

NEC Ready 7020, 7025, 7510 9010, 9510, 9515, 9520, 9530

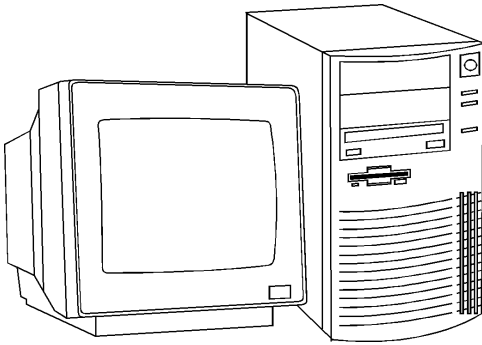


Figure 1. NEC Ready
7020, 7025, 7510,
9010, 9510, 9515, 9520, 9530

Specifications

Processor

- **7020, 7025, 7510:** Intel Pentium 75MHz
- **9010, 9510:** Intel Pentium 90MHz
- **9515, 9520:** Intel Pentium 100MHz
- **9530:** Intel Pentium 120MHz

Memory

- 7020, 7025, 9010, 9515: 8MB, expands to 128MB
- 7510, 9510, 9520, 9530: 16MB, expands to 128MB

I/O Expansion Slots

- One available 32 bit PCI slot
- Two available ISA slots
- One available 32 bit PCI/ISA slot.
- One ISA filled with Fax/Modem

Standard Drives

- **7020, 7025, 9010, 9515:** 1.44MB floppy and 850MB HD
- **7510, 9510, 9520, 9530:** 1.44MB floppy and 1.275GB HD

Integrated Features

- Integrated graphics
- One Parallel, two serial ports
- Floppy and IDE controller
- PS/2 Keyboard and Mouse
- CD ROM (IDE)
- 14.4 Internal Fax/Modem/Voice

Internal Expansion Bays

- Five storage device bays

I/O Architecture (Bus s supported)

- PCI and ISA

Power Supply

- 200 Watt

Diagnostics

- Normal Post Diags performed on Power UP of system.

CMOS Access

- QAPlus/FE

Tools and Software Requirements

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

Jumper/Switch Settings

System Board - SIMM Type 7020, 7025, 7510, 9010

Jumper	Setting	Function
JP1	1-2	Double sided SIMMS used
	2-3	Single sided SIMMS used

System Board -- Processor Speed 7020, 7025, 7510, 9010

Jumper	Setting	Function
JP5	jumped *	75MHz processor
JP6	unjumped	90MHz processor
JP7	unjumped	100MHz processor

* Default

System Board -- Bus Speed 7020, 7025, 7510, 9010

Jumper	Setting	Function
JP10	jumped	1/2 bus core frequency radio
	unjumped *	2/3 bus core frequency radio

* Default

System Board -- Processor Voltage 7020, 7025, 7510, 9010

Jumper	Setting	Function
JP12	1-2	75/90MHz, 3.38 volts
	2-3	100MHz, 3.52 volts

* Default

System Board -- Configuration Switch: SW1 9510, 9515, 9520, 9530

Toggle	Setting	Function
1 - 2	OFF - ON	Cache size is 512KB
	OFF - OFF *	Cache size is 256KB
	ON - OFF	Cache size is 0KB
3	ON	Clears password feature
	OFF *	Normal operation
4	ON	Resets CMOS
	OFF *	Normal operation
5	OFF *	CMOS setup access on
	ON	CMOS setup access off
6	ON	Int. multiplier 2:1 120MHz
	OFF	Int. multiplier 3:2 90/100MHz
7 - 8	OFF - OFF	External CPU clock: 50MHz
	ON - OFF	External CPU clock: 60MHz
	OFF - ON	External CPU clock: 66MHz

System Board -- Processor Voltage Jumper 9510, 9515, 9520, 9530

Jumper	Setting	Function
J9C1	1-3	Standard (Vstand) Pentium
	5-7	VRE Pentium

Jumper/Switch Settings (Continued)

System Board -- 9510, 9515, 9520, 9530

Jumper	Setting	Function
J5J1	1-2	Corrupt BIOS boot
	1-3 *	Normal BIOS boot
	5-6	Open, 1/6 ext. bus clock
	5-7 *	1/8 external bus clock

* 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 cover:

1. Remove the four cover screws on rear of unit.
2. Pull the cover an inch to the back of the unit.
3. Lift the top cover up and off the system unit.

Special Notices:

- For Advanced Diags use a PC Diagnostic Utility.
- Troubleshoot according to errors found during test.
- All NEC hard drives are formatted at the factory and need no formatting and are configured as primary drive.
- All switch settings will not be reflected until the system has been completely repowered.
- Multi-Sync monitors contain high voltages, any internal adjustments are to be made only by certified engineer.
- Add memory to system in closest to the drive bays first.
- Same speed and same density type, (single/double) SIMMs are needed within the same memory bank.
- Different size memory banks may be intermixed when adding memory to system board. It is recommended that Bank 0 have larger SIMMs than Bank 1 when populating the system board

Field Replaceable Units

Memory	OEM Part	IBM Part
DRAM, 1MB	158-053685-003	55H2389
4MB @ 1MB X 32 SIMM	158-053746-000	47H9640
8MB @ 2MB X 32 SIMM	158-053746-001	37H8990
16MB @ 4MB X 32 SIMM	158-053746-003	37H8991
32MB @ 8MB X 32 SIMM	158-053746-002	37H8992

Internal Hard Drives	OEM Part	IBM Part
850MB, IDE HD	158-050395-337	37H8752
1.3GB, IDE HD	158-050395-338	68H9060

Processors	OEM Part	IBM Part
Pentium 75 Mhz	158-082502-005	61H5839
Pentium 90 Mhz	158-082502-007	61H5840
Pentium 100 Mhz	158-082502-008	61H5841
Pentium 120 Mhz	158-082502-009	62H5664
Heat-sink for Pentium only	158-060324-001	70H3241

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

Cables	OEM Part	IBM Part
HD IDE signal cable	158-050324-000	66H7454
RJ-11 cable	158-050825-000	66H7521
Audio cable for CD-ROM	158-050824-000	66H7520
CD-ROM IDE signal cable	158-050562-004	61H7419
Floppy signal cable	158-050578-001	66H7477

Miscellaneous	OEM Part	IBM Part
Sound /fax / modem board	158-050792-000	61H5820
Wave table daughter	158-050805-000	61H5843
ISA/PCI bus backboard	158-050818-000A	61H5844
Power supply (200 Watt)	158-050684-000	48H7032
External speaker assembly ¹	158-050746-000	61H5848
External speaker assembly ²	158-050801-000	61H5823
External speaker assembly ³	158-050616-000	61H5877
HD busy power lamp ⁴	158-050705-202	61H7418
HD busy power lamp ⁵	158-050705-302	66H7518
Microphone	158-050802-000	61H5849
Fan assembly & cable	158-050823-000	61H5851
Keyboard PS/2 style	158-050707-000	37H8765

¹ Ready 9515, 9520, 9530, ² Ready 7510, 9010, 9510

³ Ready 7020, 7025 ⁴ Ready 7020, 7025, 7510, 9010

⁵ Ready 9510, 9515, 9520, 9530

System Boards	OEM Part	IBM Part
PCB- 7020,7025,7510,9010	158-050803-000A	61H5837
System. Brd.- 9510,15,20,30	158-050806-000A	55H1837

CD-ROM Drives	OEM Part	IBM Part
CD-ROM, IDE, 4X	158-080817-000	61H5850