NEXTSTEP for Intel Processors Release 3.3
Display Driver Overview

Driver: Diamond Stealth
Driver Overview: NeXTanswer #1941
Last Update: March 25, 1996

Availability Information

Newer Released Driver in NeXTanswers: Yes, Version 3.32, as NeXTanswer #1939
Newer Beta Driver in NeXTanswers: No, Version 0.00, as NeXTanswer #

Driver Name / Installer .pkg: DiamondStealthDisplayDriver
Driver Type: Display
Driver Scope: Product Family
Supported Components: S3 732 (Trio32), S3 764 (Trio64), S3 764 (Trio64V+), S3 801, S3 805, S3 864 (Vision), S3 868 (Vision), S3 911
PC Bus / Interface Supported by Driver*: PCI, VL-Bus

General Overview notes: This graphics driver is designed to support the VL-Bus & PCI versions of the Stealth 64 Graphics adapters from Diamond Computer Corp. These cards are based on the or S3-968, S3-868 or S3-Trio graphics controller chipsets and support 2MB or 4 MB of RAM.

This driver replaces the older Diamond Stealth64 driver.

Supported Products / Add-on Adapters:
Diamond Stealth 64 DRAM PCI-Bus Display Adapter
Diamond Stealth 64 DRAM VL-Bus Display Adapter
Diamond Stealth 64 Video PCI-Bus Display Adapter
Diamond Stealth 64 Video VL-Bus Display Adapter
Diamond Stealth 64 VRAM PCI-Bus Display Adapter
Diamond Stealth SE PCI-Bus Display Adapter

Diamond Stealth SE VL-Bus Display Adapter
Diamond Stealth 64 DRAM T PCI-Bus Display Adapter
Diamond Stealth 64 DRAM T VL-Bus Display Adapter

Supported Products / Systems (ie integrated into PC System):

Special Features of Driver / Driver Notes:
This driver does not support gamma correction in 16 and 24 bit modes.   This results in a
somewhat dim screen when using 16 bits per pixel.   Also, in these modes the brightness
slider in preferences is inoperative.

This device driver provides information in the Configure application's help panel. Choose
Info>Help from the Configure menu and scroll down to find this device driver's help topic.

Display Driver Details

Supported Connectors: 15-pin High Density (VGA)
Access Mode: Linear Framebuffer
Adapter Memory: 1MB DRAM, 1MB VRAM, 2MB DRAM, 2MB VRAM, 4MB VRAM

Display Modes (Number in () after resolution indicates frame buffer size required)

32 Bit Color Modes*:
1024x768 (4MB+), 1152x864 (4MB+), 640x480 (2MB+), 800x600 (2MB+)

16 Bit Color Modes*:
1024x768 (2MB+), 1152x864 (2MB+), 1280x1024 (4MB+), 1600x1200 (4MB+), 640x480
(1MB+), 800x600 (1MB+)

8 Bit Color / Greyscale Modes*:
1024x768 (1MB+), 1152X864 (1MB+), 1280x1024 (2MB+), 1600x1200 (2MB+), 640X480
(1MB+), 800x600 (1MB+)

Known Problems

· When used with the Diamond Stealth SE boards (both PCI and VL) configured for 800x600 8-bit Greyscale, some video artifacts and noise may be seen when viewing NeXTTIme movies or performing other graphics-intensive operations. One of the color modes is recommended if this occurs.

· Diamond has changed the PCI deviceID on their newer Stealth adapters.   This will cause autodetection to fail, thus the NEXTSTEP driver will defualt to VGA display mode.   Under NEXTSTEP 3.3, the workaround is to click Expert... while inspecting the driver in Configure.app, then modify the value of the Auto Detect setting to read 0x88d05333 0x88d15333 0x88f05333.

· Diamond Stealth 64 Series 2001 does not use an S3 controller, it uses the ARK Logic which is not supported.

Driver Version Notes

Future Planning

Future / Update Planning:
Reason for New Driver / Update:
New Driver / Update Timeframe:

New Driver / Update Description:

Note: Information contained in the "Future Planning" section of this document does not constitute a commitment on the part of NeXT to complete the planned development work.

* - Indicates information that is inclusive of the entire capability of this driver. Not all devices supported by this driver may include all features listed. Check any available NeXTanswers and the hardware manual for the device for additional information.

Product Vendor