**Figure 1. NEC Ready 425es, 433es, 466es**

## Specifications

### Processor
- Intel 486SX-25/33, 486DX2-66MHz

### Memory
- 4MB standard, expands to 36MB

### I/O Expansion Slots
- Three 8/16 bit expansion slots

### Standard Drives
- **425es:** 1.44MB floppy and 170MB
- **433es:** 1.44MB floppy and 210MB
- **466es:** 1.44MB floppy and 250MB

### Integrated Features
- Diskette and IDE controller
- One parallel port and One serial port.
- Flash ROM and 8K internal cache
- PS/2 style Keyboard and Mouse
- **433es,466es:** Fax/Modem (COM2)
- Local bus video (VGA) and graphics accelerator

### Internal Expansion Bays
- One 5.25'' front accessible bay
- One 3.5'' front accessible bay
- One 3.5'' internal bay

### I/O Architecture (Bus s supported)
- Fast Industry Standard Architecture (FISA)

### Power Supply
- 145 Watt

### Dimensions
- 4.2'' h X 15.4'' w X 16.2'' d

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

## Jumper/Switch Settings

### CONFIGURATION SWITCH -- SW1

| Switch | Setting | Function |
|---|---|---|
| 1 | ON | Turns off built in VGA |
|   | OFF * | Turns on built in VGA |
| 2 | ON | Turns off built in diskette |
|   | OFF * | Turns on built in diskette |
| 3 | ON | Turns off password feature |
|   | OFF * | Turns on password feature |
| 4 | ON | No BIOS reprogramming |
|   | OFF * | Allows BIOS reprogramming |
| 5 | ON [1] | CPU clock 25MHz |
|   | OFF [2] | CPU clock 33MHz |

* Default, [1]425es, [2]433es,466es

### CPU Select Jumpers

| Jumper | Setting | Function |
|---|---|---|
| JP1 | 1-2 ON | Turns OFF QFP CPU, turns ON PGA overdrive socket |
|   | 1-2 OFF * | Turns ON QFP CPU, turns OFF PGA overdrive socket. |
| JP2 | 1-2 ON | 486SX-PGA |
|   | 2-3 ON * | 486SX-QFP, 487SX, 486DX, DX2, Overdrive, P24T |

* Default

### Printer Interrupt Jumper

| Jumper | Setting | Function |
|---|---|---|
| JP8 | 1-2 * | LPT1=IRQ7 |
|   | 2-3 | LPT1=IRQ5 |

* 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
How to remove the side cover:
1. Locate Cover release screw close to the top on the rear panel of the system.
2. Turn cover release with a coin or slotted screw driver, so that the slot is in the vertical position.
3. Slide the cover to the front of system a few inches.
4. Lift the cover up and off to remove.

## Special Notices:
- System board has 4MB of SIMM memory solder on.
- The metal plating on the SIMM stick must match the plating of the socket in the system.
- For memory in ''page mode interleaving'', Memory banks 0 and 1 must have the same SIMM memory size of 4MB.
- The SIMM memory in Bank 2 must be the same size or less then the memory size found in Bank 1.
- All NEC hard drives are formatted at the factory and need no formatting and are configured as primary.
- All switch settings will not be reflected until the system has been completely repowered.
- When removing the processor chips, use a chip puller.
- Multi-Sync monitors contain high voltages, any internal adjustments are to be made only by certified engineer.

## Field Replaceable Units

| Memory | OEM Part | IBM Part |
|---|---|---|
| 4MB @ 1MB x 36 SIMM | 158-053409-003 | 48H7042 |
| 16MB @ 4MB x 36 SIMM | 158-053409-004 | 67H9767 |
| 256KB secondary cache | 158-053639-000 | 67H9668 |

| Controllers and Adapters | OEM Part | IBM Part |
|---|---|---|
| Keyboard / mouse intrf. brd. | 136-009534-218A | 22H1957 |

| Internal Hard Drive | OEM Part | IBM Part |
|---|---|---|
| 170MB, 3.5'', IDE HD | 158-050395-310 | 48H2529 |
| 210MB, IDE HD | 158-050395-319 | 22H1968 |
| 250MB, IDE HD | 158-050404-068 | 22H1997 |

| System Boards | OEM Part | IBM Part |
|---|---|---|
| Ready 425es- System Board | 158-026153-001A | 22H1959 |
| Ready 433es- System Board | 158-026153-100A | 22H1960 |
| Ready 466es- System Board | 158-026153-200A | 22H1961 |

| Diskette Drives | OEM Part | IBM Part |
|---|---|---|
| 3.5'', 1.44MB Floppy | 158-053408-000 | 20H9536 |
| 5.25'', 1.2MB Floppy | 136-261977-404A | 20H9508 |

| Cables | OEM Part | IBM Part |
|---|---|---|
| Keyboard/mouse intf. cable | 158-050366-001 | 55H1086 |
| Floppy signal cable | 158-050503-001 | 66H7465 |
| HD IDE signal cable | 158-050324-001 | 66H7455 |

| Miscellaneous | OEM Part | IBM Part |
|---|---|---|
| ISA backboard | 158-026135-000A | 22H1962 |
| Power supply (145 Watt) | 158-050490-000 | 22H1963 |
| Battery 3.6v | 158-060229-000 | 55H1101 |
| NEC PS/2 style mouse | 158-050484-000 | 22H1970 |
| Keyboard PS/2 style | 158-050550-000 | 20H9481 |