



Compaq Proliant Rack-Mountable Servers

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**Switch Settings Keyboard/Monitor/Mouse
OEM 169968-001, IBM P/N 20H8757**

4 Port Switch Box

Board 1: Monitor Controlling Switches

Switch	Controlling DIP SW	Server Controlled
SW1	1-4	Server 1
	5-8	Server 2
SW2	1-4	Server 3
	4-8	Server 4

**Switch Settings Keyboard/Monitor/Mouse
SPN 169968-002**

8 Port Switch Box

Board 1: Monitor Controlling Switches

Switch	Controlling DIP SW	Server Controlled
SW1	1-4	Server 1
	5-8	Server 2
SW2	1-4	Server 3
	5-8	Server 4
SW3	1-4	Server 5
	5-8	Server 6
SW4	1-4	Server 7
	5-8	Server 8

Switch Settings Keyboard/Monitor/Mouse

Monitor Mode Board 1:

Setting for each Server Monitor

Monitor	SW1-5	SW2-6	SW3-7	SW4-8
VGA Mono	OFF	OFF	ON	OFF
VGA/SVGA	OFF	ON	OFF	OFF
SVGA-Compaq 430	ON	ON	OFF	ON
XVGA-IBM 8512	OFF	ON	OFF	OFF
XVGA-IBM 8513	OFF	ON	OFF	OFF
XVGA-IBM 8514	ON	ON	OFF	OFF
XVGA-IBM 8515	ON	OFF	OFF	OFF

Note: DIP switches (SW1-2) for the 4-port box and (SW1-4) for the 8-port box must reflect the type of monitor installed on the server

Switch Settings Keyboard/Monitor/Mouse

Mode/Function

DIP Switches

Board #2: SW1 Default Settings

Description	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8
Reserved	ON							
Soft switching		ON						
Keybd Brdcstng*			OFF					
Mouse brdcstng*				OFF				
Scan mode					ON			
Reserved						OFF		
Not used							N/A	
Not used								N/A

* Use caution broadcast mode sends to all attached servers

Specifications

Processor

- Intel 486DX2/66, 5/66,

Memory

- Proliant 1000R: 16MB RAM expands to 128MB
- Proliant 2000R: 32MB RAM expands to 512MB
- Proliant 4000R: 64MB RAM expands to 512MB

I/O Expansion Slots

- 1000R: 7 total EISA bus master slots
- 2000R: 12 total slots, 7 EISA bus master slots available
- 4000R: 14 total slots, 7 EISA bus master slots available

Diskette Drive

- 1-3.5" 1.44, 1-5.25" 1.2 diskette drives

Integrated Features

- 2-Serial, parallel, pointing device port, 32-bit Fast SCSI-2, network, integrated graphics

Internal Expansion Bays

- 1000R/2000R: 5-internal hot pluggable bays, 4000R: 7-internal hot pluggable bays

I/O Architecture (Bus's supported)

- Compaq Flex, TriFlex PC architecture

Power Supply

- 1000R: 325 watt; 2000R/4000R: 488 watt

Diagnostics

- Normal Post Diags performed on Power UP of system.
- For Advanced Diags use Diskette version 9.0
- Troubleshoot according to errors found during test

Tools And Software Requirements

- Flat bladed and Torx T-8, T-10, and T-15 screwdrivers
- Needle nose pliers
- ROM removal tool
- Diagnostics and formatted blank diskettes
- Anti-static wrist strap

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

Warning: High voltage is present, use caution when running the Proliant without the system cover on.

1. How to remove the cover
2. Lift and remove the front bezel door
3. Loosen thumb screws and remove at front of panel
4. Slide system unit cover forward then up

Field Replaceable Units

Memory	Assembly	OEM Part	IBM Part
Mem. Exp. Bd.	002563-001	139947-001	20H8574
4MB 70ns mod.	118665-004	141754-001	20H6294
4MB 80ns mod.	115665-002	118741-001	93F7237
8MB 70ns mod.	129041-002	141755-001	90G7098
8MB 80ns mod.	129041-001	128954-001	93F7238
16MB 70ns mod.	137143-003	149947-001	90G7101
16MB 80ns mod.	137143-002	139143-001	90G7880
32MB 70ns mod.	139973-002	149948-001	20H8476
32MB 80ns mod.	139973-001	139949-001	20H8554

Controller Boards

Description	Assembly	OEM Part	IBM Part
SMART contrlr	002969	142130-001	20H8547
	003596	181132-001	20H8736
Fast SCSI-2	002682	142040-001	90G6451
Fast wide SCSI-2/E	003529	199634-001	37H1205
NetFlex contrlr	002709	142041-001	20H8539
NetFlex contrlr TR	142035	142042-001	20H8555
NetFlex-2 ENET-TR	003382	142222-001	20H8566
NetFix-2 Dual ENET	003101	142151-001	20H8567
NetFlex-2 TR	003647	199521-001	20H8538
NetFlex-2 Dual TR	003104	142195-001	20H8630
NetFlex-3/E contrlr	004162	169801-001	52H5606
NetFlex-3/P contrlr	004165	169811-001	74H2685
NtFix-3 100base TX	004183	169805-001	61H8949
NtFix3 100VG upgd	004189	169803-001	61H8947

Internal Hard Drive

Size	OEM Part	IBM Part
550MB Pluggable Fast SCSI-2	146799-001	20H8716
1.05GB Plggbl Fast SCSI-2	146717-001	20H8717
2.1GB Pluggable Fast SCSI-2	199428-001	20H8576
2.1GB Plggbl Fast-wide SCSI-2 ¹	199643-001	52H5595
4.3GB Pluggable Fast SCSI-2	199584-001	52H5605
4.3GB Plggbl Fast-wide SCSI-2 ¹	199598-001	52H5596

¹ Requires fast-wide SCSI-2 backplane upgrade

System Bds	Assembly	OEM Part	IBM Part
486DX2/66	003859	190751-001	20H8712
5/66	002443-004	148677-001	20H8568
	002443-014		
5/90	004495-001	163848-001	48H7139
	004495-011		
5/100	03756	163832-001	67H9849
5/100	005154-001	184793-001	52H5600
5/133	004715	213417-001	74H3820
I/O Bd 5/66,90,100	004486	163707-001	48H7137
I/O 486/50,5/66,100	003862	165677-001	20H8713

Diskette Drives	OEM Part	IBM Part
1.2MB	112566-001	93F7252
1.44MB	144207-001	20H8548
1.44MB (optional)	112565-001	93F7107

CD ROM Drives	OEM Part	IBM Part
Internal tray load	142223-001	20H8472
Caddy load	133881-001	93F9345
Quad speed, tray load, int.	184783-001	52H9094

Tape Drives	OEM Part	IBM Part
525MB ACA	142073-001	90G6447
1.2GB TBU	199615-001	61H8964
2/8GB DAT	142074-001	20H8559
4/16GB TurboDat	199464-001	20H8549
Internal TurboDat Autoloader	199466-001	20H8551
10/20 Int. DLT	199746-001	74H1954

Miscellaneous	Assembly	OEM Part	IBM Part
2400bd modem	001732-002	121250-001	93F9380
Speedpaq 144/I	003002	147453-001	55H1777
Speedpaq mdm	135698-001	199906-001	20H8096
hot-plg drv tray	146729-003	146781-001	20H8718
hot-plg drv bckpln	004192-001	190060-001	20H8714
SCSI Pass thru		142266-001	20H8715
clock battery		149344-001	20H8525
power supply		163744-001	20H8711
UPS 120v		165713-001	20H8764
UPS 220/230/240v		165714-001	20H8765
488 watt pwr spl		165628-001	52H6924

¹ Works with 5/100 processor only, assembly 005154

Cables	OEM Part	IBM Part
LED cables	165680-001	20H8719
Int. SCSI-2 HDD (2-devices)	165706-001	20H8720
Int. SCSI-2 HDD (32")	165679-001	20H8721
Diskette cable	165681-001	20H8722
External SCSI signal	146776-001	22H0168
Ext. 100 to 50 pin cable	142159-001	20H8724
Dualport ENET loopback	142254-001	20H8725
loop back cbl, NetFlex	142054-001	55H1088
Dual AUI breakout	197134-001	20H8727
Pwr Spl/Sys Bd. adap (1000R)	187369-001	20H8728
Daisy chain cable 3'	146776-003	20H8756
50-pin to 68-pin adapter	189638-001	53H1439

System ROM	OEM Part	IBM Part
System ROMPaq	143198-001	20H8731
Option ROMPaq	142207-001	37H1204
Drive Backplane ROM	146705-001	20H8735