



Figure 1. NEC PowerMate 386/25

Specifications

Processor

- Intel 80386 8/25MHz

Memory

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

I/O Expansion Slots

- Five 8/16 bit
- Two 8 bit slots

Diskette Drive

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

Integrated Features

- Diskette drive controller.
- No IDE interface.
- Enhanced keyboard.
- Parallel port.
- Two RS-232C serial ports.

Internal Expansion Bays

- Four 5.25" half height user accessible bays

I/O Architecture (Bus s supported)

- ISA

Power Supply

- 237 Watt

Diagnostics

- Normal Post Diags performed on Power UP of system.
- For Diags use 386/25 Test & Diagnostic disk.
- Troubleshoot according to errors found during test.

CMOS Access

- QAPlus/FE

Tools and Software Requirements

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

Jumper/Switch Settings

System Configuration

SW1 SWITCH SETTINGS

Switch	Setting	Function
1	ON * OFF	Color monitor installed Monochrome monitor used
2	ON OFF *	FDC port addr. as secondary FDC port addr. as primary
3	ON * OFF	Diskette controller on Diskette controller off
4	ON * OFF	Serial port (COM2) on Serial port (COM2) off
5	ON * OFF	Serial port (COM1) on Serial port (COM1) off
6	ON * OFF	Parallel port on Parallel port off
7	ON OFF *	Intel 80387-25 installed Weitek WTL3167 installed
8	OFF *	Not used
9	OFF *	Not used
10	OFF *	Not used

* Default

System Configuration, Test Mode

JUMPER SETTINGS

Jumper	Setting	Function
13A1	Released * Locked	Test Mode Off Test Mode On

* Default

System Configuration, CPU Operation Mode

JUMPER SETTINGS

Jumper	Setting	Function
13G1 or 8E2	1-2 2-3 *	Address pipeline mode Address non-pipeline mode

* Default

System Configuration, Math Coprocessor Type

JUMPER SETTINGS

Jumper	Setting	Function
13G2 or 5L1	1-2 2-3 *	Intel 80387-25 installed Weitek WTL3167 installed

* Default

System Configuration, 8742 Test Mode

JUMPER SETTINGS

Jumper	Setting	Function
20B2	Jumped Unjumped *	8742 test mode Factory setting

* Default

Jumper/Switch Settings (Continued)

System Configuration, G8BUT HD Controller

Jumper	Setting	Function
W8	Jumped *	Mode Select
W14	Unjumped *	Select translation mode
W15	Unjumped *	Cache enable

* Default

System Configuration, G8ABH Video Controller

Jumper	Setting	Function
S1	2 - 3 1 - 2	Selects address 3XX Selects address 2XX
S2	UP * DOWN	Advanced Color / High Resolution All other displays
S3, S4	S3:2-3 * S4:1-2 * S3:2-3 S4:2-3 S3:1-2 S4:1-2	Selects ROM type 27256 Selects ROM type 27512 Selects ROM type 27128
S6	2 - 3 * 1 - 2	Selects 132 columns Selects feature connector
S7	3 - 7 * 1 - 5 2 - 6 4 - 8	Selects 31ms cycle for mouse Selects 8ms cycle for mouse Selects 15ms cycle for mouse Selects 61ms cycle for mouse
S8	1 - 5 * 2 - 6 3 - 7 4 - 8	Select IRQ051 for mouse Select IRQ041 for mouse Select IRQ031 for mouse Not Used
S9	2 - 3 * 1 - 2	Disables emul. of CGA, MDA, Herz Enables emul. of CGA, MDA, Herz.
S10	2 - 3 * 1 - 2	Disables 400 line mode Enables 400 line mode **
S11	2 - 3 * 1 - 2	Selects ROM BIOS linear mode. Selects ROM BIOS paged mode.
S12	2 - 3 * 1 - 2	Selects ROM BIOS linear mode. Selects ROM BIOS paged mode.
S13	2 - 3 * 1 - 1	Disables Parallel mouse cntrlr. Enables Parallel mouse cntrlr.

* Default

** Only available w/NEC Adv. Monitor or MultiSync

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 by grounding.

System Cover

How to remove the cover:

1. Remove the five screws at the rear of the unit
2. Unlock the cover if the cover lock is present.
3. Slide the cover toward the rear of the unit a few inches.
4. Pull the cover outward and lift and remove.

Field Replaceable Units

Diskette Drives	OEM Part	IBM Part
5.25", 360KB Floppy	136-005869-002A	67H9088
3.5", 720KB Floppy	136-006372-424A	67H9094
5.25", 1.2MB Floppy	136-009598-410A	67H9148
3.5", 1.44MB Floppy	136-007954-222A	67H9112

Memory	OEM Part	IBM Part
G8FDK 2MB memory mod.	136-009366-013A	67H9130
G8FDM 8MB memory mod	136-009366-014A	67H9131
512KB memory exp. brd.	136-005873-001A	67H9091
512KB memory exp. mod.	136-005873-002A	67H9092
1MB memory exp. module	136-009592-251A	65H9309
2MB memory exp. module	136-009631-655B	67H9149
4MB memory exp. board	136-007954-250A	67H9114
8MB memory exp. module	136-009631-656B	67H9150

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

System Boards	OEM Part	IBM Part
G8FBJ- System board	158-050249-000	67H9692

Video Boards	OEM Part	IBM Part
Adv. graphics board plus	136-006793-A	47H8585
Advanced graphics board	136-005872-A	67H9090
G9XZT-Color graphics bd.	136-005871-A	67H9089
G8BYL video graphics bd.	136-008076-A	47H8600

Cables	OEM Part	IBM Part
5", ESDI HD, signal cable	808-840656-005A	67H2180
5" HD B cable	808-840069-011A	47H9817
COM1/COM2 relay cable	808-840649-001A	47H9824
Printer port relay cable	808-840648-010A	47H9823

Miscellaneous	OEM Part	IBM Part
G8FED-Serial/parallel brd.	136-009366-015A	67H9132
Power supply (237 Watt)	136-009366-010A	67H9129
ISA, backplane	136-009534-217A	67H9141
Keyboard / mouse board	136-009534-218A	22H1957
Lithium Battery	136-009534-227A	20H9497
Fan	136-009534-235A	66H6830
ISA Backboard	136-260712-501B	47H8800

Internal Hard Drive	OEM Part	IBM Part
100MB, 3.5", ESDI HD	134-500571-159O	67H9043
140MB, 5.25", ESDI HD	136-008174-620A	49H6837
300MB, 5.25", ESDI HD	136-008174-621A	67H9117