

## *Glossary*

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### **A RMS**

Amps root mean square. RMS is often used in power measurements for electronic equipment.

### **boot**

The initial load of system software from an I/O device.

### **boot PROM**

A term referred to for the EPROM chip on the main logic board. This chip contains boot code consisting of a Forth Monitor program. The boot PROM is connected to the I/O data bus.

### **boot PROM diagnostics**

The diagnostics contained in the boot PROM. These diagnostics include the Power-On Self-Test (POST) and on-board diagnostics.

### **buffer**

The auxiliary data-storage device which holds data temporarily and which may also perform other functions in conjunction with various input/output machines.

### **cache**

A buffer type of high-speed memory that is filled at medium speed from main memory, often with instructions and programs.

### **CPU**

Central Processing Unit.

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**Desktop Backup Pack**

An external unit containing a tape drive that can be connected to a SPARCstation IPC.

**Desktop Disk Pack**

An external unit containing a disk drive that can be connected to a SPARCstation IPC.

**Desktop Sun CD Pack**

An external unit containing a CD-ROM player.

**Desktop Storage Pack (DSP)**

A generic name for an external unit containing a tape drive, a disk drive, or a CD-ROM player that can be connected to a SPARCstation IPC. The external unit containing the tape drive is referred to as the Desktop Backup Pack. The external unit containing a disk drive is referred to as the Desktop Disk Pack. The external unit containing a CD-ROM is referred to as the Desktop Sun CD™ Pack.

**Diagnostic Executive**

An independent operating system running exhaustive subsystem tests independent of SunOS. Use the Diagnostic Executive after you have run POST and need to troubleshoot which FRU needs to be replaced.

**DMA**

Direct Memory Access.

**DRAM**

Dynamic Random Access Memory.

**DSP**

Desktop Storage Pack. A generic name for an external unit containing a tape drive, a disk drive, or a CD-ROM player that can be connected to a SPARCstation IPC. The external unit containing the tape drive is referred to as the Desktop Backup Pack. The external unit containing a disk drive is referred to as the Desktop Disk Pack. The external unit containing a CD-ROM player is referred to as the Desktop Sun CD Pack.

**EPROM**

Erasable programmable read-only memory. The EPROM on the main-logic board is referred to as the boot PROM.

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<b>ESM</b>	External Storage Module.
<b>External Expansion Module</b>	An external unit that contains a disk drive and can be connected to a SPARCstation IPC.
<b>Forth</b>	A programming language which offers high-level means of expressing solutions to a wide range of problems. The major feature of Forth is that user-defined operators can be used just as though they were primitives.
<b>Forth Toolkit</b>	An interactive command interpreter based on the Forth programming language. While in the Toolkit, you will see the <code>ok</code> prompt. The Toolkit gives you access to an extensive set of functions for performing hardware development, fault isolation, software development, and debugging.
<b>frame buffer board</b>	A printed circuit board installed in an SBus slot of the system unit that controls a video display.
<b>FRU</b>	A field-replaceable unit.
<b>IC</b>	Integrated Circuit.
<b>ID</b>	Identification.
<b>I/O</b>	Input/Output. For example, an input/output device.
<b>IU</b>	Instruction Unit
<b>LANCE</b>	Local Area Network Controller for Ethernet.
<b>LED</b>	Light Emitting Diode.

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**lock block**

A security device attached to the rear of the SPARCstation IPC to prevent unwanted entry into the system unit.

**light pipe**

The light pipe transfers light from the LED on the main logic board to the indicator hole.

**Manufacturing Diagnostics**

These diagnostics are used primarily in a manufacturing environment to achieve repetitive *burn-in* testing. Manufacturing Diagnostics runs POST in a continuous loop.

**Monitor**

Indicated by the `>` prompt. From the `>` prompt, you can boot the system, continue the execution of a halted program, or enter the Forth Toolkit. If disaster befalls your operating system, the Monitor automatically starts.

**MMU**

Memory Management Unit.

**NVRAM**

Non-Volatile RAM.

**On-Board Diagnostics**

To run On-Board Diagnostics, you must enter the Forth monitor, signified by the `ok` prompt. The on-board tests allow you to test the control registers, the network controller, the diskette drive system, memory, the cache, the system clock, and watch the network for valid packets. Enter `help diag` to get a list of all on-board diagnostic tests.

**Por**

Power-On reset TTL open collector signal from the power supply, which is activated after DC voltages have risen.

**POST**

Power-On Self-Test. The POST runs automatically when you turn on the system's power switch or reboot the system. The POST, stored in the boot PROM, is a series of rudimentary tests designed to verify that a viable boot path exists for loading more extensive diagnostic software, such as the Diagnostic Executive.

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<b>PROM</b>	Programmable read-only memory.
<b>PTC</b>	Positive Temperature Coefficient. A self healing device that replaces a fuse. After an error occurs, the PTC resets.
<b>RAM</b>	Random Access Memory.
<b>ROM</b>	Read Only Memory.
<b>SBus board</b>	A printed circuit board installed in an SBus slot of the system unit.
<b>security loop</b>	An internal metal loop used in conjunction with the lock block to provide protection from unwanted system access.
<b>SCC</b>	Serial Communications Controller.
<b>SCSI</b>	Small Computer System Interface.
<b>SIA</b>	Serial Interface Adapter.
<b>SIMM</b>	Single Inline Memory Module. This is a small printed circuit board that contains RAM chips.
<b>Sundiag System Exerciser</b>	The Sundiag System Exerciser, which runs underSunOS, displays real-time use of system resources and peripheral equipment such as Desktop Storage Packs and External Storage Modules.
<b>system Monitor</b>	See Monitor.
<b>TOD</b>	Time of Day clock.

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**UART**

Universal Asynchronous Receiver/Transmitter.

**VOM**

Voltage ohm meter. An instrument for measuring potential differences in volts.

**VRAM**

Video Random Access Memory.

**wrist strap**

A device that provides grounding for static electricity between your body and the system unit's chassis. Electric current and voltage do not pass through the wrist strap.