



Figure 1. NEC PowerMate SX Plus

## Specifications

### Processor

- Intel 80386SX 8/16MHz

### Memory

- 2MB standard, expands to 10MB

### I/O Expansion Slots

- Four 8/16 bit ISA slots
- One 32 bit memory slot

### Diskette Drive

- 1.2MB, 5.25" or 1.44MB, 3.5" standard

### Integrated Features

- Diskette drive controller
- Enhanced PS/2 keyboard and PS/2 mouse
- One Parallel port
- One RS-232C serial port
- VGA 15 pin @ 320x200x256, 640x480x16, 800x600x16

### Internal Expansion Bays

- Two 5.25" user accessible bays
- One 3.5" half height internal bay.

### I/O Architecture (Bus s supported)

- Industry Standard Architecture (ISA)

### Dimensions

- 4.8 h X 17.1 w X 16 d

### Power Supply

- 110 Watt

### 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

- 1/4" Flat bladed and 2PT Phillips screwdrivers
- T-15 Torx screwdriver
- Needle nose pliers
- Diags and formatted blank diskette
- Anti-static wrist strap

## Jumper/Switch Settings

### System Configuration, Switch 15G

Switch	Setting	Function
1	ON * OFF	Color display installed Monochrome monitor
2	ON * OFF	Diskette drive selection A Diskette drive selection B
3	ON * OFF	Turns on diskette drive controller Turns off diskette drive controller
4	ON * OFF	COM1 address 3F8H COM2 address 2F8H
5	ON * OFF	Serial port on Serial port off
6	ON * OFF	Parallel port on Parallel port off
7	ON * OFF	Mathcoprocessor socket on Mathcoprocessor socket off
8	ON * OFF	Integrated VGA controller on Integrated VGA controller off
9	ON OFF *	Memory area 0 to 512KB Memory area 0 to 640KB
10	ON * OFF	Turns on mouse port Turns off mouse port

\* Default

### System Jumper Settings

Jumper	Setting	Function
S1	1-2 2-3 *	Non-pipeline mode Pipeline mode
S2	1-2 * 2-3	Security lock feature on Security lock feature off
S3	1-2 * 2-3	Serial port IRQ select is COM1 Serial port IRQ select is COM2
S4	closed open *	Reset jumper is on Reset jumper is off
S5	open *	Reserved setting -- Do not change this setting
S6	1-2 * 2-3	Battery backup Vcc + 5v
S7	1-2 * 2-3	Power good select MC146818 Power good select DS1287

\* Default

### Video Board Jumper Position

Jumper	Setting	Function
S1	1-2 * 2-3	132 column, 800x600 graphics. Input clock feature connector

\* Default

## 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 *	G8AGB (WD1005) 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 to chassis.

## System Cover

How to remove the system cover:

1. Remove five screws holding the cover to the unit's back.
2. Remove two screws located on each side of the unit.
3. Grasp each side of the cover and slide to the rear.
4. As you push the cover, 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 system has been completely repowered.
- Memory may exceed the 10MB limit if it is on low speed 8mhz with a 1 wait state only.

## Field Replaceable Units

Memory	OEM Part	IBM Part
512KB memory exp. brd.	136-008689-450A	67H9127
512KB memory exp. mod.	136-008689-451A	67H9128
1MB memory exp. module	136-009593-851A	67H9145
2MB memory exp. module	136-009593-850A	67H9144
2MB memory exp. board	136-007954-251A	67H9115
4MB memory exp. module	136-009593-853A	67H9147
4MB memory exp. board	136-007954-250A	67H9114
8MB memory exp. module	136-009593-852A	67H9146

Controller	OEM Part	IBM Part
G8CDQ ST506 HD cntrlr.	808-865892-007A	62H1455
G8BUT ESDI HD controller	136-007897-610A	69H5455
Integrated HD interface brd.	136-009592-252A	48H2542

Internal Hard Drive	OEM Part	IBM Part
42MB, 3.5", ST506 HD	158-053237-226	66H0136
42MB, 5.25", ST506 HD	158-053236-426	66H0137
100MB, 3.5", ESDI HD	134-500571-159O	67H9043
140MB, 5.25", ESDI HD	136-006632-620A	67H9102

Video Boards	OEM Part	IBM Part
G8EHB - VGA board	136-009535-819A	67H9143

Diskette Drives	OEM Part	IBM Part
5.25", 1.2MB Floppy	136-009598-420A	47H8616
3.5", 1.44MB Floppy (Thin)	136-009598-425A	20H9520

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

Cables	OEM Part	IBM Part
Floppy data & signal cable	136-009534-220A	66H6826
HDD/FDD DC power cable	136-009534-221A	66H6827

Miscellaneous	OEM Part	IBM Part
G8EEZ - ISA backboard	136-009534-217A	67H9141
Lithium battery	136-009534-227A	49H5462
Fan	136-009534-235A	66H6830
Power supply (110 Watt)	136-009534-205A	20H9522
Keyboard PS/2 style	808-897060-001A	49H5552
Serial interface	136-006771-457A	66H0118

System Boards	OEM Part	IBM Part
G8EJW - System board	158-050217-000	48H7011

Processor Boards	OEM Part	IBM Part
G8EJV - Processor Board	136-456126-A	67H9246
Daughter board	158-050227-000	48H7013