



Figure 1. NEC PowerMate 386/33e

Specifications

Processor

- Intel 80386 8/33MHz

Memory

- 2MB standard, expands to 16MB

I/O Expansion Slots

- Five EISA slots
- Two 8/16 bit slots
- One 32 Bit Memory Expansion

Diskette Drive

- 1.2MB, 5.25"

Integrated Features

- Diskette drive controller.
- Enhanced keyboard PS/2 style
- Mouse PS/2 style
- One parallel port
- Two RS-232C serial ports.

Internal Expansion Bays

- Four 5.25" half height user accessible bays
- One 5.25" half height internal drive bay.

I/O Architecture (Bus s supported)

- Extended Industry Standard Architecture (EISA)

Power Supply

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

Jumper/Switch Settings

SW1 SWITCH SETTINGS

Switch	Setting	Function
1	ON *	Turns on parallel port
	OFF	Turns off parallel port
2	ON *	Turns on serial port (COM1)
	OFF	Turns off serial port (COM1)
3	ON *	Turns on serial port (COM2)
	OFF	Turns off serial port (COM2)
4	ON *	Turns on diskette drive controller
	OFF	Turns off diskette drive controller
5	ON	Diskette port address scndry. (37X)
	OFF *	Diskette port address primary (3FX)
6	ON	387 math coprocessor used
	OFF *	387 math coprocessor unused
7	ON	Base memory is 512KB
	OFF *	Base memory is 640KB
8	ON *	IRQ12 is on for mouse support
	OFF	Other option
9	ON *	Color display installed
	OFF	Monochrome display
10	ON *	Reserved, always on

* Default

System Board Jumper Settings

Jumpr.	Setting	Function
12C2	Unjumped *	385 reserved 1 pin tied to high
	Jumped	385 reserved 1 pin tied to low
10B1	1-2 *	Output to CPU is delayed to end of posted I/O write cycle 385 local bus
	2-3	Output to CPU is transparent to CPU
16C1	Unjumped	32-bit data transmit off
	Jumped *	32-bit data transmit on
16C4	1-2	EMMC2 MMWT; MMRT2 is tied to low
	2-3 *	EMMC2 MMWT; MMRT2 is tied to high
16C3	1-2	EMMC2 MMRT1; MMRT1 is tied to low
	2-3 *	EMMC2 MMRT1; MMRT1 is tied to high
16F1	Unjumped	Insert 1 BCLK between back to back ISA 8/16 bit I/O cycles from CPU for I/O recovery time
	Jumped *	Insert 3 BCLK (16 bit cycles) or 11 BCLK (8 bit cycles) between back to back ISA 8/16 bit I/O cycles from CPU for I/O recovery time

* Default

Jumper/Switch Settings (Continued)

System Board Jumper Settings

Jumper	Setting	Function
9M1	Unjumped *	Turns off manufacturing switch
	Jumped	Turns on manufacturing switch
10H1	1-2 * 2-3	Password feature on Password feature off
12C3	Unjumped *	Pipeline - Disabled
	Jumped	Pipeline - Enabled
13G1	1-2	RASO time-out timer off
	2-3 *	RASO time-out timer on
16C2	1-2	EMMC2 MMRT0; MMRT0 low
	2-3 *	EMMC2 MMRT0; MMRT0 high
3E1	1-2 *	Diskette. rate 500/250/300KBps
	2-3	Diskette. rate 500/250KBps

* Default

G8BUT ESDI HD Controller Jumper Settings

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

* Default

System Configuration, VGB Video Controller

Jumper	Setting	Function
S1	1 - 2 * 2 - 3	High Res - 132 Column Feature Connector
S2	1 - 2 * 2 - 3	16 Bit BIOS ROM data path 8 Bit BIOS ROM data path
S3	1 - 2	Slot sense ON /16bit transfer
	2 - 3 *	Slot Sense OFF/ 8 bit transfer

* 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 the chassis

System Cover

How to remove the cover:

1. Unlock the keylock at the rear of the system
2. Remove two screws on each side of the system
3. Remove one screw at the rear of the system
4. Grasp sides and slide toward the front a couple inches
5. Tip up rear of cover then lift whole cover to remove

Field Replaceable Units

Controller	OEM Part	IBM Part
G8BUT ESDI HD controller	136-007897-610A	69H5455
G8EGS- I/O Board	136-260131-503A	67H9204
I/O interface assembly	136-260131-003A	66H6892

Internal Hard Drive	OEM Part	IBM Part
100MB, 3.5", ESDI HD	134-500571-159O	67H9043
300MB, 5.25", ESDI HD	136-009366-018A	67H9133

System Boards	OEM Part	IBM Part
G8FHU- System Board	158-050285-001	47H9466

Diskette Drives	OEM Part	IBM Part
5.25", 1.2MB Floppy	136-009534-210A	48H6363
3.5", 1.44MB Floppy (Thin)	136-009598-425A	20H9520

Video Boards	OEM Part	IBM Part
G8BYL- video graphics bd.	136-008076-A	47H8600

Cables	OEM Part	IBM Part
5" HD B, ESDI/ST506 cable	808-840069-019A	67H2174
5" Floppy drive cable	158-050059-008	66H7450
COM1/COM2 relay cable	808-840649-001A	47H9824
Printer port relay cable	808-840648-010A	47H9823

Miscellaneous	OEM Part	IBM Part
Lithium battery	136-009534-227A	49H5462
Power supply (325 Watt)	136-260131-100A	48H6412

Memory	OEM Part	IBM Part
G8FHX- Memory exp. mod.	136-260131-502A	67H9203
G8FHW- Memory exp. brd.	136-260131-501A	67H9202