

Index

Symbols

> prompt, 29

A

analog monochrome frame buffer board, 14

analog monochrome frame buffer card, 53

audio, 11

chip, 11

input/output port, 11

audio cable

connecting, 97

autoboot switch, 18

B

block diagram, 3

books

reference

part numbers, 107

boot mode

default, 18

flowchart, 19

boot PROM, 4, 9

diagnostics, 22

boot prompt, 29

bringing down the system, 31

C

cache memory, 9

CD ROM player, 14

chassis, 1

open, 37

chassis and subassemblies, 37

closing the system unit, 94

color frame buffer board, 13, 16

color frame buffer card, 53

component parts, 2

components, 2

CPU, 4, 8

CPU board, 74

checking fuses, 79

fuses, 78

removing, 84

replacing, 88

test points, 76

troubleshooting, 80

CPU core, 8

D

default boot mode, 18

flowchart, 19

Desktop Backup Pack, 14
Desktop Disk Pack, 14
Desktop Storage Pack
 connecting, 96
 disconnecting, 34
Desktop SunCD Pack, 14
determining faulty SIMM locations, 45
determining which FRU needs to be replaced, 28
devices
 eight-bit, 9
Diagnostic Executive, 20, 28
diagnostic tools
 overview, 18
 summary, 20
diagnostics
 boot PROM, 22
 determining defective FRUs, 28
 manufacturing, 113
 flowchart, 113
 leaving, 116
 on-board, 26
 overview, 18
 when to use, 20
diagram
 block, Sparcstation IPC, 3
disk drive, 14, 63
 inserting, 67
 removing, 63
diskette drive, 4, 14, 68
 controller, 11
 controller chip, 13
 removing, 58
 replacing, 68
DMA, 12
DRAM, 12
drive
 disk, 14, 63
 inserting, 67
 removing, 63
 diskette, 14, 68
 removing, 58
 units, 2
DSP
 disconnecting, 34
dynamic RAM, 12

E
eight-bit devices, 9
environmental requirements, 99
Ethernet, 12
 board, 14
 card, 53
 controller chip, 13
Ethernet cables
 connecting, 96
expansion modules, 2
 disconnecting, 34
exploded views of the system, 101
external drive units, 2
External Storage Module
 connecting, 96
external storage module, 14

F
field replaceable units
 identification, 42
 replacement, 41
floating-point coprocessor, 4, 8
floppy disk drive, 11, 14, 68
 controller chip, 13
 removing, 58
floppy drive
 removing
 replacing, 68
Forth Toolkit, 29, 114
FPU, 8
frame buffer board, 14
 color, 16
frame buffer boards, 13
frame buffer card, 53
frame buffer cards, 53
frozen system, 32
FRU

- identification, 42
- replacement, 41
- fuses
 - CPU board, 78
 - checking, 79
 - main logic board, 78
 - checking, 79

G

- graphics I/O devices, 15

H

- halt command, 32
- halting the system, 31
- hard disk drive, 4, 14, 63
 - mounting bracket
 - inserting, 67
 - removing, 63
- hard drive
 - preparing for replacement, 64
- hung system, 32

I

- input power requirements, 99
- input/output, 13
- instruction unit, 8
- IU, 8

J

- jumpers
 - serial port, 75

K

- keyboard
 - installing, 97
- keyboard and mouse ports, 10

L

- LANCE, 12

- LANCE controller chip, 13
- latch button assemblies
 - removing, 92
 - replace, 93
- Light pipe, LED
 - replacing, 89

M

- main chassis, 1
- main logic board, 5, 8, 74
 - checking fuses, 79
 - fuses, 78
 - removing, 84
 - replacing, 88
 - test points, 76
 - troubleshooting, 80
- manufacturing diagnostics, 113
 - flowchart, 113
 - leaving, 116
- mass storage devices, 14
- memory
 - cache, 9
- memory management unit, 11
- MMU, 11
- Monitor, 29
- monitors, 15
 - installing, 96
- monochrome video frame buffer, 16
- mouse
 - installing, 97

N

- non-volatile RAM, 4, 10
- NVRAM parameters, 109

O

- on-board diagnostics, 26

P

- part numbers, 101

- field replaceable units
 - hardware, 106
- physical specifications, 100
- ports
 - keyboard and mouse, 10
 - serial ports A and B, 10
- POST, 18, 22
 - detailed description, 23
 - how to run, 24
 - troubleshooting, 24
- power
 - turning off, 32, 33
- power supply, 4, 15, 70
 - removing and installing, 70
- powering on the system, 98
- Power-On Self-Test, 18, 22
 - detailed description, 23
 - how to run, 24
 - troubleshooting, 24

R

- replacing FRUs
 - tools needed, 34

S

- SBus cards, 12, 13, 53
 - installing, 55
 - removing, 53
- SBus slots, 12
- SCSI controller chip, 13
- serial port jumpers, 75
- serial ports A and B, 10
- SIMM Extraction Tool, 48
- SIMM locations
 - faulty
 - determining, 45
- SIMM slots, 4
- SIMMs, 45
 - inserting, 51
 - removing, 47
- single inline memory modules
 - inserting, 51

- removing, 47
- sound, 11
 - generating, 90
- SPARCstation IPC, 3
- SPARCstation IPC block diagram, 3
- speaker, 4
 - removing, 91
 - replacing, 90
- standalone programs, 20
- Sundiag system exerciser, 28
- system
 - interconnection, 101
 - monitor, 29
 - unit, 1, 37
 - exploded views, 101
 - unit and subassemblies, 37

T

- test points, 76
- tools needed to replace FRUs, 34
- turning off power, 32, 33
- turning the power back on, 98

U

- unit bottom
 - illustration, 104
- unit top
 - illustration, 103
- user-specified programs, 20

V

- video monitors
 - installing, 96

W

- wrist strap
 - attaching, 39