x	Fixed	Fixed	Fixed	Fixed	Fixed	DVD* movies hang after playing for a couple of minutes
10	x	Fixed	Fixed	Fixed	Fixed	Fixed	With a software DVD player that uses HVA, menus show corruption on some DVD discs
11	x	Fixed	Fixed	Fixed	Fixed	Fixed	Skipping and jittering seen in DVD movies.
12	x	x	Fixed	Fixed	Fixed	Fixed	Nothing is displayed during AVI playback in preview if Web Content is enabled.
13	x	x	Fixed	Fixed	Fixed	Fixed	DVD movies do not display correctly when downscaled (flip problem).
14	x	x	x	Fixed	Fixed	Fixed	Occasionally, an access violation error occurs when resizing a software DVD video window.
15	x	x	x	x	Fixed	Fixed	MPEG playback corrupted when Windows Media Player is reduced or when MPEG is shown in Web Content preview panel.
16	x	x	x	x	x	Fixed	Blue screen when switching display type (CRT/TV/Flat Panel) when running DirectX Video Acceleration enabled DVD player.

Windows* 2000 3D Applications and Games							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Final Reality* application has visual anomalies/missing textures.
2	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Mipmap corruption problems
3	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Madden 2000* game has the wrong color field due to missing textures.
4	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Corruption on left side of main menu screen in Driver game, Lunatik*, Grand Theft Auto 2* and Demolition Race* games
5	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	In Boarder Zone* game, short white horizontal lines appear during gameplay.
6	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	3D Winbench 2000* - many problems seen during tests.
7	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Homeworld* game - screen becomes blank after Alt-Tab out and then back in.
8	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Descent: Freespace* game has missing text on the logon screen.
9	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Prince of Persia* - the mouse pointer disappears on the main menu.
10	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Blood 2* game - black screen on main menu.
11	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Dark Stone* game - main menu has missing text
12	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Drakan* game - main menu shows flickering
13	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Motocross Madness* - main menu has text cut off

Windows* 2000 3D Applications and Games							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
14	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	System reboots itself when resizing the display window of DirectX* 7 Direct3D* sample applications
15	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Star Wars: Episode 1 Racer* - main menu flickers and a page fault error occurs when playing the game
16	x	Fixed	Fixed	Fixed	Fixed	Fixed	Trophy Bass 3D* hard hangs with severe corruption when starting a game.
17	x	Fixed	Fixed	Fixed	Fixed	Fixed	3D Winbench 2000* - quality tests fail.
18	x	Fixed	Fixed	Fixed	Fixed	Fixed	Blood 2* - main menu shows flickering
19	x	Fixed	Fixed	Fixed	Fixed	Fixed	GLQuake* - Alt+Tab out of the game and back in causes corruption, spontaneous reboots, or slowness in the game.
20	x	Fixed	Fixed	Fixed	Fixed	Fixed	NBA* Inside Drive 2000* game - The paint in the free throw lanes will either go black or will tear.
21	x	Fixed	Fixed	Fixed	Fixed	Fixed	Color corruption after Alt-Tab out and back in again with Direct3D* games and sample applications .
22	x	Fixed	Fixed	Fixed	Fixed	Fixed	Dark Omen* game - When starting the game, a window pops up saying "out of date display drivers", then the game exits.
23	x	Fixed	Fixed	Fixed	Fixed	Fixed	Motocross Madness* game shows texture junction gaps.
24	x	x	x	x	Fixed	Fixed	Madden Football 2001* has incorrect textures in the stands.
25	x	x	x	x	x	Fixed	NASCAR* 4 game - game load fails on Windows 98 and Me and reboots system using Windows 2000.

Windows* 2000 Display Modes/Settings							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
1	Fixed	Fixed	Fixed	Fixed	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	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Flat panel scaling doesn't work after a resume from standby (S1) or suspend (S3).
3	Fixed	Fixed	Fixed	Fixed	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	Fixed	Fixed	Fixed	Fixed	Fixed	TV-out refuses to wake up after timing out from power saving mode.
5	x	Fixed	Fixed	Fixed	Fixed	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	Fixed	Fixed	Fixed	Fixed	Fixed	The screen content is scrambled when a crash dump is initiated.
7	x	Fixed	Fixed	Fixed	Fixed	Fixed	Hardware cursors (mouse pointers) smaller than 32x32 are corrupted. Those greater than 32x32 cause the system to hang.
8	x	x	Fixed	Fixed	Fixed	Fixed	An extra mouse cursor appears on primary monitor after the first cursor touches an Explorer window on the secondary monitor.
9	x	x	Fixed	Fixed	Fixed	Fixed	A monitor is sometimes detected as a "Default Monitor" instead of a "Plug and Play Monitor".
10	x	x	x	Fixed	Fixed	Fixed	"Kernel_Mode_Exception_Not_Handled" blue screen error is seen when resuming from S3 (Suspend to RAM).
11	x	x	x	Fixed	Fixed	Fixed	Video adapter string shows up in Display Properties as "82815" graphics on Intel® 810 and 810E chipsets.
12	x	X	x	Fixed	Fixed	Fixed	TV-out fine tuning: Brightness is set to maximum instead of default value on install.

Windows* 2000 Display Modes/Settings							
NO.	PV4.1	PV5.1	PV6.0	PV6.1	PV6.2	PV6.3.1	Issue
13	x	x	x	x	Fixed	Fixed	While the integrated display adapter is set to secondary in a multimonitor setup, disabling it from the display properties page causes the display to become corrupted.
14	x	x	x	x	x	Fixed	System icon corruption when the active desktop is turned on and "show the icons using all possible colors" is turned on.

Additional Driver Changes

No.	Ver.	Additional Driver Change																																
1	PV4.1	Software DVD* HWMC (Hardware Motion Compensation) support via Microsoft* HVA (Hardware Video Acceleration) interface for Windows* 2000																																
2	PV4.1	DirectX* 7 support for Windows* 98, and Windows* 95, and Windows* 2000																																
3	PV4.1	PAL-G TV-out mode added.																																
4	PV5.1	Added 1280x768 @ 60 Hz mode for flat panels																																
5	PV5.1	Added 1280x1024 @ 60 mode for flat panels																																
6	PV5.1	Removed two screen resolutions - 720x480 and 720x480																																
7	PV5.1	Support removed for synchronous display to a TV and a CRT monitor.																																
8	PV5.1	OpenGL* 3D screensavers are no longer hardware accelerated in Windows* 9X or Windows* 2000. They are now displayed using software rendering in all operating systems except Windows* NT 4.0.																																
9	PV6.0	DirectDraw* hardware overlay support and hardware cursor support added for the following video modes: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th></th> <th>320x200</th> <th>320x240</th> <th>352x480</th> <th>352x576</th> <th>400x300</th> <th>512x384</th> <th>640x400</th> </tr> </thead> <tbody> <tr> <td>256 colors, 70 Hz</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> </tr> <tr> <td>64k colors, 70 Hz</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> </tr> <tr> <td>16M colors, 70 Hz</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> <td>C, O</td> </tr> </tbody> </table> <p>C = Hardware cursor O = Hardware overlay</p>		320x200	320x240	352x480	352x576	400x300	512x384	640x400	256 colors, 70 Hz	C, O	C, O	C, O	C, O	C, O	C, O	C, O	64k colors, 70 Hz	C, O	C, O	C, O	C, O	C, O	C, O	C, O	16M colors, 70 Hz	C, O	C, O	C, O	C, O	C, O	C, O	C, O
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10	PV6.1	Support for Hardware Motion Compensation using the DVA (DirectX* Video Acceleration) API (Application Program Interface) in Windows 2000. This allows for smooth playback of DVD's using a software DVD player.																																
11	PV6.2	Support for Hardware Motion Compensation using the DVA (DirectX* Video Acceleration) API (Application Program Interface) in Windows 95, 98 and Me. This allows for smooth playback of DVD's using a software DVD player.																																
12	PV6.2	Intel® 810E2 and 815EM chipset support added.																																
13	PV6.2	Added support for 848x480 screen resolution for digital displays that support this mode.																																
14	PV6.2	DirectX* 8 support for Windows* Me (Millennium Edition) Windows* 98, and Windows* 95, and Windows* 2000																																
15	PV6.3.1	LFP (Local Flat Panel) support added to driver in order to support LDVS digital displays that do not contain EDID (Extended Display Identification Data).																																
16	PV6.3.1	TV-out active detection support added. This allows a TV device to be detected when booting into Windows, when entering Display Properties, when a hot key is pressed, and when resuming from a suspended state.																																
17	PV6.3.1	Support added for 1400x1050 reduced blanking mode screen resolution for digital displays that support this mode.																																
18	PV6.3.1	Support added for 100 Hz refresh rate for 640x480, 800x600, and 1024x768 video resolutions.																																

Driver Utility Changes

No.	Ver.	Driver Utility Change
1	PV5.1	An updated driver interface has been added with quick links to Intel® Web Sites and Online Support.
2	PV5.1	A "schemes" feature has been added to save and later recall graphics settings and to launch games and applications.
3	PV5.1	A desktop context menu has been added that allows a quick change of graphics settings or a recall of a saved scheme.
4	PV5.1	The integrated diagnostic tool allows viewing of all video modes supported by the display adapter.
5	PV6.3.1	System tray icon added.
6	PV6.3.1	New desktop context menus added for saving schemes, enabling and disabling the tray icon and hot keys, and quick change of graphics settings or a recall of a saved scheme.
7	PV6.3.1	Hot key support added.
8	PV6.3.1	New navigation system for graphics tabs that includes a sidebar along the left side of the window.

Documentation Changes

NO.	Ver.	Documentation Change
1	PV4.1	Removed all issues that were resolved prior to PV 2.0.
2	PV4.1	Moved VBIOS resolved issues to a separate document and added a link to new location in the VBIOS section.
3	PV5.1	Added Intel® 815 chipset family as a supported chipset.
4	PV5.1	Added Windows* Millennium Edition* as a supported operating system.
5	PV6.2	Removed all issues that were resolved prior to PV 4.1