

Glossary

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.

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.

EPRM

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

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|----------------------------------|---|
| ESM | External Storage Module. |
| External Expansion Module | An external unit that contains a disk drive and can be connected to a SPARCstation IPC. |
| Forth | 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. |
| Forth Toolkit | 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. |
| frame buffer board | A printed circuit board installed in an SBus slot of the system unit that controls a video display. |
| FRU | A field-replaceable unit. |
| IC | Integrated Circuit. |
| ID | Identification. |
| I/O | Input/Output. For example, an input/output device. |
| IU | Instruction Unit |
| LANCE | Local Area Network Controller for Ethernet. |
| LED | Light Emitting Diode. |

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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|---------------------------------|--|
| PROM | Programmable read-only memory. |
| PTC | Positive Temperature Coefficient. A self healing device that replaces a fuse. After an error occurs, the PTC resets. |
| RAM | Random Access Memory. |
| ROM | Read Only Memory. |
| SBus board | A printed circuit board installed in an SBus slot of the system unit. |
| security loop | An internal metal loop used in conjunction with the lock block to provide protection from unwanted system access. |
| SCC | Serial Communications Controller. |
| SCSI | Small Computer System Interface. |
| SIA | Serial Interface Adapter. |
| SIMM | Single Inline Memory Module. This is a small printed circuit board that contains RAM chips. |
| Sundiag System Exerciser | 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. |
| system Monitor | See Monitor. |
| TOD | Time of Day clock. |

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.