
IBM RS/6000 SP Quick Reference Guide USA Commercial Prices as of April 21, 1998 V3.0

Use this RS/6000 SP Quick Reference Guide as your source of RS/6000 SP product information. This Quick Reference information make it easy to compare models and supported options. For more detailed information and complete specifications, please refer to HONE Announcement Letters; the HONE configurator; and HONE price information.

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This guide could contain technical inaccuracies or typographical errors. All prices shown are for informational purposes only and are subject to change without notice.

Information About This Reference

Your ideas can help - Please send your suggestions/comments to:

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Versions

- 3.0 April 21, 1998. Added new PCI thin and wide SMP nodes. Added SP Switch Router information. Moved all previous model/frame information to the back of the document.
- 2.0 October 6, 1997. Added 604E high nodes, 160MHz thin nodes, and other I/O adapters.
- 1.4 April 18, 1997. Updated pricing and other items from 4/15/97 announcement.
- 1.3 February 24, 1997. Updated memory pricing and control workstation sections.
- 1.2 November 20, 1996. Added Power2 Superchip (P2SC) nodes. Node configuration diagrams are included in this document.
- 1.1.1 July 24, 1996 SMP node price corrections from HONE announcement.
Revised configuration worksheets to include price column.
- 1.1 July 16, 1996 SMP Node Announcements.
July 9, 1996 node and memory price reductions.
Control Workstation Data.
April 9, 1996 switch upgrade pricing.
- 1.0 February 1996, Initial Release of SP Quick Reference.

SP Model Designations

The SP system is machine-model type 9076-xxx. The xxx portion designates a specific model. The information below describes the model designators:

- 1st Digit (left):
 - 5 = New frame designation. Does not include any base nodes. Switch is optional.
- 2nd Digit (middle):
 - 0 = New short frame.
 - 5 = New tall frame.
- 3rd Digit (right):
 - 0 = New frame. No base node.

SP Base Frames

Mach	Mod	Price	Base Node Description
9076	500	\$18,700	New short frame, no base node
9076	550	\$50,000	New tall frame, no base node
9076	MES	\$40,000	Model 500 to model 550 upgrade

SP Expansion Frames

Feat Code	Price	Expansion Frame With Base Node
1500	\$18,700	New short frame, no base node
1550	\$50,000	New tall frame, no base node
MES	\$40,000	FC 1500 to FC 1550 upgrade

Nodes

Current														
Feat Code	Price	Descrip.	Nodes Per Frame	MHz	Inst. Cache	Data Cache	L2 Cache	Mem Slot	Disk Bay	I/O & Switch Adapter Bus Type	I/O Slot	Integr. SCSI	Integr. E'net	Annon. W/D Date
2007	\$48,000	P2SC Wide	8	135	32KB	128KB	N/A	8	4	MCA/MCA	8	SCSI-2 F/W	No	
2008	\$50,250	P2SC Thin	16	120	32KB	128KB	N/A	4	2	MCA/MCA	4	SCSI-2 F/W	Yes	
2009	\$47,600	SMP High	4	200	32KB	32KB	2MB	4	3	MCA/MCA	16	No	No	
2022	\$67,000	P2SC Thin	16	160	32KB	128KB	N/A	4	2	MCA/MCA	4	SCSI-2 F/W	Yes	
2050	\$24,000	SMP Thin	16	332	32KB	32KB	256KB	24	2	PCI/MX	2	SCSI-2 F/W	Yes	
2051	\$29,000	SMP Wide	8	332	32KB	32KB	256KB	24	4	PCI/MX	10	SCSI-2 F/W	Yes	
Withdrawn														
Feat Code	Description	Nodes Per Frame	MHz	Inst. Cache	Data Cache	L2 Cache	Mem Slot	Disk Bay	I/O & Switch Adapter Bus Type	I/O Slot	Integr. SCSI	Integr. E'net	W/D Date	
2001	Thin	16	62	32KB	128KB	N/A	2	2	MCA/MCA	4	SCSI-2	Yes	05/95	
2002	Thin	16	66	32KB	64KB	1MB opt.	2	2	MCA/MCA	4	SCSI-2 F/W	Yes	12/20/96	
2003	Wide	8	66	32KB	256KB	N/A	8	4	MCA/MCA	8	SCSI	No	12/20/96	
2004	Thin-2	16	66	32KB	128KB	2MB opt.	2	2	MCA/MCA	4	SCSI-2 F/W	Yes	06/27/97	
2005	Fast Wide	8	77	32KB	256KB	N/A	8	4	MCA/MCA	8	SCSI	No	06/27/97	
2006	SMP High	4	112	16KB	16KB	1MB	4	3	MCA/MCA	16	No	No	01/08/98	

Node Performance

Current									
Feat Code	Node Type	CPU	MHz	SPEC int95	SPEC fp95	SPEC int_rate95	SPEC fp_rate95	Relative OLTP Perf. ¹	W/D Date
2007	P2SC Wide	POWER2 Superchip	135	6.17	17.6			5.8	
2008	P2SC Thin	POWER2 Superchip	120	5.61	16.6			5.8	
2009	SMP High	PowerPC 2 x 604e	200			121	90.3	9.3	
2009	SMP High	PowerPC 4 x 604e	200			244	176	17	
2009	SMP High	PowerPC 6 x 604e	200			343	248	23.8	
2009	SMP High	PowerPC 8 x 604e	200			445	320	30.6	
2022	P2SC Thin	POWER2 Superchip	160	8.61	25.8			6.7	
2050	SMP Thin	PowerPC 2 x 604e	332			249	206	17	
2050	SMP Thin	PowerPC 4 x 604e	332			490	366	32.8	
2051	SMP Wide	PowerPC 2 x 604e	332			249	206	17	
2051	SMP Wide	PowerPC 4 x 604e	332			490	366	32.8	
Withdrawn									
Feat Code	Node Type	CPU	MHz	SPEC int95	SPEC fp95	SPEC int_rate95	SPEC fp_rate95	Relative OLTP Perf. ¹	W/D Date
2002	Thin	POWER2	66	3.25	7.71			3.0	12/20/96
2003	Wide	POWER2	66	3.33	10.4			3.9	12/20/96
2004	Thin-2	POWER2	66	3.31	9.35			3.3	06/27/97
2005	Fast Wide	POWER2	77	3.84	12.4			4.5	06/27/97
2006	SMP High	PowerPC 2 x 604	112			71.9	57.3	5.8	01/08/98
2006	SMP High	PowerPC 4 x 604	112			138	107	10	01/08/98
2006	SMP High	PowerPC 6 x 604	112			205	159	14.5	01/08/98
2006	SMP High	PowerPC 8 x 604	112			258	200	19.2	01/08/98
Notes:									
1. An 8-way R40 has a TPC-C rating of 5774. Its relative measure of performance is 19.2									

SMP Processors and Power Supplies

Feature Code	Description	List Price	200MHz 604e SMP High FC 2009	332MHz 604e SMP Thin FC 2050	332MHz 604e SMP Wide FC 2051
4320	Dual 604E Processor Card, 332MHz	\$12,000		Yes	Yes
4324	Dual 604e Processor Card, 200MHz	\$12,000	Yes		
6293	Redundant, DC Power Supply	\$1,500	Yes		
6296	Redundant, DC Power Supply	\$1,000		Yes	Yes
1. Each SMP node requires at least one processor card. 2. Maximum of qty 2 of FC 4320 for SMP thin/wide nodes. 3. Maximum of qty 4 of FC 4324 for SMP high nodes.					

Memory - Uniprocessor Thin/Wide Nodes

Feature Code	Description	Price	120MHz P2SC Thin FC 2008	160MHz P2SC Thin FC 2022	135MHz P2SC Wide FC 2007
4076	32 MB Memory Card - S5	\$1,280	Yes		Yes
4077	64 MB Memory Card - S5	\$2,560	Yes		Yes
4078	128 MB Memory Card - S5	\$3,840	Yes		Yes
4079	256 MB Memory Card - S5	\$7,680	Yes		Yes
4086	32 MB Memory Card - S6	\$1,280		Yes	
4087	64 MB Memory Card - S6	\$2,560		Yes	
4088	128 MB Memory Card - S6	\$3,840		Yes	
4089	256 MB Memory Card - S6	\$7,680		Yes	

Memory - SMP Thin/Wide/High Nodes

Feat Code	Description	List Price	200MHz 604e SMP High FC 2009	332MHz 604e SMP Thin FC 2050	332MHz 604e SMP Wide FC 2051
4029	256MB on 1GB Card	\$10,240	Yes		
4154	512MB on 1GB Card	\$16,640	Yes		
4030	1GB on 1GB Card	\$29,500	Yes		
4093	16 Position Memory Expansion Board	\$1,038		Yes	Yes
4110	2 x 128MB DIMMS	\$6,400		Yes	Yes
Notes: 1. SMP High nodes require at least one memory card and support a maximum of 4 memory cards. 2. For SMP Thin/Wide nodes, 2 x FC 4093 must be ordered with the node. 1 to 12 FC 4110 must be ordered with the node.					

Internal Disk Drives - Uniprocessor Thin/Wide Nodes

Feat Code	Description	List Price	120MHz P2SC Thin FC 2008	160MHz P2SC Thin FC 2022	135MHz P2SC Wide FC 2007
3000	4.5GB SCSI-2 Fast/Wide (1")	\$1,800	Yes	Yes	Yes
3010	9.1GB SCSI-2 Fast/Wide	\$2,900	Yes	Yes	Yes

Internal Disk Drives - SMP Thin/Wide/HighNodes

Feat Code	Description	List Price	200MHz 604e SMP High FC 2009	332MHz 604e SMP Thin FC 2050	332MHz 604e SMP Wide FC 2051
3000	4.5GB SCSI-2 F/W	\$1,800	Yes	Yes	Yes
3010	9.1GB SCSI-2 F/W	\$2,900		Yes	Yes

PCI SCSI & SAA Controllers/Cables

Feat Code	Description	List Price	332MHz 604e SMP Thin FC 2050	332MHz 604e SMP Wide FC 2051
1241	F/W SCSI Int. Cable	\$195		Yes
2114	SCSI F/W DE Y-Cable	\$270	Yes	Yes
2117	SCSI F/W SE Y-Cable	\$275	Yes	Yes
2425	SCSI F/W Sys-to-Sys 2.5m Cable	\$130	Yes	Yes
6208	SCSI -2 F/W SE Adapter	\$360	Yes	Yes
6209	SCSI-2 F/W DE Adapter	\$600	Yes	Yes
6215	SSA Multi-Initiator/RAID EL Adapter	\$3,000	Yes	Yes
6222	SSA Fast Write Cache	\$3,700	Yes	Yes

PCI Communications Adapters

Feat Code	Description	List Price	332MHz 604e SMP Thin FC 2050	332MHz 604e SMP Wide FC2051
2741	FDDI-LP Single Ring	\$1,590	Yes	Yes
2742	FDDI-LP Dual Ring	\$2,230	Yes	Yes
2743	FDDI-UP Single Ring	\$955	Yes	Yes
2934	Async Terminal/Printer Cable	\$45	Yes	Yes
2936	Async cable EIA-232/V.24	\$73	Yes	Yes
2944	128-Port Async Controller	\$1,295	Yes	Yes
2968	10/100 Ethernet Adapter	\$2,75	Yes	Yes
2920	Auto LANStreamer Token-Ring Adapter	\$795	Yes	Yes
2985	Ethernet BNC/RJ-45 Adapter	\$195	Yes	Yes
2987	Ethernet AUI/RJ-45 Adapter	\$195	Yes	Yes
8132	128-Port Async Controller Cable, 23cm	\$40	Yes	Yes
8133	RJ-45 to DB-25 Convert Cable (4 per pkg)	\$120	Yes	Yes
8136	Rack Mountable Remote Async Node	\$1,995	Yes	Yes
8137	Enhanced Remote Async Node 16-Port EIA 232	\$1,595	Yes	Yes
8138	Enhance Remote Async Node 16-Port EIA 422	\$1,795	Yes	Yes

MCA SCSI & SAA Controllers/Cables

Feat Code	Description	List Price	120MHz P2SC Thin FC 2008	160MHz P2SC Thin FC 2022	135MHz P2SC Wide FC 2007	200MHz 604e SMP High FC 2009
2412	Enhanced SCSI-2 F/W DE	\$1,370	Yes	Yes	Yes	Yes
2415	SCSI-2 F/W SE	\$1,070	Yes	Yes	Yes	Yes
2424	SCSI-2 16-bit Diff System-to-System cable .6M	\$108	Yes	Yes	Yes	Yes
2426	16-bit Y-cable for SCSI-2 F/W DE Adapter	\$445	Yes	Yes	Yes	Yes
6216	Enhanced SSA 4-Port Adapter - 8 CPU Support	\$2,000	Yes	Yes	Yes	Yes
6217	SSA 4-Port RAID Adapter - 1 CPU Support	\$3,250	Yes	Yes	Yes	Yes
6219	Enhanced SSA Multi Initiator Adapter	\$3,750	Yes	Yes	Yes	Yes
6222	Enhanced SSA Fast Write Cache	\$3,700	Yes	Yes	Yes	Yes

MCA Communications Adapters - Table 1 of 2

Current						
Feat Code	Description	List Price	120MHz P2SC Thin FC 2008	160MHz P2SC Thin FC 2022	135MHz P2SC Wide FC 2007	200MHz 604e SMP High FC 2009
2723	FDDI - Fiber Dual-Ring Upgr	\$1,995	Yes	Yes	Yes	Yes
2724	FDDI - Fiber Single Ring Adap	\$3,995	Yes	Yes	Yes	Yes
2930	8 Port Async Adapter - 232	\$832	Yes	Yes	Yes	Yes
2940	8 Port Async Adapter -422	\$936	Yes	Yes	Yes	Yes
8128	128-Port Async Controller	\$1,295	Yes	Yes	Yes	Yes
8130	16-Port Concentrator for 128-Port Controller	\$1,495	Yes	Yes	Yes	Yes
8131	4.5M Cable For 16-Port Controller	\$60	Yes	Yes	Yes	Yes
2972	Auto Token-Ring LANStreamer Adapter	\$850	Yes	Yes	Yes	Yes
2980	Ethernet High-Performance LAN Adapter	\$722	Yes	Yes	Yes	Yes
2992	Ethernet/FDX 10Mbps TP/AUI Adapter	\$595	Yes	Yes	Yes	Yes
2993	Ethernet/FDX 10Mbps BNC/AUI Adapter	\$595	Yes	Yes	Yes	Yes
2994	Ethernet 10/100 Mbps UTP	\$795	Yes	Yes	Yes	Yes
2402	Ethernet Network Terminal Accel 256	\$4,500	Yes	Yes	Yes	Yes
2403	Ethernet Network Terminal Accel 1024	\$7,500	Yes	Yes	Yes	Yes
4224	Ethernet 10BaseT Transceiver	\$195	Yes	Yes	Yes	Yes
2989	TURBOWAYS 155 ATM Adapter	\$2,695	Yes	Yes	Yes	Yes

MCA Communications Adapters - Table 2 of 2

Current						
Feat Code	Description	List Price	120MHz P2SC Thin FC 2008	160MHz P2SC Thin FC 2022	135MHz P2SC Wide FC 2007	200MHz 604e SMP High FC 2009
2700	4-Port Multiprotocol Adapter	\$2,600	Yes	Yes	Yes	Yes
2978	Multiprotocol Attachment Cable V.35	\$117	Yes	Yes	Yes	Yes
2976	Multiprotocol Attachment Cable X.21	\$117	Yes	Yes	Yes	Yes
2977	Multiprotocol Attachment Cable V.24	\$117	Yes	Yes	Yes	Yes
2705	4-Port Multiprotocol Interface Cable	\$500	Yes	Yes	Yes	Yes
2706	Multi Attachment Cable EIA-232/V.24	\$93	Yes	Yes	Yes	Yes
2995	Multi-Port Interface Cable	\$384	Yes	Yes	Yes	Yes
7006	Portmaster Adapt (1MB)	\$1,595	Yes	Yes	Yes	Yes
7042	Portmaster 8-Port 232 Interface	\$627	Yes	Yes	Yes	Yes
7044	Portmaster 8-Port 422 Interface	\$673	Yes	Yes	Yes	Yes
7046	Portmaster 6-Port V.35 Interface	\$1,227	Yes	Yes	Yes	Yes
7106	Portmaster V.35 Cable	\$848	Yes	Yes	Yes	Yes
7108	Portmaster 8-Port Cable	\$375	Yes	Yes	Yes	Yes
2735	High-Perf. Parallel Interface (HIPPI)	\$17,500			Yes	Yes
2752	Block Multiplexer Cable	\$600	Yes	Yes	Yes	Yes
2753	Block Multiplexer Cable	\$2,000	Yes	Yes	Yes	Yes
2754	ESCON Chan Emulator	\$10,000	Yes	Yes	Yes	Yes
2755	Block Multiplexer Channel Adapter	\$4,400	Yes	Yes	Yes	Yes
2756	ESCON Cntrl Unit Adap	\$10,000	Yes	Yes	Yes	Yes
2960	X.25 Interface Co-Processor/2	\$1,570	Yes	Yes	Yes	Yes
2976	X.25 Attachment Cable X.21, 6M	\$150	Yes	Yes	Yes	Yes
2977	X.25 Attachment Cable V.24, 6M	\$150	Yes	Yes	Yes	Yes
2978	X.25 Attachment Cable V.35, 6M	\$239	Yes	Yes	Yes	Yes
6305	Digital Trunk Dual Adap	\$2,400	Yes	Yes	Yes	Yes

Switches & Switch Adapters

Feature Code	Description	List Price
SP Switch (100MB/Sec)		
4008	SP Switch-8	\$23,000
4011	SP Switch	\$70,000
4020	SP Switch adapter (MCA)	\$10,000
4022	SP Switch adapter (MX)	\$12,500

SP Switch Routers and Features

Mach	Mod	Price	Description
9077	04S	\$53,000	4 Slot SP Switch Router
9077	16S	\$72,500	16 Slot SP Switch Router
1.			
Feature Codes	Price	Description	
1101	\$24,000	ATM OC3c 2-Port SM Fiber	
1102	\$20,000	ATM OC3c 2-Port MM Fiber	
1103	\$19,000	SONET/IP OC3c 1-Port MM Fiber	
1104	\$21,000	SONET/IP OC3c 1-Port SM Fiber	
1105	\$25,000	ATM OC12c 1-Port SM Fiber	
1106	\$19,000	FDDI 4-Ports MM Fiber	
1107	\$20,000	Ethernet 10/100BaseT 8-Ports	
1108	\$13,500	HIPPI 1-Port	
1109	\$17,500	HSSI 2-Port	
1112	\$14,000	Ethernet 10/100BaseT 4-Ports	
1113	\$100	Blank Faceplate	
1114	\$1,550	64MB DRAM SIMM	
1115	\$24,000	ATM OC12c 1-Port MM Fiber	
4021	\$30,000	SP Switch Router Adapter	
Notes:			
1. Each 9077 SP Switch Router includes one SP Switch Router Adapter (equivalent to FC 4021) which utilizes one of the router slots.			

Control Workstations

For a current listin of supported control workstations, go to the following IBM intranet site:

<http://hyper.austin.ibm.com/spdocs/hardware/hardware.html>

Under the heading *IBM RS/6000 SP Planning, Select Volume 2, Control Workstation and Software Environment GA22-7281-01*

Frame Configuration Worksheet

Node 15 Application: Node Type:	Node 16 Application: Node Type:
Node 13 Application: Node Type:	Node 14 Application: Node Type:
Node 11 Application: Node Type:	Node 12 Application: Node Type:
Node 9 Application: Node Type:	Node 10 Application: Node Type:
Node 7 Application: Node Type:	Node 8 Application: Node Type:
Node 5 Application: Node Type:	Node 6 Application: Node Type:
Node 3 Application: Node Type:	Node 4 Application: Node Type:
Node 1 Application: Node Type:	Node 2 Application: Node Type:
SP Switch	
SP System Name: Frame Number:	

120MHz P2SC Thin Node (FC 2008) Configuration Worksheet

System Name / Application				Unit List Price
Number of Identical Nodes				
Frame - Node Number(s)				
Node Type		FC 2008 P2SC Thin Node		
Base Cfg	Slot/Bay	Feature Code	Description/Use	
Req'd	Memory Slot #1 ¹			
Req'd	Memory Slot #2			
Opt.	Memory Slot #3			
Opt.	Memory Slot #4			
Req'd	Disk Bay #1			
Opt.	Disk Bay #2			
Std	Ethernet	Integrated	SP Reliable Ethernet Network	NC
Std	SCSI-2 F/W Port	Integrated	Internal Disk Drives	NC
Opt.	I/O Slot #1 ²			
Opt.	I/O Slot #2			
Opt.	I/O Slot #3			
Opt.	I/O Slot #4			
Total List Price Per Node				
Notes: <ol style="list-style-type: none"> 1. The first two memory slots must be filled with the same size memory card. When the remaining memory slots are filled, all four memory cards must be the same size, forming a quad. When only two memory cards are present, only 1/2 of the data and instruction caches are utilized. 2. If the system includes an SP Switch, one of these slots will be occupied by the switch adapter. Adapters may actually be installed by mfg. in a different slot than shown above. 3. This thin node must be purchased in pairs. 				

160MHz P2SC Thin Node (FC 2022) Configuration Worksheet

System Name / Application				Unit List Price
Number of Identical Nodes				
Frame - Node Number(s)				
Node Type		FC 2022 P2SC Thin Node		
Base Cfg	Slot/Bay	Feature Code	Description/Use	
Req'd	Memory Slot #1 ¹			
Req'd	Memory Slot #2			
Opt.	Memory Slot #3			
Opt.	Memory Slot #4			
Req'd	Disk Bay #1			
Opt.	Disk Bay #2			
Std	Ethernet	Integrated	SP Reliable Ethernet Network	NC
Std	SCSI-2 F/W Port	Integrated	Internal Disk Drives	NC
Opt.	I/O Slot #1 ²			
Opt.	I/O Slot #2			
Opt.	I/O Slot #3			
Opt.	I/O Slot #4			
Total List Price Per Node				
Notes: <ol style="list-style-type: none"> 1. The first two memory slots must be filled with the same size memory card. When the remaining memory slots are filled, all four memory cards must be the same size, forming a quad. When only two memory cards are present, only 1/2 of the data and instruction caches are utilized. 2. If the system includes an SP Switch, one of these slots will be occupied by the switch adapter. Adapters may actually be installed by mfg. in a different slot than shown above. 3. This thin node must be purchased in pairs 				

P2SC 135MHz Wide Node (FC 2007) Configuration Worksheet

System Name / Application				Unit List Price
Number of Identical Nodes				
Frame - Node Number(s)				
Node Type		FC 2007 P2SC Wide Node		
Base Cfg	Slot/Bay	Feature Code	Description/Use	
Req'd	Memory Pair #1 ¹			
Req'd	Memory Slot #2			
Opt	Memory Slot #3			
Opt	Memory Slot #4			
Opt	Memory Slot #5			
Opt	Memory Slot #6			
Opt	Memory Slot #7			
Opt	Memory Slot #8			
Req'd	Disk Bay #1			
Opt.	Disk Bay #2			
Opt.	Disk Bay #3			
Opt.	Disk Bay #4			
Std	SCSI-2 F/W Controller	Integrated	For Internal Disk Drives	NC
I/O Bus #1 ³				
Req'd	I/O Slot #1		Ethernet Controller for SP Reliable Ethernet Network	
Opt.	I/O Slot #2 ²			
Opt.	I/O Slot #3			
Opt.	I/O Slot #4			
I/O Bus #2 ³				
Opt.	I/O Slot #5			
Opt.	I/O Slot #6			
Opt.	I/O Slot #7			
Opt.	I/O Slot #8			
Total List Price Per Node				
Notes:				
<ol style="list-style-type: none"> 1. Memory slots must be filled in pairs. Let A and B each represent a memory card size. Valid memory combinations are: A+A, A+A+A+A, & A+A+A+A+B+B+B+B. For the A+A combination, only 1/2 of the Data Cache will be utilized and memory bus access will be 128-bits vs. 256-bits for the remaining two memory combinations. 2. If the system includes an SP Switch, one of the I/O slots will be occupied by the switch adapter. Adapters may actually be installed by mfg. in a different slot than shown above. 3. Adapters may actually be installed in different slots/busses. 				

200MHz 604e SMP High Node (FC 2009) Configuration Worksheet

System Name / Application			Unit List Price
Number of Identical Nodes			
Frame - Node Number(s)			
Node Type FC 2006 SMP High Node			
Base Cfg	Slot/Bay	Feature Code	Description/Use
Req'd	Processors #1 & #2	4324	2 x 200MHz PowerPC Processors with 1MB L2
Opt.	Processors #3 & #4		
Opt.	Processors #5 & #6		
Opt.	Processors #7 & #8		
Std.	Power Supply #1	Std.	SMP High Node D.C. Power Supply
Opt.	Power Supply #2		
Req'd	Memory Slot #1		
Opt.	Memory Slot #2		
Opt.	Memory Slot #3		
Opt.	Memory Slot #4		
Req'd	Disk Bay #1		
Opt.	Disk Bay #2		
Opt.	Disk Bay #3		
Opt.	Disk Bay #4		
Std.	Serial Port #2	Integrated	
Std.	Serial Port #3	Integrated	
Req'd	I/O Slot #1	2415	SCSI-2 Controller For Internal Disk Drives
Req'd	I/O Slot #2		Ethernet Controller for SP Reliable Ethernet Network
Opt.	I/O Slot #3 ¹		
Opt.	I/O Slot #4		
Opt.	I/O Slot #5		
Opt.	I/O Slot #6		
Opt.	I/O Slot #7		
Opt.	I/O Slot #8		
Opt.	I/O Slot #9		
Opt.	I/O Slot #10		
Opt.	I/O Slot #11		
Opt.	I/O Slot #12		
Opt.	I/O Slot #13		
Opt.	I/O Slot #14		
Opt.	I/O Slot #15		
Opt.	I/O Slot #16		
Total List Price Per Node			

332MHz SMP Thin Node (FC 2050) Configuration Worksheet

System Name / Application				Unit List Price
Number of Identical Nodes				
Frame - Node Number(s)				
Node Type		FC 2051 SMP Wide Node		
Base Cfg	Slot/Bay	Feature Code	Description/Use	
Req'd	Processors #1 & #2	4320	2 x 332MHz PowerPC Processors with 1MB L2	
Opt.	Processors #3 & #4	4320	2 x 332MHz PowerPC Processors with 1MB L2	
Opt.	Power Supply #2	6296	Optional, Redundant Power Supply	
Req'd	Memory Exp. Card	2 x 4093	Provides expansion for 4 additional DIMM pairs	
Req'd	Memory DIMM Pair #1	4110	256MB RAM	
Opt.	Memory DIMM Pair #2			
Opt.	Memory DIMM Pair #3			
Opt.	Memory DIMM Pair #4			
Opt.	Memory DIMM Pair #5			
Opt.	Memory DIMM Pair #6			
Opt.	Memory DIMM Pair #7			
Opt.	Memory DIMM Pair #8			
Opt.	Memory DIMM Pair #9			
Opt.	Memory DIMM Pair			
Opt.	Memory DIMM Pair			
Opt.	Memory DIMM Pair			
Req'd	Disk Bay #1			
Opt.	Disk Bay #2			
Std.	Serial Port #1	Integrated		NC
Std.	Ethernet	Integrated	For Private SP Ethernet	NC
Std.	SCSI-2 F/W	Integrated	For internal disk drives	NC
Opt.	MX I/O Slot #1	4022	SP Switch Adapter for MX Bus	
Opt.	PCI I/O Slot #1			
Opt.	PCI I/O Slot #2			
Total List Price Per Node				

332MHz SMP Wide Node (FC 2051) Configuration Worksheet

System Name / Application				Unit List Price
Number of Identical Nodes				
Frame - Node Number(s)				
Node Type			FC 2051 SMP Wide Node	
Base Cfg	Slot/Bay	Feature Code	Description/Use	
Req'd	Processors #1 & #2	4320	2 x 332MHz PowerPC Processors with 1MB L2	
Opt.	Processors #3 & #4	4320	2 x 332MHz PowerPC Processors with 1MB L2	
Opt.	Power Supply #2	6296	Optional, Redundant Power Supply	
Req'd	Memory Exp. Card	2 x 4093	Provides expansion for 4 additional DIMM pairs	
Req'd	Memory DIMM Pair #1	4110	256MB RAM	
Opt.	Memory DIMM Pair #2			
Opt.	Memory DIMM Pair #3			
Opt.	Memory DIMM Pair #4			
Opt.	Memory DIMM Pair #5			
Opt.	Memory DIMM Pair #6			
Opt.	Memory DIMM Pair #7			
Opt.	Memory DIMM Pair #8			
Opt.	Memory DIMM Pair #9			
Opt.	Memory DIMM Pair			
Opt.	Memory DIMM Pair			
Opt.	Memory DIMM Pair			
Req'd	Disk Bay #1			
Opt.	Disk Bay #2			
Opt.	Disk Bay #3			
Opt.	Disk Bay #4			
Std.	Serial Port #1	Integrated		NC
Std.	Ethernet	Integrated	For Private SP Ethernet	NC
Std.	SCSI-2 F/W	Integrated	For internal disk drives	NC
Opt.	MX I/O Slot #1	4022	SP Switch Adapter for MX Bus	
Opt.	PCI I/O Slot #1			
Opt.	PCI I/O Slot #2			
Opt.	PCI I/O Slot #3 ¹			
Opt.	PCI I/O Slot #4			
Opt.	PCI I/O Slot #5			
Opt.	PCI I/O Slot #6			
Opt.	PCI I/O Slot #7			
Opt.	PCI I/O Slot #8			
Opt.	PCI I/O Slot #9			
Opt.	PCI I/O Slot #10			
Total List Price Per Node				

Withdrawn SP Model Designations

The SP system is machine-model type 9076-xxx. The xxx portion designates a specific model. The information below describes the model designators:

- 1st Digit (left):
 - 2 = No switch in the frame.
 - 3 = System has switch and less than (or equal to) 80 nodes. Machine price does not include the switch.
 - 4 = System has switch and greater than 80 nodes and will have a secondary switch frame. Machine price does not include the switches or switch frames.
- 2nd Digit (middle):
 - A = Half height frame with one half-height expansion frame allowed (expansion frame not supported with FC 4007 LC8 switch)
 - B = Full height frame, no expansion frames allowed.
- 3rd Digit (right):
 - 1 = Contains one FC 2001 66MHz Thin Node pair.
 - 2 = Contains one FC 2002 66MHz Thin Node pair.
 - 3 = Contains one FC 2003 66MHz Wide Node.
 - 4 = Contains one FC 2004 66MHz Thin-2 Node pair.
 - 5 = Contains one FC 2005 77MHz Fast Wide Node.
 - 6 = Contains one FC 2006 112MHz 604 SMP High Node (no processors are included)
 - 7 = Contains one FC 2007 135MHz P2SC Wide Node.
 - 8 = Contains one FC 2008 120MHz P2SC Thin Node Pair.
 - 9 = Contains one FC 2009 200MHz 604e SMP High Node (no processors are included)
 - A = Contains one FC 2022 160MHz P2SC Thin Node Pair

Withdrawn SP System Units - Full Height Frames

Current					
Mach	Mod	Price	Base Node Description	Base Node Equiv. FC	Announced W/D Date
9076	206	\$97,600	112MHz 604 SMP High Node	2006	01/08/98
9076	207	\$98,000	135MHz P2SC Wide Node	2007	04/21/98
9076	208	\$100,250	120MHz P2SC Thin Node Pair	2008	04/21/98
9076	209	\$97,600	200MHz 604e SMP High Node	2009	04/21/98
9076	20A	\$117,000	160MHz P2SC Thin Node Pair	2022	04/21/98
9076	306	\$97,600	112MHz 604 SMP High Node	2006	01/08/98
9076	307	\$98,000	135MHz P2SC Wide Node	2007	04/21/98
9076	308	\$100,250	120MHz P2SC Thin Node Pair	2008	04/21/98
9076	309	\$97,600	200MHz 604e SMP High Node	2009	04/21/98
9076	30A	\$117,000	160MHz P2SC Thin Node Pair	2022	04/21/98
9076	406	\$97,600	112MHz 604 SMP High Node	2006	01/08/98
9076	407	\$98,000	135MHz P2SC Wide Node	2007	04/21/98
9076	408	\$100,250	120MHz P2SC Thin Node Pair	2008	04/21/98
9076	409	\$97,600	200MHz 604e SMP High Node	2009	04/21/98
9076	40A	\$117,000	160MHz P2SC Thin Node Pair	2022	04/21/98
Withdrawn					
Mach	Mod	Base Node Description	Base Node Equiv. FC	W/D Date	
9076	201	62MHz Thin Node Pair	2001	05/95	
9076	202	66MHz Thin Node Pair	2002	12/20/96	
9076	203	66MHz Wide Node	2003	12/20/96	
9076	204	66MHz Thin-2 Node Pair	2004	06/27/97	
9076	205	77MHz Fast Wide Node	2005	06/27/97	
9076	301	62MHz Thin Node Pair	2001	05/95	
9076	302	62MHz Thin Node Pair	2002	12/20/96	
9076	303	66MHz Wide Node	2003	12/20/96	
9076	304	66MHz Thin-2 Node Pair	2004	06/27/97	
9076	305	77MHz Fast Wide Node	2005	06/27/97	
9076	401	62MHz Thin Node Pair	2001	05/95	
9076	402	62MHz Thin Node Pair	2002	12/20/96	
9076	403	66MHz Wide Node	2003	12/20/96	
9076	404	66MHz Thin-2 Node Pair	2004	06/27/97	
9076	405	77MHz Fast Wide Node	2005	06/27/97	

Withdrawn SP Expansion Frames - Full Height

Current				
Feat Code ^{1,2}	Price	Expansion Frame With Base Node	Base Node Equiv. FC	Announced W/D Date
1006	\$97,600	112MHz 604 SMP High Node ³	2006	01/08/98
1007	\$98,000	135MHz P2SC Wide Node	2007	04/21/98
1008	\$100,250	120MHz P2SC Thin Node Pair	2008	04/21/98
1009	\$97,600	200MHz 604e SMPHigh Node	2009	04/21/98
1032	\$117,000	160MHz P2SC Thin Node Pair	2022	04/21/98
1016	\$97,600	112MHZ SMP High Node ³	2006	01/08/98
1017	\$98,000	135MHz P2SC Wide Node	2007	04/21/98
1019	\$97,600	200MHz 604e SMPHigh Node ³	2009	04/21/98
Withdrawn				
Feat Code ^{1,2}	Expansion Frame With Base Node		Base Node Equiv. FC	W/D Date
1001	62MHz Thin Node Pair		2001	05/95
1002	66MHz Thin Node Pair		2002	12/20/96
1003	66MHz Wide Node		2003	12/20/96
1004	66MHz Thin-2 Node Pair		2004	06/27/97
1005	77MHz Fast Wide Node		2005	06/27/97
1010	66MHz Wide Node		2003	12/20/96
1015	77MHz Fast Wide Node		2005	06/27/97
Notes:				
<ol style="list-style-type: none"> 1. If the 3rd digit of the feature code is a "0", the configurator will add a switch to the frame if this expansion frame is being attached to a 9076-3xx or 9076-4xx.. 2. If the 3rd digit of the feature code is a "1", the configurator will not add a switch to this expansion frame. These expansion frames can only be ordered for 9076-3xx or 9076-4xx systems which contain only wide and/or high nodes. This allows the switch in the first frame to be shared with nodes in the expansion frame. 3. No processors are included in the SMP node. 				

Withdrawn SP Entry System Units - Max. of 8 Nodes (1 Full Frame or 2 Half Height)

Current					
Mach	Mod	Price	Base Node Description	Base Node Equiv. FC	Announced W/D Date
9076	2A7	\$66,700	135MHz P2SC Wide Node	2007	04/21/98
9076	2A8	\$68,950	120MHz P2SC Thin Node Pair	2008	04/21/98
9076	2A9	\$66,300	200MHz 604e SMP High Node	2009	04/21/98
9076	2AA	\$85,700	160MHz P2SC Thin Node Pair	2022	04/21/98
9076	3A7	\$66,700	135MHz P2SC Wide Node	2007	04/21/98
9076	3A8	\$68,950	120MHz P2SC Thin Node Pair	2008	04/21/98
9076	3A9	\$66,300	200MHz 604e SMP High Node	2009	04/21/98
9076	3AA	\$85,700	160MHz P2SC Thin Node Pair	2022	04/21/98
9076	3B7	\$98,000	135MHz P2SC Wide Node	2007	04/21/98
9076	3B8	\$100,250	120MHz P2SC Thin Node Pair	2008	04/21/98
9076	3B9	\$97,600	200MHz 604e SMP High Node	2009	04/21/98
9076	3BA	\$117,000	160MHz P2SC Thin Node Pair	2022	04/21/98
Withdrawn					
Mach	Mod	Base Node Description		Base Node Equiv. FC	W/D Date
9076	2A2	62MHz Thin Node Pair		2002	12/20/96
9076	2A3	66MHz Wide Node		2003	12/20/96
9076	2A4	66MHz Thin-2 Node Pair		2004	06/27/97
9076	2A5	77MHz Fast Wide Node		2005	06/27/97
9076	3A2	62MHz Thin Node Pair		2002	12/20/96
9076	3A3	66MHz Wide Node		2003	12/20/96
9076	3A4	66MHz Thin-2 Node Pair		2004	06/27/97
9076	3A5	77MHz Fast Wide Node		2005	06/27/97
9076	3B2	62MHz Thin Node Pair		2002	12/20/96
9076	3B3	66MHz Wide Node		2003	12/20/96
9076	3B4	66MHz Thin-2 Node Pair		2004	06/27/97
9076	3B5	77MHz Fast Wide Node		2005	06/27/97

Withdrawn SP Expansion Frames - Half Height

Current Models				
Feat Code ^{1,2}	Price	Expansion Frame With Base Node	Base Node Equiv. FC	Announced W/D Date
1027	\$66,700	135MHz P2SC Wide Node	2007	04/21/98
1028	\$68,950	120MHz P2SC Thin Node Pair	2008	04/21/98
1029	\$66,300	200MHz 604e SMP High Node	2009	04/21/98
1052	\$85,700	160MHz P2SC Thin Node Pair	2022	04/21/98
Withdrawn Models				
Feat Code ^{1,2}	Expansion Frame With Base Node		Base Node Equiv. FC	W/D Date
1022	62MHz Thin Node Pair		2002	12/20/96
1023	66MHz Wide Node		2003	12/20/96
1024	66MHz Thin-2 Node Pair		2004	06/27/97
1025	77MHz Fast Wide Node		2005	06/27/97
Notes:				
1. The half height expansion frames can only be attached to half high SP systems 9076-2Ax and 9076-3Ax.				