Figure 1. NEC PowerMate 386/25s

Specifications

Processor
- Intel 80386 8/25MHz

Memory
- 2MB or 8MB standard, expands 16MB

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

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

Integrated Features
- Diskette drive controller.
- IDE interface on back plane board.
- PS/2 style keyboard and mouse
- Parallel port and one RS-232C serial port.

Internal Expansion Bays
- Two 5.25'' half height user accessible bays
- One 3.5'' internal bay.

I/O Architecture (Bus s supported)
- ISA

Dimensions
- 17 w X 16 d X 4.8 h

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, 2PT Phillips, T-15 Torx screwdriver
- Needle nose pliers
- Diags and formatted blank diskette
- Anti-static wrist strap

Jumper/Switch Settings

System Board - SW3 SWITCH SETTINGS

Switch	Setting	Function
1	ON	80387 coprocessor, installed
	OFF *	80387 coprocessor, absent
2	ON *	Integrated VGA on
	OFF	Integrated VGA off
3	ON *	Serial port on
	OFF	Serial port off
4	ON	Serial port selection is COM2
	OFF *	Serial port selection is COM1
5	ON *	Parallel port is on
	OFF	Parallel port is off
6	ON *	Diskette drive controller is on
	OFF	Diskette drive controller is off
7	ON	Second I/O port for diskette
	OFF *	First I/O port for diskette
8	ON	Display type set to color
	OFF *	Display type monochrome
9	ON	Turns on IDE
	OFF *	Turns off IDE
10	ON	Turns on mouse port
	OFF *	Turns off mouse port

* Default

System Board Jumper Settings

Jumper	Setting	Function
JP2	unjumped	Cache memory off
	jumped *	Cache memory on
JP6	1-2 *	No coprocessor installed
	2-3	Coprocessor installed
JP8/JP9	1-2 *	8742/8042 keyboard gate
	2-3	Fast gate
JP20	1-2	COM2, IRQ3
	2-3 *	COM1, IRQ4
JP111	unjumped *	Keyboard test controller off
	jumped	Keyboard test controller on
JP112	unjumped	Password security off
	jumped *	Password security on
JP113	unjumped *	VGA daughter board used
	jumped	No VGA daughter board

* Default

System Config, SIMM Board Jumper Settings

RAM Amount	Switch 1	Switch 2	Switch 3
2MB	OFF	OFF	OFF
4MB	OFF	OFF	ON
8MB	OFF	ON	OFF
10MB	OFF	ON	ON
16MB	ON	OFF	OFF

System Config, Math Coprocessor Settings -- JP6

Type	Jumper	SW3 - 1 Setting
Intel 80387-25	2 - 3	ON
Weitek WTL3167-25	1 - 2	OFF
None	2 - 3	OFF

Jumper/Switch Settings (Continued)

System Config, ESDI HD Controller Board (G8BUT)

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	Select translation mode
W15	Unjumped	Cache enable

System Config, MultiSync Graphics Engine

Jumper	Setting	Function
JP1	Unjumped *	Vertical and Horizontal sync
	Jumped	Composite Sync-on-green
JP2	Unjumped	2 video controllers installed
	Jumped *	1 Video controller installed

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 cover:
1. Unlock the keylock if one is present.
2. Remove five screws at the rear of the unit.
3. Remove two screws on each side of the unit.
4. When facing unit slide cover back, then lift up and off.

Field Replaceable Units

Memory	OEM Part	IBM Part
Memory expansion board	158-026093-000	67H9651
256KB SIMM	158-082065-080	67H9766
512KB memory exp. brd.	136-008689-450A	67H9127
512KB memory ex.p mod.	136-008689-451A	67H9128
1MB @ 1MB X 9 SIMM	158-082066-080	61H5863
2MB @ 2MB X 9 SIMM	158-050294-002	61H6760
2MB memory exp. board	136-007954-251A	67H9115
4MB memory exp. board	136-007954-250A	67H9114

Controller	OEM Part	IBM Part
ESDI HD controller	136-006632-654A	67H9096
G8CDQ ST506 HD cntrlr.	808-865892-007A	62H1455
G8BUT ESDI HD controller	808-865892-005A	68H5603

Internal Hard Drive	OEM Part	IBM Part
42MB, 3.5'', ST506 HD	136-008173-209A	48H6250
42MB, 5.25'', ST506 HD	158-053236-426	66H0137
42MB IDE HD	136-260476-845A	48H6413
100MB, 3.5'', ESDI HD	134-500571-159O	67H9043

System Boards	OEM Part	IBM Part
G8GAH- System board	158-026092-000	20H9512
System board	158-026092-000B	47H9357

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

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

Video Boards	OEM Part	IBM Part
G8EZE - VGA Adapter	136-260712-504A	67H9210
VGA, ISA	158-053297-000	66H0478

Cables	OEM Part	IBM Part
5'', Floppy signal cable	808-840655-014A	67H2179
ESDI HD data cable	808-840069-017A	67H2173
5'', ESDI HD, signal cable	808-840656-005A	67H2180
ST506, 5'', HD data cable	808-840069-011A	67H2171

Miscellaneous	OEM Part	IBM Part
Battery	802-140887-002A	47H9678
Backplane	158-050467-000	47H9531
Fan	136-009534-235A	66H6830
ISA Backboard	136-260712-501B	47H8800
Keyboard PS/2 style	808-897060-001A	49H5552
Power supply (110 Watt)	808-891039-001A	20H9522