

OPENSTEP for Mach Intel Processors

Release 4.x

Display Driver Overview

Driver: ATI

Driver Overview: NeXTanswer #2193

Last Update: July 12, 1996

Availability Information

Newer Released Driver in NeXTanswers*: No, Version 0.00, as NeXTanswer #2195

Newer Beta Driver in NeXTanswers*: No, Version 0.00, as NeXTanswer #2194

Driver Name / Installer .pkg: ATI

Driver Type: Display

Driver Scope: Product Family

Supported Components: AT&T ATT20C491 RAMDAC, ATI 68800 (Mach32), ATI 68830 RAMDAC, ATI 68875 RAMDAC, Brooktree Bt481 RAMDAC, Brooktree Bt485 RAMDAC

PC Bus / Interface Supported by Driver:** EISA, Integrated, VL-Bus

General Overview notes: This driver is obsolete and has been replaced by ATIMach32. See NeXTanswers #1817_ATI_Mach32_Driver_Overview.rtf

The ATI graphics driver is designed to support the ATI 68800 graphics controller (also known as Graphics Ultra Pro or Mach 32). Although ATI makes a broad range of graphics controllers, only the 68800 supports the linear frame buffer mode required by NEXTSTEP for 32-bit, 16-bit color or 8-bit grayscale. This driver supports EISA, custom LocalBus and VESA LocalBus versions of 68800 graphics adapters. This driver also supports a variety of RAMDAC's used with these chips. Although ATI has set some standards for choice of RAMDAC, this driver should only be expected to work with the specific systems and adapters listed. Note: ATI is in the process of updating the 68800 from Rev 3 to Rev 6A. Although the Rev 6A chip is designed to be compatible with Rev 3 drivers, this driver update will be tested with Rev 3 and

Rev 6A chips.

Supported Products / Add-on Adapters:

ATI Graphics Ultra Pro (EISA, ATI 68875 RAMDAC)

ATI Graphics Ultra Pro (EISA, TI 34075 RAMDAC)

ATI Graphics Ultra Pro (VL-Bus, ATI 68875 RAMDAC)

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

Intel GX/Pro (Custom LB, onboard ATI, TI 34075 RAMDAC)

Data General Dasher DE2 (Custom LB, TI 34075 RAMDAC)

AST Premmia 4D (Custom LB, onboard ATI, BT 481 RAMDAC)

Gateway V Series (VL-Bus, ATI 68875 RAMDAC)

Special Features of Driver / Driver Notes:

Display Driver Details

Supported Connectors: 15-pin High Density (VGA)

Access Mode: Linear Framebuffer

Adapter Memory: 1MB VRAM, 2MB VRAM

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

32 Bit Color Modes:**

16 Bit Color Modes:**

1024x768 (2MB+), 1120x832 (2MB+), 800x600 (1MB+)

8 Bit Color / Greyscale Modes:**

1024x768 (1MB+), 1120x832 (1MB+), 1280x1024 (2MB+), 800x600 (1MB+)

Known Problems

See Also:

1122_ATI_Ultra_Pro_Graphics_Adapter.rtf

The ATI Ultra Pro driver reserves a large number of I/O ports to accommodate SoftPC in full-screen mode. Some of these ranges may conflict with other drivers. In particular, the range 0x52eee-0xfeef may be a problem. This conflict can be resolved simply by removing this reserved range from the driver configuration. Note, however, that this may prevent SoftPC from running correctly in full screen mode. The procedure to remove the port range is as follows:

- run Configure.app and select the display driver
- select the Expert options for the driver
- find the I/O Ports entry and double-click on the values to edit them
- scroll the field all the way to the right and delete the range 0x52ee-0xfeef. Make sure to hit return after editing, or the change won't be made.
- save the configuration and reboot

Driver Version Notes

Future Planning

Future / Update Planning: Obsolete

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.

* - Any NeXTanswer number that is blank indicates that a driver will not be released for this version of NEXTSTEP.

** - 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.

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