NEC
PowerMate SX/16

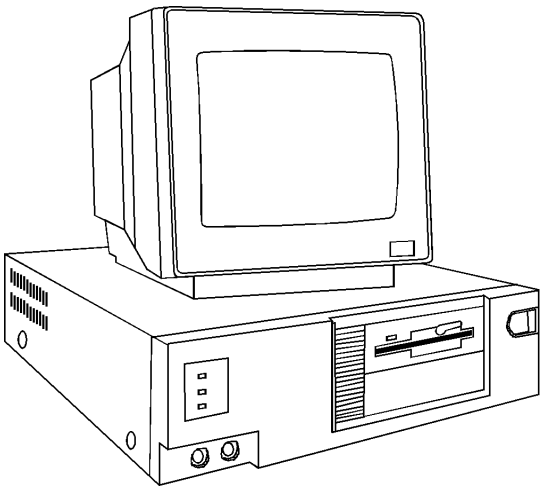

Figure 1. NEC PowerMate SX/16

Specifications

Processor
- Intel 80386SX 8/16MHz

Memory
- 2MB standard, expands to 10MB

I/O Expansion Slots
- Four 8/16 bit slots

Diskette Drive
- 1.2MB, 5.25'' or 1.44MB, 3.5'' standard

Integrated Features
- Diskette drive controller and IDE interface
- Enhanced PS/2 keyboard and PS/2 mouse
- One parallel port
- One RS-232C serial port
- VGA, 320x200x256, 640x480x16, 800x600x16.

Internal Expansion Bays
- One 5.25'' slim line user accessible bay,
- One 3.5'' half height internal bay.

I/O Architecture (Bus s supported)
- Industry Standard Architecture (ISA)

Power Supply
- 110 Watt

Dimensions
- 4.8 h X 17.1 w X 16.0 d

Diagnostics
- Normal Post Diags performed on Power UP of system.
- For Advanced Diags use a PC Diagnostic Utility.
- Troubleshoot according to errors found during test.

CMOS Access
- QAPlus/FE

Tools and Software Requirements
- 2 PT Phillips screwdriver
- Needle nose pliers
- Diags and formatted blank diskette
- Anti-static wrist strap

Jumper/Switch Settings

System Configuration, Switch SW1

Jumper	Setting	Function
S1	Released* Locked	Test Mode OFF Test Mode ON

* Default

System Configuration, Switch SW2

Switch	Setting	Function
1	ON * OFF	Enable VGA on board Disable VGA on board
2	ON * OFF	Display type logic sense on Display type logic sense off
3	ON OFF *	Password feature off Password feature on
4	ON *	Reserved -- Do not change this!

* Default

System Jumper Settings, Board G8HJJ

Jumper	Setting	Function
8C1/4D1	closed open *	Flash ROM Vpp=+12V Flash ROM Vpp=open
12D1	closed open *	Manufacturing mode Normal operation
9C1	1-2 * 2-3	27C256 type ROM installed 27C512 type ROM installed
9D1	open *	System reset Short then reopen connection

* Default

System Jumper Settings, Board G8HXL

Jumper	Setting	Function
S1	closed open *	Flash ROM Vpp=+12V Flash ROM Vpp=open
S2	1-2 * 2-3	27C256 type ROM installed 27C512 type ROM installed
S3	closed open *	Manufacturing mode Normal operation

* Default

Optional Memory Board Switch Settings

SW1	SW2	SW3	SW4	SW5&6	Memory
ON	OFF	OFF	OFF	OFF	Bank 1 (2MB)
ON	ON	OFF	OFF	OFF	Bank 1-2 (4MB)
ON	ON	ON	OFF	OFF	Bank 1-3 (6MB)
ON	ON	ON	ON	OFF	Bank 1-4 (8MB)

02/97 Doc # MT0015

Jumper/Switch Settings (Continued)

System Configuration, G8BUT HD Controller

Jumper	Setting	Function
W1	Unjumped *	BIOS ROM/RAM address map
W2	Unjumped *	BIOS ROM/RAM address map
W3	Unjumped *	BIOS ROM/RAM address map
W8	Jumped *	Mode select
W14	Unjumped *	Sector translation mode
W15	Unjumped *	Cache mode enable

* Default

Removal Procedures

Before beginning removal complete the following steps:

1. Turn off the computer and any peripheral devices.
2. Disconnect AC power cord from outlet and system.
3. Disconnect all peripheral devices from the computer.
4. Discharge any static with static strap against chassis.

System Cover

How to remove the system cover:

1. Remove Two screws on each side of the system
2. Remove Five screws on the back of the system.
3. Unlock the cover if the cover lock is present.
4. Slide the cover a few inches toward the back of system.
5. Pull the sides of the cover outward, lift it up and off.

Special Notices:

- All NEC hard drives are preformatted at the factory and are set as the primary drive in a one drive unit.
- All switch settings will not be reflected until the systerm has been completely repowered.
- Memory may exceed the 10MB limit if it is on low speed (8MHz) with a 1 wait state only.
- IDE drive can not be used with the ST506 or ESDI type controller boards. Remove the Non-IDE boards.

Field Replaceable Units

Memory	OEM Part	IBM Part
2MB @ 2MB x 9 SIMM	158-050294-002	61H6760
4MB memory exp. board	136-007954-250A	67H9114
2MB memory exp. module	136-007954-251A	67H9115

Controllers	OEM Part	IBM Part
G8DDQ ST506 HD cntrlr.	808-865892-007A	62H1455
G8BUT ESDI HD controller	808-865892-005A	68H5603
ESDI HD controller	136-006632-654A	67H9096

Internal Hard Drives	OEM Part	IBM Part
42MB, 3.5'', ST506 HD	158-053237-226	66H0136
42MB, 5.25'', ST506 HD	158-053236-426	66H0137
42MB, 5.25'', IDE HD	136-260373-253A	67H9206
42MB, 3.5'', IDE HD	136-260373-251A	67H9205

Internal Hard Drives	OEM Part	IBM Part
100MB, 3.5'', ESDI HD	134-500571-159O	67H9043
109MB, 3.5'', IDE HD	136-260373-252A	47H8795
140MB, 5.25'', ESDI HD	136-006632-620A	67H9102
* Note: IDE drives do not require a HD controller board.		

Miscellaneous	OEM Part	IBM Part
ISA backboard	136-009534-217A	67H9141
Keyboard PS/2 style	808-897060-001A	49H5552
Fan	136-009534-235A	66H6830
Power supply (110 Watt)	808-891039-001A	20H9522
NEC PS/2 style mouse	158-053512-000	65H9766

Diskette Drives	OEM Part	IBM Part
3.5'', 1.44MB Floppy	136-261568-301A	20H9489
5.25'', 1.2MB Floppy	136-261568-300A	67H9211

Cables	OEM Part	IBM Part
ST506, 5'', HD data cable	808-840069-011A	67H2171
ESDI HD data cable	808-840069-017A	67H2173
HD/FD DC power cable	136-009534-221A	66H6827
Keyboard / mouse, LED	136-261568-502A	67H9212

Tape Drives	OEM Part	IBM Part
40MB, 5.25'', tape drive	158-053116-003	47H9599
150MB, 5.25'', tape drive	158-053208-001	47H9600

System Boards	OEM Part	IBM Part
G8HJJ- System board	158-050344-000	66H0391
G8HXL- System board	158-050344-000A	66H0390

Processor Boards	OEM Part	IBM Part
GXCHH- Processor board	136-008420-707A	67H9126

02/97 Doc # MT0015