

PowerMate VP Desktop and Minitower

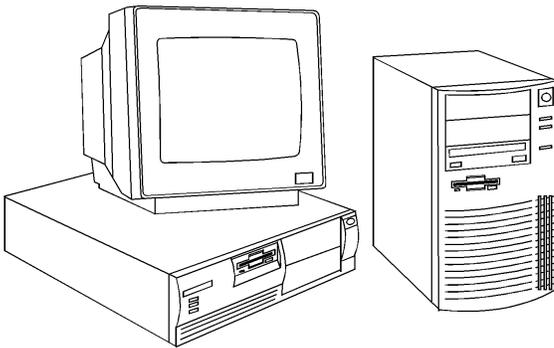


Figure 1. NEC PowerMate VP, Desktop and Minitower

Specifications

Processor

- Intel Pentium 75, 90, 100MHz

Memory

- 8 MB RAM, expands to 128MB

I/O Expansion Slots

- Desktop: Three 16 bit ISA slots
One PCI/ISA slot.
- Minitower: Three 16 bit ISA slots
One PCI slot
One PCI/ISA slot.

Diskette Drive

- 1.44MB drive standard

Integrated Features

- Integrated Video & graphics accelerator (1MB VRAM)
- One parallel, two serial ports
- 32 - bit PCI enhanced IDE disk interface
- PS/2 style keyboard and infrared mouse

Optional Features

- Multi-Media
4x CD ROM
16MB RAM
- Network card

Dimensions

- Desktop: 4.4" h X 16.9" w X 16.2" d
- Minitower: 15.25" h X 8.5" w X 17.5" d

Internal Expansion Bays

- Desktop: Two 3.5" and two 5.25" drive bays.
- Minitower: Three 3.5" and three 5.25" drive bays.

I/O Architecture (Bus s supported)

- PCI and ISA

Power Supply

- Desktop: 145 Watt
- Minitower: 200 Watt

Tools and Software Requirements

- Phillips head screwdriver
- Needle nose pliers
- Diags and formatted blank diskette
- Anti-static wrist strap

Jumper/Switch Settings

System Board, Jumper Settings

Jumper	Setting	Function
JP1	1-2* 2-3	SIMMs Memory, double sided SIMMs Memory, single sided
JP5	Jumped *	75 MHz, frequency 50 MHz
JP6	Unjumped *	90 Mhz, frequency 60 MHz
JP7	Unjumped *	100 Mhz, frequency 66 MHz
JP8	Unjumped * Jumped	Normal operation Resets CMOS Settings
JP10	Jumped Unjumped*	1/2 Bus/Core frequency ratio 2/3 Bus/Core frequency ratio
JP12	1-2 * 2-3	75/90 Processor Volts @ 3.38 100 Processor Volts @ 3.52

* 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 by touching static strap to chassis.

System Cover

Desktop version:

1. Remove the two cover screws on rear of unit.
2. Slide the cover a few inches to the back of unit.
3. Lift the top cover up and off the system unit.

Minitower version:

1. Remove the four cover screws on rear of unit.
2. Pull cover a few inches to the rear of system.
3. Lift the cover up and off of the system.

Special Notices:

Diagnostics

- For CMOS use QAPLus/FE or (F2) during power-ON
- For Advanced Diags use a PC Diagnostic Utility
- Normal Post Diags performed on Power UP of system
- Troubleshoot according to errors found during test

BIOS Functions

- All IRQ used by built- in ports are not available for use by any ISA cards in the system
- The system unit's CMOS is set with the correct hardware settings at the factory. Time and date may be the only thing to change

Memory

- Memory used is single/double sided by 32 bits @ 70ns
- On single sided memory, banks 0 or 1 must be paired in size for the bank, but the banks may have any combination of memory.
- On double sided memory, banks 0 or 1 must be paired in size for the bank and bank 1 must have less then or equal to the total RAM size in bank 0.

Field Replaceable Units

Memory	OEM Part	IBM Part
256KB Cache Board	158-053745-000	62H1302
4MB @ 4MB X 9 SIMM	158-082552-070	61H5845
4MB @ 1MB X 32 SIMM	158-053746-000	47H9640
8MB @ 2MB X 32 SIMM	158-053746-001	37H8990
8MB @ 8MB X 9 SIMM	158-082553-070	37H8754
16MB @ 16MB X 9 SIMM	158-082556-070	37H8755
16MB @ 4MB X 32 SIMM	158-053746-003	37H8991
32MB @ 8MB X 32 SIMM	158-053746-002	37H8992

System Boards	OEM Part	IBM Part
System board, no CPU	158-050794-000A	37H8756

Processors	OEM Part	IBM Part
Heat-sink	158-060219-002	65H9785
Intel 486DX2/66	158-082534-000	67H9773
Intel 486DX4/100	158-082577-001	67H9774
Intel 486DX2/66 Mini-tower	158-082533-000	37H8760

Cables	OEM Part	IBM Part
Diskette signal cable	158-050690-001	66H7494
HD IDE signal cable	158-050691-000	66H7495
CD ROM IDE signal cable	158-050691-001	66H7496
Audio cable for CD-ROM	158-050824-000	66H7520

Miscellaneous	OEM Part	IBM Part
PCI/ISA backboard bracket	158-050685-006	61H7408
PCI/ISA backboard bracket	158-050795-000A	61H7410
Network board	158-050796-000	66H0436
Sound board	158-050797-000	37H8757
Battery 3.6v	158-056137-000	37H8761
Microphone	158-050696-100	61H7414
Keyboard PS/2 style	158-050707-000	37H8765
NEC PS/2 style mouse	158-050484-002	55H1100
PCI/ISA backboard ¹	158-050798-000A	61H5819
Power supply ¹ (200 Watt)	158-050699-000	48H7032

¹ For minitower

Internal Hard Drive	OEM Part	IBM Part
540MB, IDE HD	158-050395-322	71H0400
850MB, IDE HD	158-050395-337	37H8752
1.3GB, IDE HD	158-050395-338	68H9060

CD-ROM	OEM Part	IBM Part
4x speed CD ROM	158-050817-000	37H8763

Diskette Drives	OEM Part	IBM Part
5.25", 1.2MB Floppy	158-053476-000	22H1988
3.5", 1.44MB Floppy	808-870954-101A	37H8753