NEXTSTEP for Intel Processors Release 3.3
Display Driver Overview

Driver: ELSA WINNER Multiple Display
Current Availability: Released
Driver Location (if not on CDROM): NeXTanswer #1662
Driver Overview: NeXTanswer #1661
Last Update: May 24 1995

Driver Name / Installer .pkg: ELSAWINNERMultipleDisplayDriver.pkg
Driver Type: Display
Driver Scope: Product Family
Component Supported: 864, 964, Vision868, Vision968
Component Manufacturer: S3
PC Bus / Interface Supported by Driver*: PCI

General Overview notes: This graphics driver is designed to support the PCI versions of the *WINNER 2000PRO/X* and *WINNER 1000AVI* Graphics adapters from ELSA GmbH, Aachen, Germany. The *WINNER 2000PRO/X* are based on the S3 Vision968 Graphics controller chipset and support 2, 4 or 8 MB of VRAM. For a description of the *WINNER 2000PRO/X*, see NeXTanswer #1658; the *WINNER 1000AVI* is described in NeXTanswer #1656. This driver supports all configurations including a broad variety of high-resolution and high-color (32bit) modes. The high performance RAMDAC on these adapters allows support of very high resolutions including 1600x1200 with 16-bit color.

Supported Products / Add-on Adapters:
ELSA WINNER 2000PRO/X-PCI-8   (PCI, 8MB VRAM, 250MHz RAMDAC)
ELSA WINNER 2000PRO/X-PCI-4   (PCI, 4MB VRAM, 220MHz RAMDAC)
ELSA WINNER 2000PRO/X-PCI-2   (PCI, 2MB VRAM, 220MHz RAMDAC)
ELSA WINNER 1000AVI-PCI-2   (PCI, 2MB DRAM, 135MHz RAMDAC)
ELSA WINNER 1000AVI-PCI-1   (PCI, 1MB DRAM, 100MHz RAMDAC)
ELSA WINNER 2000PRO-PCI-H   (PCI, 4MB VRAM, 200MHz RAMDAC)
ELSA WINNER 2000PRO-PCI-4   (PCI, 4MB VRAM, 175MHz RAMDAC)

ELSA WINNER 2000PRO-PCI-2   (PCI, 2MB VRAM, 135MHz RAMDAC)
ELSA WINNER 1000PRO-PCI-2   (PCI, 2MB DRAM, 135MHz RAMDAC)
ELSA WINNER 1000PRO-PCI-1   (PCI, 1MB DRAM, 100MHz RAMDAC)

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

Special Features of Driver / Driver Notes:

This driver allows the installation of   multiple graphics cards / screens on PCI bus based systems with Release 3.3 of the NEXTSTEP software.

Display Driver Details

Frame Buffer Sizes Supported*: 2MB VRAM, 4MB VRAM, 8MB VRAM

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

32 Bit Color Modes*:
1600x1280 (8MB), 1600x1200 (8MB), 1536x1152 (8MB), 1408x1024 (8MB),
1280x1024 (8MB), 1152x 864 (4MB+), 1120x 832 (4MB+),1024x 768 (4MB+),
  800x   600 (2MB+),   640x 480 (2MB+),

16 Bit Color Modes*:
1600x1280 (4MB+), 1600x1200 (4MB+), 1536x1152 (4MB+), 1408x1024 (4MB+),
1280x1024 (4MB+), 1152x 864 (2MB+), 1120x 832 (2MB+),1024x 768 (2MB+),
  800x   600 (1MB+),   640x 480 (1MB+),

8 Bit Color / Greyscale Modes*:
1600x1280 (2MB+), 1600x1200 (2MB+), 1536x1152 (2MB+), 1408x1024 (2MB+),
1280x1024 (2MB+), 1152x 864 (1MB+), 1120x 832 (1MB+),1024x 768 (1MB+),
  800x   600 (1MB+),   640x 480 (1MB+),

Supported RAMDAC's*:

RGB 528, TVP 3026, TVP 3020, S3 SDAC

Additional Display Driver Notes:

On VL-bus based systems and systems that use Release 3.2 of the NEXTSTEP software, the standard ELSA WINNER Display Driver must be used.   The standard driver is NeXTanswer #1662, the corresponding ReadMe is NeXTanswer #1661.

Known Problems

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