



# **Intel® 810 and Intel® 810E Chipset Graphics Software**

**Release Notes**

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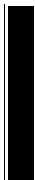
*April 2000*

**Intel® 810 and Intel® 810E Chipset Software**

**Windows\* 95 and Windows\* 98 Production Version 4.1**

**Windows\* NT 4.0 Production Version 4.1**

**Windows\* 2000 Production Version 4.1**





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# Revision History

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



## **Preface**

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This document contains resolved software issues affecting the Microsoft Windows\* 95, Windows\* 98, Windows\* NT 4.0, and Windows\* 2000 releases that use the Intel® 810 and Intel® 810E chipset graphics accelerator. This document is intended for end users of the Intel® 810 and Intel® 810E chipsets, it contains specification changes and known issues regarding the software for the Intel® 810 and Intel® 810E chipsets.

## ***Summary Table of Resolved Issues***

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The following table lists the resolved software issues that apply to all currently available Intel® 810 and Intel® 810E graphics software 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® 810 and Intel® 810E chipset driver.  |
| N/A:   | Not applicable   |



## Resolved Driver Issues (Windows\* 95 and Windows\* 98 Release)

| Windows*95 and Windows*98 3D Applications and Games |       |       |       |       |       |       |       |  |
|---|-------|-------|-------|-------|-------|-------|-------|--|
| NO.   | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue  |
| 1   | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Monster Truck Madness* intro corruption  |
| 2   | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | Corruption running Twist*, Donut* and FoxBear* applications simultaneously   |
| 3   | 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 | Atlantis* and Heretic II* freeze when maximizing and exiting the applications.   |
| 5   | x     | 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 | Quake II* application runs very slowly with 32 MB of system memory.  |
| 7   | x     | x     | x     | 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 | Starsiege TRIBES* application blacks out when launched at 640x480 display resolution.  |
| 9   | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | A general protection fault (GPF) occurs when exiting G-Nome* game application.   |
| 10  | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | Motocross Madness* application fails to load under Windows* 95.  |
| 11  | 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   | Thief * and System Shock* 2,D3D application hangs under Windows 98 when game play is attempted.  |
| 13  | x     | x     | x     | 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 | Textures disappear when running Hyperblade* application with Rearview Mirror displayed under Windows 98 with DX6.1 installed.                    |
| 15  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Severe Corruption in Tomb Raider 3 Game Application  |
| 16  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Tunnel & Sphere D3D Applications Corrupted when Restoring S3 State   |
| 17  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | 3D Mark Max99 Application Hangs  |
| 18  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Alt-Tab Fails on Quake Engine Games  |
| 19  |       | x     | x     | 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 | "Busy" Cursor remains on for 5-10 seconds after an OpenGL application starts   |
| 21  |       | x     | x     | Fixed | Fixed | Fixed | Fixed | Screen Corruption (blinking lines & color changing) occurs with Flight Simulator* 98   |

| Windows*95 and Windows*98 3D Applications and Games |       |       |       |       |       |       |       |  |
|---|-------|-------|-------|-------|-------|-------|-------|--|
| NO.   | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue  |
| 22  |       | x     | x     | Fixed | Fixed | Fixed | Fixed | Delayed display response to mouse movement while playing Unreal* or Half- Life*  |
| 23  | x     | x     | x     | x     | 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 | In Gamepack 2000 - roulette, a garbage rectangle is seen around the ball.  |
| 25  | x     | x     | x     | x     | x     | x     | Fixed | Screen corruption in Rogue Squadron 3D* game   |
| 26  | x     | x     | x     | x     | x     | x     | Fixed | Screen flickering when a Direct Draw* hardware overlay is displayed.   |
| 27  | x     | x     | x     | x     | x     | x     | Fixed | Madden 2000* game has the wrong color field due to missing textures.   |
| 28  | x     | x     | x     | x     | x     | x     | 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 | In Boarder Zone* game, short white horizontal lines appear during gameplay.  |
| 30  | x     | x     | x     | x     | x     | x     | Fixed | 3D Mark Max* 99 hangs during benchmark test.   |
| 31  | x     | x     | x     | x     | x     | x     | Fixed | 3D Winbench 2000* - many problems seen in tests.   |
| 32  | x     | x     | x     | x     | x     | x     | 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 | 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 | The Z-Buffer is not being enabled correctly in DirectX* 7 applications.  |
| 35  | x     | x     | x     | x     | x     | x     | Fixed | Prince of Persia* - the mouse pointer disappears on the main menu.   |
| 36  | x     | x     | x     | x     | x     | x     | Fixed | Missing textures in Direct3D* sample applications.   |
| 37  | x     | x     | x     | x     | x     | x     | Fixed | Unreal Tournament* - texture corruption in OpenGL* mode.   |
| 38  | x     | x     | x     | x     | x     | x     | Fixed | Blood 2* - main menu shows flickering  |
| 39  | x     | x     | x     | x     | x     | x     | Fixed | Dark Stone* game - main menu shows flickering  |
| 40  | x     | x     | x     | x     | x     | x     | Fixed | Drakan* game - main menu shows flickering  |
| 41  | x     | x     | x     | x     | x     | x     | Fixed | Motocross Madness* - main menu has text cut off  |
| 42  | x     | x     | x     | x     | x     | x     | 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 | OpenGL* 3D screensavers show blank screen when a full-screen DOS box is activated.   |
| 44  | x     | x     | x     | x     | x     | x     | Fixed | Unreal Tournament* - on several deathmatch levels, the scene is corrupted and the background shows through in front of objects                               |
| 45  | x     | x     | x     | x     | x     | x     | Fixed | S3TC* compressed textures in OpenGL* have incorrect subimage.  |
| 46  | x     | x     | x     | x     | x     | x     | Fixed | Forsaken* game hangs with DirectX* 5.0 runtimes.   |

| Windows*95 and Windows*98 3D Applications and Games |       |       |       |       |       |       |       |   |
|---|-------|-------|-------|-------|-------|-------|-------|---|
| NO.   | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue   |
| 47  | x     | x     | x     | x     | x     | x     | Fixed | 3D WinBench 98 Triangle Tests hang with DirectX 6.1 runtimes.   |
| 48  | x     | x     | x     | x     | x     | x     | 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 | Gamepack 2000* - In draw poker, the image is broken when clicking on some of the cards.   |
| 50  | x     | x     | x     | x     | x     | x     | 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. |

| Windows*95 and Windows*98 2D Applications |       |       |       |       |       |       |       |   |
|---|-------|-------|-------|-------|-------|-------|-------|---|
| NO.                                       | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue   |
| 1   | x     | x     | x     | 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 | 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 | Screen corruption occurs when running the Freel97.prz sample file of Lotus* Freelance '97.  |
| 4   | 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 | 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 | 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 | 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 | Under the Japanese version of Windows 95, playing a full-screen AVI causes a GPF.   |
| 9   | x     | x     | x     | 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 | 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   | 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 | Software DVD Video Jitter when Downscaling  |



| Windows*95 and Windows*98 2D Applications |       |       |       |       |       |       |       |  |
|---|-------|-------|-------|-------|-------|-------|-------|--|
| NO.                                       | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue  |
| 13  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Color Pattern Does not Match using Borland Delphi4.0 Application   |
| 14  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Red Line Appears on the Right of Software DVD Playback   |
| 15  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | System Hangs When MPEG Ends while Monitor is Sleep   |
| 16  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Lotus Approach '97 has Line Corruption   |
| 17  | x     | 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 | Software DVD Video Shakes in Multimonitor Configuration  |
| 19  | x     | x     | Fixed | Fixed | Fixed | Fixed | Fixed | MPEG Movie Black Screens   |
| 20  | x     | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Software DVD Green Line Screen Corruption  |
| 21  | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | GPF Occurs When Running "Home" Application and attempting to print a pie diagram   |
| 22  |       | x     | x     | 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 | Characters overwritten in notepad (screen corruption)  |
| 24  | x     | x     | x     | 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 | GPF occurs when changing display modes on some software DVD players  |
| 26  | x     | x     | x     | 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 | SYSTEST.EXE has line of white pixels above the progress indicator.   |
| 28  | x     | x     | x     | 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 | Software DVD has shadows in the subpicture when bobbing.   |
| 30  | x     | x     | x     | x     | 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 | When Macrovision* protection is enabled, brightness does not stay the same in software DVD.  |
| 32  | x     | x     | x     | x     | x     | x     | Fixed | Screen flickering when a Direct Draw* hardware overlay is displayed.   |
| 33  | x     | x     | x     | x     | x     | x     | Fixed | The graphics driver causes a GPF (General Protection Fault) when loading.  |
| 34  | x     | x     | x     | x     | x     | x     | 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 | Winbench 98 and 99 - Corruption is seen in the Direct Draw* tests.   |
| 36  | x     | x     | x     | x     | x     | x     | Fixed | Microsoft* Word 2000* and Microsoft* Excel* 2000 Toranomaki* - voice does not sync with animated screen.   |



| Windows*95 and Windows*98 2D Applications |       |       |       |       |       |       |       |  |
|---|-------|-------|-------|-------|-------|-------|-------|--|
| NO.                                       | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue  |
| 37  | x     | x     | x     | x     | x     | x     | Fixed | RealPlayer* 7 shows garbage when playing a Media File.   |
| 38  | x     | x     | x     | x     | x     | x     | Fixed | Excel* 2000 - Garbage sometimes appears when the Excel client area is scrolled.                        |
| 39  | x     | x     | x     | x     | x     | x     | Fixed | QuarkXPress* - A band of horizontal black dashes appears when opening or scrolling through a document. |



| Windows*95 and Windows*98 Display Modes/Settings |       |       |       |       |       |       |       |   |
|--|-------|-------|-------|-------|-------|-------|-------|---|
| NO.  | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue   |
| 1  | 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 | 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 | Positioning fails when running in PAL mode, in the TV-out configuration.  |
| 4  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Hsync and Vsync Polarities out of Vesa Specifications   |
| 5  | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Full Screen DOS Box Centered with Flat Panel Connected  |
| 6  | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | Video Corruption Visible on Some Monitors   |
| 7  | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | 720x480 Mode Disappears from Slider   |
| 8  | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | Flat Panel DOS Screen does not Scale  |
| 9  | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | Flat Panels are not Enabled when Power is Off   |
| 10   |       | x     | x     | 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 | Memory leak after each resume from suspend mode.  |
| 12   | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | System boots into NTSC TV Out mode even if the PAL jumper setting is set on the Chromtel* 7007 daughtercard.  |
| 13   | x     | x     | x     | x     | 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 | In Microsoft Windows* 98 SE, selecting then deselecting the monitor while in NTSC mode causes the TV out display to switch to PAL mode.   |
| 15   | x     | x     | x     | x     | 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 | 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 | 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 | 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 | 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 | Gamma range incorrect for overlay color controls  |

| Windows*95 and Windows*98 Display Modes/Settings |       |       |       |       |       |       |       |   |
|--|-------|-------|-------|-------|-------|-------|-------|---|
| NO.  | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue   |
| 21   | x     | x     | x     | x     | x     | x     | 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 | 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 | 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 | Blank screen on TV when PAL mode or NTSC J is selected.   |
| 25   | x     | x     | x     | x     | x     | x     | Fixed | PAL-G TV-out mode is not listed in the PAL drop-down menu.  |
| 26   | x     | x     | x     | x     | x     | x     | 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 | With any PCI graphic card installed, the system will not resume from standby (ACPI S1).   |
| 28   | x     | x     | x     | x     | x     | x     | 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 | 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 | 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 | 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. |
| 32   | x     | x     | x     | x     | x     | x     | 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 | Blinking screen when disk or mouse activity occurs if a flat panel is connected with a Si154Tx chip.  |

## 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 | Issue  |
| 1   | x     | Fixed | Fixed | Fixed | Fixed | Fixed | Fixed | Helicops* game application stops responding during game play, when the user crashes or completes a game level. |



| Windows* NT 4.0 3D Applications and Games |       |       |       |       |       |       |       |   |
|---|-------|-------|-------|-------|-------|-------|-------|---|
| NO.                                       | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue   |
| 2   | x     | x     | x     | 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 | 3D Screensavers do not Work at 65K Color Depth  |
| 4   | x     | x     | x     | x     | Fixed | Fixed | Fixed | In Microsoft* Golf 98, the grid and red/white pole are not shown.   |
| 5   | x     | x     | x     | x     | x     | x     | Fixed | Indy 3D* demo doesn't run. Only the background color is displayed in the window.  |

| Windows* NT 4.0 2D Applications |       |       |       |       |       |       |       |  |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|--|
| NO.                             | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue  |
| 1                               | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | Full-screen Windows DOS box disappears with TV-out enabled.  |
| 2                               | x     | x     | Fixed | Fixed | Fixed | Fixed | Fixed | NetMeeting Application has Corrupt Cursor  |
| 3                               |       | x     | 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 | Playing a certain Indeo* 5 AVI file with MPLAYER2.EXE results in video corruption.                 |
| 5                               | x     | x     | x     | Fixed | Fixed | Fixed | Fixed | Blue Screen when running Midas View Point* for 48-96 hours.  |
| 6                               |       | x     | 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 | When Macrovision* protection is enabled, brightness does not stay the same in software DVD movies. |
| 8                               | x     | x     | x     | x     | x     | x     | 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 | Issue  |
| 1                                      | x     | x     | x     | x     | x     | x     | 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 | 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. |

## 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 | Issue  |
| 1                             | x     | x     | x     | x     | x     | x     | Fixed | Overlay not working with third party video capture drivers   |
| 2                             | x     | x     | x     | x     | x     | x     | Fixed | Third party video capture drivers will not load.   |
| 3                             | x     | x     | x     | x     | x     | x     | Fixed | Winbench 98 and 99 - Corruption is seen in the Direct Draw* tests.                                   |
| 4                             | x     | x     | x     | x     | x     | x     | Fixed | OASYS* viewer - document is not scrolled up correctly.   |
| 5                             | x     | x     | x     | x     | x     | x     | Fixed | Ichitaro* - Horizontal garbage lines appear when running a slide in the autoplay mode.               |
| 6                             | x     | x     | x     | x     | x     | x     | 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 | Text in Notepad is corrupted when its client area is scrolled.                                       |
| 8                             | x     | x     | x     | x     | x     | x     | Fixed | Lotus Word Pro* - Screen corruption occurs when a figure object is duplicated to another place.      |

| Windows* 2000 3D Applications and Games |       |       |       |       |       |       |       |  |
|---|-------|-------|-------|-------|-------|-------|-------|--|
| NO.                                     | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue  |
| 1                                       | x     | x     | x     | x     | x     | x     | Fixed | Final Reality* application has visual anomalies/missing textures.  |
| 2                                       | x     | x     | x     | x     | x     | x     | Fixed | Mipmap corruption problems   |
| 3                                       | x     | x     | x     | x     | x     | x     | Fixed | Madden 2000* game has the wrong color field due to missing textures.   |
| 4                                       | x     | x     | x     | x     | x     | x     | 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 | In Boarder Zone* game, short white horizontal lines appear during gameplay.  |
| 6                                       | x     | x     | x     | x     | x     | x     | Fixed | 3D Winbench 2000* - many problems seen during tests.   |
| 7                                       | x     | x     | x     | x     | x     | x     | Fixed | Homeworld* game - screen becomes blank after Alt-Tab out and then back in.   |
| 8                                       | x     | x     | x     | x     | x     | x     | Fixed | Descent: Freespace* game has missing text on the logon screen.   |
| 9                                       | x     | x     | x     | x     | x     | x     | Fixed | Prince of Persia* - the mouse pointer disappears on the main menu.   |
| 10                                      | x     | x     | x     | x     | x     | x     | Fixed | Blood 2* game - black screen on main menu.   |
| 11                                      | x     | x     | x     | x     | x     | x     | Fixed | Dark Stone* game - main menu has missing text  |
| 12                                      | x     | x     | x     | x     | x     | x     | Fixed | Drakan* game - main menu shows flickering  |

| Windows* 2000 3D Applications and Games |       |       |       |       |       |       |       |  |
|---|-------|-------|-------|-------|-------|-------|-------|--|
| NO.                                     | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue  |
| 13                                      | x     | x     | x     | x     | x     | x     | Fixed | Motocross Madness* - main menu has text cut off  |
| 14                                      | x     | x     | x     | x     | x     | x     | Fixed | System reboots itself when resizing the display window of DirectX* 7 Direct3D* sample applications   |
| 15                                      | x     | x     | x     | x     | x     | x     | Fixed | Star Wars: Episode 1 Racer* - main menu flickers and a page fault error occurs when playing the game |

| Windows* 2000 Display Modes/Settings |       |       |       |       |       |       |       |  |
|--------------------------------------|-------|-------|-------|-------|-------|-------|-------|--|
| NO.                                  | PV2.0 | PV2.1 | PV2.5 | PV3.0 | PV3.2 | PV3.3 | PV4.1 | Issue  |
| 1                                    | x     | x     | x     | x     | x     | x     | 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 | Flat panel scaling doesn't work after a resume from standby (S1) or suspend (S3).  |
| 3                                    | x     | x     | x     | x     | x     | x     | Fixed | A flat panel display connected to the onboard graphics does not function when a PCI graphics card is used as the primary display.                                  |

## 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:<br><a href="http://developer.intel.com/design/software/drivers/platform/810.htm">http://developer.intel.com/design/software/drivers/platform/810.htm</a> |       |        |        |        |        |             |       |       |

## 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.   |

## 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. |

## 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 added a link to new location in the VBIOS section.   |