

## Release Notes

### CCPUobp SPARCblade Iie-500 and Ili-650 OpenBoot PROM

#### Revision v4.6.1

**Release Date: 2003 July 11**

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**Note: This OBP upgrade is intended for use in conjunction with an upgrade to the CCPUIie driver package v1.2.0 or later. Please see the release notes for CCPUIie (document CC02838) for further details.**

#### **Features Added**

- Upgrade from OpenBoot 3.10.X to OpenBoot 4.6. The core OBP includes improved one-pass configuration of PCI space and better modularity with most drivers as dropins.
- Watchdog support from OBP: Automatic startup of watchdog before boot and ability to disable watchdog from the 'ok' prompt. If the "watchdog-timeout" NVRAM variable is nonzero, then the watchdog will be configured to timeout after that many seconds any time a boot command is executed. If at any time you wish to prevent the watchdog from resetting the CPU (after interrupting a boot sequence or halting Solaris with the watchdog running, for example) you may run the "watchdog-off" command at the ok prompt. Alternatively, the command "steak" is provided for the same purpose.
- Automatic detection of IDE or SCSI transition card; automatic configuration of proper device aliases for each card. It is no longer necessary to manually add or remove devalias settings for "disk" and "net" when changing transition cards.
- New auto-boot-abort? variable: In some situations, generating a serial BREAK to interrupt the boot sequence is difficult or impossible. If auto-boot-abort? is true (the default), then OBP will interrupt the boot sequence and drop to the ok prompt if any key is hit during the "Initializing Memory" phase.

#### **Features Changed**

- Because new NVRAM variables have been added, the new OBP will not recognize the NVRAM layout from the previous revision and will report "NVRAM checksum invalid, setting defaults" the first time the CPU is booted after an upgrade. If you have customized any settings, you may wish to use the printenv or eeprom commands to record the NVRAM settings before upgrading. If for some reason you downgrade to an earlier OBP version, the same issue will apply.
- The platform identification strings "model" and "name" are both now set to "ccpu,SPARCblade-Iie." This provides a unique name to distinguish the SPARCblade from other platforms. This ID string is required by the latest SPARCblade Solaris driver package. See the CCPUIie release notes (CC02838 or later) for further information.
- Flash programming commands have been simplified. To download a new image and program it into the user flash:

```
load net
loaded to flash1
```

"flash0" is the boot FLASH; "flash1" is the other one (aka "user flash"). Which physical device is which depends on a jumper setting. You must also install the FLASH write-enable jumper for this to work. See the SPARCblade manual for jumper details.

- The "-f" option to probe-scsi-all has been removed. In prior versions, this flag could be used to automatically reset the CPU and execute a probe-scsi-all command before booting. In the new OBP you must manually disable auto-boot? and then use "reset" if you wish to run probe-scsi-all after halting Solaris.
- The naming convention for OBP upgrade files is now CCPUobp-vX\_Y\_Zr##.rom (i.e. CCPUobp-v4\_6\_1r00.rom).

### **Hardware/Software Dependencies**

- CCPUobp v4.6.1 requires upgrading the CCPUIIe Solaris driver package to version v1.2.0r00 or later. Previous versions of CCPUIIe or LEOPARD drivers will not correctly use the new board identification strings.

### **Fixed Issues**

- Previous OBP versions would sometimes fail to complete a network boot (diskless client or jumpstart boot) if a large amount of broadcast traffic was present on the network. This issue has been fixed.
- Previous OBP versions did not create an "available" property for the pci21554 device node. This version corrects that omission.
- In combination with the updated CCPUIIe Solaris driver package, this OBP corrects interactions with certain Natural Microsystems (NMS) cards and drivers that caused the kernel to panic when they were installed.

### **Known Issues**

- The OBP will fail to initialize if the SPARCblade is in a non-system slot.
- Incorrect RTS setting. During the first part of the OBP initialization, RTS is asserted. Right around the time the banner is printed, it is deasserted, and stays that way even after the ok prompt is presented. This means that if the terminal connected to the console port has HW flow control enabled, it cannot send any commands.