



Figure 1. NEC PowerMate 2

Specifications

Processor

- Intel 286 8/10MHz

Memory

- 640KB standard, expands to 8.6MB

I/O Expansion Slots

- Five 8/16 bit slots, two 8 bit slots

Diskette Drive

- 1.2MB, 5.25"

Integrated Features

- Diskette drive controller, no IDE interface, enhanced keyboard, parallel port, one RS-232C serial port, no built in video option.

Internal Expansion Bays

- Five total 5.25" bays;
Four front accessible.
One internal.

I/O Architecture (Bus s supported)

- ISA

Power Supply

- 237 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 and T-15 Torx screwdrivers
- Needle nose pliers
- Diags and formatted blank diskette
- Anti-static wrist strap

Jumper/Switch Settings

SWITCH S5 SETTINGS

Switch	Setting	Function
1	OFF *	Not used
2	OFF *	Not used
3	OFF *	Not used
4	ON * OFF	Turns on parallel port Turns off parallel port
5	ON * OFF	Serial port channel 1 on Serial port channel 1 off
6	ON * OFF	Serial port channel 2 on Serial port channel 2 off
7	ON *	Not used
8	ON * OFF	Turns on primary dsktte cntrlr Turns off primary dsktte cntrlr
9	ON OFF *	Scndry. I/O f/ dsktte drv on Scndry. I/O f/ dsktte drv off
10	ON * OFF	Color monitor used Monochrome monitor used

* Default

System Configuration, ROM Selection Settings

SWITCH S12 SETTINGS

Switch	Setting	Function
1	ON *	Do not change
2	OFF *	Do not change
3	ON *	Do not change
4	ON *	Do not change
5	ON *	Not used
6	ON * OFF	Chooses IBM compat. ROM Chooses APC-mode ROM

* Default

RAM Capacity Jumper Settings

SWITCH S2 SETTINGS

Jumper	Setting	Bank 0	Bank 1
4-3 1-2	jumpered unjumpered	256KB	None
4-3 * 1-2 *	unjumpered jumpered	256KB	64KB
4-3 1-2	unjumpered unjumpered	256KB	256KB

* Default

Expansion Memory Wait Jumpers

SWITCH S7 SETTINGS

Jumper	Setting	Function
4-3 * 1-2 *	unjumpered jumpered	2-wait exp. mem. 10MHz or 1-wait exp. mem. 8MHz
4-3 1-2	jumpered unjumpered	1-wait exp. mem. 8/10MHz

* Default

Jumper/Switch Settings (Continued)

Additional System Board Jumpers

Jumper	Setting	Function
S1	unjumpered 1-2 *	Normal operation Not used
S3	2-3 * 1-2	Programmable ROM Mask ROM not used
S4	2-3 * 1-2	ROM type = 27256 ROM type = 27128
S6	2-3 * 1-2	Normal operation Not used

* Default

G9YCR Disk/Diskette Controller Board Jumper Settings

Jumper	Function
E1-E2	Scndry. I/O 372, 374/377 f/ dsktte. drvs.
E2-E3 *	Primary I/O 3F3, 3F4/3F7 f/ dsktte. drvs.
E4-E5	Scndry. I/O addr. is 170/177 disk drvs.
E5-E6 *	Primary I/O addr. of 170/177 disk drvs.
E7-E8 *	Must be jumpered

* Default

G9ZNH Hard Disk Controller Board Jumper Settings

Jmpr	Setting	Function
W1	1-2 * 2-3	HS3 chosen 16 head drvs. Reduced write
W2	Always Unjumpered *	
W3	1-2 * 2-3	Prmry. I/O Addr 1F0-1F7, 3F6, 3F7 Scndry. I/O Addr 170-177, 376, 377
W4	1-2 2-3 *	Cntrlr. output drvs. off by firmware Cntrlr. output drvs. on by firmware
W7	1-2 * 2-3	Normal operation Not used
W8	1-2 * 2-3	Normal operation Not used
W9	Always Unjumpered *	
W10	1-2 * 2-3	Normal operation Not used
W11	Always Unjumpered *	

* 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.

System Cover

How to remove the cover:

1. Remove the four screws holding the top cover to the system unit on the rear panel.
2. As you pull the top cover, lift up and off.

Field Replaceable Units

Memory	OEM Part	IBM Part
512KB Memory Exp. Board	136-433626-A	66H0110
512KB Memory Exp. Mod.	136-005873-002A	67H9092

Controller Boards	OEM Part	IBM Part
G8CDQ ST506 HD cntrlr.	808-865892-007A	62H1455
G9YCR- Disk/Diskette	808-865892-001A	68H5602

Internal Hard Drive	OEM Part	IBM Part
40MB, 5.25", HD	134-500160-1040	67H9037
20MB, 5.25", HD	134-500206-1040	67H9038
66MB, 5.25", HD	136-006912-010A	67H9098

System Boards	OEM Part	IBM Part
G9ZXW- System Board	136-434411-A	67H9232

Diskette Drives	OEM Part	IBM Part
5.25", 1.2MB Floppy	136-500025-006-0	48H6359
5.25", 360KB Floppy	136-100657-006-0	67H9178
3.5", 720KB Floppy	136-006372-424A	67H9094

Video Boards	OEM Part	IBM Part
G9XZT-Color graphics brd.	136-005871-A	67H9089
Advanced graphics board	136-005872-A	67H9090

Miscellaneous	OEM Part	IBM Part
Lithium Battery, (6v)	804-020612-001A	55H1254
Power Supply (237 Watt)	808-865745-001A	49H5539