NEXTSTEP for Intel Processors

Title: AST Power Premium
Entry Number: 1123
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Product Vendor:
AST

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Keywords: AST, Power, Premium

Overview:
The AST Power Premium provides integrated VGA with 640 x 480 2 bit grayscale and EISA expandability.

Setup and Installation:
The Quality Assurance Group successfully installed NEXTSTEP Release 3.1 onto an AST Power Premium with the configuration outlined below. There are two separate means whereby this system may be configured. These are the ROM setup utility and the EISA Configuration Utility. Some configuration values may be changed in both utilities.

To invoke the ROM setup utility press <ctrl> <alt> <esc> early in the boot process. The ROM setup utility allows you to change the time and date as well as access a menu of advanced options. You should only be concerned with the advanced options settings during the installation process.

`ROM Configuration Settings`

```
Advanced Options
    Floppy and Boot
        Floppy Drives
            Floppy-Disk Adapter : Integrated
            Floppy Disk A : 1.44MB 3.5"
            Floppy Disk B : None

        Boot Options
            Boot Device : Try Floppy First
            Keyboard Error : Ignore
            NumLock : On at Boot
            Default Speed : High
    Hard Drives
        Hard-Disk Adapter : Add-in
        First Hard-Disk Type : None
            Heads :
            Cylinders :
            Sectors Per Track :
            Write Precomp :
            Landing Zone :
        Second Hard-Disk Type : None
            Heads :
            Cylinders :
            Sectors Per Track :
            Write Precomp :
            Landing Zone :
    Video and Memory
        Video
            Primary Video : Color
            Video Adapter : EGA-VGA
            800 x 600 Mode : 72 Hz non-interlaced
            1024 x 768 Mode : 72 Hz non-interlaced
        Memory
            Conventional Memory : 640 KB
            Extended Memory : 15616 KB (15.25 MB)
            Reserved Memory : 128 KB
            Cache Memory : Enable
```

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            Limit Memory Access to 16 MB : Disable
    Coprocessor and Ports
        Coprocessor
            Math Copr. Type : None
        Ports
            Parallel Port : 378h, IRQ 7
        Ports
            Serial Ports : Port 1=3F8h, 2 disabled
        Mouse
            Integrated Mouse Port : Enabled
    Security
        Password
            User Security : None
            Password :
            Verify :
    Update BIOS
        Revision
            BIOS : 1.06
            Keyboard Controller : 1.02
            BIOS Loader : 1.00
```

The following settings were recorded from the EISA Configuration Utility on this system. This system was running NEXTSTEP off of a SCSI hard disk using the integrated VGA for the display.

EISA Configuration Utility Settings
```
System AST Power Premium System Board
    Parallel Port Configuration
        Parallel Port : 378h, IRQ 7
    Serial Ports : Port 1=3F8h, 2 disabled
    Floppy-Disk Adapter : Integrated
    Floppy-Disk Type
        Floppy Disk A : 1.44 MB 3.5 "
        Floppy Disk B : None
    Hard-Disk Adapter : Add-in
    Hard-Disk Type
        First Hard-Disk Type : None
        Second Hard-Disk Type : None
```

```
    User Defined Type for First Hard-Disk
        Number of Heads (1--16) : 1
        Number of Cylinders (1--1024) : 989
        Number of Sectors Per Track (1--63) : 35
        Write Precompensation (1--1023) : 988
        Landing Zone (1--1024) : 1
    User Defined Type for Second Hard-Disk
        Number of Heads (1--16) :
        Number of Cylinders (1--1024) :
        Number of Sectors Per Track (1--63) :
        Write Precompensation (1--1023) :
        Landing Zone (1--1024) :
Video Adapter : EGA-VGA
Integrated Mouse Port : Enable
CPU - Type : 80486 DX2, Speed 50MHz
Math Coprocessor Type : None
Memory Configuration
    Conventional Memory : 640 KB
    Processor Board Memory : 16M
    Limit Access to 16 MB : Disable
    Cache Memory : Enable
Integrated VGA Video Output
    800 x 600 Mode : 72 Hz non-interlaced
    1024 x 768 Mode : 72 Hz non-interlaced
Slot 3 - AST Processor Board : Auto Added
Embedded - AST Integrated VGA : Auto Added
        Integrated VGA - Enable : Color Display
```

Known Problems:
Releases 3.1:
· During installation, the NEXTSTEP boot floppy should be ejected after the kernel has been loaded and messages are displayed describing the various probes the kernel is performing. The floppy drive activity light will be off at this point. If the floppy ejected the system will hang as the floppy drive is probed.