

Rack-Mountable ProLiant Servers

1000R, 2000R, 4000R

System Boards*	Assembly	Spare Part
486DX2/66 System I/O Board (1000 only)	003859	190751-001
5/66 Processor Board	002443-004 002443-014	148677-001
5/90 Processor Board	004495-001 004495-011	163848-001 DISCONTINUED
5/100 Processor Board	003756	163832-001
5/100 Processor Board	005154-001	184793-001
5/133 Processor Board	004715-001	213417-001
5/166 Processor Board	005590-001	213466-001
System I/O Board (5/66, 5/90, 5/100)	004486	163707-001
System I/O Board (486/50, 5/66, 5/100)	003862	165677-001

* All processor boards listed in this table ship with a processor chip installed.

Keyboard/Monitor/Mouse Switch Box Switch Settings. SPN 169968-001

4-Port Switch Box Board 1: Monitor Controlling DIP Switches

DIP Switch Banks	Controlling DIP Switches	Server Controlled
S1	Switches 1 – 4	Server 1
	Switches 5 – 8	Server 2
S2	Switches 1 – 4	Server 3
	Switches 5 – 8	Server 4

Keyboard/Monitor/Mouse Switch Box Switch Settings. SPN 169968-002

8-Port Switch Box Board 1: Monitor Controlling DIP Switches

DIP Switch Banks	Controlling DIP Switches	Server Controlled
S1	Switches 1 – 4	Server 1
	Switches 5 – 8	Server 2
S2	Switches 1 – 4	Server 3
	Switches 5 – 8	Server 4
S3	Switches 1 – 4	Server 5
	Switches 5 – 8	Server 6
S4	Switches 1 – 4	Server 7
	Switches 5 – 8	Server 8

Keyboard/Monitor/Mouse Switch Box Switch Settings.

Monitor Mode Board 1, DIP Switch Settings for Each Server Monitor

Monitor Type	SW 1 & 5	SW 2 & 6	SW 3 & 7	SW 4 & 8
VGA Monochrome	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: Each bank of DIP switches (S1 and S2) for the 4-Port switch box and (S1, S2, S3, and S4) for the 8-port switch box must reflect the type of monitor configured on the server.

Rack-Mountable ProLiant Servers

1000R, 2000R, 4000R

Keyboard/Monitor/Mouse Switch Box Switch Settings.

Mode/Function DIP Switches Board Number 2 S1 DIP Switch Default Settings

Switch Number	Function or Mode	Default Setting
1	Reserved	Enabled (ON)
2	Soft Switching Mode	Enabled (ON)
3	Keyboard Broadcasting Mode *	Disabled (OFF)
4	Mouse Broadcasting Mode *	Disabled (OFF)
5	Scan Mode	Enabled (ON)
6	Tiering Mode	Disabled (OFF) Slave
7	Not Used	
8	Not Used	

* If enabled, this function should be used with extreme caution. Broadcast Mode sends commands to all attached servers.

Memory Boards/Modules	Speed	Assembly	Spare Part
Memory Expansion Board		002563-001	139947-001
4 MB Memory Module	70 ns	118665-004	141754-001
4 MB Memory Module	80 ns	118665-002	118741-001
8 MB Memory Module	70 ns	129041-002	141755-001
8 MB Memory Module	80 ns	129041-001	128954-001
16 MB Memory Module	70 ns	137143-003	149947-001
16 MB Memory Module	80 ns	137143-002	139143-001
32 MB Memory Module	70 ns	139973-002	149948-001
32 MB Memory Module	80 ns	139973-001	139949-001

Controller Boards	Assembly	Spare Part
SMART Array Controller*	002969	142130-001
	003596	181132-001
SMART-2/E Array Controller*	194771	194752-001
Fast SCSI-2 Controller	002682	142040-001
Fast-Wide SCSI-2/E Controller	003529	199634-001
NetFlex Controller	002709	142041-001
NetFlex Controller Token Ring Module	142035	142042-001
NetFlex-2 ENET-TR Controller	003382	142222-001
NetFlex-2 DualPort ENET Controller	003101	142151-001
NetFlex-2 TR Controller	003647	199521-001
NetFlex-2 DualPort TR Controller	003104	142195-001
NetFlex-3/E Controller	004162	169801-001
NetFlex-3/P Controller	004165	169811-003
NetFlex-3 100 Base-TX UTP Module	004183	169805-001
NetFlex-3 100 VG-AnyLAN UTP Module	004189	169803-001
10/100 TX PCI UTP Controller	005139	169849-001
10 T, PCI UTP Controller	006064	242501-001
4/16 TR PCI IBM UTP/STP Controller	N/A	199764-001
50-Pin to 68-Pin Adapter (standard to wide) *		189638-001
68-Pin to 50-Pin Adapter (wide to standard) *		189631-001

* Cable adapters are supported *only* between the controller and the internal SCSI cable. Adapters are NOT supported between the device and the cable. "SMART" controllers use adapter 189638-001. "SMART-2/E & 2/P" controllers use adapter 189631-001.

Rack-Mountable ProLiant Servers

1000R, 2000R, 4000R

Miscellaneous Internal	Assembly	Spare Part
2400 Baud Modem (DAA)*		127831-001
2400 Baud Modem*	001732-002	121250-001
SpeedPaq Modem*		199906-001
SpeedPaq 144/I Data and Fax Modem*	003002	147453-001
L3 Cache Daughter Board **		163808-001
Hot-Pluggable Tray Adapter	002786-001	146781-001
Hot-Pluggable Drive Backplane	004192-001	190060-001
SCSI Pass-thru Board		142266-001

* Refer to Modem Configuration Appendix for country-specific modem part numbers.

** Works with 5/100 processor board assembly 005154 only.

Hard Drives	Spare Part
9.1 GB Non Hot-Pluggable Wide Ultra 1.6" ^{1, 2, 3}	199886-001
9.1 GB Hot-Pluggable Wide Ultra 1.6" ^{1, 2, 3}	199888-001
9.1 GB Non Hot-Pluggable Fast-SCSI-2	199885-001
4.3 GB Hot-Pluggable Wide Ultra 1" ^{1, 2, 3}	242622-001
4.3 GB Non Hot-Pluggable Wide Ultra 1" ^{1, 2, 3}	242606-001
4.3 GB Hot-Pluggable FW SCSI-2 ^{1, 2}	199598-001
4.3 GB Non Hot-Pluggable FW SCSI-2 ^{1, 2}	199599-001
4.3 GB Hot-Pluggable Fast-SCSI-2	199584-001
4.3 GB Non Hot-Pluggable Fast-SCSI-2	199585-001
2.1 GB Hot-Pluggable Wide Ultra 1" ^{1, 2, 3}	242603-001
2.1 GB Non Hot-Pluggable Wide Ultra 1" ^{1, 2, 3}	242604-001
2.1 GB Hot-Pluggable FW SCSI-2 ^{1, 2}	199878-001
2.1 GB Hot-Pluggable FW SCSI-2 ^{1, 2}	199643-001
2.1 GB Non Hot-Pluggable FW SCSI-2 ^{1, 2}	199644-001
2.1 GB Hot-Pluggable Fast-SCSI-2	199428-001
2.1 GB Non Hot-Pluggable Fast-SCSI-2	142272-001
1.05 GB Hot-Pluggable Fast SCSI-2	146717-001
1.05 GB Non Hot-Pluggable Fast SCSI-2	146799-001
Fast-Wide/Fast Hot Plug Tray	199656-001
1" Drive Tray SCA Connector*	242801-001
1" Drive Tray Fast-Wide Connector*	199880-001
1" Drive Tray Fast-SCSI-2*	242593-001
1.6" Drive Tray Fast-Wide Connector	199656-001
1.6" Drive Tray Fast-SCSI-2 Connector	146781-001

¹ Requires Optional Fast-Wide SCSI-2 Controller or adapter, and/or Fast-Wide SCSI-2 Cabling.

² Requires optional Fast-Wide SCSI-2 backplane upgrade.

³ Limited to Fast-Wide SCSI-2 bus speeds.

* 1" Tray Kits contain 1.6" and 1" covers without side-springs.

Miscellaneous External	Spare Part
See "Rack Mountable ProLiant Storage System" section for information on:	
* External hot-pluggable hard drives	
* Stand-By Recovery Server Option and cables	
* On-Line Recovery Server Option and cables	
See "Rack Mountable SCSI Storage Expander" section for information on:	
* External non-pluggable hard drives	
* External tape drives	
Compaq 4-port, Keyboard/Mouse/Monitor Switch	242696-001
Compaq 8-port, Keyboard/Mouse/Monitor Switch	242697-001

Rack-Mountable ProLiant Servers

1000R, 2000R, 4000R

28.8k-bps Modem

Country	Assembly	Spare Part	RJ-11 Phone Cable	Option
U.S.	223610-002	259214-002	127949-001	259213-001

CD-ROM Drives

	Spare Part
Tray Load	142223-001
Caddy Load	133881-001
QuadSpeed, Tray Load, Internal	184783-001
8X, IDE	295934-001

Diskette Drives

	Spare Part
1.2 MB	DISCONTINUED
1.44 MB (standard)	144207-201
1.44 MB (optional)	112565-001

Tape Drives	Spare Part	Tape Cartridge	Spare Part
525 MB ACA	142073-001	525 MB QIC Cart.	119504-001
1.2 GB Tape Drive	199615-001	1.2 GB QIC Cart.	199625-001
2/8 GB DAT Clam Gray	142074-001	1.3 GB 60 M DDS1	131167-001
		2.0 GB 90 M DDS1	131148-001
		DAT Cleaning Cart.	131194-001
2/8 GB DAT Beach Gray	142074-201	1.3 GB 60 M DDS1	131167-001
		2.0 GB 90 M DDS1	131148-001
		DDS1 Cleaning Cart.	131194-001
2/4 GB DAT	142074-201	1.3 GB 60 M DDS1	131167-001
		2.0 GB 90 M DDS1	131148-001
		DDS1 Cleaning Cart.	131194-001
4/16 GB TurboDAT Clam Gray	199464-001	4.0 GB 120M DDS2	199496-001
		DDS2 Cleaning Cart.	242618-001
4/16 GB TurboDAT Beach Gray	199464-201	4.0 GB 120M DDS2	199496-001
		DDS2 Cleaning Cart.	242618-001
4/8 GB DAT	295163-001	4.0 GB 120M DDS2	199496-001
		DDS2 Cleaning Cart.	242618-001
TurboDAT Autoloader (internal) Clam Gray	199466-001	4 Cartridge Magazine	199467-001
		12 Cartridge Magazine	199468-001
TurboDAT Autoloader (internal) Beach Gray	199466-201	4 Cartridge Magazine	199467-001
		12 Cartridge Magazine	199468-001
10/20 Table Top DLT	199676-001	10/20 GB Data Cart.	199703-001
10/20 Internal DLT	199746-001	DLT Cleaning Cart.	199705-001
15/30 Table Top DLT	242469-001	15/30 GB Data Cart.	242467-001
15/30 Internal DLT	242468-001	DLT Cleaning Cart.	199705-001
35/70 Table Top DLT	242854-B21	35/70 GB Data Cart.	295394-001
35/70 Internal DLT	242853-B21	DLT Cleaning Cart.	199705-001

Rack-Mountable ProLiant Servers

1000R, 2000R, 4000R

Cables	Spare Part
LED Cable	165680-001
Internal SCSI-2 HDD Cable (two devices w/ termination)	165706-001
Internal SCSI-2 HDD Cable (32")	165679-001
Diskette Cable	165681-001
External SCSI Signal Cable	146776-004
External 100-Pin to 50-Pin Cable	142159-001
Loop Back Cable (2 CH NIC)	142254-001
Loop Back Cable (NetFlex)	142054-001
2-Channel Ethernet "Y" Cable	197134-001
Power Supply-to-System Board Adapter Cable (model 1000 only)	187369-001
Daisy Chain Cable, 3'	146776-003
Cable, Keyboard/Mouse/Monitor, SWB-CPU, 20'	187565-002
Cable, Keyboard/Mouse/Monitor, SWB-CPU, 40'	187565-003

ROM Information	Spare Part
System ROMPaq	143198-001
Option ROMPaq	142207-001
Drive Backplane ROM	146705-001

Power Supply/Battery	Spare Part
Clock/Battery	149344-001
Power Supply	163744-001
Rack-Mountable UPS 120v (1000, 2000/4000)	165713-001
Rack-Mountable UPS 220/230/240v (1000, 2000/4000)	165714-001
488 Watt Redundant Power Supply (1000, 2000/4000)	165628-001

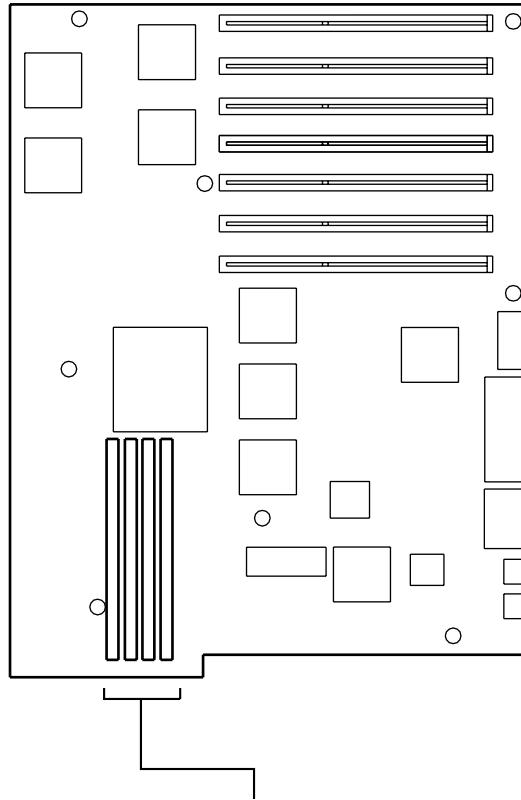
Options	Assembly	Spare Part
Remote Insight Board (EISA)	004367-001	199819-001

Rack-Mountable ProLiant Servers

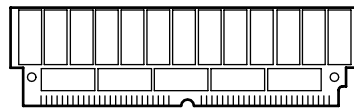
1000R, 2000R, 4000R

Memory Upgrade Chart (Model 1000R)

PROCESSOR BOARD - 003859



ADD ANY COMBINATION OF THE FOLLOWING MEMORY MODULES,
UP TO 128 MEGABYTES TOTAL SYSTEM MEMORY

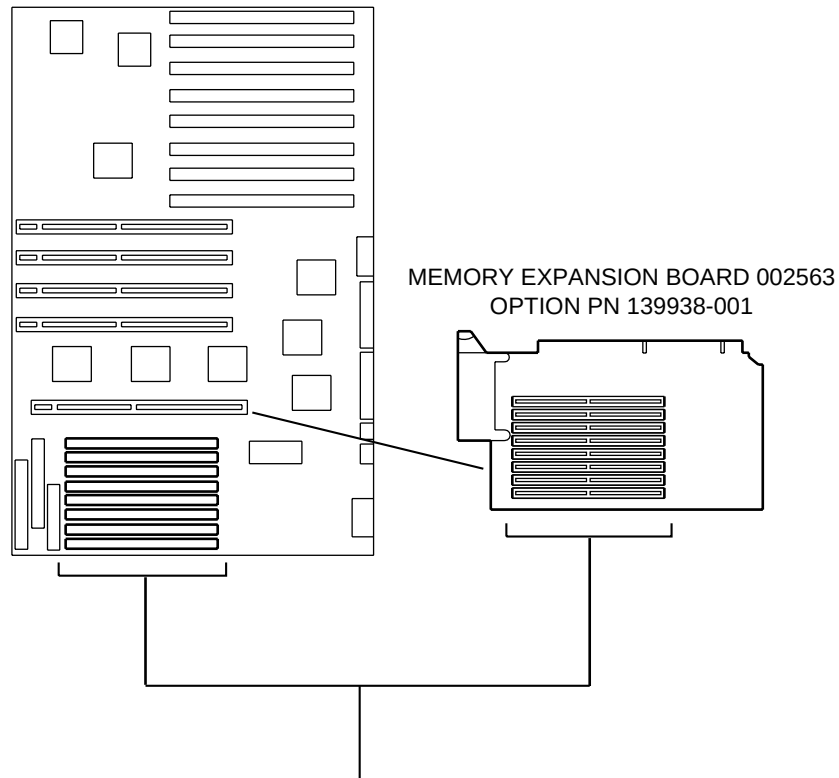


2-MB 70ns - OPTION PN 141683-001
2-MB 80ns - OPTION PN 118689-001
4-MB 70ns - OPTION PN 118690-001
4-MB 80ns - OPTION PN 136817-001
8-MB 70ns - OPTION PN 141685-001
8-MB 80ns - OPTION PN 128877-001
16-MB 70ns - OPTION PN 190747-001
16-MB 80ns - OPTION PN 149320-001
32-MB 70ns - OPTION PN 190748-001
32-MB 80ns - OPTION PN 149147-001

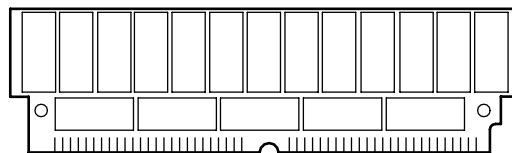
Rack-Mountable ProLiant Servers 1000R, 2000R, 4000R

Memory Upgrade Chart (Models 2000R/4000R)

PROCESSOR BOARDS
002443 / 003862



SIMMS MUST BE ADDED IN SETS OF 4 OF THE SAME SIZE AND SPEED
UP TO 256 MB ON THE SYSTEM BOARD AND
UP TO 256 MB ON THE EXPANSION BOARD FOR
UP TO 512 MEGABYTES TOTAL SYSTEM MEMORY



16-MB 70ns (4 x 4MB) - OPTION PN 149949-001

32-MB 70ns (4 x 8MB) - OPTION PN 149912-001

64-MB 70ns (4 x 16MB) - OPTION PN 149913-001

128-MB 70ns (4 x 32MB) - OPTION PN 149914-001