**Dell 486 DE/SV**

## Specifications

### Processor

- SE: Intel 486SX/20, 486SX/33, 486SX/50
- DE: Intel 486SX/25, 486DX/33/50, 486DX2/50

### Memory

- SE: 4MB standard, expands to 128MB
- DE: 4 to 96MB

### I/O Expansion Slots

- SE: 8-full length expansion slots
- DE: 6-32 bit expansion slots

### Diskette Drive

- 1.44MB diskette drive

### Integrated Features

- Parallel, 2-serial, keyboard, VGA

### Internal Expansion Bays

- SE: 3-external, 8-internal
- DE: 3-external, 1-internal

### I/O Architecture

- Extended Industry Standard Architecture (EISA)

### Power Supply

- SE: 300W
- DE: 224W

### Diagnostics

- Normal Post Diags performed on Power UP of system.
- Dell system support diskette
- Troubleshoot according to errors found during test

### CMOS Access

- QAPlus/FE

## Tools and Software Requirements

- Flat bladed screwdriver
- Needle nose pliers
- Anti-static wrist strap
- Diagnostics and formatted blank diskettes

## System Board Configuration Switches

| Switch | Setting | Function |
|---|---|---|
| EVGA | ON | Turns off on board VGA |
| | OFF* | Turns on board VGA |
| MSYC | ON | For older multisync monitors |
| | OFF* | For Dell multisync monitors |
| EPWD | ON* | Turns on password option |
| | OFF | Turns off password option |
| AROM | ON | Sys uses ROM BIOS boot code |
| | OFF | Sys uses flash ROM boot code |

\* Default

## System Board Configuration Jumpers

| Jumper | Setting | Function |
|---|---|---|
| MNT | jumpered | Turns on manufactr. maint. |
| | unjumpered* | Turns off manufactr. maint. |
| BOOT | jumpered | Flash boot erase is on |
| | unjumpered* | Flash boot erase is off |
| RESET | jumpered | Cold sys boot operation on |
| | unjumpered* | System operates normally |

\* Default

System Board Configuration Jumpers Dell
486 DE Only

| Jumper | Setting | Function |
|---|---|---|
| JM6 | unjumpered | 486SX operation |
| | jumpered* | 487SX operation |
| JM7 | 1-2* | 486SX operation |
| | 2-3 | 487SX operation |
| JM8 | unjumpered* | 486SX operation |
| | 1-2 | 487SX operation |

\* 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 the outlet and system
3. Disconnect all peripheral devices from the computer.

### System Cover

How to remove the cover
1. System has top, side and front covers
2. To remove the top cover slide it towards the back of the system until it stops
3. Spread the sides slightly to disengage the tabs
4. Lift the cover up and off
5. Remove the side cover by removing top cover first
6. Turn the keylock, insert hand in cutout on top left corner
7. Disengage ball ends, lift the cover up and away
8. To remove the front cover close the retractable dust cover
9. Grasp front cover and each side and pull off.

# Field Replaceable Units

| Memory | OEM Part | IBM Part |
|---|---|---|
| 1MB SIMM | 22125 | 22H2720 |
| 2MB SIMM | 22126 | 22H2724 |
| 4MB SIMM | 25192 | 22H2894 |
| 8MB SIMM 30 PIN | 35787 | 22H2722 |
| 8MB SIMM | 25191 | 22H3599 |
| 8MB SIMM | 22131 | 22H2895 |
| 64MB SIMM | 60684 | 22H2897 |

| Controller | OEM Part | IBM Part |
|---|---|---|
| IDE dual | 60548 | 49H3809 |
| Dual HD/FD ESDI | 16194 | 22H2857 |
| SCSI PIO | 25739 | 22H2858 |
| SCSI | 35837 | 22H2816 |
| HD EISA/SCSI, no cache | 31846 | 22H3116 |
| MIRROR MOD EISA/SCSI | 32162 | 22H2664 |
| CARD CACHE .5M EISA/SCSI | 32160 | 22H2666 |
| 2MB UPGD EISA | 20510 | 22H2668 |
| ESDI MEM UPGD 3.5MB | 16156 | 22H2669 |
| DDA,C,F3/F5 W/ DOC | 33391 | 49H4958 |
| ESDI 120MHz 15BPS | 42761 | 22H2865 |
| FD ESDI SINGLE | 40428 | 22H2864 |

| Internal Hard Drive Size | OEM Part | IBM Part |
|---|---|---|
| 200MB SCSI | 13772 | 22H2868 |
| 200MB | 14066 | 22H2869 |
| 320MB | 14680 | 22H2758 |
| 80MB IDE | 14684 | 22H2759 |
| 40MB IDE | 14685 | 22H2760 |
| 200MB Maxtor | 17498 | 22H2870 |
| 50MB Quantum | 17694 | 22H2763 |
| 1.4GB | 17910 | 22H2716 |
| 40MB | 18814 | 22H2871 |
| 50MB IDE | 18914 | 22H2680 |
| 500MB | 19539 | 22H2706 |
| 500MB | 19540 | 22H2872 |
| 1.4GB | 19866 | 22H2873 |

| System Bds. | OEM Part | IBM Part |
|---|---|---|
| 486DE | 16570 | 22H2908 |
| 486DE | 60716 | 22H2911 |
| 433DE/SE | 16461 | 48H7144 |
| 466DE/SE/2 | 29578 | 48H9546 |
| 486DE w/ video | 18910 | 22H2910 |
| 486DE w/ video | 30911 | 22H2909 |
| 486SE | 19403 | 22H2914 |
| 486SE | 14086 | 22H2913 |

| Coprocessor Cards | OEM Part | IBM Part |
|---|---|---|
| Weitek4167-25 | 21305 | 22H2671 |
| Weitek4167-33 | 21306 | 22H2866 |

| Processor Cards | OEM Part | IBM Part |
|---|---|---|
| 20MHz proc DE/SE upgd | 60715 | 48H7124 |
| 33MHz proc DE/SE upgd | 60714 | 49H3820 |
| 50MHz proc DE/SE | 14053 | 48H6598 |
| 66MHz proc upgd DE/SE | 27217 | 22H3296 |

| Video Memory | OEM Part | IBM Part |
|---|---|---|
| 1024/256 color card | 43072 | 22H2725 |
| 1024/16 color card | 43073 | 22H2552 |
| ATI Ultra video bd | 17696 | 22H2798 |
| ATI vantage video bd | 18692 | 22H3457 |
| Number 9 GXI video bd | 30472 | 22H2729 |
| VGA 16-bit sigma | 63589 | 22H2730 |
| VGA 16-bit daughter bd | 13940 | 22H2900 |
| Sys video BIOS | 14090 | 22H2912 |

| Tape Drives | OEM Part | IBM Part |
|---|---|---|
| 150 Tape Backup Ctrlr | 42062 | 22H2520 |
| 40/120MB TBU ctrlr | 19496 | 22H2555 |
| 250MB TBU | 14861 | 22H2735 |
| 40-120MB Int. | 19493 | 22H3142 |
| 525MB | 28860 | 68H1326 |
| 320/525MB int. | 14259 | 22H2738 |
| 4GB DAT Internal | 19994 | 22H2739 |
| 2GB DAT | 16741 | 22H2808 |

| Diskette Drives | OEM Part | IBM Part |
|---|---|---|
| 3.5/5.25 combo | 27952 | 48H9208 |
| 3.5 (5.25) | 42756 | 22H2673 |
| 2.88MB | 31103 | 22H2867 |
| 5.25 | 40155 | 22H3146 |

| Cables | OEM Part | IBM Part |
|---|---|---|
| 4 Wire Y | 40012 | 49H0670 |
| Data ESDI | 42935 | 66H9801 |
| Dual drive IDE | 43044 | 49H1564 |
| Floppy 3 drive | 43042 | 51H3517 |

| Miscellaneous | OEM Part | IBM Part |
|---|---|---|
| Pwr Sply 224W lite-on | 17916 | 48H7292 |
| Pwr Sply 224W AC | 23319 | 22H2806 |
| Pwr Sply 224W | 14181 | 55H1820 |
| Pwr Sply 350W | 17914 | 48H7371 |
| 4.5V alkaline | 20409 | 48H7821 |
| Lithium battery | 20610 | 47H4786 |
| 2400bd int modem | 43154 | 22H2740 |
| 9600bd int. w/ sw | 29801 | 22H2822 |
| 9600 bd external | 22300 | 22H2823 |