

Entry Number:  
Title: **The AST Power Premium**  
Entry **Date: 20 May 1993**

Product Vendor: **AST**  
Vendor Contact Information:

Hardware Platform: **Intel Processor Family**  
Reported in Software Version: **NeXTSTEP Release 3.1**  
Keywords: **AST, Power, Premium**

**Usage Commentary:**  
The AST Power Premium provides integrated VGA 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

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:

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.