AS/400e SB1, S10, S20, S30, and S40 models

AS/400e SB1, S10, S20, S30, and S40 models are special-purpose servers. The upgrade capability of these servers is limited.

Model	Announce/availability date	Withdrawn from marketing
SB1 #2310 and #2311	Announced 19 August 1997	29 December 2000
SB1 #2312 and #2313	Announced 1 September 1998	29 December 2000

Model and processor	Announce date	General availability date	Withdrawn from marketing
S10 2118	19 August 1997	08 August 1997	31 May 1999
S10 2119	19 August 1997	08 August 1997	31 May 2000
S20 2161	19 August 1997	08 August 1997	31 May 2000
S20 2163	19 August 1997	08 August 1997	31 May 2000
S20 2165	19 August 1997	08 August 1997	31 May 2000
S20 2166	19 August 1997	08 August 1997	31 May 2000
S20 2170	19 May 1998	08 August 1997	31 May 1999
S20 2177	19 August 1997	08 August 1997	31 May 2000
S20 2178	19 August 1997	08 August 1997	31 May 2000
S30 2257	19 August 1997	08 August 1997	31 May 2000
S30 2258	19 August 1997	08 August 1997	31 May 2000
S30 2259	19 August 1997	08 August 1997	31 May 2000
S30 2260	19 August 1997	08 August 1997	31 May 2000
S30 2320	19 August 1997	08 August 1997	31 May 2000

Model and processor	Announce date	General availability date	Withdrawn from marketing
S30 2321	19 August 1997	08 August 1997	31 May 2000
S30 2322	19 August 1997	08 August 1997	31 May 2000
S40 2256	10 February 1998	08 August 1997	31 May 2000
S40 2261	19 August 1997	08 August 1997	31 May 2000
S40 2207	01 September 1998	08 August 1997	31 May 2000
S40 2208	01 September 1998	08 August 1997	31 May 2000
S40 2340	01 September 1998	08 August 1997	31 May 2000
S40 2341	01 September 1998	08 August 1997	31 May 2000

11.1 AS/400e S10 model overview

Model	S10	
Processor feature	**#2118**	**#2119**
Relative system performance (CPW)[1]		
Client/server environment	45.4	73.1
Interactive environment	16.2	24.4
Number of n-way multiprocessors	1	1
Main storage (MB)	64-384	128-512
Disk storage base (GB)	4.19	
Maximum internal (GB)		
V4R1	85.8	
V4R2/R3	175.4	
System I/O card slots		
SPD	0	
PCI	8	
Communications lines[2]	1-10	
LAN/ATM adapters	1-3	
Maximum workstation controllers		
Twinaxial	1	
ASCII	0	
Maximum workstations		
Twinaxial (V4R1)	7	
Twinaxial (V4R2/R3)	28	
ASCII	0	
¼-inch/8mm cartridge tape (internal)	0-1	
½-inch tape		
Reel 9348	0-1	
Reel 2440,9347	0	
Cartridge 34xx, 35xx	0-1	
8mm cartridge (external)	0-1	
Optical libraries	0-1	
Diskettes (5 ¼-inch or 8-inch)	0	
Fax adapters	0	
Cryptographic processor	0	
System I/O buses	1	

Note 1	Commercial Processing Workload (CPW) is used to measure the performance of all iSeries and AS/400e processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine what performance is achievable.
Note 2	One line is used for Operations Console or Client Access Console if selected. The maximum is nine if Twinaxial Console is selected.

11.2 AS/400e S20 model overview

Model	S20						
Processor feature	**#2161**	**#2163**	**#2165**	**#2166**	**#2170**	**#2177**	**#2178**
Relative system performance[1]							
Client/server environment	113.8	210.0	464.3	759.0	464.3	759.0	759.0
Interactive environment	31.0	35.8	49.7	56.9	49.7	110.7	221.4
Number of n-way multiprocessors	1	1	2	4	1	4	4
Main storage (MB)	256-2048	256-2048	256-4096	256-4096	256-4096	256-4096	256-4096
Numbers are for all processor features	**Base system**	**SUE #5064 PCI (#9329)**		**SUE #5064 SPD (#9331)**	**Expansion tower**	**#5065 Expansion Tower**	**System maximum**
		note 4		note 4	-		
Disk storage base (GB)	4.19	-		-	274.8		4.19
Maximum internal (GB) (V4R2/R3)	263.2 (5)	263.2		263.2	561.5		944.8
Maximum external (GB) (V4R2/R3)	-	-		note 2	note 2		893.3
Total maximum (GB) (V4R2/R3)							944.8
Total maximum (GB) (V4R4)	263.2(5)	263.2		263.2	561.5	386.5	944.8
Total maximum (GB) (V5R1)	263.2(5)	263.2		263.2	561.5	773.0	944.8
External SPD bus	0	4		4	0		4
Maximum card slots-SPD	0	0		6	13	0	58
Maximum card slots-PCI	8	14		0	0	12	22
Communication lines[3]	1-10	0-18		0-30	0-78	0-36	96
LAN/ATM adapters	1-3	0-5		0-6	0-13	3	16
Maximum workstation controllers[6]						12	
Twinaxial	1	1		1	1		1
ASCII (V4R1)	0	0		1	1		1
ASCII (V4R2/R3)	0	0		2	2		2
Maximum workstations[6]							
Twinaxial (V4R1)	7	7		7	7	28	7
Twinaxial (V4R2/R3)	28	28		28	28	1	28
Twinaxial (V4R4)	0	0		6	6		6
ASCII (V4R1)	0	0		28	28		28
ASCII (V4R2/R3)							
¼-inch/8mm cartridge tape (internal)	0-1	0-3		0-3	0-4	0-2	0-17
½-inch tape							
Reel 9348	0-1	0-2		0-4	0-4		4
Reel 2440	0	0		0-4	0-4		4
Reel 9347	0	0		0	0		0
Cartridge 34xx, 35xx	0-1	0-2		0-4	0-4	0-3	6
8mm cartridge (external)	0-1	0-2		0-4	0-4	0-3	4
Tape libraries	0-1	0-2		0-4		0-3	4
Optical libraries	0-1	0-2		0-12	0-14	3	14
Diskettes (5 ¼-inch or 8-inch)	0	0		0-2	0-2		2
Fax adapters	0	0		0-6	0-13		32
Cryptographic processor	0	0		0-1	0-1	0-3	1

Note 1	CPW is used to measure the performance of all iSeries and AS/400e processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine the performance that is achievable.
Note 2	External DASD can be attached using an SPD card in the expansion unit.
Note 3	One line is used for Client Access Console or Operations Console if selected. Maximum is nine if Twinaxial Console is selected.
Note 4	The #5064 must be configured with #9329 (PCI) or #9331 (SPD). Therefore, these columns are mutually exclusive.
Note 5	Maximum is 85.8 GB (V4R1) or 175.4 GB (V4R2/R3/V4R4) on the #2161 Processor.
Note 6	The S20 processors #2170, #2177, and #2178 support a maximum of 60 Twinax and 58 ASCII Workstation Controllers and 2392 Twinax and 1044 ASCII Workstations.

11.3 AS/400e S30 model overview

Model	S30						
Processor feature	**#2257**	**#2258**	**#2259**	**#2260**	**#2320**	**#2321**	**#2322**
Relative system performance (CPW)[1]							
Client/server environment	319.0	583.3	998.6	1794.0	998.6	1794.0	1794.0
Interactive environment	51.5	64.0	64.0	64.0	215.1	386.4	579.6
Number of n-way multiprocessors	1	2	4	8	4	8	8
Main storage (MB)							
Minimum	512	512	512	1024	512	1024	1024
Maximum (V4R1/R2)	12288	12288	12288	12288	12288	12288	12288
Maximum (V4R3)	16384	16384	16384	24576	16384	24576	24576
Disk storage base (GB)	4.19				4.19		
Maximum internal (GB) (V4R1)	927.7				927.7		
Maximum external (GB) (V4R1)	893.3				893.3		
Maximum combined (GB) (V4R1)	927.7				927.7		
Max internal (GB) (V4R2/R3)	1340.0				1340.0		
Maximum external (GB) (V4R2/R3)	1305.6				1305.6		
Maximum combined (GB) (V4R2/R3)	1340.0				1340.0		
Disk unit IOPs	1-37				1-37		
Minimum feature card slots	3				3		
Maximum feature card slots	235				235		
Communication lines	1-200				1-200		
LAN/ATM adapters[2]	1-32				1-32		
Maximum workstation controllers							
Twinaxial	1				175		
ASCII (V4R1)	1				175		
ASCII (V4R2/R3)	2				175		
Maximum workstations							
Twinaxial (V4R1)	7				7000		
Twinaxial (V4R2/R3)	28				7000		
ASCII (V4R1)	6				3150		
ASCII (V4R2/R3)	28				3150		
¼-inch/8mm cartridge tape (internal)	0-17				0-17		
½-inch tape							
Reel 2440, 9348	0-4				0-4		
34xx, 35xx	0-8				0-8		
8mm cartridge tape (external)	0-4				0-4		
Optical libraries	0-22				0-22		
Diskettes (5 ¼-inch or 8-inch)	0-2				0-2		
Fax adapters	0-32				0-32		
Cryptographic processor	0-1				0-1		
System I/O buses	1-19				1-19		
System expansion (#5072/#5073/#5082/#5083)	0-18				0-18		
Storage expansion (#5055/#5057)	0-1				0-1		
Storage expansion (#5052/#5058)	0-18				0-18		

Note 1	CPW is used to measure the performance of all iSeries and AS/400e processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine the performance that is achievable.
Note 2	Can include up to 16 Integrated PC Servers.

11.4 AS/400e S40 model overview

Model	S40					
Processor feature	**#2256**	**#2261**	**#2207**	**#2208**	**#2340**	**#2341**
Relative system performance (CPW note 1)						
Client/server environment	1794	2340	3660	4550	3660	4450
Interactive environment	64	64	120	120	1050	2050
Number of n-way multiprocessors	8	12	8	12	8	12
Main storage (MB)						
Minimum	1024	1024	1024	1024	1024	1024
Maximum (V4R1/R2)	20480	20480	-	-	-	-
Maximum (V4R3)	32768	32768	40960	40960	40960	40960
Disk storage base (GB)						
Minimum			4.19		4.19	
V4R1						
Maximum internal			996.4		-	
Maximum external			893.3		-	
Maximum combined			996.4		-	
V4R2					-	
Maximum internal			1546.1		-	
Maximum external			1511.8		-	
Maximum combined			1546.8			
V4R3						
Maximum internal			2095.9		2095.9	
Maximum external			2061.3		2061.3	
Maximum combined			2095.9		2095.9	
Disk unit IOPs			1-37		1-37	
Minimum feature card slots			3		3	
Maximum feature card slots			237		237	
Communications lines						
V4R1/R2			1-250		-	
V4R3			1-300		1-300	
LAN/ATM adapters[2]						
V4R1/R2			1-48		-	
V4R3			1-72		1-72	
Workstation controllers			1-3		1-175	
Twinaxial			0-1		0-175	
ASCII (V4R1)			0-1		-	
ASCII (V4R2/R3)			0-2		0-175	
Maximum workstations						
Twinaxial (V4R1)			7		-	
Twinaxial (V4R2/R3)			28		7000	
ASCII (V4R1)			6		-	
ASCII (V4R2/R3)			28		3150	
¼-inch/8mm cartridge tape			0-17		0-17	
½ (internal)						
½-inch Tape						
Reel-to-reel (2440, 9348)			0-4		0-4	
Cartridge (34xx, 35xx)			0-8		0-8	
8mm cartridge tape (external)			0-4		0-4	
Optical libraries			0-22		0-22	
Diskettes (5 ¼-inch or 8-inch)			0-2		0-2	
Fax adapters			0-32		0-32	
Cryptographic processor			0-1		0-1	
System I/O buses			1-19		1-19	
System expansion (#5072/#5073/#5082/#5083)			0-18		0-18	
Storage expansion (#5057)			0-1		0-1	
Storage expansion (#5052/#5058)			0-18		0-18	

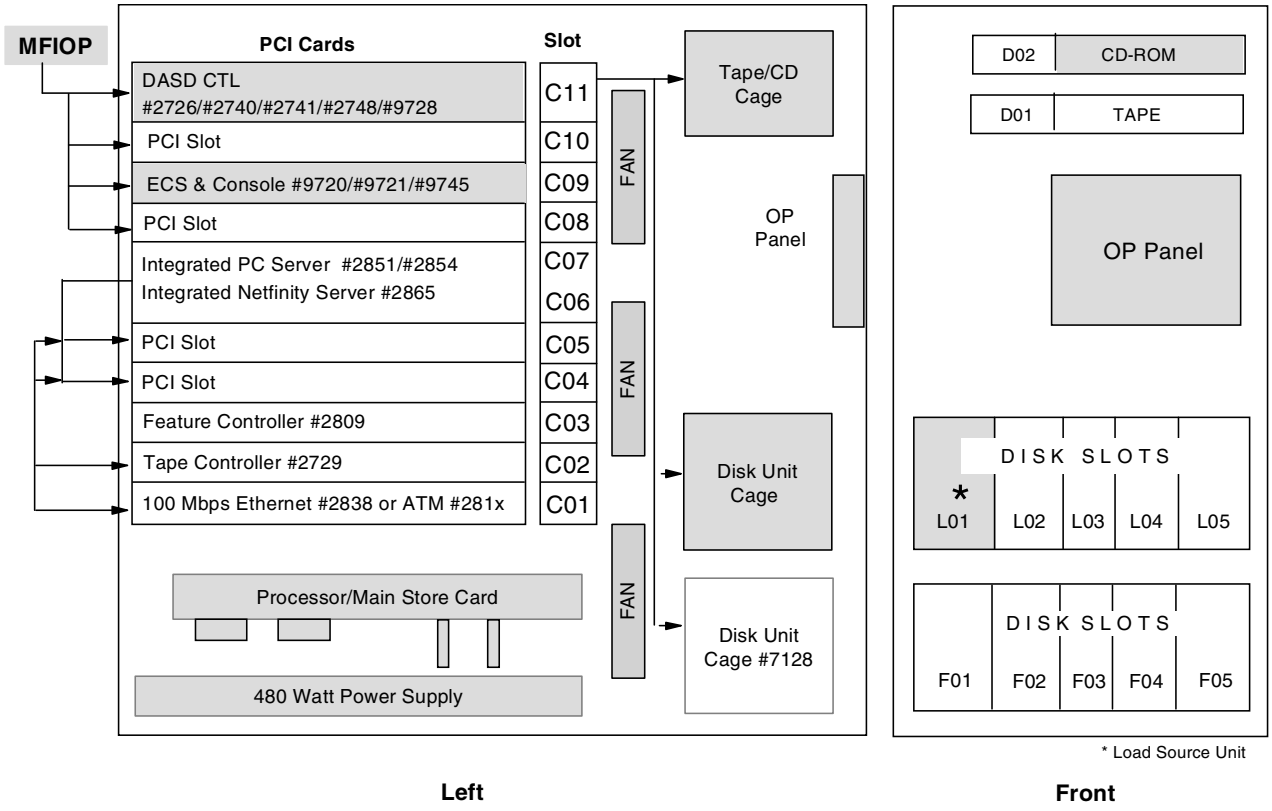
Note 1	Commercial Processing Workload is used to measure the performance of all iSeries and AS/400e processors announced from September 1996 onward. The CPW value is measured on maximum configurations. The type and number of disk devices, the number of workstation controllers, the amount of memory, the system model, other factors, and the application being run determine the performance that is achievable.
Note 2	Can include up to 16 Integrated PC Servers.

11.5 AS/400e SB1 model overview

Model	**SB1**			
Processor feature	**#2310**	**#2311**	**#2312**	**#2313**
Relative system performance [1]				
Normalized FI dialog steps per hour	125,888	185,533	Note 2	Note 2
Number of n-way multiprocessors	8	12	8	12
Main storage (MB)	4096	4096	8192	8192
Minimum operating system level	V4R1		V4R3	V4R3
Disk storage base (GB)				
Minimum	16.77			
Maximum internal	34.35			
Maximum external	-			
Maximum combined	34.35			
Disk unit IOPs	1			
Minimum feature card slots	3			
Maximum feature card slots	29			
Communications lines	1-16			
LAN/ATM adapters	1-5			
Workstation controllers	1-3			
Twinaxial	0-1			
ASCII (V4R1)	0-1			
ASCII (V4R2/R3)	0-2			
Maximum workstations				
Twinaxial (V4R1)	7			
Twinaxial (V4R2/R3)	28			
ASCII (V4R1)	6			
ASCII (V4R2/R3)	28			
¼-inch/8mm cartridge tape	0-3			
½-inch tape				
Reel-to-reel (2440, 9348)	0-4			
Cartridge (34xx, 35xx)	0-4			
8mm cartridge tape (external)	0-4			
Optical libraries	0-2			
Diskettes (5 ¼-inch or 8-inch)	0-2			
Fax adapters	0-2			
Cryptographic processor	0-1			
System I/O buses	1-5			
System expansion (#5073)	0-2			

Note 1	Model SB1 performance measurements when used as a SAP R/3 application server. FI Dialog Steps may not be realized in all environments. Listed FI Dialog Steps per hour are at 65% CPU Utilization.
Note 2	See http://www.softmall.ibm.com/as400/isvsol for additional information.

11.6 9406 Model S10 system unit

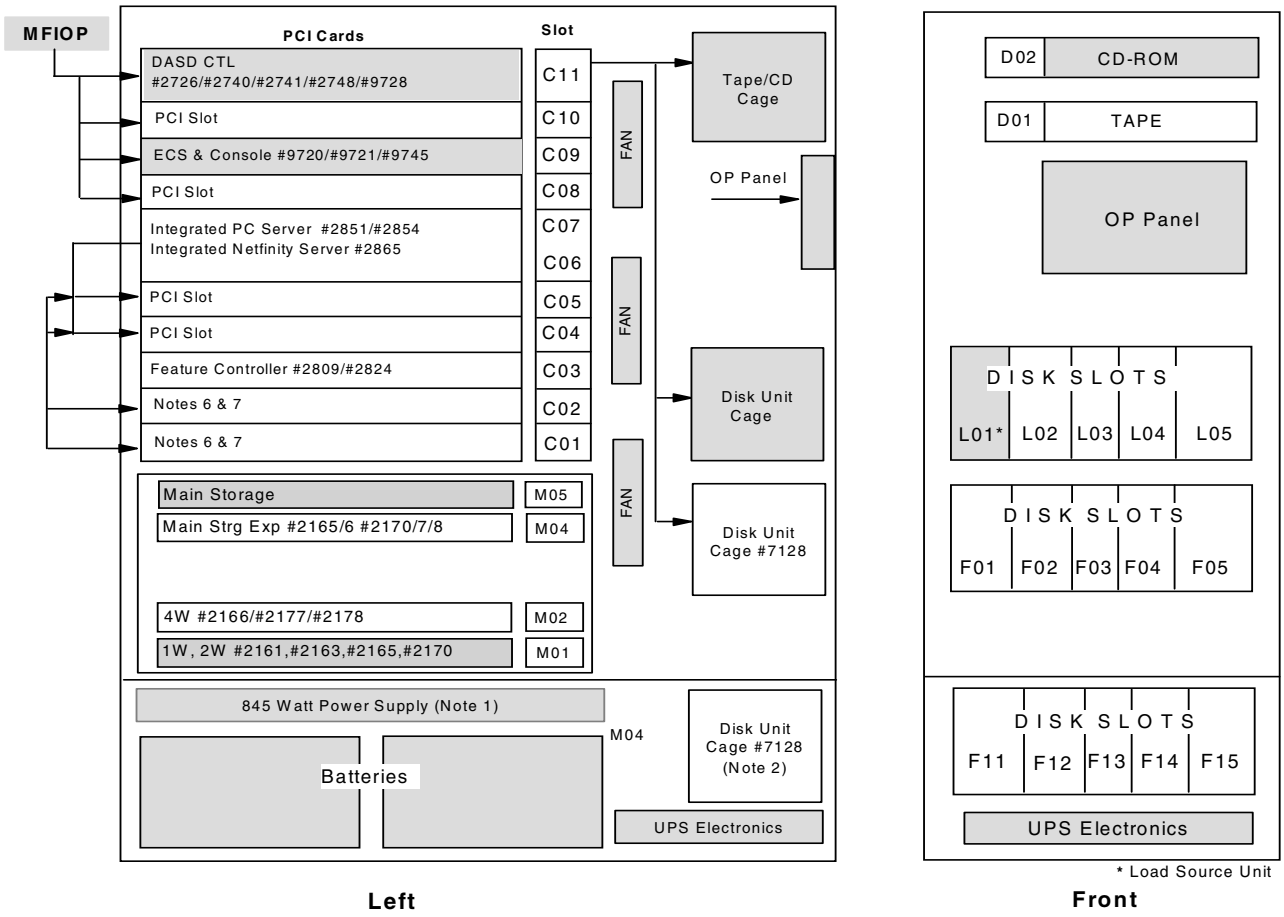


Notes:

1. The #9728 Base Disk Unit Controller does not support RAID-5 or integrated hardware disk compression and only supports five disks. If there is an intention to install more than five disks or implement RAID-5 later, the #9728 should be changed for a #2726/#2740/#2741/#2748.
2. If an Integrated PC Server is in slots C06 and C07, it controls its LAN IOAs in slots C04 and C05. If there is no IPCS or Integrated Netfinity Server, C04 and C05 are controlled by C03.
3. If an Integrated PC Server, or an Integrated Netfinity Server is in slots C06 and C07. The #2722/#2746 PCI Twinaxial Workstation IOA is not allowed in slot C08, and LAN IOAs are not allowed in slots C08 or C10.
4. SIMM modules plug directly to the planar board.
5. If #2854 PCI Integrated PC Server or #2865 PCI Integrated Netfinity Server is installed in slots C06 and C07:
   - Slot C04 supports #2723, #2724, or #2838/#9738.
   - Slot C05 supports #2723 or #2724.
6. For the #2809 in C03:
   - Slot C01 supports the #2738/#9738 PCI 100/10 Mbps Ethernet IOA or #281x ATM.
   - Slot C02 supports the #2718 or #2729 PCI Magnetic Media Controller.
   - Slots C04/C05 support the #2721, #2722, #2723, #2724, #2745, or #2746.

7. For the #2824 in C03:
   - Slot C01 supports the #2838/#9738 or #281x.
   - Slot C02 supports the #2718, #2729, #2750, #2751, #2761, or #4800.
   - Slots C04/C05 support the #2721, #2722, #2723, #2724, #2745, #2746, #2750, #2751, #2761, or #4800.
8. If a #2838 or #281x is installed on the #2824/#2809 in C03, only features #2721 or #2745 may be installed in slots C04 or C05.
9. There is a maximum of one #2838 or #281x per #2824/#2809 IOP.
10. There is a maximum of one #2750, #2751, or #2761 per #2824 IOP.
11. There is a maximum of one #4800 per #2824 IOP.

11.7 9406 Model S20 system unit



Notes:

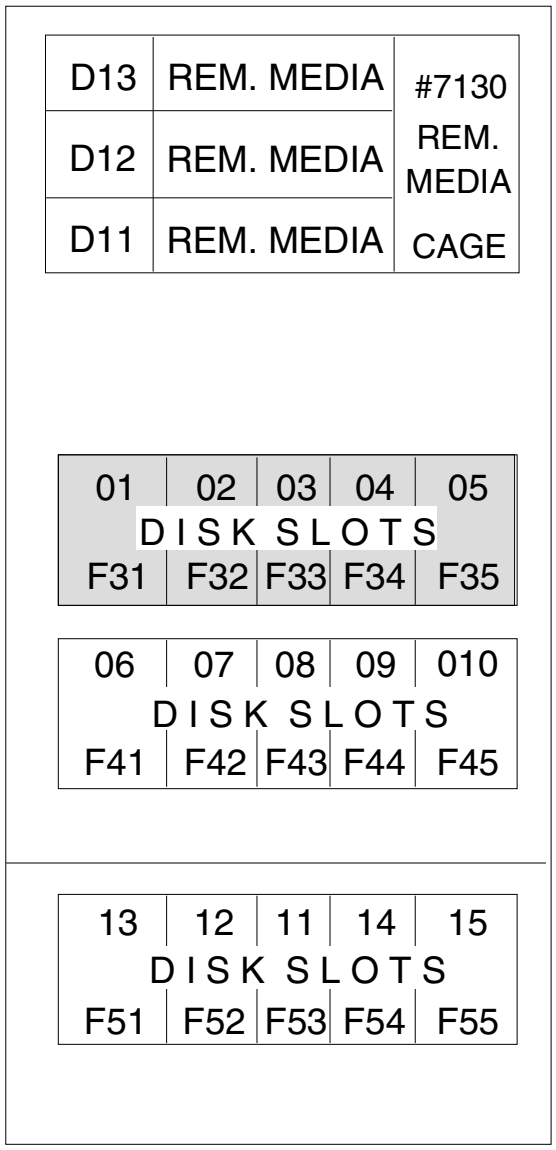
1. Processor #2161 has a 480-watt power supply. All other S20 models use the 845-watt power supply. The layout of the #2161 processor/main storage compartment differs from this drawing.
2. This cage is not available with the #2161 processor.
3. The #9728 Base Disk Unit Controller does not support RAID-5 or integrated hardware disk compression and only supports five disks. If there is intention to install more than five

disks in the base system unit or implement RAID-5 later, the #9728 should be changed for a #2726/#2740/#2741/#2748.

4. If an Integrated PC Server, or an Integrated Netfinity Server is in slots C06 and C07, then #2722/#2746 PCI Twinaxial Workstation IOA and LAN IOAs are not allowed in slot C08.
5. If #2854 PCI Integrated PC Server or #2865 PCI Integrated Netfinity Server is installed in slots C06 and C07:
   - Slot C04 supports #2723, #2724, or #2838/#9738.
   - Slot C05 supports #2723 or #2724.
6. For the #2809 in C03:
   - Slot C01 supports the #2738/#9738 PCI 100/10 Mbps Ethernet IOA or #281x ATM.
   - Slot C02 supports the #2718 or #2729 PCI Magnetic Media Controller.
   - Slots C04/C05 support the #2721, #2722, #2723, #2724, #2745, or #2746.
7. For the #2824 in C03:
   - Slot C01 supports the #2838/#9738 or #281x.
   - Slot C02 supports the #2718, #2729, #2750, #2751, #2761, or #4800.
   - Slots C04/C05 support the #2721, #2722, #2723, #2724, #2745, #2746, #2750, #2751, #2761, or #4800.
8. If a #2838 or #281x is installed on the #2824/#2809 in C03, only features #2721 or #2745 may be installed in C04/C05.
9. There is a maximum of one #2838 or #281x per #2824 IOP.
10. There is a maximum of one #2750, #2751, or #2761 per #2824 IOP.
11. There is a maximum of one #4800 per #2824 IOP.

11.8 9406 Model S20 #5064 System Unit Expansion

Front of #5064

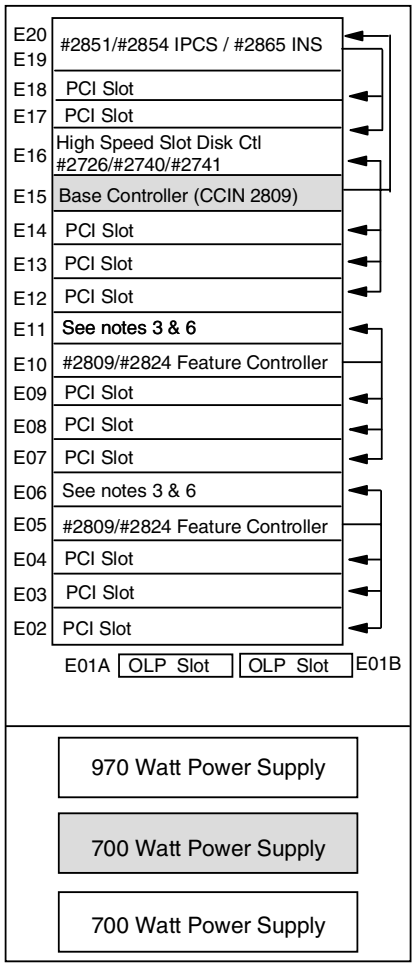


Note: The #5064 can either have #9329/#9330 PCI or a #9331 SPD planar board.

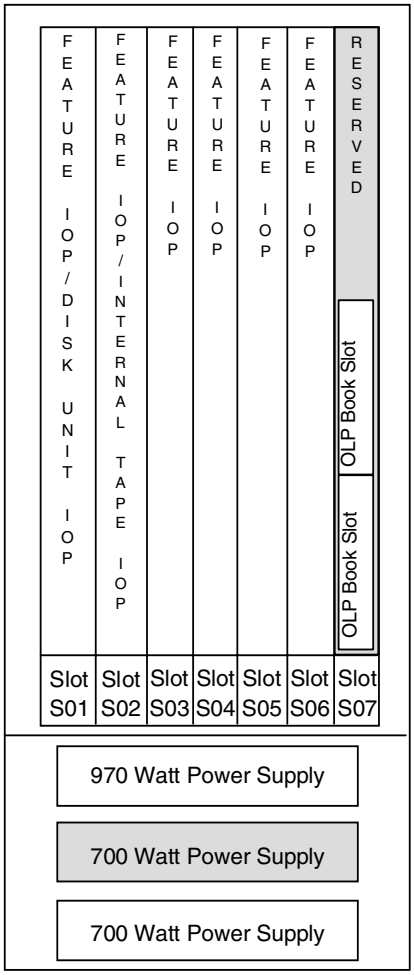
For diagrams of the #597X and #508X expansion towers, refer to 14.1, “AS/400e 500, 510, and 530 models overview” on page 452.

11.9 #9329 PCI Card Cage and #9331 SPD Card Cage

#5064 with 9329 PCI Card Cage

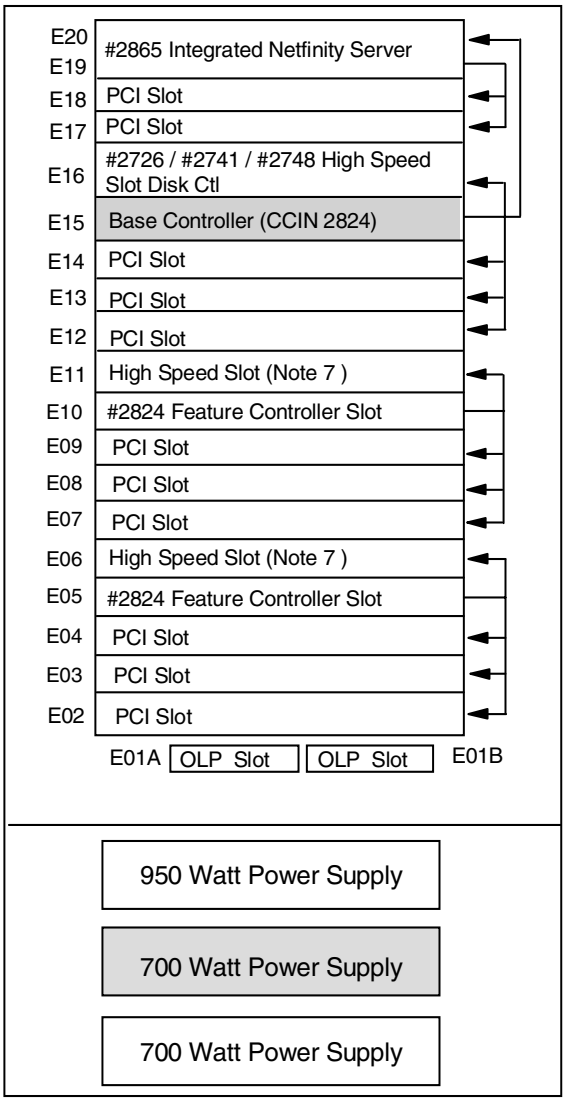


#5064 with 9331 SPD Card Cage



11.10 #9330 PCI Integrated Expansion Unit Card Cage

#5064 with #9330 PCI Card Cage



Notes:

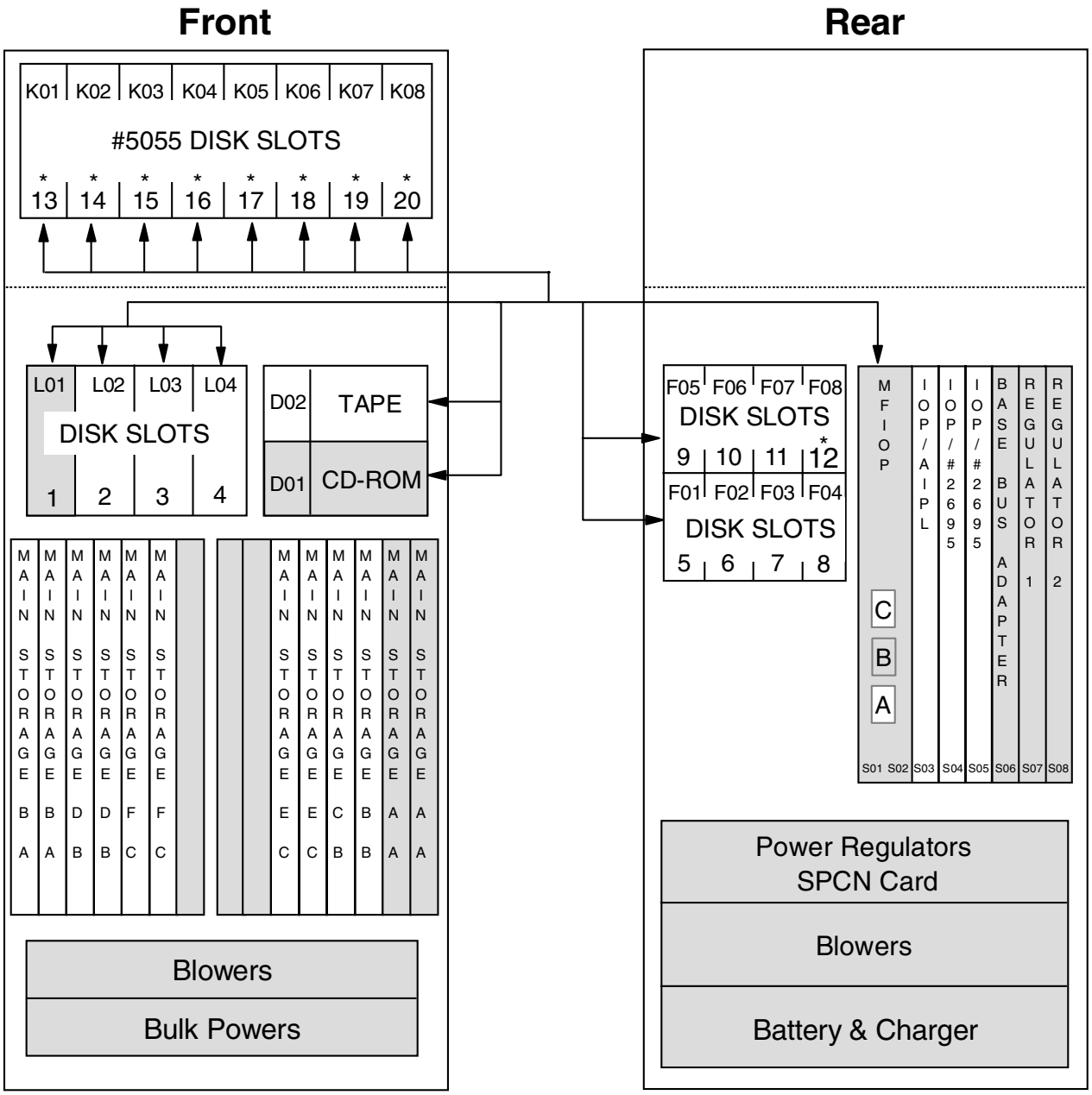
1. Optical link processors are used for connecting expansion towers and racks.
2. Base PCI LAN/WAN/Workstation IOP (CCIN 2809) in the #9329 slot E15 supports:
   - In E16 (high-speed slot):
     - #2726, #2740, #2741
   - In E12, E13, E14 (low-speed slots):
     - #2721, #2722, #2723, #2724, #2745, or #2746
     - Three cards in any combination with a maximum of one LAN card
     - When a #2851/#2854 PCI Integrated PC Server or #2865 PCI Integrated Netfinity Server is installed in the system expansion unit slots E19/E20, no LANs are allowed in slots E12, E13, and E14.

3. The #2809 PCI LAN/WAN/Workstation IOP in #9329 slots E05 or E10 supports:
   - In E06 or E11(high-speed slots):
     - #2718, #2729, #2838, or #281x
   - In E02, E03, E04 or E07, E08, and E09 (low-speed slots):
     - #2721, #2722, #2723, #2724, #2745, or #2746
     - Three cards in any combination with a maximum of two LAN cards.
     - When a #2838 PCI 100/10 Mbps Ethernet IOA or any ATM feature is installed in E11, only #2721/#2745 PCI Two-Line WAN IOAs are allowed in slots E08 and E09. E07 cannot be used.
     - When a #2838 PCI 100/10 Mbps Ethernet IOA or any ATM feature is installed in E06, only #2721/#2745 PCI Two-Line WAN IOAs are allowed in slots E03 and E04. E02 cannot be used.
     - When a #2718/#2729 PCI Magnetic Media Controller is installed in E11, only one LAN is allowed in slots E08 or E09.
     - When a #2718/#2729 PCI Magnetic Media Controller is installed in E06, only one LAN is allowed in slots E03 or E04.
4. The #2838/#9738 100/10 Mbps Ethernet is normally located in slot E06 or E11. However, if driven by #2865 PCI Integrated Netfinity Server one #2838/#9738 is located in slot E17.
5. Base PCI LAN/WAN/Workstation IOP (CCIN 2824) in #9330 slot E15 supports:
   - In E16 (high-speed slot):
     - #2726, #2741, or #2748
   - In E12, E13, E14 (low-speed slots):
     - #2721, #2722, #2723, #2724, #2745, #2746, #2750, #2751, or #2761
     - Maximum of two LAN (#2723 and/or #2724) adapters
     - A maximum of one remote access card (#2750, #2751 or #2761)
     - Any combination of WAN and Twinax adapters
     - When a #2851/#2854 PCI Integrated PC Server or #2865 PCI Integrated Netfinity Server is installed in the system expansion unit slots E19/E20, no LAN features are allowed in slots E12, E13, and E14. Two LAN adapters are allowed on the IPCS or Integrated Netfinity Server, one of which may be high speed.
6. The #2824 PCI Feature Controller in #9329 slots E05 or E10 supports:
   - In E06 or E11 (high-speed slots):
     - #2718, #2729, #2838, #2750, #2751, #2761, #281x, or #4800
   - In E02, E03, E04 or E07, E08, E09 (low-speed slots):
     - #2721, #2722, #2723, #2724, #2745, #2746, #2750, #2751, or #2761
     - Three cards in any combination
     - When a #2838 PCI 100/10 Mbps Ethernet IOA or any ATM feature is installed in E11, only #2721/#2745 PCI Two-Line WAN IOAs are allowed in slots E08 and E09. E07 cannot be used.
     - When a #2838 PCI 100/10 Mbps Ethernet IOA or any ATM feature is installed in E06, only #2721/#2745 PCI Two-Line WAN IOAs are allowed in slots E03 and E04. E02 cannot be used.
     - When a #2729 PCI Magnetic Media Controller is installed in E11, only one LAN is allowed in slots E08 and E09.

- When a #2729 PCI Magnetic Media Controller is installed in E06, only one LAN is allowed in slots E03 and E04.
- A maximum of one remote access card (#2750, #2751 or #2761) per #2824
- A maximum of two low-speed LANs (#2723 and/or #2724) per #2824

7. The #2824 PCI Feature Controller in the #9330 slots E05 or E10 supports:
   - In E06 or E11(high-speed slots):
     - #2718, #2729, #2745, #2746, #2750, #2751, #2761, #281x, #2838, or #4800
   - In E02, E03, E04 or E07, E08, E09 (low-speed slots):
     - #2721, #2722, #2723, #2724, #2745, #2746, #2750, #2751, or #2761
     - Three cards in any combination
     - Maximum of one #2838 high-speed LAN or one #281x ATM per #2824
     - If high-speed LAN or ATM feature present, #2723/#2724 not allowed on this #2824
     - A maximum of one #2750, #2751, or #2761 remote access card per #2824
     - A maximum of two #2723 or #2724 low-speed LANs per #2824

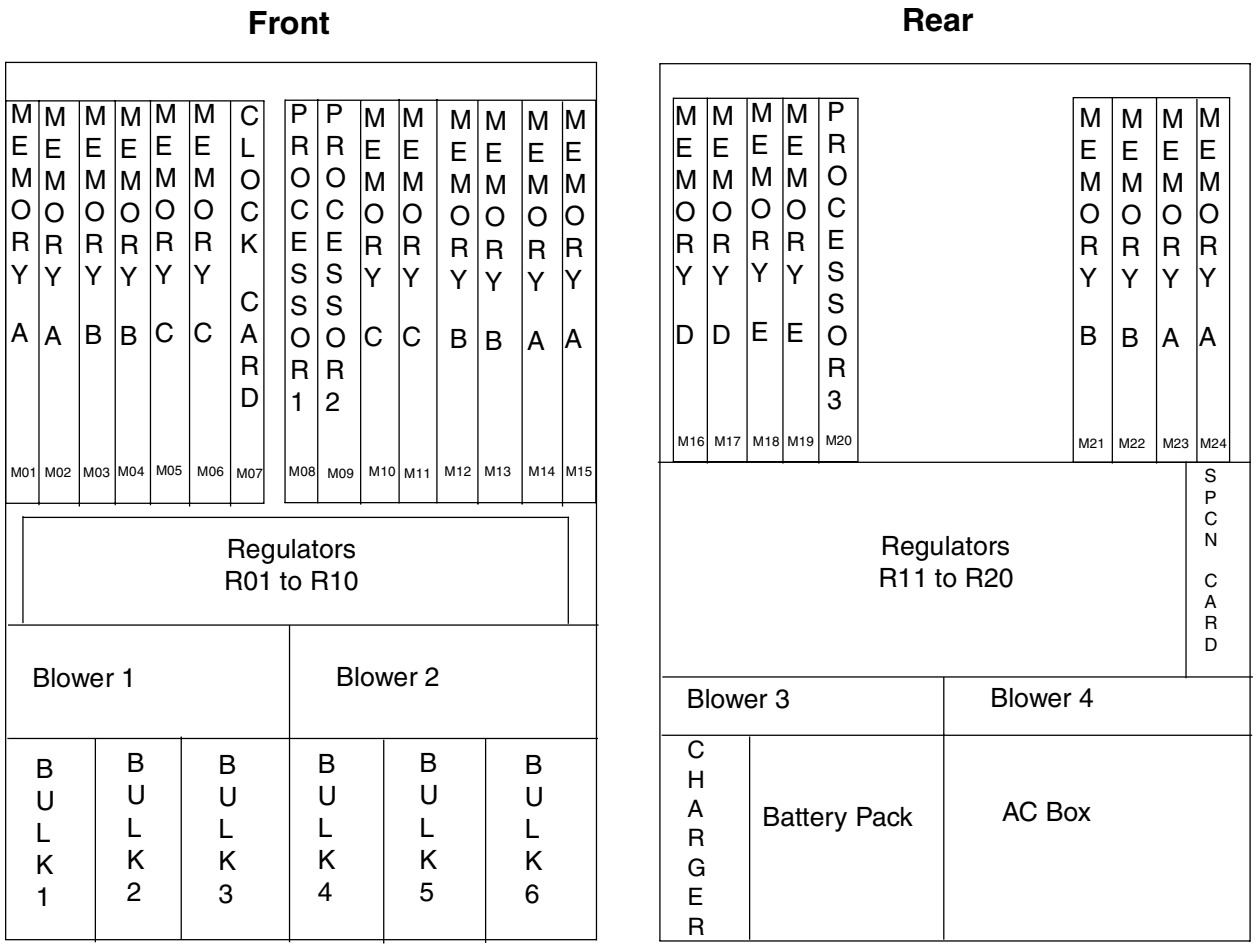
11.11 9406 Model S30 system unit



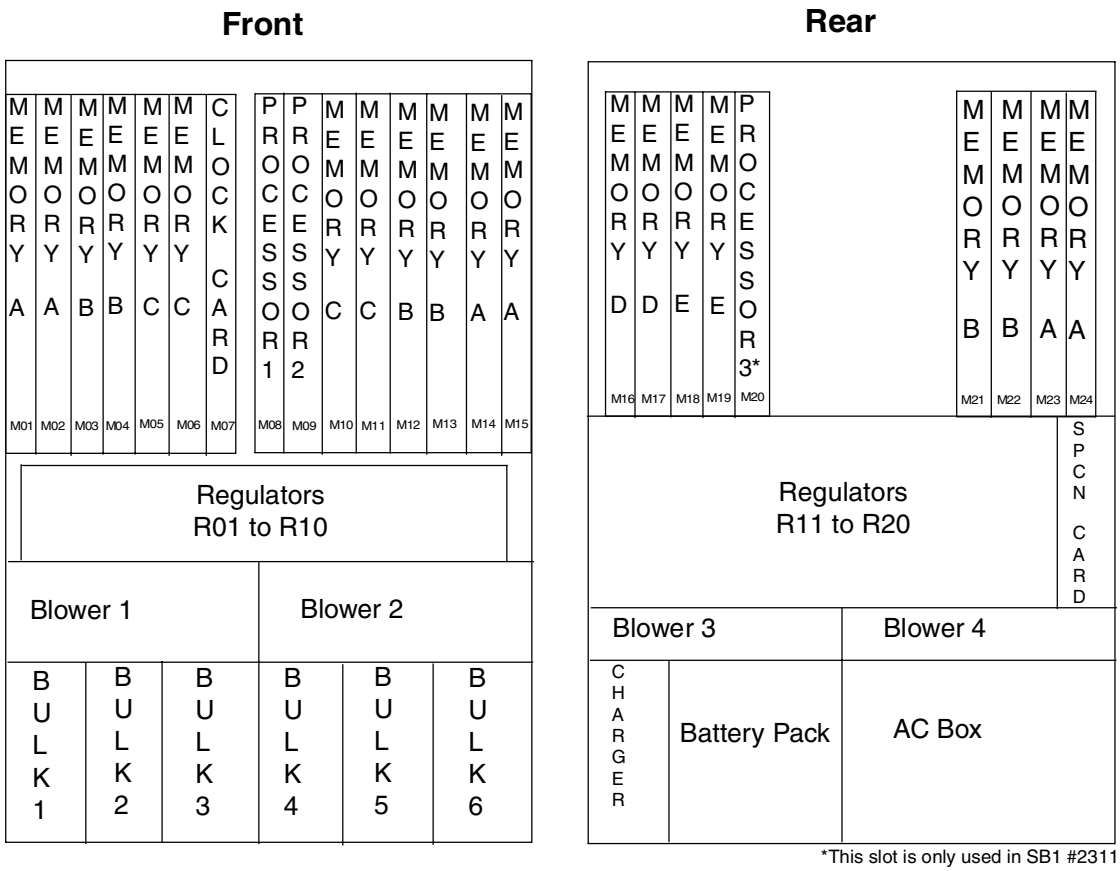
** This slot is used only in the S30 #2260, #2321, and #2322.
* One-byte disks cannot be installed in these slots.

Note: For memory slots, the first letter applies to the S30 #2257, #2258, #2259, and #2320. The second letter applies to the S30 #2260, #2321, and #2322.

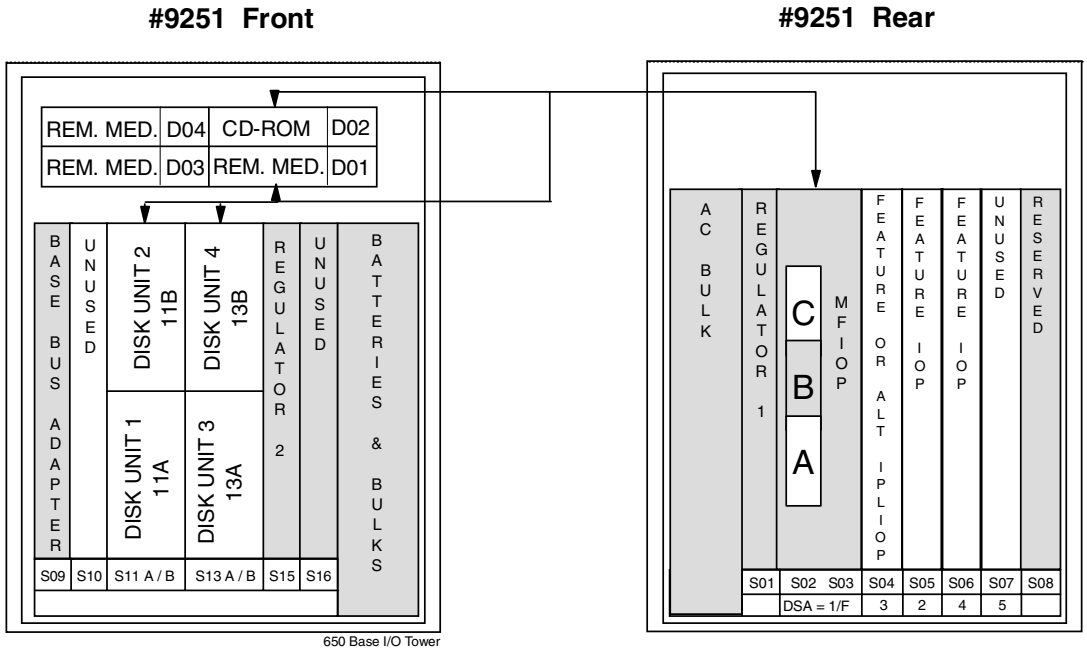
11.12 9406 Model S40 system unit



11.13 9406 Model SB1 system unit



*This slot is only used in SB1 #2311



= Are part of the base configuration

* One byte disks cannot be installed in these slots

11.14 AS/400e Model S10 and S20 features

Note: The darker shaded cells in the tables indicate the base features.

PROCESSORS	
#2118	**45.4 RSP CPW Processor in Client/Server, 16.2 RSP CPW Processor Interactive Environment. Base Memory 64 MB.** Model S10 only.
#2119	**73.1 RSP CPW Processor in Client/Server Environment, 24.4 RSP CPW Processor in Interactive Environment. Base Memory 128 MB.** Model S10 only.
#2161	**113.8 RSP CPW Processor in Client/Server Environment, 31.0 CPW Processor in Interactive Environment. Base Memory 256 MB.** Model S20 only.
#2163	**210.0 RSP CPW Processor in Client/Server Environment, 35.8 RSP CPW in Interactive Environment. Base Memory 256 MB.** Model S20 only.
#2165	**464.3 RSP CPW 2-way Processor in Client/Server Environment, 49.7 RSP CPW 2-way Processor in Interactive Environment. Base Memory 256 MB**. Model S20 only.
#2166	**759.0 RSP CPW 4-way Processor in Client/Server Environment, 56.9 RSP CPW 4-way Processor in Interactive Environment. Base Memory 256 MB.** Model S20 only.
#2170	**464.3 RSP CPW 2-way Processor in Client/Server Environment, 49.7 RSP CPW 2-way Processor in Interactive Environment. Base Memory 256 MB**. Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. When upgrading to a Model 720, 730, or 740, to have the interactive capacity of this system properly converted to the appropriate supported feature, process an RPO order to the records of the #2170 processor feature of the Model S20 to add a #1490 interactive specify. Minimum OS/400 level: V4R2 Model S20 only.
#2177	**759.0 RSP CPW 4-way Processor in Client/Server Environment, 110.7 RSP CPW 4-way Processor in Interactive Environment. Base Memory 256 MB.** Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. When upgrading to a Model 720, 730, or 740, to have the interactive capacity of this system properly converted to the appropriate supported feature, process an RPO order to the records of the #2177 processor feature of the Model S20 to add a #1491 interactive specify Minimum OS/400 level: V4R1 Model S20 only.
#2178	**759.0 RSP CPW 4-way Processor in Client/Server Environment, 221.4 RSP CPW 4-way Processor in Interactive Environment. Base Memory 256 MB.** Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. When upgrading to a Model 720, 730, or 740, to have the interactive capacity of this system properly converted to the appropriate supported feature, process an RPO order to the records of the #2178 processor feature of the Model S20 to add a #1492 interactive specify. Minimum OS/400 level: V4R1 Model S20 only.
POWER AND PACKAGING	
#2688	**#2688 Optical Link Processor (1063 Mbps)** The #2668 is a card that is used for attaching the #5072, #5073, #5082, and #5083 Storage Expansion Towers on the Model S20. Each #2688 supports a maximum of two #50xx towers. Prerequisite: #5064 System Unit Expansion with either #9331 Expansion Unit for SPD Cards or #9329 PCI Card Expansion Unit Maximum: Two Card slots used: None Model S20 only.

#2695	**#2695 Optical Bus Adapter** Allows for the addition of up to three #2686 or #2688 Optical Link Processors in any combination. Card slots used: One Maximum: Two
#5052	**#5052 Storage Expansion Unit** The #5052 provides space for up to 16 disk units. It attaches to the top of the #5072 1063 Mbps System Unit Expansion Tower and the #5082 per tower is supported and #5143 Power Supply may be required. Model S20 only.
#5058	**#5058 Storage Expansion Unit (Ultra SCSI)** The #5058 provides space for up to disk units. It attaches to the top of the #5073 1063 Mbps System Unit Expansion Tower and the #5083 Storage Expansion Tower. Only one #5058 per tower is supported. Model S20 only.
#5064	**#5064 System Unit Expansion** The #5064 allows one addition of either an #9331 Expansion Unit for SPD Cards or #9329 PCI Card Expansion Unit. It also supports one #7130 Expansion Unit Tape Cage for up to three tapes or CD-ROMs. It supports five disks and allows one or two #7128 DASD Expansion Units. The #5064 is processor dependent. Maximum: One Model S20 only.
#5065	**#5065 Storage/PCI Expansion Tower** The #5065 provides an additional bus. It includes a 1063 Mbps optical bus card. The #5065 has redundant, hot swappable power supplies. It supports three LAN, WAN, or workstation controllers, 12 PCI IOA cards, two removable media, and up to 45 disk units. Three specific disk slots may be used for the #4331 1.6 GB Read Cache Device. The #5065 is the only storage expansion unit to support Ultra2 SCSI. See 9.10, “9406 System Unit Expansion Towers for 6xx and 7xx” on page 237. Minimum OS/400 level: V4R4 Prerequisite: #2688 Optical Link Processor Maximum: Four on the Model S20 The #5065 is a Customer Install Feature (CIF). Model S20 only.
#5066	**#5066 1.8 M I/O Tower** The #5066 provides two additional buses. The #5066 is actually two #5065 Storage/PCI Expansion Towers installed in a #5066 1.8 M I/O Tower. The #5066 reports to the system as two #5065s. The #5066 includes two 1063 Mbps optical bus cards, various cables (including optical cables) and the 1.8M I/O Tower. The #5066 includes 24 PCI IOA slots, space for 90 disk units, space for four removable media devices, battery backup, redundant/hot swap power supplies, and two base PCI LAN/WAN/Workstation IOPs (CCIN 2824). The #5066 is capable of controlling Ultra2 SCSI disk units. Two line cords must be specified. Maximum: Two on the Model S20 Prerequisite: #2688 Optical Link Processor Minimum OS/400 level: V4R4
#5072	**#5072 1063 Mbps System Unit Expansion Tower** The #5072 provides additional buses. It includes a 1063 Mbps optical bus card, 13 SPD I/O card slots, space for up to four internal tape units or CD-ROMs (a maximum of three), and battery and power supplies. It can support one #5052 Storage Expansion Unit. Due to power restrictions, some combinations of high-powered cards may mean that an additional #5072 is required. Prerequisite: #2688 Optical Link Processor The #5072 is only supported on upgrades. It cannot be ordered with a new system. Maximum: A total of four expansion towers of all types Model S20 only.
#5073	**#5073 1063 Mbps System Unit Expansion Tower** The #5073 provides additional buses. It includes a 1063 Mbps optical bus card, 13 SPD I/O card slots, space for up to four internal tape units or CD-ROMs (a maximum of three), and battery and power supplies. It can support one #5058 Storage Expansion Unit. Due to power restrictions, some combinations of high-powered cards may mean that an additional #5073 is required. Prerequisite: #2688 Optical Link Processor Maximum: A total of four expansion towers of all types Model S20 only.
#5082	**#5082 Storage Expansion Tower 1063 Mbps** The #5082 provides a DASD tower for adding up to 16 disk units. A total of 32 disks units are supported with the addition of #5052. It includes a 1063 Mbps optical bus card, two SPD I/O card slots for the disk IOPs (#6502, #6512, #6530 supported but not orderable, or #6532 or #6533 for new orders), and battery and power supplies. Prerequisite: #2688 Optical Link Processor The #5082 is only supported on upgrades. It cannot be ordered with a new system. Maximum: A total of four expansion towers of all types Model S20 only.

#5083	**#5083 Storage Expansion Tower 1063 Mbps (Ultra SCSI)** The #5083 provides a DASD tower for adding up to 16 disk units. A total of 32 disks units are supported with the addition of #5058. It includes a 1063 Mbps optical bus card, two SPD I/Os (#6502, #6512, #6530 supported but not orderable, or #6532 or #6533 for new orders), and battery and power supplies. Prerequisite: #2688 Optical Link Processor Maximum: A total of four expansion towers of all types Model S20 only.
#5143	**#5143 Power Supply** The #5143 is a 400 watt-power supply that is usually a prerequisite for a #5052 installed on a #5072 or #5082. Maximum: One per #5072 or #5082. Model S20 only.
#5153	**Redundant Power Supply** The #5153 contains two power supplies, an 970 watt and a 700 watt. The #5153 provides redundancy for the power supplies in the system unit and system unit expansion. The #5153 physically resides in the #5064 System Unit Expansion. Maximum: One Model S20 Processors #2163, #2165, #2166, #2170, #2177, and #2178 only.
#7128	**#7128 DASD Expansion Unit** The #7128 allows the addition of five disk units to either the system unit or the #5064 System Unit Expansion. Maximum: One in Base System with Model S10 Processors #2118, #2119, or Model S20 Processor #2161. Two in Base System with Model S20 Processors #2163, #2165, #2166, #2170, #2177, or #2178. Two in #5064 System Unit Expansion.
#7130	**#7130 Expansion Unit Tape Cage** The #7130 allows the addition of three tape or CD-ROM units to the #5064 System Unit Expansion. Tape Units #1349, #1350, #1355, #1360, #6481, #6482, #6485, or #6490 are supported in the first two tape positions. Only Tape Units #1355 and #6485 are supported in the third position. A tape controller is required to support these tape devices. Prerequisite: #5064 System Unit Expansion Maximum: One Model S20 only.
#9329	**#9329 PCI Card Expansion Unit** The #9329 contains eleven PCI card slots and three high-speed PCI card slots. These are driven by three PCI controllers and one Integrated PC Server (not included). It also has space for one or two #2686 or #2688 Optical Link Processor Cards to support up to four external towers. A Base PCI LAN/WAN/Workstation IOP is included with #9329. Prerequisite: #5064 System Unit Expansion Maximum: One Model S20 only.
#9330	**#9330 PCI Integrated Expansion Unit** The #9330 contains 11 low-speed PCI card slots and three high-speed PCI card slots. These are driven by one base Controller (CCIN 2824) and two feature controllers. One IPCS or Integrated Netfinity Server is optional. It also has space for one or two #2686 or #2688 Optical Link Processor cards to support up to four external towers. Maximum: One Minimum OS/400 level: V4R4 Model S20 only.
#9331	**#9331 Expansion Unit for SPD Cards** The #9331 allows the addition of up to six SPD cards and one or two #2686 or #2688 Optical Link Processor cards to support up to four external towers. The #9331 includes an SPD controller card. Prerequisite: #5064 System Unit Expansion Maximum: One Model S20 only.
	MAIN STORAGE
Base	There are no features to specify the base memory of 64 MB on the Model S10 #2118 Processors; 128 MB on the Model S10 #2119 Processor; or 265 MB on all of the Model S20 processors.
#2830	**Main Storage Expansion** The #2830 contains 16 sockets for placement of 32 MB or 128 MB main storage card. Processors #2165, #2166, #2170, #2177, and #2178 only. Maximum: One Model S20 only.
#3001	**32 MB Main Storage** Plugs directly into the CPU or #2830. Must be added in pairs. Model S20 only. Prerequisite: One #2830 Main Storage Expansion for 16 or more on Processors #2165, #2166, #2170, #2177, and #2178. Maximum: 14 on Processors #2161 and #2163; 30 on Processors #2165, #2166, #2170, #2177, and #2178. Model S20 only.

#3002	**128 MB Main Storage** Plugs directly into the CPU or #2830. Must be added in pairs. Prerequisite: One #2830 Main Storage Expansion for 16 or more on Processors #2165, #2166, #2170, #2177, and #2178. Maximum: 14 on Processors #2161 and #2163; 30 on Processors #2165, #2166, #2170, #2177, and #2178. Model S20 only.
#3110	**64 MB Main Storage** Plugs directly into the CPU. Must be added in pairs on Model S10 Processor #2119. Supported on both Model S10 processors. Maximum: Five on Processor #2118; six on Processor #2119. Model S10 only.
#3182	**32 MB Main Storage** Plugs directly into the CPU. Must be added in pairs on Model S10 Processor #2119. Supported on both Model S10 processors. Maximum: Five on processor #2118; six on processor #2119. Model S10 only.
#8172	**32 MB Base Main Storage Replace** Provides 32 MB of memory. It is not orderable being supported for model upgrades only. Model S10 only.
#8210	**64 MB Optional Main Storage** Provides 64 MB of additional memory. It is not orderable since it is supported for upgrades only. Model S10 only.
WORKSTATION CONTROLLERS	
Base MFIOP	**Base Multifunction IOP (PCI)** The base system includes this MFIOP, which has three PCI card slots and one high-speed PCI card slots used for the base system disk controller, and drives one Integrated PC Server. The high-speed PCI card slot supports the #2723, #2740, #2741, or #9278 Disk Unit Controller. One PCI card slot supports the #9720 or #9721 Base PCI Two-Line WAN IOA. The remaining two PCI card slots support #2720, #2721, #2723, #2724, #9273, or #9274 PCI IOAs. Only one of these can be a #2723, #2724, #9723, or #9724 LAN IOA. Also, if a #2851 or #2854 PCI Integrated PC Server is installed in slots C06 and C07, the #2720 Base PCI WAN/Twinaxial IOA is not allowed in slot C08 and LAN IOAs are not allowed in slots C08 or C10.
Base IOP	**Base Controller for #9329/#9330 PCI Integrated Expansion Unit** An IOP comes as standard (no feature required) with #9329 and #9330 PCI Integrated Expansion Unit. In the #9329, it is identified as CCIN 2809. In the #9330, it is identified as CCIN 2824. It is used for attaching LAN, WAN, and workstation IOAs to the system and supports one slot reserved for a PCI disk controller and three low-speed slots. It also supports one PCI Integrated PC Server/Integrated Netfinity Server. The base controller is located in slot E15. **CCIN 2809:** In the high-speed slot E16, only the #2726 or #2741 PCI RAID Disk Unit Controller is supported. In slots E12, E13, and E14, it supports any three (with a maximum of one LAN) of the #2721, #2722, #2723/#9723, #2724/#9724, #2745 or #2746. When a #2865 PCI Integrated Netfinity Server is installed in E19/E20, no LAN cards are allowed in E12, E13, and E14. **CCIN 2824:** In the high-speed slot E16, only the #2726, #2741 or #2748 PCI RAID Disk Unit Controller is supported. In slots E12, E13, and E14, it supports any three (with a maximum of two LAN cards) of #2721, #2722, #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751, or #2761. There is a maximum of one #2750, #2751 or #2761. There can be any combination of WAN and Twinax. When a #2865 PCI Integrated Netfinity Server is installed in E19/E20, no LAN cards are allowed in E12, E13, and E14. Maximum: One. Model S20 only.
Base IOP	**Base Controller for #5065 Storage/PCI Expansion Tower** This IOP comes as standard (no feature required) with the #5065 Storage/PCI Expansion Tower. It is installed in slot C03 and is identified as CCIN 2824. It is used for attaching LAN, WAN, and workstation IOAs through two high-speed slots and two low-speed slots. The #2718, #2729 or #2748 are supported in C04 only. The #2723/#9723, #2724/#9724, #2645, #2746, #2750, #2751, #2761, or #4800 are supported in C04 or C05. The #281X or #2838/#9738 are supported on C05 only. The #2723/#9723, #2724/#9724, #2745, #2746 #2750, #2751, or #2761 are supported in C01 or C02. Restrictions apply. Maximum: One

#2629	**#2629 LAN/WAN/Workstation IOP (SPD)** The #2629 supports up to three #2699, #6149, #6180, or #6181 LAN/WAN/ Workstation IOAs. The #6149 and #6181 cannot occupy all three positions of the #2629. For restrictions on placing #2629 in #5072, see 10.3, “AS/400e 640 and 650 models overview” on page 276. SPD slots required: One Maximum: One per SPD slot Model S20 only.
#2720	**#2720 Base PCI WAN/Twinaxial IOA** The #2720 is a combined twinaxial/communications adapter for S10 and S20. Supports 28 twinax devices but is limited to seven display sessions with V4R1 or 28 with V4R2 and above. Model S20 #2170, #2177, and #2178 processors support twinax devices on any release. Provides a single communication line. PCI slots required: One Maximum: One The #2720 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2722	**#2722 Twinaxial Workstation IOA (PCI)** One eight-port attachment is provided to support 40 twinax devices but is limited to seven display sessions with V4R1 or 28 with V4R2 and later. Model S20 processors #2170, #2177, and #2178 support twinax devices on any release. PCI slots required: One Maximum: One Model S20 only.
#2746	**#2746 PCI Twinaxial Workstation IOA** One eight-port attachment is provided to support 40 twinax devices but is limited to seven display sessions with V4R1 or 28 with V4R2 and later. Model S20 processors #2170, #2177, and #2178 support twinax devices on any release. Maximum: One PCI slots required: One (low speed in system unit or #9329, High or low speed in #9330 or #5065 Storage/PCI Expansion Tower) Minimum OS/400 level: V4R4 Model S20 only.
#2809	**#2809 PCI LAN/WAN/Workstation IOP** The #2809 can be used for attaching LAN, WAN, and workstation IOAs to the system. When installed in the system unit in slot C03, it can support #2838 or #281x ATM IOA in high-speed slot C01, #2729 in high-speed slot C02, and any combination of #2721, #2722, #2723, or #2724 in low-speed slots C04 and C05. If #2838 is installed in slot C03 only, the #2721 is allowed in slots C04 and C05. If #2851/#2854 is installed in slots C06 and C07, slots C04 and C05 cannot be used. The #2809 can also be installed in slot E05 or E10 of the #5064 System Unit Expansion with #9329. In each of these positions (E05or E10), this card supports one high-speed card slot that can support a #2838, #2729, or #281x ATM IOA. It also supports three low-speed card slots that can contain any combination of #2721, #2722, #2723, or #2724. If #2838 is installed in the first two low-speed slots. Maximum: One in the system unit, two in the #9329 PCI Card Expansion Unit The #2809 is a Customer Install Feature (CIF) on a Model 600 for an MES that only includes CIF features.
#2824	**#2824 PCI Feature Controller** The #2824 can be used for attaching additional LAN, WAN, and Workstation IOAs to the system. There is a maximum of one in the system unit, two in the #9329/#9330 PCI Integrated Expansion Unit, and two in the #5065 Storage/PCI Expansion Tower. In system unit slot C03, it supports PCI feature IOAs in slots C01, C02, C04 and C05 (if an Integrated Netfinity Server is installed). The server controls slots C04 and C05). In slot C01, the #2824 supports #2838/#9738 or #281x. In the C02 high-speed slot, it supports the #2718, #2729, #2750, #2751, #2761, or #4800. In C04 and C05, it supports the #2721, #2722, #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751, or #2761. If the #2838/#9738 is in C01, only the #2721 or #2745 may be installed in C04 and C05. In #9329 PCI Card Expansion Unit slots E05 or E10, it supports high-speed slots E06 or E11 and low-speed slots E02, E03, E04 or E07, E08, E09. In E06 and E11, it supports the #2718, #2729, #2838/#9738, #2750, #2751, #2761, #281x, or #4800. In the low-speed slots, it supports the #2721, #2722, #2723/#9723, #2724/#9724, #2746, #2745, #2750, #2751, or #2761. In #9330 PCI Integrated Expansion Unit slots E05 or E10, it supports high-speed slots E06 or E11 and low-speed slots E02, E03, E04 or E07, E08, E09. In E06 and E11, it supports the #2718, #2729, #2838/#9738, #2745, #2746, #2750, #2751, #2761, #281x, or #4800. In the low-speed slots, it supports the #2721, #2722, #2723/#9723, #2724/#9724, #2746, #2745, #2750, #2751, or #2761.

#2824 (cont.)	In the #5065 Storage/PCI Expansion Tower slots C08 or C13, it supports two high-speed and two low-speed slots: The #2718, #2729, or #2748 are supported in C09 and C14 only. The #2838/#9738 and #281x are supported in C05, C10, and C15 only. The #2738/#9738, #2724/#9724, #2745, #2746, #2750, #2751, #2761, or #4800 are supported in C09, C10, C14, or C15. The #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751 or #2761 are supported in C06, C07, C11, or C12. Additional restrictions apply. Minimum OS/400 level: V4R4 The #2824 is a Customer Install Feature (CIF) on a Model 600 for an MES that only includes CIF features.
#6050	**#6050 Enhanced Twinaxial Workstation Controller (SPD)** One eight-port attachment is provided to support up to seven twinaxial devices with V4R1 or 28 with V4R2 or V4R3. Model S20 processors #2170, #2177, and #2178 support more twinax devices on any release. The #6050 is supported but not orderable. SPD slots required: One Maximum: One Model S20 only.
#6141	**#6141 ASCII Workstation Controller (SPD)** The #6141 supports up to six ASCII devices. SPD slots required: One Maximum: One Model S20 only.
#6142	**#6142 ASCII 12-Port Workstation Attachment** The #6142 plugs into the #9141 or #6141 ASCII Workstation Controller providing an additional 12 ports. Eighteen ASCII devices can now be supported. Only one #6142 can be attached per #6141. SPD slots required: None Model S20 only.
#6180	**#6180 Twinaxial Workstation IOA (SPD)** One eight-port attachment is provided to support up to seven twinaxial devices with V4R1 or 28 with V4R2 and later. Model S20 processors #2170, #2177, and #2178 support more twinax devices on any release. Prerequisite: #2629 LAN/WAN/Workstation IOP IOA slots required: One in #2629 Maximum: One Model S20 only.
#9720	**#9720 Base PCI WAN/Twinaxial IOA** The #9720 is a combined twinaxial/communications adapter can be included as the base in the S10 and S20 models. It provides four posts supporting a maximum of seven twinaxial devices with V4R1 or 28 with V4R2 and above. Model #2170, #2177, and #2178 S20 processors support 28 twinax devices on the #9720 on any release. The #9720 also provides a single communication line to support ECS. The #9720 is mutually exclusive with the #2720, #9721, and #9745. PCI slots required: One Maximum: One
	COMMUNICATIONS
#2605	**#2605 ISDN Basic Rate Interface Adapter (SPD)** Connects to the #2623 to support one communication line connecting to an ISDN network. The ISDN Basic Rate Interface supported by #2605 contains two high-speed ISDN user channels. One or two #2605s may be attached to one #2623 with no other IOAs allowed on the #2623. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2609	**#2609 EIA 232/V.24 Two-Line Adapter (SPD)** Connects to #2623 to support two communications lines using Async, BSC, SDLC, or X.25 protocols. Two cables must be specified: #9023 EIA 232/V.24 20-ft. (6m) enhanced cable #9835 EIA 232/V.24 50-ft. (15m) enhanced cable #9022 EIA 232/V.24 20-ft. (6m) enhanced cable #9836 EIA 232/V.24 50-ft. (15m) enhanced cable The #2609 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.

#2610	**#2610 EIA 232/V.24 Two-Line Adapter (SPD)** The #2610 connects to the #2623 to support two communications line using X.21 or X.25 networks. Two cables must be specified: #9021 X.21 20-ft. (6m) cable #9839 X.21 50-ft. (15m) cable The #2610 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2612	**#2612 EIA 232/V.24 One-Line Adapter (SPD)** The #2612 connects to #2623 to support one communications line using Async, BSC, SDLC, or X.25 protocols. One cable must be specified (see cable features for the #2609). The #2612 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2613	**#2613 V.35 One-Line Adapter (SPD)** The #2613 connects to #2623 to support one V.35 communications line using either BSC, SDLC, or X.25 protocols. Each #2623 supports one V.35 line at speeds up to 640 Kbps, or three V.35 lines at speeds up to 384 Kbps. No other adapters are allowed on the #2623 when running T1/E1/J1. One cable must be specified: #9020 V.35 20-ft. (6m) cable #9838 V.35 50-ft. (15m) cable The #2613 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller
#2614	**#2614 X.21 One-Line Interface Adapter (SPD)** The #2624 connects to #2623 to support one communications line using X.21 or X.25 networks. One cable must be specified (see cable features for the #2610). The #2614 is supported for upgrades. SPD slots required: One Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2620	**#2620 Full Cryptographic Processor (SPD)** The #2620 provides full cryptographic support for encrypting and decrypting data. Distribution of the #2620 is restricted by U.S. Government Export Regulations. In countries outside the USA and Canada, it can only be marked to financial institutions and subsidiaries of U.S. companies. If a #2620 cannot be sold, a #2628 should be sold in its place. Card slots required: One Maximum: One Model S20 only.
#2623	**#2623 Six-Line Communications Controller (SPD)** The #2623 provides for attachment of a wide range of iSeries or AS/400e communications adapters. These adapters are supported by the #2623: #2605, #2609, #2610, #2612, #2613, #2614, #2654, #2655, #2656, #2657, #2658, #2659, #6153, and #6173. The #2623 supports two #2605 ISDN adapters or up to three EIA 232/V.24, X.21, and V.35 adapters. The #2623 is only orderable on Model S20 for customers purchasing the #2605 ISDN adapter. SPD slots required: One Model S20 only.
#2628	**#2628 Limited Cryptographic Processor (SPD)** The #2628 provides the same function as the #2620, except that is does not include data encryption/decryption using a commercial Data Masking Facility for data scrambling. It can be marketed to any non-U.S. company. SPD slots required: One Maximum: One Model S20 only.
#2629	**#2629 LAN/WAN/Workstation IOP (SPD)** The #2629 supports up to three #2699, #6149, #6180, or #6181 LAN/WAN/ Workstation IOAs. The #6149 and #6181 cannot occupy all three positions of the #2629. For restrictions on placing the #2629 in the #5072, see 10.3, “AS/400e 640 and 650 models overview” on page 276. SPD slots required: One Maximum: One per SPD slot Model S20 only.
#2654	**#2654 EIA 232/V.24 Two-Line IOA 20-ft. Enhanced Cable** The #2654 connects to the #2623 to support two communications line supporting Async, BSC, SDLC, or X.25 protocols using two EIA 232/V.24 20-ft. (6.2 m) enhanced cables. The #2654 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.

#2655	**EIA 232/V.24 Two-Line Adapter 20-ft. Cable** Connects to the #2623 to support two communications lines supporting Async, BSC, SDLC, or X.25 protocols using two EIA 232/V.24 20-ft. (6.2 m) cables. The #2655 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2656	**X.21 Two-Lined Adapter 20-ft. Cable** Connects to the #2623 to support two communications lines to attach to a X.21 or X.25 network using 20-ft. (6.2 m) cables. The #2656 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2657	**EIA 232/V.24 Two-Lined Adapter 50-ft. Enhanced Cable** Connects to the #2623 to support two communications lines supporting Async, BSC, SDLC, or X.25 protocols using two EIA 232/V.24 50-ft. (15 meter) enhanced cables. The #2657 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2658	**EIA 232/V.24 Two-Lined Adapter 50-ft. Cable** Connects to the #2623 to support two communications lines supporting Async, BSC, SDLC, or X.25 protocols using two EIA 232/V.24 50-ft. (15 meter) enhanced cables. The #2658 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2659	**X.21 Two-Line Adapter 50-ft. Cable** Connects to #2623 to support two communications lines to attach to a X.21 or X.25 network using 50-ft. (15 meter) cables. The #2659 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#2664	**#2664 Integrated Fax Adapter (SPD)** The #2664 provides two ports capable of transmission and receipt of facsimile data to or from a Group 3 capable Fax machine, another iSeries or AS/400e with the #2664, or PCs with appropriately programmed Fax adapters. SPD slots required: One Maximum: 32 Restriction: Not supported with V5R1 and later Model S20 only.
#2666	**#2666 High-Speed Communications Adapter (SPD)** The #2666 provides one communications line capable at T1/E1 (1.544/2.048 Mbps) speeds. One of these cables must be specified: #9879 20-ft. (6m) V.35 CCITT cable #9880 80-ft. (24m) V.35 CCITT cable #9882 20-ft. (6m) RS449/V.36 CCITT cable #9883 80-ft. (24m) RS449/V.36 CCITT cable* #9884 150-ft. (45m) RS449/V.36 CCITT cable* #9885 20-ft. (6m) X.21 CCITT cable *These cables are only allowed when the customer's modem supports Looped Clocking Mode. The #2666 is supported but not orderable on Model S20. SPD slots required: One Maximum: Eight Model S20 only.
#2699	**#2699 Two-Line WAN IOA (SPD)** The #2699 supports up to two multiple protocol communications ports when one or two of these cables are attached: #0328 Operations Console 20-ft. (6m) PCI cable* #0329 V.24/EIA232 80-ft. (24m) cable #0330 V.24/EIA232 20-ft. (6m) cable #0331 V.24/EIA232 50-ft. (15m) cable #0332 V.24/EIA232 20-ft. (6m) enhanced cable #0333 V.24/EIA232 50-ft. (15m) enhanced cable #0334 V.24/EIA232 80-ft. (24m) enhanced cable #0335 V.36/EIA449 20-ft. (6m) cable #0336 V.36/EIA449 50-ft. (15m) cable #0337 V.36/EIA449 150-ft. (45m) cable #0338 V.35 20-ft. (6m) cable

#2699 (cont.)	#0339 V.35 50-ft. (15m) cable #0340 V.35 80-ft. (24m) cable #0341 X.21 20-ft. (6m) cable #0342 X.21 50-ft. (15m) cable *Used to support the Operations Console function on CPU models supporting logical partitioning (LPAR) for secondary partitions when logical partitioning is implemented (Minimum OS/400 level: V4R4): #0328 Operations Console 20-ft. (6m) cable. There are some restrictions on communications using #2699. For full details, see “Comm. Restrictions” on page 34. Prerequisite: #2629 LAN/WAN/Workstation IOP IOA slots required: One on #2629 Model S20 only.
#2720 #9720	**#2720 Base PCI WAN/Twinaxial IOA** The #2720 is a combined twinaxial/communications adapter for Model S10 and S20. Supports a single multiple protocol port based on which one of the following cables is attached. It also supports twinax workstations (see “WORKSTATION CONTROLLERS” on page 363). #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0350 V.24/EIA232 20-ft. (6m) enhanced PCI cable #0351 V.24/EIA232 50ft(15m) enhanced PCI cable #0352 V.24/EIA232 80ft(24m) enhanced PCI cable #0353 V.35 20-ft. (6m) PCI cable #0354 V.35 50-ft. (15m) PCI cable #0355 V.35 80-ft. (24m) PCI cable #0356 V.36 20-ft. (6m) PCI cable #0357 V.36 50-ft. (15m) PCI cable #0358 V.36 80-ft. (24m) PCI cable #0359 X.21 20-ft. (6m) PCI cable #0360 X.21 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. (24m) PCI cable #0367 Operations Console PCI Cable 20-ft. (6m)* The #2720 is mutually exclusive with the #9720, #9721, and #9745. PCI slots required: One Maximum: One The #2720 is a Customer Install Feature (CIF) on a Model S10 for MES that only includes CIF features.
#2721	**PCI Two-Line WAN IOA** The #2721 supports up to two multiple protocol communications ports when one or two of the following cables are attached: #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0350 V.24/EIA232 20-ft. (6m) enhanced PCI cable #0351 V.24/EIA232 50-ft. (15m) enhanced PCI cable #0352 V.24/EIA232 80-ft. (24m) enhanced PCI cable #0353 V.35 20-ft. (6m) PCI cable #0354 V.35 50-ft. (15m) PCI cable #0355 V.35 80-ft. (24m) PCI cable #0356 V.36 20-ft. (6m) PCI cable #0357 V.36 50-ft. (15m) PCI cable #0358 V.36 80-ft. (24m) PCI cable #0359 X.21 20-ft. (6m) PCI cable #0360 X.21 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. (24m) PCI cable #0367 Operations Console PCI Cable 20-ft. (6m)* *Used to support the Operations Console function on CPU models supporting logical partitioning (LPAR) for secondary partitions when logical partitioning is implemented. (Minimum OS/400 level: V4R4): #0367 Operations Console PCI Cable 20-ft. (6m). There are some restrictions on communications using the #2721. For details, see “Comm. Restrictions” on page 34. PCI slots required: One (low speed only) The #2720 is a Customer Install Feature (CIF) on a Model S10 for MES that only includes CIF features.

#2745	**#2745 PCI Two-Line WAN IOA** The #2745 supports up to two multiple protocol communications ports when one or two of the following cables are attached: #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0350 V.24/EIA232 20-ft. (6m) enhanced PCI cable #0351 V.24/EIA232 50ft(15m) enhanced PCI cable #0352 V.24/EIA232 80ft(24m) enhanced PCI cable #0353 V.35 20-ft. (6m) PCI cable #0354 V.35 50-ft. (15m) PCI cable #0355 V.35 80-ft. (24m) PCI cable #0356 V.36 20-ft. (6m) PCI cable #0357 V.36 50-ft. (15m) PCI cable #0358 V.36 80-ft. (24m) PCI cable #0359 X.21 20-ft. (6m) PCI cable #0360 X.21 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. (24m) PCI cable #0367 Operations Console PCI Cable 20-ft. (6m)* *Used to support the Operations Console function on CPU models supporting logical partitioning (LPAR) for secondary partitions when logical partitioning is implemented. (V4R4 and later): There are some restrictions on communications using the #2745. For full details, see “Comm. Restrictions” on page 34. PCI slots required: One (low speed). Minimum OS/400 level: V4R3 The #2745 is a Customer Install Feature (CIF) on a Model S10 for an MES that includes CIF features only.
#2750	**#2750 PCI ISDN BRI U Adapter** (available in the United States and Canada only) The #2750 is a four-port (8 channel) ISDN BRI (basic rate) full sized PCI card. Each port consists of 2B+D configuration. The #2750 is the “U”-bus (2 wire) version of the ISDN BRI PCI card. The #2750 feature supports these protocols: PPP (communicates with remote analog modems (V.90) as well as with remote ISDN devices) IDLC Fax Four 30-ft. (9.3 m) RJ-45 to RJ-45 network cables are shipped with each #2750 feature. For configuration purposes, each #2750 counts as eight lines (two lines per port) towards the system communication maximums. Supports full duplex. Requirements: The #2750 requires country certification or homologation. Full sized PCI card slot. Maximum: One per IOP The #2750 is a Customer Install Feature (CIF) on a Model S10 for an MES that includes CIF features only.
#2751	**#2751 PCI ISDN BRI S/T IOA** The #2751 is a four-port (eight channel) ISDN BRI (basic rate) full sized PCI card. Each port consists of 2B+D configuration. The #2751 is the “S/T”-bus (four wire) version of the ISDN BRI PCI card. **Note**: This requires a network terminating device in the circuit. In the United States and Canada, this must be provided by the customer. In other countries, it is most likely provided by the telephone company. The #2751 feature supports these protocols: PPP (communicates with remote analog modems (V.90) as well as with remote ISDN devices) IDLC Fax Four 30-ft. (9.3 m) RJ-45 to RJ-45 network cables are shipped with each #2751 feature. For configuration purposes, each #2751 counts as eight lines (two lines per port) towards the system communication maximums. Supports full duplex. Requirements: The #2751 requires country certification or homologation. Full sized PCI card slot. Maximum: One per IOP Prerequisite: #2824 PCI Feature Controller Minimum OS/400 level: V4R4 and PTF MF22528, or Cumulative (CUM) PTF package C9313440.

#2761	**#2761 Integrated Analog Modem (PCI)** The #2761 allows the modem function to be integrated into the IOA and supports multiple analog modem ports (eight phone lines). The #2761 runs these protocols without the need for an external modem: SLIP/PPP uses V.90, so maximum line speed is 56 Kbps. SDLC uses V.34, so maximum line speed is 33.6 Kbps. Fax uses V.17 to achieve a 14.4 Kbps maximum line speed. An asynchronous line description is required for Fax and can only be used for Fax. ECS line not supported. Eight 30-ft. (8 m) phone cables are shipped with each #2761. To the iSeries or AS/400e server, the #2761 appears like a single IOA with eight individual resources available. For configuration purposes, each #2761 counts as eight communications lines. Requirements: The #2761 requires country certification or homologation. Full sized PCI card slot. Maximum: One per IOP Prerequisite: #2824 PCI Feature Controller Minimum OS/400 level: V4R4 with PTF MF22528 (or supersede) or Cumulative Package C9313440. The #2761 is a Customer Install Feature (CIF) on a Model S10 for an MES that includes CIF features only.
#2809	**#2809 PCI LAN/WAN/Workstation IOP** The #2809 can be used for attaching LAN, WAN, and workstation IOAs to the system. For full details, see “WORKSTATION CONTROLLERS” on page 363. There are some restrictions on communications using #2809. For full details, see #2609 in 10.13, “AS/400e Model 640 and 650 features” on page 317. Maximum: One in the base system unit, two in the #9329 PCI Card Expansion Unit. The #2809 is a Customer Install Feature (CIF) on a Model S10 for an MES that includes CIF features only.
#2824	**#2824 PCI Feature Controller** The #2824 can be used for attaching LAN, WAN, and Workstation IOAs to the system. For full details, see “WORKSTATION CONTROLLERS” on page 363. There are some restrictions on communications using #2824. For restrictions, see “Comm. Restrictions” on page 34. The #2824 is a Customer Install Feature (CIF) on a Model S10 for an MES that includes CIF features only.
#4800	**#4800 PCI Cryptographic Processor** The #4800 is a hardware cryptography solution based on the IBM 4758 card. It is a half-length PCI card. Since the feature is temperature sensitive, it is shipped separately in specially designed, insulated packaging. Maximum: One per #2824. Prerequisite: #2824 PCI Feature Controller Minimum OS/400 level: V4R4 The #4800 is a Customer Install Feature (CIF) on a Model S10 for an MES that includes CIF features only.
#4802	**#4802 PCI Cryptographic Processor** The #4802 is a hardware cryptography solution based on the IBM 4758 (LEEDS-1) card. The #4802 is a half-length PC form-factor PCI card, which offers rich cryptography function, secure storage of cryptographic keys, and 12 MB/s performance (at the card level) for bulk data encryption. The #4802 provides greater security by use of 168-bit key (versus 56-bit key on #4800). The #4802 is available worldwide. The level of cryptographic function is determined by the Cryptographic Access Provider licensed program that is downloaded to the adapter. Due to temperature requirements (card temperature must not drop below 5 F (-15 C)), the #4802 is shipped separately from the system in a special package. Prerequisite: An available high-speed slot under a #2824 PCI Feature Controller in a #5065/#5066 PCI Expansion Tower. Minimum OS/400 level: V4R5 Maximum: Three per system
#6153	**V.35 One-Line Adapter (20-ft. Cable)** The #6153 connects to the #2623 to support one communications line supporting V.35 protocol using a 50-ft. (15m) cable. The #6173 is supported for upgrades only. SPD slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.
#6173	**V.35 One-Line Adapter (50-ft. Cable)** The #6173 connects to #2623 to support one communications line supporting V.35 protocol using a 50-ft. (15 meter) cable. The #6173 is supported for upgrades only. SPD slots Required: None Prerequisite: #2623 Six-Line Communications Controller Model S20 only.

#9721	**#9721 Base PCI Two-Line WAN IOA** The #9721 is a two line communications adapter that supports ECS and Client Access Console or Operations Console. Select one of these cables for ECS: #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0350 V.24/EIA232 20-ft. (6m) enhanced PCI cable #0351 V.24/EIA232 50-ft. (15m) enhanced PCI cable #0352 V.24/EIA232 80-ft. (24m) enhanced PCI cable #0353 V.35 20-ft. (6m) PCI cable #0354 V.35 50-ft. (15m) PCI cable #0355 V.35 80-ft. (24m) PCI cable #0356 V.36 20-ft. (6m) PCI cable #0357 V.36 50-ft. (15m) PCI cable #0358 V.36 80-ft. (24m) PCI cable #0359 X.21 20-ft. (6m) PCI cable #0360 X.21 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. (24m) PCI cable #0367 Operations Console PCI Cable 20-ft. (6m)* *Must be ordered for Client Access Console: #0362 20-ft. (6m) Client Access Console cable **Used to support the Operations Console function on V4R3: #0367 Operations Console PCI Cable 20-ft. (6m) (required). To support the Remote Control Panel function, the #0381 Remote Control Panel Cable can be ordered as an option. The #0381 cable does not attach to a communications port. PCI card slots required: One Maximum: One The #9721 is mutually exclusive with the #9720 and #9745.
#9745	**#9745 Base PCI Two-Line WAN IOA** The #9745 is a two line communications adapter that supports ECS and Client Access Console or Operations Console. Select on of these cables for ECS: #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0350 V.24/EIA232 20-ft. (6m) enhanced PCI cable #0351 V.24/EIA232 50-ft. (15m) enhanced PCI cable #0352 V.24/EIA232 80-ft. (24m) enhanced PCI cable #0353 V.35 20-ft. (6m) PCI cable #0354 V.35 50-ft. (15m) PCI cable #0355 V.35 80-ft. (24m) PCI cable #0356 V.36 20-ft. (6m) PCI cable #0357 V.36 50-ft. (15m) PCI cable #0358 V.36 80-ft. (24m) PCI cable #0359 X.21 20-ft. (6m) PCI cable #0360 X.21 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. (24m) PCI cable #0367 Operations Console PCI Cable 20-ft. (6m)* Must be ordered for Client Access Console. #0362 20-ft. (6m) Client Access Console cable *Used to support the Operations Console function on V4R3 #0367 Operations Console PCI Cable 20-ft. (6m)*(required) To support the Remote Control Panel function, the #0381 Remote Control Panel Cable can be ordered as an option. The #0381 cable does not attach to a communication port. PCI card slots required: One Maximum: One Mutually exclusive with #9720 and #9721. Minimum OS/400 level: V4R3
Comm. Restriction	Refer to “Comm. Restrictions” on page 34.

LANS/ATM	
#2617	**#2617 Ethernet/IEEE 802.3 Adapter/HP (SPD)** Provides a single attachment to one Carrier Sense Multiple Access/Collision Detect Local Area Network. Consists of an adapter card and internal code, which supplies Ethernet Version 2 and IEEE 802.3 Media Access Control (MAC) plus IEEE 802.2 Logical Link Control (LLC) functions. An AUI Ethernet cable must be ordered separately. Supports 10 Mbps half duplex only. SPD slots required: One Model S20 only.
#2618	**#2618 Fiber Distributed Data Interface Adapter (SPD)** The #2618 provides one interface to connect an iSeries or AS/400e to an FDDI LAN which complies with ANSI X3T9.5 and ISO 9314 standards. Consists of a card, a wrap connector, and Licensed Internal Code, which supplies IEEE 802.2 Logical Link Control (LLC), ANSI X3T9.5/ISO 9314 Media Access Control (MAC) functions, and ANSI X3T9.5 Station Management (SMT) functions. A multi-code (62.5/125 micron) FDDI optical fiber jumper cable to connect the adapter to the FDDI ring must be ordered separately. SPD slots required: One Model S20 only.
#2619	**#2619 LAN/WAN/Workstation IOA (SPD)** The #2619 provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an adapter card, internal code (supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC) functions), and an external 8-ft. (2.4m) cable. SPD slots required: One Model S20 only.
#2629	**#2629 LAN/WAN/Workstation IOP (SPD)** The #2629 supports up to three #2699, #6149, #6180, or #6181 LAN/WAN/ Workstation IOAs. The #6149 and #6181 cannot occupy all three positions of the #2629. For restrictions on placing #2629 in #5072, see 10.13, “AS/400e Model 640 and 650 features” on page 317. SPD slots required: One Maximum: One per SPD slot Model S20 only.
#2663	**#2663 I/O Attachment Processor (SPD)** The #2663 I/O processor is required when attaching the #2668 Wireless LAN Adapter. The #2663 and #2668 are integrated in a single hardware package to operate as a unit. SPD slots required: One (with #2668) Model S20 only.
#2665	**Shielded Twisted-Pair Distributed Data Interface Adapter (SPD)** The #2665 provides one interface to connect to an FDDI LAN, which is constructed of IBM Cabling System Type 1, 2, 6, or 9 shielded twisted-pair wiring. It consists of a card, a wrap connector, and Licensed Internal Code, which supplies IEEE 802.2 Logical Link Control (LLC), ANSI X3T9.5/ISO 9314 Media Access Control (MAC) functions and ANSI X3T9.5 Station Management (SMT) functions. IBM FDDI copper jumper cables to connect the adapter to the FDDI ring must be ordered separately. SPD slots required: One Model S20 only.
#2668	**#2668 Wireless LAN Adapter (SPD)** The #2668 provides wireless connectivity to workstations or other systems connected to a wireless LAN network. One of these antenna cables must be specified: #9814 20-ft. (6m) Antenna Cable #9815 50-ft. (15m) Antenna Cable One of these antenna must be specified: #9889 YAGI Directional Antenna #9890 Omni Directional Antenna (360 degree) #9891 Hemispherical Antenna (180 degree) #9892 Directional Antenna (90 degree) SPD slots required: One (with #2663) Prerequisite: #2663 I/O Attachment Processor Model S20 only.

#2723 #9723	**#2723 PCI Ethernet IOA** The #2723 provides a single attachment to one Carrier Sense Multiple Access/Collision Detect Local Area Network. Consists of an adapter card and internal code, which supplies Ethernet Version 2 and IEEE 802.3 Media Access Control (MAC) plus IEEE 802.2 Logical Link Control (LLC) functions. This Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. Has a RJ45 connector and a 15-pin D-shell connector for attachment of customer-supplied cabling. AUI Ethernet or RJ45 twisted pair cable must be ordered separately. Cabling must meet or exceed Industry Standard EIA/TIA T568B. PCI slots required: One The #9723 is a base LAN feature. Prerequisite: #6617 Integrated PC Server, #6618 Integrated Netfinity Server or #5065 Storage/PCI Expansion Tower.
#2724 #9724	**#2724 PCI 16/4 Mbps Token Ring IOA** The #2724 provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an adapter card, internal code (supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC) functions), and an external 8-ft. (2.4m) cable. Alternatively a twisted pair cable for attachment to the RJ45 connector on the IOA can be ordered separately. This IOA is capable of operating in half or full duplex mode. PCI slots required: One. The #9724 is a base LAN feature. Prerequisite: #6617 Integrated PC Server, #6618 Integrated Netfinity Server or #5065 Storage/PCI Expansion Tower.
#2809	**#2809 PCI LAN/WAN/Workstation IOP** The #2809 can be used for attaching LAN, WAN, and Workstation IOAs to the system. For full details, see “WORKSTATION CONTROLLERS” on page 363. Maximum: One in the base system unit, two in the #9329 PCI Card Expansion Unit. The #2809 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2810	**#2810 LAN/WAN IOP (SPD)** The #2810 I/O processor is required to attach one #2838 PCI 100/10 Mbps Ethernet IOA, or #2811/#2812/#2815/#2816/#2818/#2819 PCI ATM IOA. Prerequisite for these preceding features, although they can alternatively be located directly in an appropriate PCI slot. SPD slots required: One Model S20 only.
#2811	**#2811 PCI 25 Mbps UTP ATM IOA (PCI or SPD)** The #2811 provides attachment into an Asynchronous Transfer Mode (ATM) network using Unshielded Twisted Pair (UTO) cabling. The #2811 is typically used where 25 Mbps speed is required over distances of less than 100 meters. Minimum OS/400 level: V4R2 SPD slots required: One (with #2810) or PCI slots required: One Prerequisite: #2809 PCI LAN/WAN/Workstation IOP (when located on PCI slot); #2810 LAN/WAN IOP (when located in SPD slot) The #2811 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2812	**#2812 PCI 45 Mbps Coax T3/DS3 ATM IOA (PCI or SPD)** The #2812 provides attachment into an Asynchronous Transfer Mode (ATM) network using coax cabling and the T3/DS-3 interface. The #2812 is typically used where 45 Mbps speed is required over distances of less than 100 meters. SPD slots required: One (with #2810) or PCI slots required: One Prerequisite: #2809 PCI LAN/WAN/Workstation IOP (when located in PCI slot); #2810 LAN/WAN IOP (when located in SPD slot) The #2812 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features. Minimum OS/400 level: V4R2
#2815	**#2815 PCI 155 Mbps UTP OC3 ATM IOA (PCI or SPD)** The #2815 provides attachment into an Asynchronous Transfer Mode (ATM) network using the Unshielded Twisted Pair (UTP-5) interface. This interface is intended for connection to both local area switches and direct connection to service provider equipment. The #2815 is typically used where 155 Mbps speed is required over distances of less than 100 meters. Minimum OS/400 level: V4R2 SPD slots required: One (with #2810) or PCI slots required: One Prerequisite: #2809 PCI LAN/WAN/Workstation IOP (when located in PCI slot); #2810 LAN/WAN IOP (when located in SPD slot) The #2815 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2816	**#2816 PCI 155 Mbps MMF ATM IOA (PCI or SPD)** The #2816 provides attachment into an Asynchronous Transfer Mode (ATM) network using the Multi-Mode Fiber (MMF) 62.5 micron interface. This interface is intended for connection to both local area switches and direct connection to service provider equipment. The #2816 is typically used where 155 Mbps speed is required over distances of less than 2 kilometers. Minimum OS/400 level: V4R2 SPD slots required: One (with #2810) or PCI slots required: One Prerequisite: #2809 PCI LAN/WAN/Workstation IOP (when located in PCI slot); #2810 LAN/WAN IOP (when located in SPD slot) The #2816 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.

#2818	**#2818 PCI 155 Mbps SMF OC3 ATM IOA (PCI or SPD)** The #2818 provides attachment into an Asynchronous Transfer Mode (ATM) network using the Single Mode Fiber (SMF) 9 micron interface. This interface is intended primarily for direct connection to service provider equipment, but can be used for local area switches. The #2818 is typically used where 155 Mbps speed is required over distances of from 16 to 40 kilometers. Minimum OS/400 level: V4R2 SPD slots required: One (with #2810) or PCI slots required: One Prerequisite: #2809 PCI LAN/WAN/Workstation IOP (when located in PCI slot); #2810 LAN/WAN IOP (when located in SPD slot) The #2818 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2819	**#2819 PCI 34 Mbps Coax E3 ATM IOA (PCI or SPD)** The #2819 provides attachment into an Asynchronous Transfer Mode (ATM) network using coax cabling and the E3 interface. The #2819 is typically used where 34 Mbps speed is required over distances of less than 1000 meters. Minimum OS/400 level: V4R2 SPD slots required: One (with #2810) or PCI slots required: One Prerequisite: #2809 PCI LAN/WAN/Workstation IOP (when located in PCI slot); #2810 LAN/WAN IOP (when located in SPD slot) The #2819 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2838 #9738	**#2838 PCI 100/10 Mbps Ethernet IOA (PCI or SPD)** The #2838 provides attachment to standard 100 Mbps high-speed Ethernet LANs and allows attachment to existing 10 Mbps Ethernet LANs. The Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. The adapter comes standard with an RJ45 connector for attachment to UTP-5 media. SPD slots required: One (with #2810); three (with #6617/#6618) or PCI slots required: One Prerequisite: #2809 PCI LAN/WAN/Workstation IOP/#2824 PCI Feature Controller or #2854 PCI Integrated PC Server/#2865 PCI Integrated Netfinity Server (when located in PCI slot); #2810 LAN/WAN IOP or #6617 Integrated PC Server/#6618 Integrated Netfinity Server (when located in SPD slot). The #2838 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2851	**#2851 Integrated PC Server** The #2851 contains a 166 MHz Pentium Processor, four main storage slots, and two LAN IOA slots for high performance serving to LAN attached PCs. Comes with 32 MB main storage and supports up to three of these main storage features: #2860 16 MB Integrated PC Server Memory #2961 32 MB Integrated PC Server Memory Either one or two of these LAN IOAs are supported: #9723/#2723 PCI Ethernet IOA #9724/#2724 PCI 16/4 Mbps Token Ring IOA The #9723 and #9724 are the base LAN. PCI slots required: Two in reserved positions in the base system unit or in the #9329 PCI Card Expansion Unit The #2851 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2854	**#2854 PCI Integrated PC Server** The #2854 contains a 200 MHz Pentium Processor, four main storage slots, and two LAN IOA slots for high performance serving to LAN attached PCs. Between one and four of these main storage features must be ordered: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory Either one or two of these LAN IOAs are supported: #9723/#2723 PCI Ethernet IOA #9724/#2724 PCI 16/4 Mbps Token Ring IOA #2738/#9738 PCI 100/10 Mbps Ethernet IOA (specify #0222 required if installed on #2854 PCI Integrated PC Server) The #9723, #9724, and #9738 are the base LAN. Only one of the IOAs can be #2838/#9738. The #2854 comes with a special cable which provides industry standard keyboard, mouse, serial, and parallel connections. If running Windows NT on the #2854, then: #0325 Integrated PC Server Extension Cable for Windows NT is required. #1700 Integrated PC Server Keyboard or Mouse for Windows NT is the default in the U.S.A. A display is required on the IPCS to support Windows NT. For country-specific keyboard/mouse and display support, refer to the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ When running OS/2 on the #2854, then the #0325 and #1700 are not allowed. When running Novell Netware on the #2854, then the #0325 and #1700 are not allowed. A maximum of 256 MB IOP memory is supported.

#2854 (cont.)	Minimum OS/400 level: V4R2 PCI slots required: Two reserved positions in the base system unit or in the #9329 PCI Card Expansion Unit. The #2854 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2865	**#2865 PCI Integrated Netfinity Server** The #2865 contains a 333 MHz Pentium Processor, four main storage slots, and two LAN IOA slots for high performance serving to LAN-attached PCs. The four main storage slots can each contain one of these features, giving a maximum of 1024 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory #2867 256 MB Integrated PC Server Memory Up to two of these LAN IOAs are supported. At least one LAN IOA is required. A maximum of one LAN IOA can be a #2838/#9738. #2723 PCI Ethernet IOA #2724 PCI 16/4 Mbps Token Ring IOA #2838 PCI 100/10 Mbps Ethernet IOA (specify feature #0222 is required) Only one of these Base LAN IOAs is supported: #9723 PCI Ethernet IOA #9724 PCI Token Ring IOA #9738 PCI 100/10 Mbps Ethernet IOA (specify feature #0222 is required) If running Windows NT on the #2865, then: A minimum of 64 MB IOP memory is required. #0325 Integrated PC Server Extension Cable for Windows NT is required. #1700 Integrated PC Server Keyboard/Mouse for Windows NT, the default in the U.S.A. A display is required to support Windows NT on the IPCS. For country-specific keyboard or mouse and display support, refer to the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ When running OS/2 on the #2865, then the #0325 and #1700 are not allowed. A maximum of 512 MB IOP memory is supported. When running Novell Netware on the #2865, then the #0325 and #1700 are not allowed. A maximum of 256 MB IOP memory is supported. PCI slots required: Two in reserved positions in the base system unit or in the #9329 PCI Card Expansion Unit. Minimum OS/400 level: V4R2 and Cumulative Package C8342420 or V4R3 and Cumulative Package C8349430.
#6149	**#6149 16/4 Mbps Token Ring IOA (SPD)** The #6149 provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an IOA card, internal code, which supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC), and an external 8-ft. (204m) cable. Alternatively, a twisted pair cable for attachment to the RJ45 connector on the IOA can be ordered separately. Can operate in half or full duplex mode. SPD slots required: None Prerequisite: #2629 LAN/WAN/Workstation IOP or #6616 Integrated PC Server #2629 or #6616 slots required: One Model S20 only.
#6181	**#6181 ASCII Workstation Controller (SPD)** The #6181 provides a single attachment to one Carrier Sense Multiple Access/Collision Detect Local Area Network. Consists of an adapter card and internal code, which supplies Ethernet Version 2 and IEEE 802.3 Media Access Control (MAC) plus 802.2 Logical Link Control (LLC) functions. Has an RJ45 connector and a 15 pin D-shell connector for attachment of customer supplied cabling. This cable can be ordered if the customer is choosing IBM AUI cabling: #9025 Ethernet Cable (3 meter AUI) If the customer is not choosing IBM AUI cabling, AUI Ethernet or RJ45 twisted pair cable must be ordered separately. Cabling must meet or exceed Industry Standard EIA/TIA T568B. The Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. SPD slots required: None Prerequisite: #2629 LAN/WAN/Workstation IOP or #6616 Integrated PC Server #2629 or #6616 slots required: One Model S20 only.

	Integrated PC Server (formerly known as FSIOP) (SPD) Contains a 66 MHz 486 processor, main storage and ability to attach to one or two LANs for high performance serving to LAN attached PCs. The initial order configurations can be upgraded using #6509 and #6520:
#6516	16 MB One-Port Integrated PC Server
#6517	32 MB One-Port Integrated PC Server
#6518	48 MB One-Port Integrated PC Server
#6519	64 MB One-Port Integrated PC Server
#6526	16 MB Two-Port Integrated PC Server
#6527	32 MB Two-Port Integrated PC Server
#6528	48 MB Two-Port Integrated PC Server
#6529	64 MB Two-Port Integrated PC Server
	These cables need to be specified depending on the LAN being attached to: #9024 Token ring cable (2.4m) #9025 Ethernet Cable (3m AUI) SPD slots required: Two contiguous slots.
#6509	**Additional 16 MB for Integrated PC Server** The #6509 is used to increase the memory on an installed Integrated PC Server up to the maximum of 64 MB. Model S20 only.
#6520	**Upgrade One-Port Integrated PC Server to Two Port Integrated PC Server** The #6520 cannot be used with a Two-Port Integrated PC Server. The #9024 or #9025 cables can be ordered with #6520 depending on the LAN to be attached.
#6616	**#6616 Integrated PC Server (SPD)** The #6616 contains a 166 MHz Pentium Processor, two main storage slots, and two LAN IOA slots for high performance serving to LAN attached PCs. The two main storage slots can each contain one of these features, giving a maximum of 256 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory Supports one or two of these LAN IOAs: #6149 16/4 Mbps Token Ring IOA #6181 ASCII Workstation Controller SPD slots required: Two contiguous slots. Model S20 only.
#6617	**#6617 Integrated PC Server (SPD)** The #6617 contains a 200 MHz Pentium Processor, four main storage slots, and three LAN IOA slots for high performance serving to LAN-attached PCs. The four main storage slots can each contain one of these features, giving a maximum of 512 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory Up to three of these LAN IOAs are supported. At least one LAN IOA is required. A maximum of two of the LAN IOAs can be the #2838/#9738: #9723/#2723 PCI Ethernet IOA #9724/#2724 PCI 16/4 Mbps Token Ring IOA #2738/#9738 PCI 100/10 Mbps Ethernet IOA The #9723, #9724, and #9738 are the base LAN. The third LAN and the second #2838/#9738 can only be used if running Windows NT on the #6617. The #0222 100/10 Mbps Ethernet on IPCS is required for each #2838/#9738 attached to the #6671 Integrated PC Server. If running Windows NT on the #6617, then: The #0325 Integrated PC Server Extension Cable for Windows NT is required. The #1700 Integrated PC Server Keyboard/Mouse for Windows NT is the default in the U.S.A. A display is required on the IPCS to support Windows NT. For country-specific keyboard/mouse and display support, refer to the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ When running OS/2 on the #6617, then: #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used and only one can contain a #2838/#9738.

#6617 (cont.)	When running Novell Netware on the #6617, then: #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used and only one can contain a #2838/#9738. A maximum of 256 MB IOP memory is supported. Minimum OS/400 level: V4R2 SPD slots required: Three contiguous slots. Model S20 only.
#6618	**#6618 Integrated Netfinity Server (SPD)** The #6618 contains a 333 MHz Pentium Processor, four main storage slots, and three LAN IOA slots for high performance serving to LAN-attached PCs. The four main storage slots can each contain one of these features, giving a maximum of 1024 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory #2867 256 MB Integrated PC Server Memory Up to three of these LAN IOAs are supported. At least one LAN IOA is required. A maximum of two of the LAN IOAs can be #2838/#9738: #2723 PCI Ethernet IOA #2724 PCI 16/4 Mbps Token Ring IOA #2838 PCI 100/10 Mbps Ethernet IOA (specify feature #0222 is required) Only one of these Base LAN IOAs is supported: #9723 PCI Ethernet IOA #9724 PCI Token Ring IOA #9738 PCI 100/10 Mbps Ethernet IOA (specify feature #0222 is required) The third LAN and the second #2838 can only be used if running Windows NT on the #6618. The #0222 100/10 Mbps Ethernet on IPCS is required for each #2838 attached to the #6618 Integrated Netfinity Server. If running Windows NT on the #6618, then: A minimum of 64 MB IOP memory is required. The #0325 Integrated PC Server Extension Cable for Windows NT is required. The #1700 Integrated PC Server Keyboard or Mouse for Windows NT is the default in the U.S.A. A display is required to support Windows NT on the IPCS. For country-specific keyboard or mouse and display support, refer to the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ Minimum OS/400 level: V4R2 and Cumulative Package C8342420 or V4R3 and Cumulative Package C8349430. Model S20 only. When running OS/2 on the #6618, then: The #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used and only one can contain a #2838/#9738. A maximum of 512 MB IOP memory is supported. When running Novell Netware on the #6618, then: The #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used and only one can contain a #2838/#9738. A maximum of 256 MB IOP memory is supported. SPD slots required: Three contiguous slots. Cannot be placed in #5044 System Unit Expansion Rack.
	DISK UNITS
#1312	**One-byte 1.03 GB Disk Unit Conversion Kit** Provides the hardware for migrating one 1.03 GB one-byte SCSI disk unit. Supported only in the system unit or #5064 System Unit Expansion. One #1312 migrates a #1203, #1602, #6601, #6602, #6701, #6802, #9601, or #9602 disk. Two #1312s migrate #2802, #6612, #6812, #8612, or #9802 dual disks.
#1313	**One-byte 1.96 GB Disk Unit Conversion Kit** Provides the hardware for migrating one 1.96 GB one-byte SCSI disk unit. Supported only in system unit or #5064 System Unit Expansion. One #1313 migrates #1204, #1603, or #6603 disk. Two migrate #6613, #7613, or #86130 dual disks.
#1322	**Two-byte 1.03 GB Disk Unit Conversion KIt** Provides the hardware for migrating one 1.03 GB two-byte SCSI disk unit. Supported only in system unit or #5064 System Unit Expansion. One #1322 migrates #1211, #1213, #4211, #4652, #6652, or #9652 disk.
#1323	**Two-byte 1.96 GB Disk Unit Conversion Kit** Provides the hardware for migrating one 1.96 GB two-byte SCSI disk unit. Supported only in system unit or #5064 System Unit Expansion. One #1323 migrates #1212, #1214, #4212, #4650, #6650, or #8650 disk.

#1325	**Two-byte 1.03 GB Disk Unit Conversion Kit** Provides the hardware for migrating one 1.03 GB two-byte SCSI disk unit. Supported only in system unit or #5064 System Unit Expansion. One #1325 migrates #1205, #4205, #4605, #6605, #9605, or #9705 disks.
#1326	**Two-byte 1.96 GB Disk Unit Conversion Kit** Provides the hardware for migrating one 1.96 GB two-byte SCSI disk unit. Supported only in system unit or #5064 System Unit Expansion. One #1326 migrates #1206, #4206, #4606, #6606, #8606, #8706, or #9606 disks.
#1327	**Two-byte 4.19 GB Disk Unit Conversion Kit** Provides the hardware for migrating one 4.19 GB two-byte SCSI disk unit. If located in a 3xx/5xx model, the #1327 is used; in a 2xx/4xx model, the #1377 is used. Supported only in the system unit or #5064 System Unit Expansion. One #1327 migrates #1207, #4207, #4607, #6607, #7607, #8607, or #8707 disks.
#1333	**Two-byte 8.58 GB Disk Unit Conversion Kit (Ultra SCSI)** Provides the hardware for migrating one 8.58 GB two-byte SCSI disk unit. Supported only in the system unit or #5064 System Unit Expansion. One #1333 migrates #6713, #7713, or #8713 disk.
#1334	**Two-byte 17.54 GB Disk Unit Conversion Kit (Ultra SCSI)** Provides the hardware for migrating one 14.54 GB two-byte SCSI disk unit. Supported only in the system unit or #5064 System Unit Expansion. One #1334 migrates #6714 disk. Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R4
#1336	**Two-byte 1.96 GB Disk Unit Conversion Kit (Ultra SCSI)** Provides the hardware for migrating one 1.96 GB two-byte SCSI disk unit. Supported only in system unit or #5064 System Unit Expansion. One #1336 migrates #6906 disk.
#1337	**Two-byte 4.19 GB Disk Unit Conversion Kit (Ultra SCSI)** Provides the hardware for migrating one 4.19 GB two-byte SCSI disk unit. If located in a 3xx/5xx model, the #1337 is used, and in a 2xx/4xx model, the #1337 is used. Supported only in the system unit or #5064 System Unit Expansion. One #1337 migrates #6607, #6907, or #7607 disk.
#1602	**One-byte 1.03 GB Disk Unit Conversion Kit** Provides the hardware for migrating one 1.03 GB one-byte SCSI disk unit. Supported only in the #5052 or #5058 Storage Expansion Unit positions 1 through 7. Dual disk units requires two of these kits. Can be placed in system unit with purchase of #1312 migration kit. Model S20 only.
#1603	**#1603 1.96 GB Single Disk Unit Conversion Kit** Provides the hardware for migrating one 1.96 GB one-byte SCSI disk unit. Supported only in #5052 or #5058 Storage Expansion Unit positions 1 through 7. Dual disk units require two of these kits. Can be placed in system unit with purchase of #1313 migration unit. Model S20 only.
#4308	**4.19 GB Additional Two-byte Disk Unit (Ultra SCSI)** Supported in the #5065/#5066 PCI Expansion Tower only. Provides a 3 ½-inch single disk unit with 4.19 GB capacity for additional disk storage. Prerequisite: #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller Minimum OS/400 level: V4R4 The #4308 is a Customer Install Feature (CIF).
#4314	**#4314 8.58 GB Disk Unit (Ultra SCSI)** The #4314 provides an additional 3 ½-inch two-byte single disk unit with 8.58 GB capacity (7200 RPM). Prerequisite: #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller. Minimum OS/400 level: V4R4 The #4314 is a Customer Install Feature (CIF). Supported in the #5065/#5066 PCI Expansion Tower only.
#4317	**#4317 8.58 GB Disk Unit 10k RPM (Ultra2 SCSI)** The #4317 provides an additional 3 ½-inch single disk unit with 8.58 GB capacity. Prerequisite: #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller. Minimum OS/400 level: V4R4 The #4317 is a Customer Install Feature (CIF). Supported in the #5065/#5066 PCI Expansion Tower only.
#4318	**#4318 17.54 GB Disk Unit 10k RPM (Ultra2 SCSI)** The #4318 provides an additional 3 ½-inch single disk unit with 17.54 GB capacity. Prerequisite: #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller. Minimum OS/400 level: V4R4 The #4318 is a Customer Install Feature (CIF). Supported in the #5065/#5066 PCI Expansion Tower only

#4324	**17.54 GB Additional Two-byte Disk Unit (Ultra SCSI)** Provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage (7200 RPM). Prerequisite: #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller. Minimum OS/400 level: V4R4 The #4324 is a Customer Install Feature (CIF). Supported in #5065/#5066 PCI Expansion Tower only
#4331	**#4331 1.6 GB Read Cache Device** The #4331 provides 1.6 GB of capacity for large read cache function. It is mutually exclusive with DASD compression. The system arrives in performance mode with compression function turned off on the #2748 PCI RAID Disk Unit Controller. Prerequisite: #2748 PCI RAID Disk Unit Controller Minimum OS/400 level: V4R4 One DASD slot 1.6 inch. Maximum: One per #2748 IOP The #4331 is a CIF feature. Supported in #5065/#5066 PCI Expansion Tower only.
#6605	**1.03 GB Additional Two-byte Disk Unit** The #6605 provides a 3 ½-inch single disk unit with 1.03 GB capacity for additional disk storage. The #6605 is supported for upgrades only. Supported only in the #5052 or #5058 Storage Expansion Units. Model S20 only.
#6606	**1.96 GB Additional Two-byte Disk Unit** The #6606 provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. The #6606 is supported for upgrades only. Supported only in #5052 or #5058 Storage Expansion Unit. Model S20 only.
#6607	**#6607 4.19 GB Additional Two-byte Disk Unit** The #6607 provides a 3 ½-inch single disk unit with 4.19 GB capacity for additional disk storage. The #6607 is supported for upgrades only. Supported only in the #5052 or #5058 Storage Expansion Unit or the #5082 or #5083 Storage Expansion Towers. RPQ 843977 and RPQ 843978 can be used for upgrades to Sxx system units and the #5064, #5072 and #5073 Storage Expansion Units and Towers. Model S20 only.
#6650	**1.96 GB Additional Two-byte Disk Unit** Model S20 only. Provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. The #6650 is supported for upgrades only. Supported only in the #5052 or #5058 Storage Expansion Unit or the #5082 or #5083 Storage Expansion Towers.
#6652	**1.03 GB Additional Two-byte Disk Unit** Provides a 3 ½-inch single disk unit with 1.03 GB capacity for additional disk storage. The #6652 is supported for upgrades only. Supported only in the #5052 or #5058 Storage Expansion Unit or the #5082 or #5083 Storage Expansion Towers. Model S20 only.
#6713	**#6713 8.58 GB Disk Unit (Two-byte) (Ultra SCSI)** The #6713 provides a 3 ½-inch single disk unit with 8.58 GB capacity for additional disk storage. Supported only in the #5052 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Towers. For best performance, use attached to the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5803. RPQ 843977 and RPQ 843978 can be used for upgrades to Sxx system units and the #5064, #5072, and #5073 Storage Expansion Units and Towers. Model S20 only.
#6714	**#6714 17.54 GB Disk Unit (Two-byte) (Ultra SCSI)** The #6714 provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage. Supported only in the #5052 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Tower. For best performance, use attached to the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5803. RPQ 843977 and RPQ 843978 can be used for upgrades to Sxx system units and the #5064, #5072, and #5073 Storage Expansion Units and Towers. Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R4 Model S20 only.

#6717	**#6717 8.58 GB 10k RPM Disk Unit (Two-byte) (Ultra SCSI)** The #6717 provides a 3 ½-inch single disk unit with 8.58 GB capacity for additional disk storage. Supported in the #5052 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Towers. For best performance when installed in the Storage Expansion or Storage Expansion Tower, use the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5083. Not supported on the #6502/#6512/#6530. Supported in the #5065/#5066 PCI Expansion Tower through RPQ 847102. Minimum OS/400 level: V4R4 Model S20 only.
#6718	**#6718 17.54 GB 10k RPM Disk Unit (Two-byte) (Ultra SCSI)** The #6718 provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage. Supported in the #5052 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Towers. For best performance when installed in Storage Expansion or Storage Expansion Tower, use the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5083. Not supported on #6502/#6512/#6530. Supported in the #5065/#5066 PCI Expansion Tower through RPQ 847102. Minimum OS/400 level: V4R4 Model S20 only.
#6806	**1.96 GB Additional Two-byte Disk Unit (Ultra SCSI)** The #6806 provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. Supported only in the system unit or #5064 System Unit Expansion. The #6806 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#6807	**#6807 4.19 GB Additoinal Two byte Disk Unit (Ultra SCSI)** The #6807 provides a 3 ½-inch single disk unit with 4.19 GB capacity for additional disk storage. Supported only in the system unit or #5064 System Unit Expansion. The #6807 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#6813	**#6813 8.58 GB Additional Two-byte Disk Unit (Ultra SCSI)** The #6813 provides a 3 ½-inch single disk unit with 8.58 GB capacity for additional disk storage. Supported only in the system unit or #5064 System Unit Expansion. The #6813 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#6817	**#6817 8.58 GB 10k RPM Disk Unit (Two-byte) (Ultra SCSI)** The #6817 provides a 3 ½-inch single disk unit with 8.58 GB capacity for additional disk storage. Supported only in the system unit or #5064/#9364 System Unit Expansion. Not supported on #5064/#9364 System Unit Expansion with #6502/#6512/#6530. Supported in the #5065/#5066 PCI Expansion Tower through RPQ 847102. The #6817 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features. Minimum OS/400 level: V4R3 Supported on S20.
#6818	**#6818 17.54 GB 10k RPM Disk Unit (Two-byte) (Ultra SCSI)** The #6818 provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage. Supported only in the system unit or #5064/#9364 System Unit Expansion. Not supported on #5064/#9364 System Unit Expansion with #6502/#6512/#6530. Minimum OS/400 level: V4R4 Supported in the #5065/#5066 PCI Expansion Tower through RPQ 847102. The #6818 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#6824	**#6824 17.54 GB Disk Unit (Two-Byte) (Ultra SCSI)** The #6824 provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage. Supported only in the system unit or #5064 System Unit Expansion. Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R4 The #6824 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#6831	**#6831 1.6 GB Read Cache Device** The #6831 feature provides 1.6 GB of capacity for large read cache function. It is mutually exclusive with DASD compression. The system arrives in performance mode with compression function turned off on the #2748 PCI RAID Disk Unit Controller. Mirroring is not supported on the #6831. Prerequisite: #2748 PCI RAID Disk Unit Controller Minimum OS/400 level: V4R4 One DASD slot 1.6 inch. Maximum: One per #2748 IOP
#6906	**1.96 GB Additional Two-byte Disk Unit (Ultra SCSI)** The #6906 provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. Supported only in the #5052 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Towers. For best performance, use it attached to the #6532 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5083. Model S20 only.

#6907	**4.19 GB Additional Two-byte Disk Unit (Ultra SCSI)** The #6907 provides a 3 ½-inch single disk unit with 4.19 GB capacity for additional disk storage. Supported only in the #5052 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Tower. For best performance, use it attached to the #6532 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5083. RPQ 843977 and RPQ 843978 can be used for upgrades to Sxx system units and the #5064, #5072, and #5073 Storage Expansion Units and Towers. Model S20 only.
#8813	**8.58 GB Optional Base Two-byte Disk Unit (Ultra SCSI)** The #8813 provides a 3 ½-inch single disk unit with 8.58 GB capacity as the base disk unit in place of the #9707.
#8817	**#8817 8.58 GB Optional Base Two-byte Disk Unit 10k RPM (Ultra SCSI)** The #8817 provides a 3 ½-inch single disk unit with 8.58 GB capacity as the base disk unit in place of the #9707. Supported only in system unit or #5064/#9364 System Unit Expansion. Not supported on #5064/#9364 System Unit Expansion with #6502/#6512/#6530. Minimum OS/400 level: V4R3
#8818	**#8818 17.54 GB Optional Base Two-byte Disk Unit 10k RPM (Ultra SCSI)** The #8818 provides a 3 ½-inch single disk unit with 17.54 GB capacity as the base disk unit in place of #9707. Supported only in system unit or the #5064/#9364 System Unit Expansion. Not supported on the #5064/#9364 System Unit Expansion with the #6502/#6512/#6530. Minimum OS/400 level: V4R4
#8824	**17.54 GB Optional Base Two-byte Disk Unit (Ultra SCSI)** The #8824 provides a 3 ½-inch single disk unit with 17.54 GB capacity as the base disk unit in place of the #9707. Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R4
#9707	**#9707 4.19 GB Base Two-byte Disk Unit (Ultra SCSI)** The #9707 provides a 3 ½-inch single disk unit with 4.19 GB capacity as the base disk unit. The #9707 is included with new Model S10 or S20 orders.
RPQ 843977	**RPQ 843977** is for customers who want to move 4/8/17 GB disk units from one AS/400e to another AS/400e. The RPQ provides hardware for mounting one disk unit. The hardware in this RPQ allows for mounting #6607/#6907 (4.194 GB unit), #6713 (8.58 GB unit), and #6714 (17.54 GB unit) in the system unit of a Model 640/650/S30/S40/730/740 and in the #5052/#5055/#5057/#5058/#5070/#5071/#5072/#5073/#5080/#5081/#5082/#5083 disk expansion units and towers. These target enclosures use SPD technology. After the disk drives are installed, an RPO change must be processed to add a #6607/#6907 for each #6607/#6907 added, a #6713 for each #6713 added, and a #6714 for each #6714 added.
RPQ 843978	**RPQ 843978** is for customers who want to move 4/8/17 GB disk units from one AS/400e to another AS/400e. The RPQ provides hardware for mounting one disk unit. The hardware in this RPQ allows for mounting device types #6607/#6907 (4.194 GB unit), #6713 (8.58 GB unit), and #6417 (17.54 GB unit) in the system unit of a Model 170/600/S10/620/ S20/720 and the #7101/#7102/#5064/#9364 expansion units and towers. After the disk drives are installed, an RPO change must be processed to add a #6807 for each #6607/#6907 added, add a #6813 for each device #6713 added, and add a #6824 for each #6417 added.
RPQ 847102	**RPQ 847102** ships the disk mounting hardware and instructions required to convert a #6717/#6817 to a #4317 and a #6718/#6818 to a #4318. Order one RPQ for each disk unit to be converted. Confirm that there is disk space available in an existing or on-order #5065/#5066 PCI Expansion Tower. This RPQ can also be used to move a disk to an iSeries 270, 820, 830, 840, or #5075, #5074/#9074, and #5079/#9079 PCI Expansion Towers.
	INTERNAL TAPE AND CD-ROM UNITS
#1349	**1.2 GB ¼-inch Cartridge Tape Unit Conversion Kit** The #1349 provides the hardware for migrating a #1251, #1379, #6368, #7343, #8343, #9343, #5348, #6348, #7348, #8348, or #9348 1.2 GB ¼-inch cartridge tape unit. Supported only in the system unit or #5064 System Unit Expansion.
#1350	**2.5 GB ¼-inch Cartridge Tape Unit Conversion Kit** The #1350 provides the hardware for migrating a #1252, #1260, #1380, #6369, #6380, #6344, #7344, #8344, #5349, #6349, #7349, or #8349 2.5 GB ¼-inch cartridge tape unit. Supported only in the system unit or #5064 System Unit Expansion.
#1355	**13 GB ¼-inch Cartridge Tape Unit Conversion Kit** The #1355 provides the hardware for migrating the #6385 13 GB ¼-inch cartridge tape unit. Supported only in the system unit or #5064 System Unit Expansionn.
#1360	**7 GB 8 mm Cartridge Tape Unit Conversion Kit** The #1360 provides the hardware for migrating #1261 or #6390 7 GB 8 mm cartridge tape unit. Supported only in the system unit or #5064 System Unit Expansion.
#1379	**1.2 GB ¼-inch Cartridge Tape Unit Conversion Kit** The #1379 provides the hardware for migrating 1.2 GB ¼-inch cartridge tape unit. Supported only in the #5071 or #5073 1063 Mbps System Unit Expansion Towers. Model S20 only.

#1380	**2.5 GB ¼-inch Cartridge Tape Unit Conversion Kit** The #1380 provides the hardware for migrating a 2.5 GB ¼-inch cartridge tape unit. Supported only in the #5072/#5073 1063 Mbps System Unit Expansion Towers. Model S20 only.
#4425	**#4425 CD-ROM** Supported only in #5065 Storage/PCI Expansion Tower. Prerequisite: #2748 PCI RAID Disk Unit Controller Minimum OS/400 level: V4R4 The #4425 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#4482	**#4482 4 GB ¼-inch Cartridge Tape Unit** The #4482 is supported only in the #5065 Storage/PCI Expansion Tower. Can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4482 is a Customer Install Feature (CIF).
#4483	**#4483 16 GB ¼-inch Cartridge Tape Unit** The #4483 is supported only in the #5065 Storage/PCI Expansion Tower. Can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4483 is a Customer Install Feature (CIF).
#4486	**#4486 25 GB ¼-inch Cartridge Tape Unit** The #4486 is supported only in the #5065 Storage/PCI Expansion Tower. Can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4486 is a Customer Install Feature (CIF).
#4487	**#4487 50 GB ¼-inch Cartridge Tape Unit** The #4487 can be used for save/restore, alternate IPL, migration and ¼-inch cartridge tape exchange using the appropriate media and density. The #4487 tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the ##5065 Storage/PCI Expansion Tower. Prerequisite: #2748/#2778 PCI RAID Disk Unit Controller. Minimum OS/400 level: V5R1 The #4487 is a Customer Install Feature (CIF).
#4684	**#4684 30 GB ¼-inch Cartridge Tape Unit** The #4684 is a 30 GB ¼-inch cartridge tape unit that can be mounted in a removable media device slot of a system unit or an expansion tower. The #4684 maybe used for save/restore, alternate IPL, program distribution, migration and ¼-inch cartridge tape exchange. See 16.8, “QIC format compatibility for iSeries and AS/400e systems” on page 531, for supported media types. Supported only in the #5065. The #4684 is a Customer Install Feature (CIF).
#6325	**Optional CD-ROM Feature** Available on Model S20 System Unit Expansion Towers #5072/#5073 1063 Mbps System Unit Expansion Tower. Prerequisite: #2624 Storage Device Controller Limits the use of tape in the same tower to #6380 and #6390. Minimum OS/400 level: V4R4 Model S20 only.
#6380	**#6380 2.5 GB ¼-inch Cartridge Tape Unit (Conversion Kit)** The #6380 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. The #6380 is supported for upgrades only. It cannot be ordered as a new feature. Supported only in the #5072/#5073 1063 Mbps System Unit Expansion Tower. Model S20 only.
#6381	**#6381 2.5 GB ¼-inch Cartridge Tape** The #6381 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. Supported only in the #5072/#5073 1063 Mbps System Unit Expansion Towers. Model S20 only.
#6382	**#6382 4 GB ¼-inch Cartridge Tape Unit** The #6382 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5072/#5073 1063 Mbps System Unit Expansion Towers. Model S20 only.
#6383	**#6383 16 GB ¼-Inch Cartridge Tape Unit** The #6383 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5072/#5073 1063 Mbps System Unit Expansion Tower. The #6363 must be controlled by the #6513. Model S20 only.

#6385	**#6385 13 GB ¼-Inch Cartridge Tape Unit** The #6385 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5072/#5073 1063 Mbps System Unit Expansion Towers. Model S20 only.
#6386	**#6386 25 GB ¼-inch Cartridge Tape Unit** The #6386 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5072/#5073 1063 Mbps System Unit Expansion Towers. Model S20 only.
#6390	**#6390 7 GB 8 mm Cartridge Tape Unit** The #6390 can be used for save/restore, alternate IPL, migration, and 8 mm cartridge tape exchange using the appropriate media and density. Supported only in the #5072/#5073 1063 Mbps System Unit Expansion Towers. Model S20 only.
#6425	**Optional CD-ROM Feature** Prerequisite: #2626 16/4 Mbps Token Ring Adapter, #2740 PCI RAID Disk Unit Controller or #2741 PCI RAID Disk Unit Controller with #9329 PCI Card Expansion Unit. Not supported in combination with the #9331. Minimum OS/400 level: V4R3 Model S20 only. Available on Model S20 #5064 System Unit Expansion.
#6481	**2.5 GB ¼-inch Cartridge Tape Unit** The #6481 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. Supported only in the system unit or the #5064 System Unit Expansion.
#6482	**4 GB ¼-inch Cartridge Tape Unit** The #6482 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in system unit or the #5064 System Unit Expansion.
#6483	**16 GB ¼-inch Cartridge Tape Unit** The #6483 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the system unit or the #5064/#9364 System Unit Expansion.
#6484	**#6484 30 GB ¼-inch Cartridge Tape Unit** The #6484 is a 30 GB ¼-inch cartridge tape unit that can be mounted in a removable media device slot of a system unit or System unit expansion. The #6384 maybe used for save/restore, alternate IPL, program distribution, migration and ¼-inch cartridge tape exchange. See 16.8, “QIC format compatibility for iSeries and AS/400e systems” on page 531, for supported media types. Supported only in the system unit or the #5064/#9364 System Unit Expansion. Model S20 only. The #6384 is a Customer Install Feature (CIF).
#6485	**13 GB ¼-inch Cartridge Tape Unit** The #6485 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the system unit or the #5064 System Unit Expansion.
#6486	**25 GB ¼-inch Cartridge Tape Unit** The #6486 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in system unit or the #5064 System Unit Expansion.
#6490	**7 GB 8 mm Cartridge Tape Unit** The #6490 can be used for save/restore, alternate IPL, migration, and 8 mm cartridge tape exchange using the appropriate media and density. Supported only in the system unit or the #5064 System Unit Expansion.
MAGNETIC MEDIA CONTROLLERS	
#2621	**#2621 Storage Device Controller (SPD)** The #2621 provides attachment for one or two of these devices with hardware data compression: 2440, 9348, 7208, 3995, and 9427. Dual drive 7208s count as two devices. If the #2621 supports a 3995 or #5032, it must be dedicated to it. If the #2621 supports a 9427, we recommend that the 9427 be attached to both ports of the #2621. For new orders, the #6534 is used in preference to #2621 as long as it supports the tape device required. Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower SPD slots required: One Model S20 only.

#2624	**#2624 Storage Device Controller (SPD)** The #2624 provides support for up to three internal tape drives. With the addition of the #6146, it also supports one external diskette drive. Can be used to support tape drives only in the #5072 or #5073 1063 Mbps System Unit Expansion Towers. For new orders, the #6513 is used in preference to the #2624, unless the #2624 is required to support a diskette drive or one is already installed. Also used to support the optional the #6325 CD-ROM in the #5072/#5073 1063 Mbps System Unit Expansion Towers. Not supported to drive the #6425 CD-ROM in the Model S20 with #9331 in the integrated #5064 System Unit Expansion. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower Model S20 only.
#2644	**#2644 Magnetic Tape Attachment Card/HP (SPD)** The #2644 provides attachment for 3422, 3430, 3480, 3490 Axx, 3490 Bxx, 3490 Dxx, 3490E Axx, 3490E Cxx, x10 Tape Subsystem Models. Also requires the #9980 Serpentine Cable, except for the 3490E Cxx when ordered with internal cables. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower Model S20 only.
#2718	**#2718 PCI Magnetic Media Controller** The #2718 provides SCSI attachment for one 7207-122 QIC-SLR Tape Bridge Box (4 GB External ¼-inch Cartridge Tape Drive) (4 GB ¼-inch cartridge external tape drive) and 7208-345 60 GB External 8mm Tape Drive. See 16.7.4, "#2718/#2768 PCI Magnetic Media Controller: Device cabling rules" on page 530, for information on connecting devices to the #2718. PCI slots required: One. Prerequisite: #2809 PCI LAN/WAN/Workstation IOP/#2824 LAN/WAN/Workstation IOP. Maximum: One in the system unit, two in the #5064 System Unit Expansion with #9329/#9330, and three in the #5065 Storage/PCI Expansion Tower. The #2718 is a Customer Install Feature (CIF) on a Model S10 for an MES that only includes CIF features.
#2726	**PCI RAID Disk Unit Controller–4 MB Cache (RAID/Mirrored/Unprotected)** This is an Ultra SCSI controller that provides RAID protection and a 4 MB write-cache for up to 15 disks installed in the system unit or #5064 System Unit Expansion. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of three arrays are allowed for each #2726. The #2726 also supports one CD-ROM drive (which comes as standard) and one internal tape drive when placed in the system unit. When placed in the #5064 System Unit Expansion, it supports up to three internal tape drives. Supports the #1349, #1350, #1355, #160, #6481, #6482, #6484, #6485, or #6490 tape units. Mutually exclusive with the #9728, #2740, or #2741 in the same system unit or #5064. The #2726 is not capable of integrated hardware disk compression. High-speed PCI slots required: One Prerequisite: System unit or #5064 System Unit Expansion with #9329 PCI Card Expansion Unit Maximum: One per system unit or #5064 The #2726 is a Customer Install Feature (CIF) in a Model S10 for an MES that only includes CIF features.
#2729	**#2729 PCI Magnetic Media Controller** The #2729 provides SCSI attachment for one 3490E Fxx, 3490E Cxx with #5040, 3494 D1x or L1x, 3570, 3575, 3590, 7208, 9348, or 9427 Tape drive or 3995 C4x Optical Library Dataserver. Minimum OS/400 to support 3995: V4R2 High-speed PCI slots required: One Prerequisite: #2809 PCI LAN/WAN/Workstation IOP9/#2824 LAN/WAN/Workstation IOP Maximum: One per system unit or two in the #5064 System Unit Expansion with #9329/#9330 and three in the #5065 Storage/PCI Expansion Tower The #2729 is a Customer Install Feature (CIF) in a Model S10 for an MES that only includes CIF features.
#2740	**#2740 PCI RAID Disk Unit Controller–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #2740 is an Ultra SCSI controller that provides RAID protection and a 4 MB write-cache for up to 10 disks installed in the system unit. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of two arrays are allowed for each #2740. The #2740 also supports one CD-ROM drive (which comes as standard) and one internal tape drive. Supports the #1349, #1350, #1355, #1360, #6481, #6482, #6484, #6485, or #6490 tape units. Mutually exclusive with the #9728, #2726, or #2741, in the same system unit. The #2740 is not supported in the ##5064 System Unit Expansion. The #2740 is not capable of integrated hardware disk compression. High-speed PCI slots required: One Maximum: One Minimum OS/400 level: V4R2 The #2740 is a Customer Install Feature (CIF) in a Model S10 for an MES that only includes CIF features.

#2741	**#2741 PCI RAID Disk Unit Controller–4 MB Cache (RAID Mirrored/Unprotected) (Ultra SCSI)** The #2741 is an Ultra SCSI controller that provides RAID protection and a 4 MB write-cache for up to 15 disks installed in the system unit or #5064 System Unit Expansion. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of three arrays are allowed for each #2726. The #2726 also supports one CD-ROM drive (comes as standard) and one internal tape drive when placed in the system unit. When placed in the #5064 System Unit Expansion, it supports up to three internal tape drives. Supports the #1349, #1350, #1355, #1360, #6481, #6482, #6484, #6485, or #6490 tape units. Mutually exclusive with the #2726, #2740, or #9728 in the same system unit or #5064. High-speed PCI slots required: One Prerequisite: System unit or #5064 System Unit Expansion with #9329 PCI Card Expansion Unit Maximum: One per system unit or #5064 Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R3 Minimum OS/400 to support integrated hardware disk compression on #6714/#8714 17.54 GB Disk Unit: V4R4 Supports integrated hardware disk compression except on the #6824/#8824 17.54 GB Disk Unit. Model S20 only.
#2748	**#2748 PCI RAID Disk Unit Controller–26 MB Cache (RAID Mirrored/Unprotected) (Ultra2 SCSI)** The #2748 is Ultra2 SCSI capable when installed in the #5065 Storage/PCI Expansion Tower or is Ultra SCSI capable when installed in the Model 720 system unit or a #5064/#9364 System Unit Expansion. The #2748 has a 26 MB write-cache and provides RAID-5 protection and compression for internal disk units. It supports up to 15 disks. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of three arrays are allowed for each #2748. The #2748 supports both compression and non-compression modes. The mode is determined by a hardware jumper on the card. The #2748 also supports #6831/#4331 1.6 GB Read Cache Device. When placed in the system unit, it supports one internal tape and one CD-ROM. In the #5064/#9364 System Unit Expansionn, it supports up to three internal tape and CD-ROM. In the #5065 Storage/PCI Expansion Tower, it supports up to two internal tapes and CD-ROM. Supports the #1349, #1350, #1355, #1360, #4482, #4483, #4486 #6480, #6481, #6482, #6483, #6485, #6486, or #6490 tape units. Mutually exclusive with the #2726, #2740, #2741 or #9728 in the same system unit or #9330 PCI Integrated Expansion Unit. High-speed PCI slots required: One Prerequisite: System unit or #5064 System Unit Expansion with #9330 PCI Integrated Expansion Unit or #5065 Storage/PCI Expansion Tower Maximum: One per system unit or #5064, three per #5065 Storage/PCI Expansion Tower. Minimum OS/400 level: V4R4
#2778	**#2778 PCI RAID Disk Unit Controller–104 MB Cache (RAID Mirrored/Unprotected) (Ultra2 SCSI)** The #2778 is an Ultra2 SCSI controller with a maximum compressed write cache size of 104 MB that provides RAID-5 protection and compression for internal disk units and supports internal tape units and CD-ROMs. The #2778 supports both disk compression and enhanced modes. The mode of operation is determined by a hardware jumper and disk compression mode should only be used when disk compression is desired. In addition to providing RAID-5 protection for disks, the #2778 is also designed to work as a high performance controller for disks protected by system mirroring or disks with no protection. A minimum of four disk units of the same capacity are needed for a valid RAID-5 configuration. A maximum of four arrays are allowed per controller, with a maximum of 10 disk units allowed per array. All disk units in an array must be of the same capacity. The #2778 also supports the #4331 1.6 GB Read Cache Device, which is used by Extended Adaptive Cache to provide increased performance. The #4331 1.6 GB Read Cache Device is supported only when the #2778 is in enhanced mode. The #2778 controller supports a maximum of 15 disk units. The #2778 controls up to two removable media devices (internal tape or CD-ROM). Minimum OS/400 level: OS/400 V5R1 Prerequisite: Available High-speed SCSI slot in #5065/#5066 PCI Expansion Tower. Maximums: Three (in combination with #2748) per #5065. Six (in combination with #2748) per #5066 1.8 M I/O Tower.
#6146	**#6146 Diskette Adapter (SPD)** The #6146 provides attachment for one #9331 011, 012 Diskette Unit and the #6134 5 ¼-inch diskette drive. SPD slots required: None Prerequisite: #2624 Storage Device Controller Maximum: Two Model S20 only.
#6501	**#6501 Tape/Disk Device Controller (SPD)** The #6501 provides attachment for up to two 9337 2xx, 4xx or 5xx models. Also supports up to two 3490E Exx. 3490E Fxx, 3570, 3575, or 3590 models. Also provides attachment for the 2105 Versatile Storage Server. DASD and tape units cannot be mixed on the same #6501. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower Maximum: Four for tape; for disk, see the model overview tables at the beginning of this chapter. Model S20 only.

#6502	**#6502 High Performance Controller–2 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #6502 provides RAID protection and a 2 MB write-cache for up to 16 disks located in #5052 or #5058 Storage Expansion Unit, #5082 or #5083 Storage Expansion Tower, or #5064 System Unit Expansion. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of two arrays are allowed for each #6502. The #6502 is supported for upgrades. The #6502 is not capable of integrated hardware disk compression. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or, #5072/#5073 1063 Mbps System Unit Expansion Tower, #5082/#5083 Storage Expansion Tower Model S20 only.
#6512	**#6512 High Performance Controller (RAID/Mirrored/Unprotected) (SPD)** The #6512 provides RAID protection and a 4 MB write-cache for up to 16 disks located in #5052 or #5058 Storage Expansion Unit, or #5064 System Unit Expansion. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of two arrays are allowed for each #6512. The #6512 is supported for upgrades. The #6512 is not capable of integrated hardware disk compression. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower, #5082/#5083 Storage Expansion Tower. Model S20 only.
#6513	**#6513 Internal Tape Device Controller (SPD)** The #6513 provides support for up to three internal tape drives when located in #9331 Expansion Unit for SPD Cards, or four internal tape drives when located in the #5072/#5073 1063 Mbps System Unit Expansion Towers. The #6513 is the default controller unless a #2624 is installed. Supports the #1379, #1380, #6380, #6381, #6382, #6383,#6385, #6386, and #6390 in the #5072/#5073 1063 Mbps System Unit Expansion Tower; and the #1349, #1350, #1355, #1360, #6481, #6482, #6485, #6486, and #6490 in a #5064 System Unit Expansion with the #9331. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower. Maximum: Five Model S20 only.
#6530	**#6530 Disk Unit Controller No Cache (Mirrored/Unprotected) (SPD)** Controller for up to 16 disks located in the #5052 or #5058 Storage Expansion Unit, #5082 or #5083 Storage Expansion Tower or #5064 System Unit Expansion. The #6530 is supported for upgrades. The #6530 is not capable of integrated hardware disk compression. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower or #5082/#5083 Storage Expansion Tower. Model S20 only.
#6532	**#6532 RAID Disk Unit Controller–4 MB Cache (RAID/ Mirrored/Unprotected) (Ultra SCSI) (SPD)** Ultra SCSI Controller for up to 16 disks installed in #5058 Storage Expansion Unit, #5083 Storage Expansion Tower, or #5064 System Unit Expansion. Also supports disks located in #5052 Storage Expansion Unit or #5082 Storage Expansion Tower, but not at Ultra SCSI speeds. Offers performance improvements over #6502, #6512, and #6530. A minimum of four drives and a maximum of ten drives are supported in a RAID-5 array. A maximum of four arrays are allowed for each #6532. The #6532 is not capable of integrated hardware disk compression. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower or #5082/#5083 Storage Expansion Tower. Model S20 only.
#6533	**#6533 RAID Disk Unit Controller–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI) (SPD)** Ultra SCSI Controller for up to 16 disks installed in the #5058 Storage Expansion Unit, #5083 Storage Expansion Tower, or #5064 System Unit Expansion. Also supports disks located in the #5052 Storage Expansion Unit or #5082 Storage Expansion Tower, but not at Ultra SCSI speeds. Offers performance improvements over the #6502, #6512, and #6530. A minimum of four drives and a maximum of ten drives are supported in a RAID-5 array. A maximum of four arrays are allowed for each #6533. SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower or #5082/#5083 Storage Expansion Tower. Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R3 Minimum OS/400 to support integrated hardware disk compression on #6714/#8714 17.54 GB Disk Unit: V4R4 Model S20 only.

#6534	**#6534 Magnetic Media Controller (SPD) (Ultra SCSI)** Provides attachment for one 3490E Cxx with #5040, 3490E Exx, 3490E Fxx, 3494 D1x or L1x, 3570, 3575, 3590, 7208, 9348, or 9427 Tape Drives or 3995 C4x Optical Library Dataserver. Minimum OS/400 to support 3995: V4R2 SPD slots required: One Prerequisite: #5064 System Unit Expansion with #9331 Expansion Unit for SPD Cards or #5072/#5073 1063 Mbps System Unit Expansion Tower. Model S20 only.
#9728	**Base PCI Disk Unit Controller (Ultra SCSI)** The #9728 is the base IOA for the system unit. Provides Ultra SCSI attachment for up to five internal disk units, one internal CD-ROM (standard) and one internal tape drive. Does not support RAID. Supports the #1349, #1350, #1355, #1360, #6481, #6482, #6485, or #6490 tape units. Mutually exclusive with the #2726, #2740, or #2741 in the same system unit. The #9728 is not capable of integrated hardware disk compression. The #9728 has CCIN 2728. See Chapter 17, “Customer Card Identification Numbers” on page 539. High-speed PCI slots required: One Maximum: One per system unit.

11.15 AS/400e Model S30 and S40 features

Note: The darker shaded cells in the tables indicate the base features.

Processors	
#2207	**3660 RSP CPW 8-way Processor in Client/Server Environment 120 RSP CPW 8-way Processor in Interactive Environment. Base Memory 1024 MB.** Minimum OS/400 level: V4R3 Model S40 only.
#2208	**4550 RSP CPW 12-way Processor in Client/Server Environment 120 RSP CPW 8-wayProcessor in Interactive Environment. Base Memory 1024 MB.** Minimum OS/400 level: V4R3 Model S40 only.
#2256	**1794.0 RSP CPW 8-way Processor in Client/Server Environment, 64.0 RSP CPW 8-way Processor in Interactive Environment. Base Memory 1024 MB.** Model S40 only.
#2257	**319.0 RSP CPW Processor in Client/Server Environment, 51.5 RSP CPW Processor in Interactive Environment. Base Memory 512 MB.** Model S30 only.
#2258	**583.3 RSP CPW 2-way Processor in Client/Server Environment, 64.0 RSP CPW 2-way Processor in Interactive Environment. Base Memory 512 MB.** Model S30 only.
#2259	**998.6 RSP CPW 4-way Processor in Client/Server Environment, 64.0 RSP CPW 4-way Processor in Interactive Environment. Base Memory 512 MB.** Model S30 only.
#2260	**1794.0 RSP CPW 8-way Processor in Client/Server Environment, 64.0 RSP CPW 8-way Processor in Interactive Environment. Base Memory 1024 MB.** Model S30 only.
#2261	**2340.0 RSP CPW 12-way Processor in Client/Server Environment, 64.0 RSP CPW 12-way Processor in Interactive Environment. Base Memory 1024 MB.** Model S40 only.
#2311	**12-way processor. Base Memory 4096 MB.** 185,533 normalized FI Dialog Steps per hour at 65% CPU. Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. Model SBI only.
#2320	**998.6 RSP CPW 4-way Processor in Client/Server Environment, 215.1 RSP CPW 4-way Processor in Interactive Environment. Base Memory 512 MB.** Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. Model S30 only.

#2321	**1794.0 RSP CPW 8-way Processor in Client/Server Environment, 386.4 RSP CPW 8-way Processor in Interactive Environment. Base Memory 1024 MB.** Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. Model S30 only.
#2322	**1794.0 RSP CPW 8-way Processor in Client/Server Environment, 579.6 RSP CPW 8-way Processor in Interactive Environment. Base Memory 1024 MB.** Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. Model S30 only.
#2340	**3660 RSP CPW 8-way Processor in Client/Server Environment 1050 RSP CPW 8-way Processor in Interactive Environment Base Memory 1024 MB.** Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. Minimum OS/400 level: V4R3 Model S40 only.
#2341	**4550 RSP CPW 12-way Processor in Client/ Server Environment 2050 SRP CPW 8-way Processor in Interactive Environment Base Memory 1024 MB** Model S40 only. Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features. Minimum OS/400 level: V4R3
POWER AND PACKAGING	
Base Optical Bus Adapter	**Base Optical Bus Adapter** This is a base Optical Bus Adapter in the S30 and S40 identified as CCIN 2696 with no feature code required.
#2688	**#2688 Optical Link Processor (1063 Mbps)** The #2688 is a card that is used for attaching #5072, #5073, #5082, or #5083 Storage Expansion Towers. Each #2688 supports a maximum of two #50xx towers. Card slots used: None Maximum: Nine on S30 and S40 Prerequisite: #2695 Optical Bus Adapter or IOA slot on the Base Optical Bus Adapter.
#2695	**#2695 Optical Bus Adapter** Allows for the addition of up to three #2688 Optical Link Processors. Card slots used: One Maximum: One
#2730	**#2730 Programmable Regulator** The #2730 is required when five or more main storage cards are installed in a Model S30 only. Card slots used: None Maximum: One
#5052	**#5052 Storage Expansion Unit** The #5052 provides space for up to 16 disk units. It attaches to the top of the #5072 1063 Mbps System Unit Expansion Tower or #5082 Storage Expansion Tower. The #5052 is only supported with upgrades. It cannot be ordered with a new system. Only one #5052 per tower is supported and #5143 Power Supply may be required. Model S30 and S40 only.
#5055	**#5055 Storage Expansion Unit (Ultra SCSI)** The #5055 provides space up to eight disk units. It attaches to the top of the Model S30 system unit. Prerequisite: #9751 or #9754 MFIOP with RAID and #5151 Power Supply . Model S30 only.
#5057	**#5057 Storage Expansion Unit (Ultra SCSI)** The #5057 provides space for up to 16 disk units. It attaches to the top of the Model S40 system unit. Prerequisite: #9751 or #9754 MFIOP with RAID. Model S30 only.
#5058	**#5058 Storage Expansion Unit (Ultra SCSI)** The #5058 provides space for up to 16 disk units. It attaches to the top of the #5073 1063 Mbps System Unit Expansion Tower and the #5083 Storage Expansion Tower. Only one #5058 per tower is supported. Model S30 and S40 only.

#5065	**#5065 Storage/PCI Expansion Tower** The #5065 provides an additional bus. It includes a 1063 Mbps optical bus card. The #5065 has redundant, hot swappable power supplies. It supports three LAN/WAN/Workstation controllers, 12 PCI IOA cards, two removable media, and up to 45 disk units. Three specific disk slots may be used for #4331 1.6 GB Read Cache Device. The #5065 is the only storage expansion unit to support Ultra2 SCSI. Prerequisite: #2688 Optical Link Processor. Maximum: Eighteen on the Model S30 and S40. Minimum OS/400 level: V4R4 The #5065 is a Customer Install Feature (CIF).
#5066	**#5066 1.8 M I/O Tower** The #5066 provides two additional buses. The #5066 is actually two #5065 Storage/PCI Expansion Towers installed in a #5066 1.8 M I/O Tower. The #5066 reports to the system as two #5065s. The #5066 includes two 1063 Mbps optical bus cards, various cables (including optical cables) and the 1.8M I/O Tower. The #5066 includes 24 PCI IOA slots, space for 90 disk units, space for four removable media devices, battery backup, redundant/hot swap power supplies, and two base PCI LAN/WAN/Workstation IOPs (CCIN 2824). The #5066 is capable of controlling Ultra2 SCSI disk units. Two line cords must be specified. Prerequisite: #2688 Optical Link Processor. Maximum: Nine on the Model S30 and S40. Minimum OS/400 level: V4R4
#5072	**#5072 1063 Mbps System Unit Expansion Tower** The #5072 provides an I/O tower for creating additional buses on the Model S30 and S40. It includes a 1063 Mbps optical bus card, 13 SPD I/O card slots, space for up to four internal tape units or CD-ROMs (a maximum of three), and battery and power supplies. It can support one #5052 Storage Expansion Unit. Due to power restrictions, some combinations of high powered cards may mean that an additional #5072 is required. Prerequisite: #2688 Optical Link Processor and #2695 Optical Bus Adapter or #2688 and an IOA slot on the System Unit Base Optical Bus Adapter. The #5072 is only supported on upgrades, it cannot be ordered with a new system. Model S30 and S40 only.
#5073	**#5073 1063 Mbps System Unit Expansion Tower** The #5073 provides an I/O tower for creating additional buses on the Model S30, and S40. It includes a 1063 Mbps optical bus card, 13 SPD I/O card slots, space for up to four internal tape units or CD-ROMs (a maximum of three), and battery and power supplies. It can support one #5058 Storage Expansion Unit. Due to power restrictions, some combinations of high powered cards may mean that an additional #5073 is required. Prerequisite: #2688 Optical Link Processor and #2695 Optical Bus Adapter or #2688 and an IOA slot on the System Unit Base Optical Bus Adapter.
#5082	**#5082 Storage Expansion Tower** The #5082 provides a DASD tower for adding up to 16 disk units. A total of 32 disk units are supported with an addition of #5052. It includes a 1063 Mbps Optical Bus Card, two SPD I/O card slots for the #6502, #6512, #6530 disk IOPs—all supported but not orderable; #6532 or #6533—for new orders, and battery and power supplies. Prerequisites: #2688 Optical Link Processor and #2695 Optical Bus Adapter or #2688 and an IOA slot on the Base Optical Bus Adapter. The #5082 is only supported on upgrades; it cannot be ordered with a new system. Model S30 and S40 only.
#5083	**#5083 Storage Expansion Tower (Ultra SCSI)** The #5083 provides a DASD tower for adding up to 16 disk units. A total of 32 disk units are supported with an addition of #5058. It includes a 1063 Mbps Optical Bus Card, two SPD I/O card slots for the disk IOPs (#6502, #6512, #6430—all supported but not orderable; #6532 or #6533—for new orders), and battery and power supplies. Prerequisites: #2688 Optical Link Processor and #2695 Optical Bus Adapter or #2688 and an IOA slot on the Base Optical Bus Adapter. Model S30 and S40 only.
#5101	**30 Disk Expansion Feature** This provides two 15 unit disk enclosures, a 700-watt power supply, backplanes and internal cables. Maximum: One per #5065 Storage/PCI Expansion Tower
#5143	**#5143 Power Supply** The #5143 Power Supply is a 400-watt power supply that is normally a prerequisite of a #5052 installed in a #5072 1063 Mbps System Unit Expansion Tower or #5082 Storage Expansion Tower Maximum: One per #5072 or #5082. Model S30 and S40 only.
#5150	**Battery Backup (External)** An external battery backup that when used in conjunction with an internal battery backup is capable of extending the Continuously Power Main Storage (CPM) time to at least 48 hours. On Model S30, S40, and SBI, a standard internal battery backup is capable of maintaining CPM on 16 GB of main storage for at least 24 hours. The #5150 is required when main storage exceeds 16 GB on a Model S30 and S40.

#5151	**Power Supply (650 watts)** The #5151 is a 650 feature power supply that is a prerequisite for #5052 Storage Expansion Unit. Also required when six or more main storage cards are installed. Maximum: One Model S30 only.
#9251	**#9251 Base I/O Tower** The #9251 is the base tower on a Model S40. Includes four feature SPD IOP slots, space for three removable media devices, one CD-ROM drive, one MFIOP, the ability to add up to 20 feature disk units (with #5057—Model S40 only), and battery and power supplies. Supported on the Model S40 only.
	MAIN STORAGE
#3179	**256 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321, and #2322 and Model S40 Processors. Requires one dedicated memory card slot. Maximum: Five pairs on Model S30 Processors #2257, #2258, #2259 and #2320; two fours on Model S30 Processors #2260, #2321, and #2322; four fours on Model S40. Minimum OS/400 level: V4R2 Model S30 and S40 only.
#3180	**512 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2220. Must be added in fours on Model S30 Processors #2260, #2321, and #2322 and Model S40 Processors. Requires one dedicated memory card slot. Maximum: Five pairs on Model S30 Processors #2257, #2258, #2259, and #2320; two fours on Model S30 Processors #2260, #2321, #2322; four fours on S40. Minimum OS/400 level: V4R2 Model S30 and S40 only.
#3189	**128 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321, and #2322 and Model S40. Requires one dedicated memory card slot. Maximum: Five pairs on Model S30 Processors #2257, #2258, #2259, and #2320; two fours on Model S30 Processors #2260, #2321, and #2322; four fours on Model S40. Model S30 and S40 only.
#3190	**256 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321 and #2322 and Model S40. Requires one dedicated memory card slot. Maximum: Five pairs on Model S30 Processors #2257, #2258, #2259, and #2320; two fours on Model S30 Processors #2260, #2321, and #2322; four fours on Model S40. Model S30 and S40 only.
#3191	**512 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in focus on Model S30 Processors #2260, #2321, and #2322 and Model S40. Requires one dedicated memory card slot. Maximum: Five pairs on Model S30 Processors #2257, #2258, #2259, and #2320; and two fours on Model S30 Processors #2260, #2321, and #2322; four fours on Model S40. Model S30 and S40 only.
#3192	**1024 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2360, #2321, and #2322 on Model S40. Requires one dedicated memory card slot. Maximum: Five pairs on Model S30 Processors #2257, #2258, #2259, and #2320; two fours on Model S30 Processors #2260, #2321, and #2322; four fours on Model S40. Model S30 and S40 only.
#3193	**2084 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321, and #2322 and Model S40. Requires one dedicated memory card slot. Maximum: Four pairs on Model S30 Processors #2257, #2258, #2259, and #2320; two fours on Model S30 Processors #2260, #2321, and #2322; four fours on Model S40. Minimum OS/400 level: V4R3 Model S30 and S40 only.
#8180	**Optional Base 512 MB Main Storage** Provides an optional 512 MB main storage card in place of a base 256 MB card. Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2230. Must be added in fours on Model S30 Processors #2260, #2321, and #2322 and Model S40. Requires one dedicated memory card slot. Minimum OS/400 level: V4R2 Model S30 and S40 only.

#8191	**Optional Base 512 MB Main Storage** Provides an optional 512 MB main storage card in place of a base 256 MB card. Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321, and #2322 and Model S40. Requires one dedicated memory card slot. Model S30 and S40 only.
#8192	**Optional Base 1024 MB Main Storage** Provides an optical 1024 MB main storage card in place of a base 256 MB card. Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321, and #2321, and #2322, and Model S40. Requires one dedicated memory card slot. Model S30 and S40 only.
#8193	**Optional Base 2048 MB Main Storage** Provides an optional 2048 MB main storage card in place of a base 256 MB card. Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321, and #2322, and Model S40. Requires one dedicated card slot. Minimum OS/400 level: V4R3 Model S30 and S40 only.
#9179	**Base 256 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321, and #2322 and Model S40. Requires on dedicated memory card slot. Minimum OS/400 level: V4R2
#9190	**Base 256 MB Main Storage** Must be added in pairs on Model S30 Processors #2257, #2258, #2259, and #2320. Must be added in fours on Model S30 Processors #2260, #2321, and #2322 and Model S40. Requires one dedicated memory card slot.
WORKSTATION CONTROLLERS	
Base IOP	**Base Controller for Storage/#5065 Storage/PCI Expansion Tower** A base IOP comes as standard (no feature required) with #5065 Storage/PCI Expansion Tower. It is installed in slot C03 and is identified as CCIN 2824. It is used for attaching LAN, WAN, and workstation IOAs through two high-speed slots and two low-speed slots. The #2718, #2729, or #2748 are supported in C04 only. The #2723/#9723, #2724/#9724, #2645, #2746, #2750, #2751, #2761, or #4800 are supported in C04 or C05. The #281X or #2838/#9738 are supported on C05 only. The #2723/#9723, #2724/#9724, #2745, #2746 #2750, #2751, or #2761 are supported in C01 or C02. Restrictions apply. Maximum: One
#2629	**#2629 LAN/WAN/Workstation IOP** The #2699 supports up to three #2699, #6149, #6180, #6181, #9249, #9280, and #9381 LAN/WAN/Workstation IOAs. The #6149, #6181, #9249, and #9381 cannot occupy all three positions of the #2629. No more than seven #2629s can be placed in one #5072 1063 Mbps System Unit Expansion Tower. The #2629 cannot be placed in slot 14 of a #5072. There is no restriction on placing #2629 in #5073 1063 Mbps System Unit Expansion Tower. Card slots required: One
#2746	**#2746 PCI Twinaxial Workstation IOA** One eight-port attachment is provided to support 40 active twinaxial devices. PCI slots required: One Prerequisite: #5065 Storage/PCI Expansion Tower. Maximum: For workstation controller maximums in any combination, see 9.1, “AS/400e 720 model overview” on page 224. Minimum OS/400 level: V4R4
#2824	**#2824 PCI Feature Controller** The #2824 can be used for attaching additional LAN, WAN, and workstation IOAs to the system. There is a maximum of two in the #5065 Storage/PCI Expansion Tower. In #5065 Storage/PCI Expansion Tower slots C08 or C13, it supports two high-speed and two low-speed slots: The #2718, #2729 or #2748 are supported in C09 and C14 only. The #2838/#9738 and #281x are supported in C05, C10 and C15 only. The #2838/#9738, #2724/#9724, #2745, #2746, #2750, #2751, #2761 or #4800 are supported in C09, C10, C14, or C15. The #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751 or #2761 are supported in C06, C07, C11, or C12. Additional restrictions apply. Minimum OS/400 level: V4R4
#5540	**#5540 System Console on Twinaxial Workstation IOA Specify** The System Console attaches to #6180 or #9280 Twinaxial Workstation IOA or other migrated twinaxial workstation controller.
#5541	**System Console Attached to ASCII Workstation Controller Specify** The System Console attaches to #9141 or #6141 ASCII Workstation Controller.

#5543	**Client Access/400 System Console Specify** The System Console is a PC attached to the #9751 MFIOP. Prerequisite: #0344 Cable for attaching Client Access Console and #9699 Base Two-Line WAN IOA in slot B in the #9751 or #9754 MFIOP with RAID.
#5544 #0328	**#5544 System Console on Operations Console** The System Console is a PC. The #5544 is the default for V4R3 S30 and S40 Models. Prerequisite: #0328 Cable to be attached to Port 0 of the #9699 Base Two-Line WAN IOA in slot B of the #9751 or #9754 MFIOP with RAID. #0328: Operations Console Cable: This is a 6-meter used to attach a PC to a #9699 for use as a remote PC Console. Mutually exclusive with #3044. Minimum OS/400 level: V4R3
#6050 #9050	**#6050 Enhanced Twinaxial Workstation Controller** One eight-port attachment is provided to support up to seven twinaxial devices with V4R1 or 28 with V4R2 or V4R3. Model S30 processors #2320, #2321, and #2322 and S40 processors #2340 and #2341 support more twinax devices on any release. The #9050 is the base twinaxial workstation controller on some older models. Card slots required: One Model S30 or S40 only.
#6141 #9141	**#6141 ASCII Workstation Controller** The #6141 supports up to six ASCII devices. The #9141 can be specified as new orders on the base workstation controller. Card slots required: One
#6142	**#6142 ASCII 12-Port Workstation Attachment** The #6142 plugs into the #9141 or #6141 ASCII Workstation Controller providing an additional 12 ports. Eighteen ASCII devices can now be supported. Only one #6142 can be attached per #6141 or #9141. Card slots required: None
#6180 #9280	**Twinaxial Workstation IOA** One eight-port attachment is provided to support up to seven twinaxial devices with V4R1 or 28 with V4R2. Model S30 processors #2320, #2321, and #2322 and S40 processors #2340 and #2341 support more twinax devices on any release. The #9280 is specified on new order when a twinaxial workstation is required, and there is no ASCII workstation controller. One #6280/#9280 is placed in slot C of the #9751 or #9754 MFIOP when the System Console is ASCII. All other #6180s must be placed in a #2629 LAN/WAN/Workstation IOP. IOA slots required: One #2629, #9751, or #9754 slot.
#9751	**MFIOP with RAID (Ultra SCSI)** The #9751 is standard on the Model S30 and S40. Contains function for controlling 20 disk units, one tape unit and one CD-ROM unit. Has three IOA slots for controlling LANs, twinaxial workstations, and communications. IOA slot A is reserved for attaching one #2699 Two-Line WAN IOA or one #6149 or #6181 LAN IOA. IOA slot B is reserved for attaching the #9699 Base Two-Line WAN IOA. IOA slot C is reserved for attaching one ##2699 Two-Line WAN IOA or one #6180 or #9280 Twinaxial IOA. Occupies two card slots. The #9751 is not capable of integrated hardware disk compression. The #9751 has CCIN 6751. See Chapter 17, “Customer Card Identification Numbers” on page 539.
#9754	**#9754 MFIOP with RAID (Ultra SCSI)** The #9754 contains function for controlling 20 disk units, one tape unit and one CD-ROM unit. Has three IOA slots for controlling LANs, twinaxial workstations, and communications. IOA slot A is reserved for attaching one #2699 Two-Line WAN IOA or one #6149 or #6181 LAN IOA. IOA slot B is reserved for attaching the #9699 Base Two-Line WAN IOA. IOA slot C is reserved for attaching one #2699 Two-Line WAN IOA or one #6180 or #9280 Twinaxial IOA. Occupies two card slots. The #9754 is standard on the Model S30 and S40 and on systems ordered with V4R2. Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R3 Minimum OS/400 to support integrated hardware disk compression on #6714/#8714 17.54 GB Disk Units: V4R4 The #9754 has CCIN 6754.
	COMMUNICATIONS
#2605	**#2605 ISDN Basic Rate Interface Adapter** The #2605 connects to #2623 to support one communications line connecting to an ISDN network. The ISDN Basic Rate Interface supported by #2605 contains two high-speed ISDN user channels. One or two #2605s may be attached to one #2623 with no other IOAs allowed on the #2523. Card slots required: None Prerequisite: #2623 Six-Line Communications Controller

#2609	**#2609 EIA 232/V.24 Two-Line Adapter** The #2609 connects to #2623 to support two communications lines using Async, BSC, SDLC, or X.25 protocols. Two cables must be specified: #9023 EIA 223/V.24 20-ft. (6m) enhanced cable #9835 EIA 223/V.24 50-ft. (15m) enhanced cable #9022 EIA 232/V.24 20-ft. (6m) cable #9836 EIA 232/V.24 50-ft. (15m) cable Card slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S30 and S40 only.
#2610	**#2610 EIA 232/V.24 Two-Line Adapter (SPD)** The #2610 connects to the #2623 to support two communications lines using X.21 or X.25 networks. Two cables must be specified: #9021 X.21 20-ft. (6m) cable #9839 X.21 50-ft. (15m) cable Prerequisite: #2623 Six-Line Communications Controller Model S30 or S40 only.
#2612	**#2612 EIA 232/V.24 One-Line Adapter** The #2612 connects to #2623 to support one communications line using Async, BSC, SDLC, or X.25 protocols. One cable must be specified (see cable features for #2609). Card slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S30 and S40 only.
#2613	**#2613 V.35 One-Line Adapter** Connects to #2623 to support one V.35 communications line using either BSC, SDLC, or X.25 protocols. Each #2623 supports one V.35 line at speeds up to S30 Kbps, or two V.35 lines at speeds up to 512 Kbps, or three V.35 lines at speeds up to 384 Kbps. No other adapters are allowed on #2623 when running T1/E1/J1. One cable must be specified: #9020 V.35 20-ft. (6m) cable #9838 V.35 50-ft. (15m) cable Card slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S30 or S40 only.
#2614	**#2614 X.21 One-Line Interface Adapter (SPD)** Connects to #2623 to support one communications line using X.21 or X.25 networks. One cable must be specified (see cable features for #2610). Card slots required: None Prerequisite: #2623 Six-Line Communications Controller Model S30 or S40 only.
#2620	**#2620 Full Cryptographic Processor** The #2620 provides full cryptographic support for encrypting and decrypting data. Distribution of the #2620 is restricted by U.S. Government Export Regulations. In countries outside the U.S.A. and Canada, it can only be marketed to financial institutions and subsidiaries of U.S. companies. If a #2620 cannot be sold, a #2628 should be sold in its place. Card slots required: One Maximum: One
#2623	**#2623 Six-Line Communications Controller** The #2623 provides for attachment of a wide range of iSeries or AS/400e communications adapters. The following adapters are supported by the #2623: #2605, #2609, #2620, #2612, #2613, #2614, #2655, #2656, #2657, #2658, #2659, #6153, and #6173. The #2623 supports two #2605 ISDN adapters or up to three EIA 232/V.24, X.21, and V.35 adapters. The #2623 is only orderable on Model S30 and S40 for customers purchasing the #2605 ISDN adapter. Card slots required: One
#2628	**#2628 Limited Cryptographic Processor** The #2628 provides the same function as #2620 except that it does not include data encryption/decryption using commercial Data Masking Facility for data scrambling. Can be marketed to any non-U.S. company. Card slots required: One Maximum: One
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three IOAs. Those supported are the #2699, #6149, #6180, #6181, #9280, and #9381. #6149, #6181, #9149, and #9381 LAN IOAs cannot occupy all three positions of the #2629. No more than seven #2629s can be placed in one #5072 1063 Mbps System Unit Expansion Tower. The #2629 cannot be placed in slot 14 of a #5072. There is no restriction on placing #2629 in the #5073 1063 Mbps System Unit Expansion Tower. Card slots required: One

#2664	**#2664 Integrated Fax Adapter (SPD)** The #2664 provides two ports capable of transmission and receipt of facsimile data to or from a Group 3 capable Fax machine, another iSeries or AS/400e with #2663, or PCs with approximately programmed Fax adapter. The #2664 consists of a card, a wrap cable, two country unique attachment couplers and telephone cables, and Licensed Internal Code. Card slots required: One Maximum: 32 on Model S30 and S40. Restriction: Not supported with V5R1 and later
#2666	**#2666 High-Speed Communications Adapter** The #2666 provides one communications line capable of T1/E1 (1.544/2.048 Mbps) speeds. The #2666 consists of a card, a wrap connector and a cable. One of these cables must be specified: #9879 20-ft. (6m) V.35 CCITT cable #9880 80-ft. (24m) V.35 CCITT cable #9882 20-ft. (6m) RS449/V.36 CCITT cable #9883 80-ft. (24m) RS440/V.36 CCITT cable* #9884 150-ft. (45m) RS449/V.36 CCITT cable* #9885 20-ft. (6m) X.21 CCITT cable * These cables are only allowed when the customer's modem supports Looped Clocking Mode. The #2666 is supported but not orderable on Model S30 and S40. Card slots required: One Maximum: Twenty on Model S30; 30 on Model S40 Model S30 or S40 only.
#2699 #9699	**#2699 Two-Line WAN IOA** The #2699 supports up to two multiple protocol communications ports when any one or two if these cables are attached: #0328 Operations Console Cable 20-ft. (6m) (for #9699 and requires V4R3)* #0329 V.24/EIA 232 80-ft. (24m) cable #0330 V.24/EIA 232 20-ft. (6m) cable #0331 V.24/EIA 232 50-ft. (15m) cable #0332 V.24/EIA 232 20-ft. (6m) enhanced cable #0333 V.24/EIA 232 50-ft. (15m) enhanced cable #0334 V.24/EIA 232 80-ft. (24m) enhanced cable #0335 V.24/EIA 449 20-ft. (6m) cable #0336 V.36/EIA 449 50-ft. (15m) cable #0337 V.36/EIA 449 150-ft. (45m) cable #0338 V.35 20-ft. (6m) cable #0339 V.35 50-ft. (15m) cable #0340 V.35 80-ft. (24m) cable #0341 X.21 20-ft. (6m) cable #0342 X.21 50-ft. (15m) cable #0344 Comms Console Cable 20-ft. (6m) *For #2699: Used to support the Operations Console function on CPU models supporting Logical Partitioning (LPAR) for secondary partitions when logical partitioning is implemented (V4R4 and later): #0328 Operations Console 20-ft. (6m) cable For #9699 and to support the Remote Control Panel function (supported for the primary partition only), the Remote Control Panel Cable #0380 can be ordered as an option. The #0380 cable does not attach to a communication port. The #9699 is the base communications adapter card and is placed in slot B of the #9751 or #9754 MFIOP. There are some restrictions on communications using #2699. For full details, see "Comm. Restrictions" on page 34. Prerequisite for #2699: #2629 LAN/WAN/Workstation IOP or a spare IOA slot in #9751 or #9754 MFIOP with RAID IOA slots required for #2699: One on #2629, #9751, or #9754

#2745	**#2745 PCI Two-Line WAN IOA** Supports up to two multiple protocol communications ports when one or two of these cables are attached: #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0350 V.24/EIA232 20-ft. (6m) enhanced PCI cable #0351 V.24/EIA232 50-ft. (15m) enhanced PCI cable #0352 V.24/EIA232 80-ft. (24m) enhanced PCI cable #0353 V.35 20-ft. (6m) PCI cable #0354 V.35 50-ft. (15m) PCI cable #0355 V.35 80-ft. (24m) PCI cable #0356 V.36 20-ft. (6m) PCI cable #0357 V.36 50-ft. (15m) PCI cable #0358 V.36 150-ft. (45m) PCI cable #0359 X.21 20-ft. (6m) PCI cable #0360 X.21 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. (24m) PCI cable #0367 Operations Console PCI Cable 20-ft. (6m)* *Used to support the Operations Console function on CPU models supporting logical partitioning (LPAR) (V4R4 and later). A maximum of one #0367 cable is allowed per #2745. See “Comm. Restrictions” on page 34. Prerequisite: #5065 Storage/PCI Expansion Tower. PCI card slots required: One
#2750	**#2750 PCI ISDN BRI U Adapter** The #2750 is a 4 port (8 channel) ISDN BRI (basic rate, 2 wire interface) full size card. Each port consists of 2B+D configuration A wrap cable/plug and four 30-ft. (9.3 m) RJ-45 to RJ-45 cables are shipped with each card. Each #2750 counts as eight communication lines against the system maximums. It supports SLIP/PPP, IDLC, and Fax protocols. Supports full duplex. The feature is country-specific. Prerequisites: #5065 Storage/PCI Expansion Tower and #2824 PCI Feature Controller Minimum OS/400 level: V4R4 with PTF MF22528 (or supersede) or Cumulative Package C9313440.
#2751	**#2751 PCI ISDN BRI S/T IOA** The #2751 is a 4 port (8 channel) ISDN BRI (basic rate, 4 wire interface) full size card. Each port consists of 2B+D configuration A wrap cable/plug and four 30-ft. RJ-45 to RJ-45 cables are shipped with each card. Each #2751 counts as eight communication lines against the system maximums. It supports SLIP/PPP, IDLC, and Fax protocols. Supports full duplex. The feature is country-specific. Prerequisites: #5065 Storage/PCI Expansion Tower and #2824 PCI Feature Controller Minimum OS/400 level: V4R4 with PTF MF22528 (or supersede) or Cumulative Package C9313440
#2761	**#2761 Integrated Analog Modem** The #2761 supports multiple analog modem ports (eight phone lines). The feature includes a wrap cable/plug and eight 30-ft. (8 m) phone cables. Each #2761 counts as eight communication lines against the system maximums. It supports SLIP/PPP, SDLC and Fax protocols. Supports full duplex. ECS line not supported. To the iSeries or AS/400e server, the #2761 looks like a single IOA with eight individual line resources available. The feature is country-specific. Prerequisites: #5065 Storage/PCI Expansion Tower and #2824 PCI Feature Controller Minimum OS/400 level: V4R4 with PTF MF22528 (or supersede) or Cumulative Package C9313440
#2824	**#2824 PCI Feature Controller** The #2824 can be used for attaching LAN, WAN, and Workstation IOAs to the system. For full details, see the Workstation Controllers section. There is a maximum of two in the #5065 Storage/PCI Expansion Tower. In #5065 Storage/PCI Expansion Tower slots C08 or C13, it supports two high-speed and two low-speed slots: The #2718, #2729, or #2748 are supported in C09 and C14 only. The #2838/#9738 and #281x are supported in C05, C10 and C15 only. The #2738/#9738, #2724/#9724, #2745, #2746, #2750, #2751, #2761, or #4800 are supported in C09, C10, C14 or C15. The #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751, or #2761 are supported in C06, C07, C11 or C12. Prerequisite: #5065 Storage/PCI Expansion Tower. Additional restrictions apply. Minimum OS/400 level: V4R4
#4800	**#4800 PCI Cryptographic Processor** The #4800 is a hardware cryptography solution based on the IBM 4758 card. It is a half length PCI card. As the feature is temperature sensitive, it is shipped separately in specially designed, insulated packaging. Maximum: Three per system Prerequisite: #2824 PCI Feature Controller Minimum OS/400 level: V4R4

#4802	**#4802 PCI Cryptographic Processor** The #4802 is a hardware cryptography solution based on the IBM 4758 (LEEDS-1) card. The #4802 is a half-length PC form-factor PCI card which offers rich cryptography function, secure storage of cryptographic keys, and 12 MB/s performance (at the card level) for bulk data encryption. The #4802 provides greater security by use of 168-bit key (versus 56-bit key on #4800). The #4802 is available worldwide. The level of cryptographic function is determined by the Cryptographic Access Provider licensed program that is downloaded to the adapter. Prerequisite: An available high-speed slot under a #2824 PCI Feature Controller in a #5065/#5066 PCI Expansion Tower Maximum: Three per system Minimum OS/400 level: V4R5
	LANS/ATM
#2617 #9617	**#2617 Ethernet/IEEE 802.3 Adapter/HP** (SPD) The #2617 provides a single attachment to one Carrier Sense Multiple Access/Collision Detector Local Area Network. Consists of an adapter card and internal code, which supplies Ethernet Version 2 and IEEE 802.3 Media Access Control (MAC) plus IEEE 802.2 Logical Link Control (LLC) functions. Supports 10 Mbps half duplex only. An AIO Ethernet cable must be ordered separately. The #9617 specifies the base LAN on upgraded systems. Card slots required: One Model S30 and S40 only.
#2618 #8664	**#2618 Fiber Distributed Data Interface Adapter (SPD)** The #2618 provides one interface to connect an iSeries or AS/400e to an FDDI LAN which complies with ANSI X3T9.5 and ISO 9314 standards. Consists of a card, a wrap connector, and Licensed Internal Code, which supplies IEEE 802.2 Logical Link Control (LLC), ANSI X3T9.5/ISO 9314 Media Access Control (MAC) functions, and ANSI X3T9.5 Station Management (SMT) functions. A multi-node (62.5/125 micron) FDDI optical fiber jumper cable to connect the adapter to the FDDI ring must be ordered separately. The #8664 specifies the base LAN. Card slots required: One
#2619 #9619	**#2619 LAN/WAN/Workstation IOA (SPD)** The #2619 provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an adapter card, internal code, which supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC) functions, and an external 8-ft. (2.4m) cable. The #9619 specifies the base LAN on upgraded systems. Card slots required: One Model S30 and S40 only.
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three IOAs. Those supported are the #2699, #6149, #6180, #6181, #9249, #9280, and #9381. The #6149, #6181, #9249, and #9381 LAN IOAs cannot occupy all three positions of the #2629. No more than seven #2629s can be placed in one #5072 1063 Mbps System Unit Expansion Tower, and the #2629 cannot be placed in slot 14 of a #4072. There is no restriction on placing the #2629 in #5073 1063 Mbps System Unit Expansion Tower. Card slots required: One
#2663	**#2663 I/O Attachment Processor (SPD)** The #2663 I/O processor is required when attaching the #2668 Wireless LAN Adapter. The #2663 and #2668 are integrated in a single hardware package to operate as a unit. Card slots required: One (with #2668)
#2665 #8665	**Shielded Twisted-Pair Distributed Data Interface Adapter** The #2665 provides one interface to connect to an FDDI LAN which is constructed of IBM Cabling System Type 1, 2, or 9 shielded twisted-pair wiring. It consists of a card, a wrap connector, and Licensed Internal Code, which supplies IEEE 802.2 Logical Link Control (LLC), ANSI X3T9.5/ISO 9314 Media Access Control (MAC) functions, and ANSI X3T9.5 Station Management (SMT) functions. IBM FDDI copper jumper cables to connect the adapter to the FDDI ring must be ordered separately. The #8665 specifies the base LAN on upgraded systems. Card slots required: One Model S30 and S40 only.
#2668	**#2668 Wireless LAN Adapter (SPD)** The #2668 provides wireless connectivity to workstations or other systems connected to a wireless LAN network. One of these antenna cables must be specified: #9814 20-ft. (6m) Antenna Cable #9815 50-ft. (15m) Antenna Cable One of these antenna must be specified #9889 YAGI Directional Antenna #9890 Omni Directional Antenna (360 degree) #9891 Hemispherical Antenna (180 degree) #9892 Directional Antenna (90 degree) Card slots required: One (with #2663) Prerequisite: #2663 I/O Attachment Processor Maximum: Three on S30 and S40.

#2723 #9723	**#2723 PCI Ethernet IOA** The #2723 provides a single attachment to one Carrier Sense Multiple Access/Collision Detect Local Area Network. Consists of an adapter card and internal code which supplies Ethernet Version 2 and IEEE 802.3 Media Access Control (MAC) plus IEEE 802.2 Logical Link Control (LLC) functions. This Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. Has a RJ45 connector and a 15 pin D-shell connector for attachment of customer supplied cabling. AUI Ethernet or RJ45 twisted pair cable must be ordered separately. Cabling must meet or exceed Industry Standard EIA/TIA T568B. The #9723 is a base LAN feature. SPD card slots required: Three (with #6617 or #6618). PCI slots required: One. Prerequisite: #6617 Integrated PC Server, #6618 Integrated Netfinity Server or #5065 Storage/PCI Expansion Tower.
#2724 #9724	**#2724 PCI 16/4 Mbps Token Ring IOA** The #2724 provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an adapter card, internal code, which supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC) functions, and an external 8-ft. (2.4m) cable. Alternatively, a twisted pair cable for attachment to the RJ45 connector on the IOA can be ordered separately. This IOA is capable of operating in half or full duplex mode. SPD card slots required: Three (with #6617 or #6618) PCI slots required: One. The #9724 is a base LAN feature. Prerequisite: #6617 Integrated PC Server, #6618 Integrated Netfinity Server or #5065 Storage/PCI Expansion Tower.
#2810	**#2810 LAN/WAN IOP** The #2810 is required to attach one #2838 PCI 100/10 Mbps Ethernet IOA or #2811/#2812/#2815/#2816/#2818/#2819 PCI ATM IOA. Card slots required: One (with any of the preceding features)
#2811	**#2811 PCI 25 Mbps UTP ATM IOA** The #2811 provides attachment into an Asynchronous Transfer Mode (ATM) network using Unshielded Twisted Pair (UTP) cabling, the #2811 is typically used where 25 Mbps speed is required over distances of less than 100 meters. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2
#2812	**#2812 PCI 45 Mbps Coax T3/DS3 ATM IOA** The #2812 provides attachment in an Asynchronous Transfer Mode (ATM) network using coax cabling and the T3/DS-3 interface. The #2812 is typically used where 45 Mbps speed is required over distances of less than 1000 meters. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2
#2815	**#2815 PCI 155 Mbps UTP OC3 ATM IOA** The #2815 provides attachment into an Asynchronous Transfer Mode (ATM) network using the Unshielded Twisted Partible-5 interface. This interface is intended for connection to both local area switches and direct connection to server provider equipment. The #2815 is typically used where 155 Mbps speed is required over distances of less than 100 meters. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2
#2816	**#2816 PCI 155 Mbps MMF ATM IOA** The #2816 provides attachment into Asynchronous Transfer Mode (ATM) network using the Multi-Mode Fiber (MMF) 62.5 micron interface. This interface is intended for connection to both local area switches and direct connection to service provider equipment. The #2816 typically used where 155 Mbps speed is required over distances of less than 2 kilometers. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP. Minimum OS/400 level: V4R2
#2818	**#2818 PCI 155 Mbps SMF OC3 ATM IOA** The #2818 provides attachment into an Asynchronous Transfer Mode (ATM) network using the Single Mode Fiber (SMF) 9 micron interface. This interface is intended primarily for direct connection to service provider equipment, but can be used for local area switches. The #2818 is typically used where 155 Mbps speed is required over distances of from 16 to 40 kilometers. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP. Minimum OS/400 level: V4R2
#2819	**#2819 PCI 34 Mbps Coax E3 ATM IOA** The #2819 provides attachment into an Asynchronous Transfer Mode (ATM) network using coax cabling and the E3 interface. The #2819 is typically used where 34 Mbps speed is required over distances of less than 1000 meters. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP. Minimum OS/400 level: V4R2

#2824	**#2824 PCI Feature Controller** The #2824 can be used for attaching additional LAN, WAN, and workstation IOAs to the system. There is a maximum of two in the #5065 Storage/PCI Expansion Tower. In #5065 Storage/PCI Expansion Tower slots C08 or C13, it supports two high-speed and two low-speed slots: The #2718, #2729 or #2748 are supported in C09 and C14 only. The #2838/#9738 and #281x are supported in C05, C10 and C15 only. The #2738/#9738, #2724/#9724, #2745, #2746, #2750, #2751, #2761, or #4800 are supported in C09, C10, C14, or C15. The #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751, or #2761 are supported in C06, C07, C11, or C12. Additional restrictions apply. Minimum OS/400 level: V4R4
#2838 #9738	**#2838 PCI 100/10 Mbps Ethernet IOA** Provides attachment to a standard 100 Mbps high-speed Ethernet LAN and allows attachment to existing 10 Mbps Ethernet LAN. This Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex. The adapter comes with an RJ45 connector for attachment to UTP-5 media. Cabling for 10 Mbps must be CAT-3 or CAT-5, and cabling for 100 Mbps must be CAT-5 that meets or exceeds Industry Standard EIA/TIA T568A or T568B. SPD card slots required: One (with #2810) or three (with #6617 or #6618). PCI slots required: One Prerequisite: #2810 LAN/WAN IOP or #6617 Integrated PC Server, #6618 Integrated Netfinity Server, or #5065 Storage/PCI Expansion Tower.
#6149 #9249	**16/4 Mbps Token Ring IOA** Provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an IOA card, internal code, which supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC), and an external 8-ft. (2.4m) token ring cable. Alternatively a twisted pair cable for attachment to the RJ45 connector on the IOA can be ordered separately. The #6149 can operate in full or half-duplex mode. The #9249 specifies the base LAN. Prerequisite: #2629 LAN/WAN/Workstation IOP, #6616 Integrated PC Server, #9751, or #9754 MFIOP with RAID
#6181 #9381	**#6181 ASCII Workstation Controller** The #6181 provides a single attachment to one Carrier Sense Multiple Access/Collision Detect Local Area Network. Consists of an adapter card and internal code, which supplies Ethernet Version 2 and IEEE 802.3 Media Access Control (MAC) plus 802.2 Logical Link Control (LLC) functions. Has a FJ45 connector and a 15 pin D-shell connector for attachment of customer supplied cabling. AUI Ethernet or RJ45 twisted pair cable must be ordered scepter-port integrated PC separately. This Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. The #9025 Ethernet Cable (3M AUI) can be ordered if the customer chooses IBM AUI cabling. Cabling must meet or exceed Industry Standard EIA/TIA T568B. The #9381 specifies the base LAN. Card slots required: None Prerequisite: #2629 LAN/WAN/Workstation IOP, #6616 Integrated PC Server, #9751, or #9754 MFIOP with RAID
	Integrated PC Server (formerly known as FSIOP) Contains a 66 MHz 486 Processor, main storage and ability to attach to one or two LANs for high performance serving to LAN attached PCs. The initial order configurations can be upgraded using the #6509 and #6520:
#6516	16 MB One-Port Integrated PC Server
#6517	32 MB One-Port Integrated PC Server
#6518	48 MB One-Port Integrated PC Server
#6519	64 MB One-Port Integrated PC Server
#6526	16 MB Two-Port Integrated PC Server
#6527	32 MB Two-Port Integrated PC Server
#6528	48 MB Two-Port Integrated PC Server
#6529	64 MB Two-Port Integrated PC Server
#8716 to #8719	Specify for One-Port Integrated PC Server as a base LAN.
#8726 to #8729	Specify for Two-Port Integrated PC Server as a base LAN.
	These cables need to be specified depending on the LAN being attached to: #9024 Token ring cable (2.4m) #9025 Ethernet Cable (3m AUI) Card slots required: Two contiguous slots
#6509	Additional 16 MB for Integrated PC Server This is used to increase the memory on an installed PC Server up to the maximum of 65 MB.
#6520	Upgrade One-Port Integrated PC Server to Two Port Integrated PC Server This cannot be used with a Two-Port Integrated PC Server. The #9024 or #9025 can be ordered with #6520 depending upon the LAN to be attached. Maximum: 16 Model S30 and S40 only.

#6616	**#6616 Integrated PC Server** The #6616 contains a 166MHz Pentium Processor, two main storage slots, and two LAN IOA slots for higher performance serving to LAN attached PCs. The two main storage slots can each contain one of these features, giving a maximum of 256 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory Either one or two of these IOAs are supported: #9249/#6149 16/4 Mbps Token Ring IOA #9381/#6181 ASCII Workstation Controller #9249 and #9381 specify base LAN adapters Card slots required: Two contiguous slots Maximum: 16 on S30 and S40
#6617	**#6617 Integrated PC Server (SPD)** The #6617 contains a 200 MHz Pentium Processor, four main storage slots, and three LAN IOA slots for high performance serving to LAN-attached PCs. The four main storage slots can each contain one of these features, giving a maximum of 512 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory Up to three of these LAN IOAs are supported. At least one LAN IOA is required. A maximum of two of the LAN IOAs can be the #2838/#9738. #9723/#2723 PCI Ethernet IOA #9723/#2723 PCI Ethernet IOA #2738/#9738 PCI 100/10 Mbps Ethernet IOA (specify feature #0222 is required) The #9723, #9724, and #9738 are the base LAN. The third LAN and the second #2838. The #9738 can be used if running Windows NT on the #6617. The #0222 100/10 Mbps Ethernet on IPCS is required for each #2838/#9738 attached to the #6617 Integrated PC Server. If running Windows NT on the #6617, then: #0325 Integrated PC Server Extension Cable for Windows NT is required. #1700 Integrated PC Server keyboard/Mouse for Windows NT is recommended (in those countries offering it). A display is required on the IPCS to support Windows NT. A minimum of 64 MB is required if running Windows NT. For country-specific keyboard/mouse and display support, see the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ When running OS/2 on the #6617, then the #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used, and only one can contain a #2838/#9738. When running Novell Netware on the #6617, then the #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used, and only one can contain a #2838/#9738. A maximum of 256 MB IOP memory is supported. Card slots required: Three contiguous slots. Cannot be placed in #5044 System Unit Expansion Rack. Minimum OS/400 level: V4R2
#6618	**#6618 Integrated Netfinity Server (SPD)** Minimum OS/400 level: V4R2 and Cumulative Package C8342420 or V4R3 and Cumulative Package C8349430. Contains a 333 MHz Pentium Processor, four main storage slots, and three LAN IOA slots for high performance serving to LAN-attached PCs. The four main storage slots can each contain one of these features, giving a maximum of 1024 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory #2867 256 MB Integrated PC Server Memory Up to three of these LAN IOAs are supported. At least one LAN IOA is required. A maximum of two of the LAN IOAs can be #2838. #2723 PCI Ethernet IOA #2724 PCI 16/4 Mbps Token Ring IOA #2838 PCI 100/10 Mbps Ethernet IOA (Specify #0222 is required) The third LAN and the second #2838 can only be used if running Windows NT on the #6618. The #0222 100/10 Mbps Ethernet on IPCS is required for each #2838 attached to the #6618 Integrated Netfinity Server. If running Windows NT on the #6618, then: A minimum of 64 MB IOP memory is required. The #0325 Integrated PC Server Extension Cable for Windows NT is required. The #1700 Integrated PC Server Keyboard or Mouse for Windows NT, the default in the U.S.A. A display is required to support Windows NT on the IPCS.

#6618 (cont.)	For country-specific keyboard/mouse and display support, see the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ When running OS/2 on the #6618, then: The #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used. A maximum of 512 MB IOP memory is supported. When running Novell Netware on the #6618, then: #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used. A maximum of 256 MB IOP memory is supported. SPD slots required: Three contiguous slots. Cannot be placed in #5044 System Unit Expansion Rack.
	DISK UNITS
#1602	**1.03 GB One-byte Disk Unit Conversion Kit** Provides the hardware for migrating one 1.03 GB one-byte SCSI disk unit. Supported only in system unit or #5052, #5057, and #5058 Storage Expansion Unit positions 1 through 7. One #1602 migrates a #1312, #6602, #6802, or #9602 disk. Two #1602s migrate a #2802, #6612, #6812, #8612, or #9802 dual disk. Model S30 or S40 only.
#1603	**#1603 1.96 GB Single Disk Unit Conversion Kit** Provides the hardware for migrating one 1.96 GB one-byte SCSI disk unit. Supported only in system unit or #5052, #5057 and #5058 Storage Expansion Unit positions 1 through 7. One #1603 migrates #1313 or #6603 disk. Two #1602s migrate a #6613, #7613, or #8613 dual disk. Model S30 or S40 only.
#4308	**4.19 GB Additional Two-byte Disk Unit (Ultra SCSI)** Supported in the #5065/#5066 PCI Expansion Tower only. Provides a 3 ½-inch single disk unit with 4.19 GB capacity for additional disk storage. Prerequisite: A #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller The #4308 is a Customer Install Feature (CIF). Minimum OS/400 level: V4R4
#4314	**#4314 8.58 GB Disk Unit (Ultra SCSI)** The #4314 provides an additional 3 ½-inch two-byte single disk unit with 8.58 GB capacity (7200 RPM). Prerequisite: A #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller Minimum OS/400 level: V4R4 The #4314 is a Customer Install Feature (CIF). Supported in the #5065/#5066 PCI Expansion Tower only.
#4317	**#4317 8.58 GB Disk Unit 10k RPM (Ultra2 SCSI)** The #4317 provides an additional 3 ½-inch single disk unit with 8.58 GB capacity. Prerequisite: A #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller Minimum OS/400 level: V4R4 The #4317 is a Customer Install Feature (CIF). Supported in the #5065/#5066 PCI Expansion Tower only.
#4318	**#4318 17.54 GB Disk Unit 10k RPM (Ultra2 SCSI)** The #4318 provides an additional 3 ½-inch single disk unit with 17.54 GB capacity. Prerequisite: A #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller Minimum OS/400 level: V4R4 The #4318 is a Customer Install Feature (CIF). Supported in the #5065/#5066 PCI Expansion Tower only
#4324	**17.54 GB Additional Two-byte Disk Unit (Ultra SCSI)** Supported in the #5065/#5066 PCI Expansion Tower only Provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage (7200 RPM). Prerequisite: A #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller Minimum OS/400 level: V4R4 The #4324 is a Customer Install Feature (CIF).
#4331	**#4331 1.6 GB Read Cache Device** The #4331 provides 1.6 GB of capacity for large read cache function. It is mutually exclusive with DASD compression. The system arrives in performance mode with compression function turned off on the #2748 PCI RAID Disk Unit Controller. Prerequisite: #2748 PCI RAID Disk Unit Controller One DASD slot 1.6 inch. Maximum: One per #2748 IOP. Minimum OS/400 level: V4R4 The #4331 is a Customer Install Feature (CIF). Supported in the #5065/#5066 PCI Expansion Tower only.

#6605	**1.03 GB Additional Two-byte Disk Unit** Provides a 3 ½-inch single disk unit with 1.03 GB capacity for additional disk storage. The #6605 is supported for upgrades only. Model S30 or S40 only.
#6606 #9606	**1.96 GB Additional Two-byte Disk Unit** Provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. The #6606 is supported for upgrades only. The #9606 specifies a 1.96 GB base disk unit. Model S39 or S40 only.
#6607 #7607	**4.19 GB Additional Two-byte Disk Unit** Provides a 3 ½-inch single disk unit with 4.19 GB capacity for additional disk storage. The #6607 is supported for upgrades only. The #7607 specifies an optional 4.19 GB base disk unit. Model S30 or S40 only. RPQ 843977 and RPQ 843978 can be used for the #6607, upgrades to Sxx system units and the #5052, #5055, #5057, #5058, #5072, #5073, #5082, and #5083 Expansion Units and Towers.
#6650	**1.96 GB Additional Two-byte Disk Unit** Provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. The #6650 is supported or upgrades only. Model S30 or S40 only.
#6652	1.03 GB Additional Two-byte Disk Unit Provides a 3 ½-inch single disk unit with 1.03 GB capacity for additional disk storage. The #6652 is supported for upgrades only. Model S30 or S40 only.
#6713 #7713 #8713	**#6713 8.58 GB Disk Unit (Two-byte) (Ultra SCSI)** The #6713 provides a 3 ½-inch single disk unit with 8.57 GB capacity for additional disk storage. For best performance, use attached to the #9751 or #9754 MFIOP, #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in the system unit; #5055, #5057, #5058 Storage Expansion Unit; or #5083 Storage Expansion Tower. The #7713 and #8713 specify an optional 8.57GB base disk. The #7713 is supported for upgrades only. The #7713 Model S30 or S40 only. The #6713 and #8713 Model S30 or S40. RPQ 843977 and RPQ 843978 can be used for the #6713, upgrades to Sxx system units and #5052, #5055, #5057, #5058, #5072, #5073, #5082 and #5083 Storage Expansion Units and Towers.
#6714 #8714	**#6714 17.54 GB Disk Unit (Two-byte) (Ultra SCSI)** The #6714 provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage. For best performance, use attached to the #9751 or #9754 MFIOP, or #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in the system unit. RPQ 843977 and RPQ 843978 can be used for #6714, upgrades to Sxx system units and #5052, #5055, #5057, #5058, #5072, #5073, #5082, and #5083 Storage Expansion Units and Towers. Minimum OS/400 level: V4R4 Model S30 or S40 only.
#6717 #8617	**#6717 8.58 GB 10k RPM Disk Unit (Two-byte) (Ultra SCSI)** The #6717 provides a 3 ½-inch single disk unit with 8.58 GB capacity for additional disk storage. Supported in the #5052, #5055, #5057 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Towers and in the #9251 or Model S30 System Tower. For best performance when installed in Storage Expansion or Storage Expansion Tower, use the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5083. Not supported on #6502/#6512/#6530. The #8617 specifies an optional 8.58 GB base disk. Supported in the #5065/#5066 PCI Expansion Tower through RPQ 847102. Minimum OS/400 level: V4R3
#6718 #8618	**#6718 17.54 GB 10k RPM Disk Unit (Two-byte) (Ultra SCSI)** The #6718 provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage. Supported in the #5052, #5055, #5057 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Tower and in #9251 or Model S30 System Tower. For best performance when installed in Storage Expansion or Storage Expansion Tower, use the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5083. Not supported on the #6502/#6512/#6530. The #8618 specifies an optional 17.54 GB base disk. Supported in the #5065/#5066 PCI Expansion Tower through RPQ 847102. Minimum OS/400 level: V4R4
#6906	**1.96 GB Additional Two-byte Disk Unit (Ultra SCSI)** The #6906 provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. For best performance, use attached to the #9751 or #9754 MFIOP, #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in the system unit; #5055, #5057, #5058 Storage Expansion Unit, or #5083 Storage Expansion Tower. Model S30 or S40 only.
#6907 #9907	**4.19 GB Additional Two-byte Disk Unit (Ultra SCSI)** The #6907 provides a 3 ½-inch single disk unit with 4.19 GB capacity for additional disk storage. For best performance, use attached to the #9751 or #9754 MFIOP, #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in the system unit; #5055, #5057 or #5058 Storage Expansion Unit, or #5083 Storage Expansion Tower. The #6906 Model S30 or S40 only. The #9907 specifies a 4.19 GB base disk included with new Model S30 and S40 orders and with upgrades to these models from CISC models. RPQ 843977 and RPQ 843978 can be used for #6907 upgrades to Sxx system units and the #5052, #5055, #5057, #5058, #5072, #5073, #5082 and #5083 Storage Expansion Towers and Towers.

RPQ 843977	**RPQ 843977** is for customers who want to move 4/8/17 GB disk units from one AS/400e to another AS/400e. The RPQ provides hardware for mounting one disk unit. The hardware in this RPQ allows for mounting #6607/#6907 (4.194 GB unit), #6713 (8.58 GB unit), and #6714 (17.54 GB unit) in the system unit of a Model 640/650/S30/S40/730/740 and in the #5052/#5055/#5057/#5058/#5070/#5071/#5072/#5073/#5080/#5081/#5082/#5083 disk expansion units and towers. These target enclosures use SPD technology. After the disk drives are installed, an RPO change must be processed to add a #6607/#6907 for each #6607/#6907 added, a #6713 for each #6713 added, and a #6714 for each #6714 added.
RPQ 843978	**RPQ 843978** is for customers who want to move 4/8/17GB disk units from one AS/400e to another AS/400e. The RPQ provides hardware for mounting one disk unit. The hardware in this RPQ allows for mounting device types #6607/#6907 (4.194 GB unit), #6713 (8.58 GB unit), and #6417 (17.54 GB unit) in the system unit of a Model 170/600/S10/620/ S20/720 and the #7101/#7102/#5064/#9364 expansion units and towers. After the disk drives are installed, an RPO change must be processed to add a #6807 for each #6607/#6907 added, add a #6813 for each device #6713 added, and add a #6824 for each #6417 added.
RPQ 847102	**RPQ 847102** ships the disk mounting hardware and instructions required to convert a #6717/#6817 to a #4317 and a #6718/#6818 to a #4318. Order one RPQ for each disk unit to be converted. Confirm that there is disk space available in an existing or on-order #5065/#5066 PCI Expansion Tower. This RPQ can also be used to move a disk to an iSeries 270, 820, 830, 840, or #5075, #5074/#9074, and #5079/#9079 PCI Expansion Towers.
	INTERNAL TAPE AND CD-ROM UNITS
#1379	**1.2 GB ¼-inch Cartridge Tape Unit Conversion Kit** The #1379 provides the hardware for migrating 1.2 GB ¼-inch cartridge tape units. The #1379 migrates the #1349, #5348, #6368, #7348, #8348, or #9349 Tape Units. Attaches to the #2621, #6513, #9751, or #9754 MFIOP. Model S30 or S40 only.
#1380	**2.5 GB ¼-inch Cartridge Tape Unit Conversion Kit** The #1380 provides the hardware for migrating 2.5 GB ¼-inch cartridge tape units. The #1380 migrates the #1350, #5349, #6349, #6369, #7349, #8349, or #9349 Tape Units. Attaches to the #2621, #6513, #9751, or #9754 MFIOP. Model S30 or S40 only.
#4425	**#4425 CD-ROM** Prerequisite: #2748 PCI RAID Disk Unit Controller. Minimum OS/400 level: V4R4 The #4425 is a Customer Install Feature (CIF). Supported only in #5065 Storage/PCI Expansion Tower.
#4482	**#4482 4 GB ¼-inch Cartridge Tape Unit** The #4482 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4482 is a Customer Install Feature (CIF). Supported only in #5065 Storage/PCI Expansion Tower.
#4483	**#4483 16 GB ¼-inch Cartridge Tape Unit** The #4483 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4483 is a Customer Install Feature (CIF). Supported only in #5065 Storage/PCI Expansion Tower.
#4486	**#4486 25 GB ¼-inch Cartridge Tape Unit** The #4486 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4486 is a Customer Install Feature (CIF). Supported only in #5065 Storage/PCI Expansion Tower.
#4487	**#4487 50 GB ¼-inch Cartridge Tape Unit** The #4487 can be used for save/restore, alternate IPL, migration and ¼-inch cartridge tape exchange using the appropriate media and density. The #4487 tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5065. Prerequisite: #2748/#2778 PCI RAID Disk Unit Controller. Minimum OS/400 level: V5R1 The #4487 is a Customer Install Feature (CIF).
#4684	**#4684 30 GB ¼-inch Cartridge Tape Unit** The #4684 s a 30 GB ¼-inch cartridge tape unit that can be mounted in a removable media device slot of a system unit or an expansion tower. The #4684 maybe used for save/restore, alternate IPL, program distribution, migration and ¼-inch cartridge tape exchange. See 16.8, “QIC format compatibility for iSeries and AS/400e systems” on page 531, for supported media types. Supported only in the #5065. The #4684 is a Customer Install Feature (CIF).
#6325	**Optional CD-ROM Feature** The #6325 limits the use of tape in the same tower to a #6380 and #6390. Prerequisite: #2624 Storage Device Controller Minimum OS/400 level: V4R3

#6380	**#6380 2.5 GB ¼-inch Cartridge Tape Unit** The #6380 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. The #6380 is supported for upgrades only. Attaches to the #2624, #6513, #9751, or #9754 MFIOP. Available on Model S30 and S40 #5072/#5073 1063 Mbps System Unit Expansion Tower.
#6381	**#6381 2.5 GB ¼-inch Cartridge Tape** The #6381 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. Attaches to #6513, #9751, or #9754 MFIOP.
#6382	**#6382 4 GB ¼-inch Cartridge Tape Unit** The #6382 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Attaches to the #6513, #9751, or #9754 MFIOP.
#6383	**#6383 16 GB ¼-Inch Cartridge Tape Unit** The #6383 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5072, #5073, or the #9251 Towers and in the Model S30 System Tower. One can be controlled by the MFIOP. An additional #6383 must be controlled by the #6513.
#6384	**#6384 30 GB ¼-inch Cartridge Tape Unit** The #6384 is a 30 GB ¼-inch cartridge tape unit that can be mounted in a removable media device slot of a system unit or an expansion tower. The #6384 maybe used for save/restore, alternate IPL, program distribution, migration and ¼-inch cartridge tape exchange. See 16.8, “QIC format compatibility for iSeries and AS/400e systems” on page 531, for supported media types. Supported only in the #5072, #5073, or #9251 Towers and in the Model S30 System Tower. The #6384 is a Customer Install Feature (CIF).
#6385	**#6385 13 GB ¼-Inch Cartridge Tape Unit** The #6385 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Attaches to the #6513, #9751, or #9754 MFIOP.
#6386	**#6386 25 GB ¼-inch Cartridge Tape Unit** The #6386 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5072, #5073, or #9251 Towers and in the Model S30 System Tower.
#6390	**#6390 7 GB 8 mm Cartridge Tape Unit** The #6390 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. Attaches to the #2624, #6513, #9751, or #9754 MFIOP.
	MAGNETIC MEDIA CONTROLLERS
#2621	**#2621 Storage Device Controller** The #2621 provides attachment for one or two of these devices with hardware data compression for tapes: 2240, 9348, 7208, 3995, 9427, and #5032. Dual drive 7208s counts as two devices. If #2621 supports a 3995 or #5023, it must be dedicated to it. If the #2621 supports a 9427, it is recommended that the 9427 be attached to both parts of the #2621. For new orders, the #6434 is used in preference to #2621 as long as it supports the tape device required. Card slots required: One Maximum: Four for external tape, 22 for #3995 on S30 or S40.
#2624	**#2624 Storage Device Controller** The #2624 provides support for up to three internal tape drives. With the addition of #6146, it also supports one external diskette drive. For new orders, the #6513 is used in preference to #2624 unless #2624 is required anyway to support a diskette drive. Supports also the internal CD-ROM installed in the #5072/#5073 1063 Mbps System Unit Expansion Tower. Card slots required: One Maximum: Seven for internal tape/CD-ROM on S30 or S40; two for diskette.
#2644	**#2644 Magnetic Tape Attachment Card/HP** The #2644 provides attachment for the 3422, 3430, 3480, 3490 Exx, 3490 Box, 3490 Exx, 3490E Box, 3490E Cxx, and 3490E Exx Tape Subsystem Models. Also requires the #9980 Serpentine Cable except for 3490E Cxx when ordered with internal cables. Card slots required: One Maximum: Eight on S30 and S40.
#2718	**#2718 PCI Magnetic Media Controller** The #2718 provides SCSI attachment for one 7207-122 QIC-SLR Tape Bridge Box (4 GB External ¼-inch Cartridge Tape Drive) (4 GB ¼-inch cartridge external tape drive), 7208-345 60 GB External 8mm Tape Drive, or 7210-020 CD-ROM. See 16.7.4, “#2718/#2768 PCI Magnetic Media Controller: Device cabling rules” on page 530, for information on connecting devices to the #2768. High-speed PCI slots required: One. Prerequisite: #2824 PCI Feature Controller Maximum: Three in the #5065 Storage/PCI Expansion Tower Minimum OS/400 to support 7210-020 and 7208-345: V4R5

#2729	**#2729 PCI Magnetic Media Controller** The #2729 provides SCSI attachment for one 3490E Exx, 3490E Fxx, 3490E Cxx with #5040, 3494 D1x or L1x. 3570, 3575, 3590, 7208, 9348, or 9427 Tape Drive or 3995 C4x Optical Library Dataserver. High-speed PCI slots required: One. Prerequisite: #2824 PCI Feature Controller. Maximum: Three in the #5065 Storage/PCI Expansion Tower. Minimum OS/400 to support 3995: V4R2
#2748	**#2748 PCI RAID Disk Unit Controller–26 MB Cache (RAID Mirrored/Unprotected) (Ultra2 SCSI)** The #2748 is Ultra2 SCSI capable when installed in the #5065 Storage/PCI Expansion Tower. The #2748 has a 26 MB write-cache and provides RAID-5 protection and compression for internal disk units. It supports up to 15 disks. A minimum of four drives and a maximum of 10 drives are supported in each array. A maximum of three arrays is allowed for each #2748. The #2748 supports both compression and non-compression modes. The mode is determined by a hardware jumper on the card. The #2748 also supports #6831/#4331 1.6 GB Read Cache Device. It supports up to three internal tape and CD-ROMs. In the #5065 Storage/PCI Expansion Tower, it supports up to two internal tapes and CD-ROM. Supports the #1349, #1350, #1355, #1360, #4482, #4483, #4486, #4684, #6480, #6481, #6482, #6483, #6484,#6485, #6486, or #6490 tape units. Maximum: Three per #5065 Storage/PCI Expansion Tower. High-speed PCI slots required: One Prerequisite: #5065 Storage/PCI Expansion Tower. Minimum OS/400 level: V4R4
#2778	**#2778 PCI RAID Disk Unit Controller–104 MB Cache (RAID Mirrored/Unprotected) (Ultra2 SCSI)** The #2778 is an Ultra2 SCSI controller with a maximum compressed write cache size of 104 MB that provides RAID-5 protection and compression for internal disk units and supports internal tape units and CD-ROMs. The #2778 supports both disk compression and enhanced modes. The mode of operation is determined by a hardware jumper and disk compression mode should only be used when disk compression is desired. In addition to providing RAID-5 protection for disks, the #2778 is also designed to work as a high performance controller for disks protected by system mirroring or disks with no protection. A minimum of four disk units of the same capacity are needed for a valid RAID-5 configuration. A maximum of four arrays are allowed per controller, with a maximum of 10 disk units allowed per array. All disk units in an array must be of the same capacity. The #2778 also supports the #4331 1.6 GB Read Cache Device, which is used by Extended Adaptive Cache to provide increased performance. The #4331 1.6 GB Read Cache Device is supported only when #2778 is in enhanced mode. The #2778 controller supports a maximum of 15 disk units. The #2778 controls up to two removable media devices (internal tape or CD-ROM). Minimum OS/400 level: OS/400 V5R1 Prerequisite: Available High-speed SCSI slot in #5065/#5066 PCI Expansion Tower Maximums: Three (in combination with #2748) per #5065 Storage/PCI Expansion Tower. Six (in combination with #2748) per #5066 1.8 M I/O Tower.
#6146	**#6146 Diskette Adapter (SPD)** The #6146 provides attachment for on 9331 011 or 012 Diskette Unit. Card slots required: None Prerequisite: #2624 Storage Device Controller Maximum: Two
#6500	**Direct Access Storage Device Controller** The #6500 provides attachment for one 9337 0xx or 1xx Disk Unit. The #6500 is supported for upgrades only. Card slots required: One Model S30 and S40 only.
#6501	**#6501 Tape/Disk Device Controller** The #6501 provides attachment for up to two 9337 2xx, 4xx, or 5xx models. Also supports up to two 3490E Cxx with #5040, 3490E Exx, 3494 Lxx or Dxx, 3490E Fxx, 3570, or 3590 models. Also provides attachment for 2105 Versatile Storage Server. DASD and Tape Units cannot be mixed on the same #6501. The #6534 is used in preference to the #6501 if it supports the tape device being configured. Card slots required: One Maximum: Eight for tape; for disk, see the model overview tables at the beginning of this chapter. Model S30 or S40 only.
#6502	**#6502 High Performance Controller Disk Unit Controller (RAID/Mirrored/Unprotected)** The #6502 provides RAID protection and a 2 MB write-cache for up to 16 disks located in the #5052 or #5058 Storage Expansion Unit or #5053 Storage Expansion Tower. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of two arrays are allowed for each #6502. The #6502 is supported for upgrades. The #6502 is not capable of integrated hardware disk compression. Card slots required: One Model S30 and S40 only.

#6512	**#6512 High Performance Controller Disk Unit Controller–4 MB Cache (RAID/Mirrored/Unprotected)** The #6512 provides RAID protection and a 4 MB write-cache for up to 16 disks located in #5052 or #5058 Storage Expansion Unit, #5082 or #5083 Storage Expansion Tower. A minimum of four drives and a maximum of 10 drives are supported in each array. A maximum of two arrays are allowed for each #6512. The #6512 is supported for upgrades. Model S30 and S40 only. The #6512 is not capable of integrated hardware compression. Card slots required: One
#6513	**#6513 Internal Tape Device Controller** The #6513 provides support for up to two internal tape drives when located in Model S40 system unit or four internal tape drives when located in #5072/#5073 1063 Mbps System Unit Expansion Tower. The #6513 is the default controller unless a #2624 is installed. Supports #1379, #1380, #6380, #6381, #6382, #6383, #6385, #6386, and #6390 Tape Units. Card slots required: One Maximum: Five on S30 and S40.
#6530	**#6530 Disk Unit Controller No Cache–No Cache (Mirrored/Unprotected)** The #6530 is a controller for up to 16 disks located in #5052 or #5058 Storage Expansion Unit, or #5082 or #5083 Storage Expansion Tower. The #6530 is supported for upgrades. Model S30 and S40 only. The #6530 is not capable of integrated hardware disk compression. Card slots required: One.
#6532	**#6532 RAID Disk Unit Controller–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #6532 is an Ultra SCSI Controller for up to 16 disks installed in the #5058 Storage Expansion Unit, or #5083 Storage Expansion Tower. Also Supports disks located in the #5052 Storage Expansion Unit or the #5082 Storage Expansion Tower, but not at Ultra SCSI speeds. Offers performance improvements over the #6502, #6512, and #6530. A minimum of four drives and a maximum of 10 drives are supported in each array. A maximum of four arrays are allowed for each #6532. Model S30 and S40 only. The #6532 is not capable of integrated hardware disk compression. Card slots required: One
#6533	**#6533 RAID Disk Unit Controller–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #6533 is an Ultra SCSI Controller for up to16 disks installed in #5058 Storage Expansion Unit, or #5083 Storage Expansion Tower. Also Supports disks located in #5052 Storage Expansion Unit or #5082 Storage Expansion Tower, but not at Ultra SCSI speeds. Offers performance improvements over #6502, #6512, and #6530. A minimum of four drives and a maximum of 10 drives are supported in each array. A maximum of four arrays is allowed for each #6533. Card slots required: One. Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R3 Model S30 and S40 only.
#6534	**#6534 Magnetic Media Controller (SPD) (Ultra SCSI)** The #6534 provides attachment for one 3490E Cxx with #5040), 3490E Exx, 3490E Fxx, 3494 D1x or L1x, 3570, 3575, 3590, 7208, 9348, or 9427 Tape Drive or 3995 C4x Optical Library Dataserver. Card slots required: One Maximum: Eight on S30 and S40. Minimum OS/400 to support 3995: V4R2
#9751	**MFIOP with RAID–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #9751 is an Ultra SCSI controller for up to 20 disks installed in the system unit and #5505 or #5057 Storage Expansion Unit. On the Model S30, disks 1 to 12 can be located in the system unit and 13 to 20 in the #5055 Storage Expansion Unit. On the Model S40, disks 1 to 4 can be located in the system unit and 5 to 20 in the #5057 Storage Expansion Unit. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of four arrays are allowed. The #9751 is not capable of integrated hardware disk compression. The #9751 has CCIN 6751. Card slots required: Two Maximum: One
#9754	**#9754 MFIOP with RAID–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #9754 is an Ultra SCSI controller for up to 20 disks installed in the system unit and the #5505 or #5057 Storage Expansion Unit. On the Model S30, disks 1 to 12 can be located in the system unit and 13 to 20 in the #5055 Storage Expansion Unit. On the Model S40, disks 1 to 4 can be located in the system unit and 5 to 20 in the #5057 Storage Expansion Unit. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of four arrays are allowed. Card slots required: Two Maximum: One #9754 is standard on systems ordered with V4R2 Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R3 Minimum OS/400 to support integrated hardware disk compression for #6714/#8714 17.54 GB Disk Unit: V4R4 The #9754 has CCIN 6754.

11.16 AS/400e Model SB1 features

Note: The darker shaded cells in the tables indicate the base features.

SB1 Processors	
#2310	**8-way Processor. Base Memory 4096 MB.** 125,888 normalized FI Dialog Steps per hour at 65% CPU. Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features.
#2311	**12-way processor. Base Memory 4096 MB.** 185,533 normalized FI Dialog Steps per hour at 65% CPU. Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features.
#2312	**8-way Processor. Base Memory 8192 MB.** See http://www-4.ibm.com/software/ for the latest information. Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features.
#2313	**12-way Processor. Base Memory 8192 MB.** At time of print, FI Dialog steps were still being finalized. See http://www-4.ibm.com/software/ for the latest information. Prerequisite: #04xx ISV Software feature. See 19.19, “Software preload feature codes” on page 623, for a list of valid features.
POWER AND PACKAGING	
#2688	**#2688 Optical Link Processor (1063 Mbps)** The #2688 is a card that is used for attaching #5072, #5073, #5082, or #5083 Storage Expansion Towers. Each #2688 supports a maximum of two #50xx Towers. Card slots used: None Maximum: Two on SB1 Prerequisite: #2695 Optical Bus Adapter or IOA slot on the Base Optical Bus Adapter.
#2695	**#2695 Optical Bus Adapter** Allows for the addition of up to three #2688 Optical Link Processors. Card slots used: One Maximum: One
#5065	**#5065 Storage/PCI Expansion Tower** The #5065 provides an additional bus. It includes a 1063 Mbps optical bus card. The #5065 has redundant, hot swappable power supplies. It supports three LAN/WAN/Workstation controllers, 12 PCI IOA cards, two removable media, and up to 45 disk units. Three specific disk slots may be used for #4331 1.6 GB Read Cache Device. The #5065 is the only storage expansion unit to support Ultra2 SCSI. Prerequisite: #2688 Optical Link Processor. Minimum OS/400 level: V4R4 The #5065 is a Customer Install Feature (CIF).
#5073	**#5073 1063 Mbps System Unit Expansion Tower** The #5073 provides an I/O tower for creating additional buses on the Model SB1. It includes a 1063 Mbps optical bus card, 13 SPD I/O card slots, space for up to four internal tape units or CD-ROMs (a maximum of three), and battery and power supplies. It can support one #5058 Storage Expansion Unit. Due to power restrictions, some combinations of high powered cards may mean that an additional #5073 is required. Prerequisite: #2688 Optical Link Processor and #2695 Optical Bus Adapter or #2688 and an IOA slot on the System Unit Base Optical Bus Adapter.
#5101	**30 Disk Expansion Feature** This provides two 15 unit disk enclosures, a 700-watt power supply, backplanes and internal cables. Maximum: One per #5065 Storage/PCI Expansion Tower
#5150	**Battery Backup (External)** An external battery backup that when used in conjunction with an internal battery backup is capable of extending the Continuously Power Main Storage (CPM) time to at least 48 hours. On SB1 models, a standard internal battery backup is capable of maintaining CPM on 16 GB of main storage for at least 24 hours.
#9251	**#9251 Base I/O Tower** The #9251 is the Base Tower on a Model SB1. Includes four feature SPD IOP slots, space for three removable media devices, one CD-ROM drive, one MFIOP, and battery and power supplies. Model SB1 only.

MAIN STORAGE	
#9179	**Base 256 MB Main Storage** Model SB1 comes standard with four 1024 MB main storage card on processors #2310 and #2311 and eight 1024 MB main storage cards on processors #2312 and #2313. There are no additional main storage features on Model SB1. Minimum OS/400 level: V4R2
#9190	**Base 256 MB Main Storage** Model SB1 comes standard with four 1024 MB main storage cards on processors #2310 and #2311 and with 1024 MB main storage cards on processors #2312 and #2313. There is no additional feature main storage available on Model SB1.
WORKSTATION CONTROLLERS	
Base IOP	**Base Controller for Storage/#5065 Storage/PCI Expansion Tower** The base IOP comes as standard (no feature required) with #5065 Storage/PCI Expansion Tower. It is installed in slot C03 and is identified as CCIN 2824. It is used for attaching LAN, WAN, and workstation IOAs through two high-speed slots and two low-speed slots. The #2718, #2729 or #2748 are supported in C04 only. The #2723/#9723, #2724/#9724, #2645, #2746, #2750, #2751, #2761 or #4800 are supported in C04 or C05. The #281X or #2838/#9738 are supported on C05 only. The #2723/#9723, #2724/#9724, #2745, #2746 #2750, #2751 or #2761 are supported in C01 or C02. Restrictions apply. Maximum: One
#2629	**#2629 LAN/WAN/Workstation IOP** The #2699 supports up to three #2699, #6149, #6180, #6181, #9249, #9280, and #9381 LAN/WAN/workstation IOAs. The #6149, #6181, #9249, and #9381 cannot occupy all three positions of the #2629. No more than seven #2629s can be placed in one #5072 1063 Mbps System Unit Expansion Tower. The #2629 cannot be placed in slot 14 of a #5072. There is no restriction on placing #2629 in #5073 1063 Mbps System Unit Expansion Tower. Card slots required: One
#2746	**#2746 PCI Twinaxial Workstation IOA** One eight-port attachment is provided to support 40 active twinaxial devices. PCI slots required: One Prerequisite: #5065 Storage/PCI Expansion Tower. Maximum: For workstation controller maximums in any combination, see 9.1, “AS/400e 720 model overview” on page 224. Minimum OS/400 level: V4R4
#2824	**#2824 PCI Feature Controller** The #2824 can be used for attaching additional LAN, WAN, and Workstation IOAs to the system. There is a maximum of two in the #5065 Storage/PCI Expansion Tower. In #5065 Storage/PCI Expansion Tower slots C08 or C13, it supports two high-speed and two low-speed slots: The #2718, #2729 or #2748 are supported in C09 and C14 only. The #2838/#9738 and #281x are supported in C05, C10 and C15 only. The #2838/#9738, #2724/#9724, #2745, #2746, #2750, #2751, #2761 or #4800 are supported in C09, C10, C14, or C15. The #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751 or #2761 are supported in C06, C07, C11, or C12. Additional restrictions apply. Minimum OS/400 level: V4R4
#5540	**#5540 System Console on Twinaxial Workstation IOA Specify** The System Console attaches to #6180 or #9280 Twinaxial Workstation IOA or other migrated twinaxial workstation controller.
#5541	**System Console Attached to ASCII Workstation Controller Specify** The System Console attaches to #9141 or #6141 ASCII Workstation Controller.
#5543	**Client Access/400 System Console Specify** The System Console is a PC attached to the #9751 MFIOP. Prerequisite: #0344 Cable for attaching Client Access Console and #9699 Base Two-Line WAN IOA in slot B in the #9751 or #9754 MFIOP with RAID.
#5544 #0328	**#5544 System Console on Operations Console** The System Console is a PC. The #5544 is the default for V4R3 SB1 Models. Prerequisite: #0328 Cable to be attached to Port 0 of the #9699 Base Two-Line WAN IOA in slot B of the #9751 or #9754 MFIOP with RAID. #0328: Operations Console Cable: This is a 6-meter used to attach a PC to a #9699 for use as a remote PC Console. Mutually exclusive with #3044. Minimum OS/400 level: V4R3
#6141 #9141	**#6141 ASCII Workstation Controller** The #6141 supports up to six ASCII devices. The #9141 can be specified as new orders on the Base Workstation Controller. Card slots required: One
#6142	**#6142 ASCII 12-Port Workstation Attachment** The #6142 plugs into the #9141 or #6141 ASCII Workstation Controller providing an additional 12 ports. Eighteen ASCII devices can now be supported. Only one #6142 can be attached per #6141 or #9141. Card slots required: None

#6180 #9280	**Twinaxial Workstation IOA** One eight-port attachment is provided to support up to seven twinaxial devices with V4R1 or 28 with V4R2. The #9280 is specified on new order when a twinaxial workstation is required and there is no ASCII workstation controller. One #6280/#9280 is placed in slot C of the #9751 or #9754 MFIOP when the System Console is ASCII. All other #6180s must be placed in a #2629 LAN/WAN/Workstation IOP. IOA slots required: One #2629, #9751, or #9754 slot.
#9751	**MFIOP with RAID (Ultra SCSI)** The #9751 is standard on the Model SB1. Contains function for controlling 20 disk units, one tape unit and one CD-ROM unit. Has three IOA slots for controlling LANs, twinaxial workstations, and communications. IOA slot A is reserved for attaching one #2699 Two-Line WAN IOA or one #6149 or #6181 LAN IOA. IOA slot B is reserved for attaching the #9699 Base Two-Line WAN IOA. IOA slot C is reserved for attaching one ##2699 Two-Line WAN IOA or one #6180 or #9280 Twinaxial IOA. Occupies two card slots. The #9751 is not capable of integrated hardware disk compression. The #9751 has CCIN 6751. See Chapter 17, “Customer Card Identification Numbers” on page 539.
#9754	**#9754 MFIOP with RAID (Ultra SCSI)** The #9754 contains function for controlling 20 disk units, one tape unit and one CD-ROM unit. Has three IOA slots for controlling LANs, twinaxial workstations, and communications. IOA slot A is reserved for attaching one #2699 Two-Line WAN IOA or one #6149 or #6181 LAN IOA. IOA slot B is reserved for attaching the #9699 Base Two-Line WAN IOA. IOA slot C is reserved for attaching one #2699 Two-Line WAN IOA or one #6180 or #9280 Twinaxial IOA. Occupies two card slots. The #9754 is standard on the Model SB1 and on systems ordered with V4R2. has CCIN 6754. Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R3 Minimum OS/400 to support integrated hardware disk compression on #6714/#8714 17.54 GB Disk Units: V4R4
COMMUNICATIONS	
Comm. Restric-tions	See “Comm. Restrictions” on page 34 for communications rules and restrictions.
#2605	**#2605 ISDN Basic Rate Interface Adapter** The #2605 connects to #2623 to support one communications line connecting to an ISDN network. The ISDN Basic Rate Interface supported by #2605 contains two high-speed ISDN user channels. One or two #2605s may be attached to one #2623 with no other IOAs allowed on the #2523. Card slots required: None Prerequisite: #2623 Six-Line Communications Controller
#2620	**#2620 Full Cryptographic Processor** The #2620 provides full cryptographic support for encrypting and decrypting data. Distribution of the #2620 is restricted by U.S. Government Export Regulations. In countries outside the U.S.A. and Canada, it can only be marketed to financial institutions and subsidiaries of U.S. companies. If a #2620 cannot be sold, a #2628 should be sold in its place. Card slots required: One Maximum: One
#2623	**#2623 Six-Line Communications Controller** The #2623 provides for attachment of a wide range of iSeries or AS/400e communications adapters. The follower adapters are supported by the #2623: #2605, #2609, #2620, #2612, #2613, #2614, #2655, #2656, #2657, #2658, #2659, #6153, and #6173. Of these only the #2605 is supported on the Model SB1. The #2623 supports two #2605 ISDN adapters or up to three EIA 232/V.24, X.21, and V.35 adapters. The #2623 is only orderable on SB1 Models for customers purchasing the #2605 ISDN adapter. Card slots required: One
#2628	**#2628 Limited Cryptographic Processor** The #2628 provides the same function as #2620 except that it does not include data encryption/decryption using commercial Data Masking Facility for data scrambling. Can be marketed to any non-U.S. company. Card slots required: One Maximum: One
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three IOAs. Those supported are the #2699, #6149, #6180, #6181, #9280, and #9381. #6149, #6181, #9149 and #9381 LAN IOAs cannot occupy all three positions of the #2629. No more than seven #2629s can be placed in one #5072 1063 Mbps System Unit Expansion Tower. The #2629 cannot be placed in slot 14 of a #5072. There is no restriction on placing the #2629 in #5073 1063 Mbps System Unit Expansion Tower. Card slots required: One
#2664	**#2664 Integrated Fax Adapter (SPD)** The #2664 provides two ports capable of transmission and receipt of facsimile data to or from a Group 3 capable Fax machine, another iSeries or AS/400e with #2663, or PCs with approximately programmed Fax adapter. The #2664 consists of a card, a wrap cable, two country unique attachment couplers and telephone cables, and Licensed Internal Code. Card slots required: One Maximum: Two on Model SB1 Restriction: Not supported with V5R1 and later

#2699 #9699	**#2699 Two-Line WAN IOA** The #2699 supports up to two multiple protocol communications ports when any one or two if these cables are attached: #0328 Operations Console Cable 20-ft. (6m) (for #9699 and requires V4R3)* #0329 V.24/EIA 232 80-ft. (24m) cable #0330 V.24/EIA 232 20-ft. (6m) cable #0331 V.24/EIA 232 50-ft. (15m) cable #0332 V.24/EIA 232 20-ft. (6m) enhanced cable #0333 V.24/EIA 232 50-ft. (15m) enhanced cable #0334 V.24/EIA 232 80-ft. (24m) enhanced cable #0335 V.24/EIA 449 20-ft. (6m) cable #0336 V.36/EIA 449 50-ft. (15m) cable #0337 V.36/EIA 449 150-ft. (45m) cable #0338 V.35 20-ft. (6m) cable #0339 V.35 50-ft. (15m) cable #0340 V.35 80-ft. (24m) cable #0341 X.21 20-ft. (6m) cable #0342 X.21 50-ft. (15m) cable #0344 Comms Console Cable 20-ft. (6m) *For #2699: Used to support the Operations Console function on CPU models supporting Logical Partitioning (LPAR) for secondary partitions when logical partitioning is implemented (V4R4 and later): #0328 Operations Console 20-ft. (6m) Cable. For #9699 and to support the Remote Control Panel function (supported for the primary partition only), the Remote Control Panel Cable #0380 can be ordered as an option. The #0380 cable does not attach to a communication port. The #9699 is the base communications adapter card and is placed in slot B of the #9751 or #9754 MFIOP. There are some restrictions on communications using #2699. For full details, see “Comm. Restrictions” on page 34. Prerequisite for #2699: #2629 LAN/WAN/Workstation IOP or a spare IOA slot in #9751 or #9754 MFIOP with RAID. IOA slots required for #2699: One on #2629, #9751, or #9754
#2745	**#2745 PCI Two-Line WAN IOA** Supports up to two multiple protocol communications ports when one or two of these cables are attached: #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0350 V.24/EIA232 20-ft. (6m) enhanced PCI cable #0351 V.24/EIA232 50-ft. (15m) enhanced PCI cable #0352 V.24/EIA232 80-ft. (24m) enhanced PCI cable #0353 V.35 20-ft. (6m) PCI cable #0354 V.35 50-ft. (15m) PCI cable #0355 V.35 80-ft. (24m) PCI cable #0356 V.36 20-ft. (6m) PCI cable #0357 V.36 50-ft. (15m) PCI cable #0358 V.36 150-ft. (45m) PCI cable #0359 X.21 20-ft. (6m) PCI cable #0360 X.21 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. (24m) PCI cable #0367 Operations Console PCI Cable 20-ft. (6m)* *Used to support the Operations Console function on CPU models supporting logical partitioning (LPAR) (V4R4 and later). A maximum of one #0367 cable is allowed per #2745. See “Comm. Restrictions” on page 34. Prerequisite: #5065 Storage/PCI Expansion Tower. PCI card slots required: One
#2750	**#2750 PCI ISDN BRI U Adapter** The #2750 is a 4 port (8 channel) ISDN BRI (basic rate, 2 wire interface) full size card. Each port consists of 2B+D configuration A wrap cable/plug and four 30-ft. (9.3 m) RJ-45 to RJ-45 cables are shipped with each card. Each #2750 counts as eight communication lines against the system maximums. It supports SLIP/PPP, IDLC, and Fax protocols. Supports full duplex. The feature is country-specific. Prerequisites: #5065 Storage/PCI Expansion Tower and #2824 PCI Feature Controller. Minimum OS/400 level: V4R4 with PTF MF22528 (or supersede) or Cumulative Package C9313440.
#2751	**#2751 PCI ISDN BRI S/T IOA** The #2751 is a 4 port (8 channel) ISDN BRI (basic rate, 4 wire interface) full size card. Each port consists of 2B+D configuration A wrap cable/plug and four 30-ft. RJ-45 to RJ-45 cables are shipped with each card. Each #2751 counts as eight communication lines against the system maximums. It supports SLIP/PPP, IDLC, and Fax protocols. Supports full duplex. The feature is country-specific. Prerequisites: #5065 Storage/PCI Expansion Tower and #2824 PCI Feature Controller Minimum OS/400 level: V4R4 with PTF MF22528 (or supersede) or Cumulative Package C9313440.

#2761	**#2761 Integrated Analog Modem** The #2761 supports multiple analog modem ports (eight phone lines). The feature includes a wrap cable/plug and eight 30-ft. (8 m) phone cables. Each #2761 counts as eight communication lines against the system maximums. It supports SLIP/PPP, SDLC and Fax protocols. Supports full duplex. ECS line not supported. To the iSeries or AS/400e server, the #2761 looks like a single IOA with eight individual line resources available. The feature is country-specific. Prerequisites: #5065 Storage/PCI Expansion Tower and #2824 PCI Feature Controller Minimum OS/400 level: V4R4 with PTF MF22528 (or supersede) or Cumulative Package C9313440.
#2824	**#2824 PCI Feature Controller** The #2824 can be used for attaching LAN, WAN, and Workstation IOAs to the system. For full details, see the Workstation Controllers section. There is a maximum of two in the #5065 Storage/PCI Expansion Tower. In #5065 Storage/PCI Expansion Tower slots C08 or C13, it supports two high-speed and two low-speed slots: The #2718, #2729 or #2748 are supported in C09 and C14 only. The #2838/#9738 and #281x are supported in C05, C10 and C15 only. The #2738/#9738, #2724/#9724, #2745, #2746, #2750, #2751, #2761 or #4800 are supported in C09, C10, C14 or C15. The #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751 or #2761 are supported in C06, C07, C11 or C12. Prerequisite: #5065 Storage/PCI Expansion Tower. Additional restrictions apply. Minimum OS/400 level: V4R4
#4800	**#4800 PCI Cryptographic Processor** The #4800 is a hardware cryptography solution based on the IBM 4758 card. It is a half length PCI card. Because the feature is temperature sensitive, it is shipped separately in specially designed, insulated packaging. Maximum: Three per system Prerequisite: #2824 PCI Feature Controller Minimum OS/400 level: V4R4
#4802	**#4802 PCI Cryptographic Processor** The #4802 is a hardware cryptography solution based on the IBM 4758 (LEEDS-1) card. The #4802 is a half-length PC form-factor PCI card that offers rich cryptography function, secure storage of cryptographic keys, and 12 MB/s performance (at the card level) for bulk data encryption. The #4802 provides greater security by use of 168-bit key (versus 56-bit key on #4800). The #4802 is available worldwide. The level of cryptographic function is determined by the Cryptographic Access Provider licensed program which is downloaded to the adapter. Prerequisite: An available high-speed slot under a #2824 PCI Feature Controller in a #5065/#5066 PCI Expansion Tower. Maximum: Three per system. Minimum OS/400 level: V4R5
	LANS/ATM
#2618 #8664	**#2618 Fiber Distributed Data Interface Adapter (SPD)** The #2618 provides one interface to connect an iSeries or AS/400e to an FDDI LAN that complies with ANSI X3T9.5 and ISO 9314 standards. Consists of a card, a wrap connector, and Licensed Internal Code, which supplies IEEE 802.2 Logical Link Control (LLC), ANSI X3T9.5/ISO 9314 Media Access Control (MAC) functions, and ANSI X3T9.5 Station Management (SMT) functions. A multi-node (62.5/125 micron) FDDI optical fiber jumper cable to connect the adapter to the FDDI ring must be ordered separately. The #8664 specifies the base LAN. Card slots required: One
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three IOAs. Those supported are the #2699, #6149, #6180, #6181, #9249, #9280, and #9381. The #6149, #6181, #9249, and #9381 LAN IOAs cannot occupy all three positions of the #2629. No more than seven #2629s can be placed in one #5072 1063 Mbps System Unit Expansion Tower. The #2629 cannot be placed in slot 14 of a #4072. There is no restriction on placing #2629 in #5073 1063 Mbps System Unit Expansion Tower Card slots required: One
#2663	**#2663 I/O Attachment Processor (SPD)** The #2663 I/O processor is required when attaching the #2668 Wireless LAN Adapter. The #2663 and #2668 are integrated in a single hardware package to operate as a unit. Card slots required: One (with #2668)

#2668	**#2668 Wireless LAN Adapter (SPD)** The #2668 provides wireless connectivity to workstations or other systems connected to a wireless LAN network. One of these antenna cables must be specified: #9814 20-ft. (6m) Antenna Cable #9815 50-ft. (15m) Antenna Cable One of these antenna must be specified: #9889 YAGI Directional Antenna #9890 Omni Directional Antenna (360 degree) #9891 Hemispherical Antenna (180 degree) #9892 Directional Antenna (90 degree) Card slots required: One (with #2663) Prerequisite: #2663 I/O Attachment Processor Maximum: Two on SB1
#2723 #9723	**#2723 PCI Ethernet IOA** The #2723 provides a single attachment to one Carrier Sense Multiple Access/Collision Detect Local Area Network. Consists of an adapter card and internal code, which supplies Ethernet Version 2 and IEEE 802.3 Media Access Control (MAC) plus IEEE 802.2 Logical Link Control (LLC) functions. This Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. Has an RJ45 connector and a 15 pin D-shell connector for attachment of customer supplied cabling. AUI Ethernet or RJ45 twisted pair cable must be ordered separately. Cabling must meet or exceed Industry Standard EIA/TIA T568B. The #9723 is a base LAN feature. SPD card slots required: Three (with #6617 or #6618). PCI slots required: One. Prerequisite: #6617 Integrated PC Server, #6618 Integrated Netfinity Server or #5065 Storage/PCI Expansion Tower.
#2724 #9724	**#2724 PCI 16/4 Mbps Token Ring IOA** The #2724 provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an adapter card, internal code, which supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC) functions, and an external 8-ft. (2.4m) cable. Alternatively, a twisted pair cable for attachment to the RJ45 connector on the IOA can be ordered separately. This IOA is capable of operating in half or full duplex mode. SPD card slots required: Three (with #6617 or #6618). PCI slots required: One. The #9724 is a base LAN feature. Prerequisite: #6617 Integrated PC Server, #6618 Integrated Netfinity Server or #5065 Storage/PCI Expansion Tower.
#2810	**#2810 LAN/WAN IOP** The #2810 is required to attach one #2838 PCI 100/10 Mbps Ethernet IOA or #2811/#2812/#2815/#2816/#2818/#2819 PCI ATM IOA. Card slots required: One (with any of the preceding features)
#2811	**#2811 PCI 25 Mbps UTP ATM IOA** The #2811 provides attachment into an Asynchronous Transfer Mode (ATM) network using Unshielded Twisted Pair (UTP) cabling, the #2811 is typically used where 25 Mbps speed is required over distances of less than 100 meters. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2
#2812	**#2812 PCI 45 Mbps Coax T3/DS3 ATM IOA** The #2812 provides attachment in an Asynchronous Transfer Mode (ATM) network using coax cabling and the T3/DS-3 interface. The #2812 is typically used where 45 Mbps speed is required over distances of less than 1000 meters. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2
#2815	**#2815 PCI 155 Mbps UTP OC3 ATM IOA** The #2815 provides attachment into an Asynchronous Transfer Mode (ATM) network using the Unshielded Twisted Partible-5 interface. This interface is intended for connection to both local area switches and direct connection to server provider equipment. The #2815 is typically used where 155 Mbps speed is required over distances of less than 100 meters. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2
#2816	**#2816 PCI 155 Mbps MMF ATM IOA** The #2816 provides attachment into Asynchronous Transfer Mode (ATM) network using the Multi-Mode Fiber (MMF) 62.5 micron interface. This interface is intended for connection to both local area switches and direct connection to service provider equipment. The #2816 is typically used where 155 Mbps speed is required over distances of less than 2 kilometers. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP. Minimum OS/400 level: V4R2

#2818	**#2818 PCI 155 Mbps SMF OC3 ATM IOA** The #2818 provides attachment into an Asynchronous Transfer Mode (ATM) network using the Single Mode Fiber (SMF) 9 micron interface. This interface is intended primarily for direct connection to service provider equipment, but can be used for local area switches. The #2818 is typically used where 155 Mbps speed is required over distances of from 16 to 40 kilometers. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP. Minimum OS/400 level: V4R2
#2819	**#2819 PCI 34 Mbps Coax E3 ATM IOA** The #2819 provides attachment into an Asynchronous Transfer Mode (ATM) network using coax cabling and the E3 interface. The #2819 is typically used where 34 Mbps speed is required over distances of less than 1000 meters. Card slots required: One (with #2810). Prerequisite: #2810 LAN/WAN IOP. Minimum OS/400 level: V4R2
#2824	**#2824 PCI Feature Controller** The #2824 can be used for attaching additional LAN, WAN, and Workstation IOAs to the system. There is a maximum of two in the #5065 Storage/PCI Expansion Tower. In #5065 Storage/PCI Expansion Tower slots C08 or C13, it supports two high-speed and two low-speed slots: The #2718, #2729 or #2748 are supported in C09 and C14 only. The #2838/#9738 and #281x are supported in C05, C10 and C15 only. The #2738/#9738, #2724/#9724, #2745, #2746, #2750, #2751, #2761, or #4800 are supported in C09, C10, C14, or C15. The #2723/#9723, #2724/#9724, #2745, #2746, #2750, #2751, or #2761 are supported in C06, C07, C11, or C12. Additional restrictions apply. Minimum OS/400 level: V4R4
#2838 #9738	**#2838 PCI 100/10 Mbps Ethernet IOA** Provides attachment to a standard 100 Mbps high-speed Ethernet LAN and allows attachment to existing 10 Mbps Ethernet LAN. This Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex. The adapter comes with an RJ45 connector for attachment to UTP-5 media. Cabling for 10 Mbps must be CAT-3 or CAT-5, cabling for 100 Mbps must be CAT-5 that meets or exceeds Industry Standard EIA/TIA T568A or T568B. SPD card slots required: One (with #2810) or three (with #6617 or #6618). PCI slots required: One Prerequisite: #2810 LAN/WAN IOP or #6617 Integrated PC Server, #6618 Integrated Netfinity Server, or #5065 Storage/PCI Expansion Tower.
#6149 #9249	**16/4 Mbps Token Ring IOA** Provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an IOA card, internal code, which supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC), and an external 8-ft. (2.4m) token ring cable. Alternatively a twisted pair cable for attachment to the RJ45 connector on the IOA can be ordered separately. The #6149 can operate in full or half-duplex mode. #9249 specifies the base LAN. Prerequisite: #2629 LAN/WAN/Workstation IOP, #6616 Integrated PC Server, #9751, or #9754 MFIOP with RAID
#6181 #9381	**#6181 ASCII Workstation Controller** The #6181 provides a single attachment to one Carrier Sense Multiple Access/Collision Detect Local Area Network. Consists of an adapter card and internal code, which supplies Ethernet Version 2 and IEEE 802.3 Media Access Control (MAC) plus 802.2 Logical Link Control (LLC) functions. Has a FJ45 connector and a 15 pin D-shell connector for attachment of customer supplied cabling. AUI Ethernet or RJ45 twisted pair cable must be ordered scepter-port integrated PC separately. This Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. The #9025 Ethernet Cable (3M AUI) can be ordered if the customer chooses IBM AUI cabling. Cabling must meet or exceed Industry Standard EIA/TIA T568B. The #9381 specifies the base LAN. Card slots required: None Prerequisite: #2629 LAN/WAN/Workstation IOP, #6616 Integrated PC Server, #9751, or #9754 MFIOP with RAID
#6616	**#6616 Integrated PC Server** The #6616 contains a 166MHz Pentium Processor, two main storage slots, and two LAN IOA slots for higher performance serving to LAN attached PCs. The two main storage slots can each contain one of these features, giving a maximum of 256 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory Either one or two of these IOAs are supported: #9249/#6149 16/4 Mbps Token Ring IOA #9381/#6181 ASCII Workstation Controller #9249 and #9381 specify base LAN adapters. Card slots required: Two contiguous slots Maximum: Two on SB1.

#6617	**#6617 Integrated PC Server (SPD)** The #6617 contains a 200 MHz Pentium Processor, four main storage slots, and three LAN IOA slots for high performance serving to LAN-attached PCs. The four main storage slots can each contain one of these features, giving a maximum of 512 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory Up to three of these LAN IOAs are supported. At least one LAN IOA is required. A maximum of two of the LAN IOAs can be the #2838/#9738. #9723/#2723 PCI Ethernet IOA #9723/#2723 PCI Ethernet IOA #2738/#9738 PCI 100/10 Mbps Ethernet IOA (Specify feature #0222 is required) The #9723, #9724, and #9738 are the base LAN. The third LAN and the second #2838. The #9738 can be used if running Windows NT on the #6617. The #0222 100/10 Mbps Ethernet on IPCS is required for each #2838/#9738 attached to the #6617 Integrated PC Server. If running Windows NT on the #6617, then: #0325 Integrated PC Server Extension Cable for Windows NT is required. #1700 Integrated PC Server keyboard/Mouse for Windows NT is recommended (in those countries offering it). A display is required on the IPCS to support Windows NT. A minimum of 64MB is required if running Windows NT. For country-specific keyboard/mouse and display support, see the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ When running OS/2 on the #6617, then the #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used, and only one can contain a #2838/#9738. When running Novell Netware on the #6617, then the #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used, and only one can contain a #2838/#9738. A maximum of 256 MB IOP memory is supported. Card slots required: Three contiguous slots. Cannot be placed in #5044 System Unit Expansion Rack. Minimum OS/400 level: V4R2
#6618	**#6618 Integrated Netfinity Server (SPD)** Minimum OS/400 level: V4R2 and Cumulative Package C8342420 or V4R3 and Cumulative Package C8349430. Contains a 333 MHz Pentium Processor, four main storage slots, and three LAN IOA slots for high performance serving to LAN-attached PCs. The four main storage slots can each contain one of these features, giving a maximum of 1024 MB. At least one main storage feature is required: #2861 32 MB Integrated PC Server Memory #2862 128 MB Integrated PC Server Memory #2867 256 MB Integrated PC Server Memory Up to three of these LAN IOAs are supported. At least one LAN IOA is required. A maximum of two of the LAN IOAs can be #2838. #2723 PCI Ethernet IOA #2724 PCI 16/4 Mbps Token Ring IOA #2838 PCI 100/10 Mbps Ethernet IOA (specify #0222 is required) The third LAN and the second #2838 can only be used if running Windows NT on the #6618. The #0222 100/10 Mbps Ethernet on IPCS is required for each #2838 attached to the #6618 Integrated Netfinity Server. If running Windows NT on the #6618, then: A minimum of 64 MB IOP memory is required. The #0325 Integrated PC Server Extension Cable for Windows NT is required. The #1700 Integrated PC Server Keyboard or Mouse for Windows NT, the default in the U.S.A. A display is required to support Windows NT on the IPCS. For country-specific keyboard/mouse and display support, see the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ When running OS/2 on the #6618, then: The #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used. A maximum of 512 MB IOP memory is supported.

#6618 (cont.)	When running Novell Netware on the #6618, then: #0325 and #1700 are not allowed. Only two of the LAN IOA slots can be used. A maximum of 256 MB IOP memory is supported. SPD slots required: Three contiguous slots. Cannot be placed in #5044 System Unit Expansion Rack.
	DISK UNITS
#4318	**#4318 17.54 GB Disk Unit 10k RPM (Ultra2 SCSI)** The #4318 provides an additional 3 ½-inch single disk unit with 17.54 GB capacity. Prerequisite: A #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller. Minimum OS/400 level: V4R4 The #4318 is a Customer Install Feature (CIF). Supported in the #5065/#5066 PCI Expansion Tower only
#4324	**17.54 GB Additional Two-byte Disk Unit (Ultra SCSI)** Supported in the #5065/#5066 PCI Expansion Tower only Provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage (7200 RPM). Prerequisite: A #5065/#5066 PCI Expansion Tower with #2748 PCI RAID Disk Unit Controller. Minimum OS/400 level: V4R4 The #4324 is a Customer Install Feature (CIF).
#6606 #9606	**1.96 GB Additional Two-byte Disk Unit** Provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. The #6606 is supported for upgrades only. The #9606 specifies a 1.96 GB base disk unit. Model S39 or S40 only.
#6713 #8713	**#6713 8.58 GB Disk Unit (Two-byte) (Ultra SCSI)** The #6713 provides a 3 ½-inch single disk unit with 8.57 GB capacity for additional disk storage. For best performance, use attached to the #9751 or #9754 MFIOP, #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in the system unit; #5055, #5057, #5058 Storage Expansion Unit; or #5083 Storage Expansion Tower. The #8713 specifies an optional 8.57GB base disk. The #6713 and #8713 Model SB1. Four are required if ordered on Model SB1, and they must be mirrored. RPQ 843977 and RPQ 843978 can be used for upgrades to Sxx system units and #5052, #5055, #5057, #5058, #5072, #5073, #5082, and #5083 Storage Expansion Units and Towers.
#6717 #8617	**#6717 8.58 GB 10k RPM Disk Unit (Two-byte) (Ultra SCSI)** The #6717 provides a 3 ½-inch single disk unit with 8.58 GB capacity for additional disk storage. Supported in the #5052, #5055, #5057 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Towers and in the #9251. For best performance when installed in Storage Expansion or Storage Expansion Tower, use the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5083. Not supported on #6502/#6512/#6530. The #8617 specifies an optional 8.58 GB base disk. Supported in the #5065/#5066 PCI Expansion Tower through RPQ 847102. Minimum OS/400 level: V4R3
#6718 #8618	**#6718 17.54 GB 10k RPM Disk Unit (Two-byte) (Ultra SCSI)** The #6718 provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage. Supported in the #5052, #5055, #5057 or #5058 Storage Expansion Unit or #5082 or #5083 Storage Expansion Tower and in #9251. For best performance when installed in Storage Expansion or Storage Expansion Tower, use the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in a #5058 or #5083. Not supported on the #6502/#6512/#6530. The #8618 specifies an optional 17.54 GB base disk. Supported in the #5065/#5066 PCI Expansion Tower through RPQ 847102. Minimum OS/400 level: V4R4
RPQ 843977	**RPQ 843977** is for customers who want to move 4/8/17 GB disk units from one AS/400 to another AS/400. The RPQ provides hardware for mounting one disk unit. The hardware in this RPQ allows for mounting #6607/#6907 (4.194 GB unit), #6713 (8.58 GB unit), and #6714 (17.54 GB unit) in the #5052/#5055/#5057/#5058/#5070/#5071/#5072/#5073/ #5080/#5081/#5082/#5083 disk expansion units and towers. These target enclosures use SPD technology. After the disk drives are installed, an RPO change must be processed to add a #6607/#6907 for each #6607/#6907 added, a #6713 for each #6713 added, and a #6714 for each #6714 added.
RPQ 843978	**RPQ 843978** is for customers who want to move 4/8/17GB disk units from one AS/400 to another AS/400. The RPQ provides hardware for mounting one disk unit. The hardware in this RPQ allows for mounting device types #6607/#6907 (4.194 GB unit), #6713 (8.58 GB unit), and #6417 (17.54 GB unit) in the system unit of a Model 170/600/S10/620/ S20/720 and the #7101/#7102/#5064/#9364 expansion units and towers. After the disk drives are installed, an RPO change must be processed to add a #6807 for each #6607/#6907 added, add a #6813 for each device #6713 added, and add a #6824 for each #6417 added.
RPQ 847102	**RPQ 847102** ships the disk mounting hardware and instructions required to convert a #6717/#6817 to a #4317 and a #6718/#6818 to a #4318. Order one RPQ for each disk unit to be converted. Confirm that there is disk space available in an existing or on-order #5065/#5066 PCI Expansion Tower. This RPQ can also be used to move a disk to an iSeries 270, 820, 830, 840, or #5075, #5074/#9074, and #5079/#9079 PCI Expansion Towers.

INTERNAL TAPE AND CD-ROM UNITS	
#4482	**#4482 4 GB ¼-inch Cartridge Tape Unit** The #4482 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4482 is a Customer Install Feature (CIF). Supported only in #5065 Storage/PCI Expansion Tower.
#4483	**#4483 16 GB ¼-inch Cartridge Tape Unit** The #4483 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4483 is a Customer Install Feature (CIF). Supported only in #5065 Storage/PCI Expansion Tower.
#4486	**#4486 25 GB ¼-inch Cartridge Tape Unit** The #4486 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4486 is a Customer Install Feature (CIF). Supported only in #5065 Storage/PCI Expansion Tower.
#4487	**#4487 50 GB ¼-inch Cartridge Tape Unit** The #4487 can be used for save/restore, alternate IPL, migration and ¼-inch cartridge tape exchange using the appropriate media and density. The #4487 tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5065. Prerequisite: #2748/#2778 PCI RAID Disk Unit Controller. Minimum OS/400 level: V5R1 The #4487 is a Customer Install Feature (CIF).
#4684	**#4684 30 GB ¼-inch Cartridge Tape Unit** The #4684 s a 30 GB ¼-inch cartridge tape unit that can be mounted in a removable media device slot of a system unit or an expansion tower. The #4684 maybe used for save/restore, alternate IPL, program distribution, migration and ¼-inch cartridge tape exchange. See 16.8, “QIC format compatibility for iSeries and AS/400e systems” on page 531, for supported media types. Supported only in the #5065. The #4684 is a Customer Install Feature (CIF).
#6325	**Optional CD-ROM Feature** The #6325 limits the use of tape in the same tower to a #6380 and #6390. Prerequisite: #2624 Storage Device Controller Minimum OS/400 level: V4R3
#6381	**#6381 2.5 GB ¼-inch Cartridge Tape** The #6381 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. Attaches to #6513, #9751, or #9754 MFIOP.
#6382	**#6382 4 GB ¼-inch Cartridge Tape Unit** The #6382 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Attaches to the #6513, #9751, or #9754 MFIOP.
#6383	**#6383 16 GB ¼-Inch Cartridge Tape Unit** The #6383 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5072, #5073, or the #9251 Towers. One can be controlled by the MFIOP. An additional #6383 must be controlled by the #6513.
#6384	**#6384 30 GB ¼-inch Cartridge Tape Unit** The #6384 is a 30 GB ¼-inch cartridge tape unit that can be mounted in a removable media device slot of a system unit or an expansion tower. The #6384 maybe used for save/restore, alternate IPL, program distribution, migration and ¼-inch cartridge tape exchange. See 16.8, “QIC format compatibility for iSeries and AS/400e systems” on page 531, for supported media types. Supported only in the #5072, #5073, or #9251 Towers. The #6384 is a Customer Install Feature (CIF).
#6385	**#6385 13 GB ¼-Inch Cartridge Tape Unit** The #6385 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Attaches to the #6513, #9751, or #9754 MFIOP.
#6386	**#6386 25 GB ¼-inch Cartridge Tape Unit** The #6386 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. Supported only in the #5072, #5073 or #9251 Towers.

#6390	**#6390 7 GB 8 mm Cartridge Tape Unit** The #6390 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. Attaches to the #2624, #6513, #9751, or #9754 MFIOP.
	MAGNETIC MEDIA CONTROLLERS
#2621	**#2621 Storage Device Controller** The #2621 provides attachment for one or two of these devices with hardware data compression for tapes: 2240. 9348, 7208, 3995, 9427, and #5032. Dual drive 7208s counts as two devices. If the #2621 supports a 3995 or #5023, it must be dedicated to it. If the #2621 supports a 9427, it is recommended that the 9427 be attached to both parts of the #2621. For new orders, the #6434 is used in preference to #2621 as long as it supports the tape device required. Card slots required: One Maximum: Two for external tape and for #3995 on SB1.
#2624	**#2624 Storage Device Controller** The #2624 provides support for up to three internal tape drives. With the addition of #6146, it also supports one external diskette drive. For new orders, the #6513 is used in preference to #2624 unless #2624 is required anyway to support a diskette drive. Supports also the internal CD-ROM installed in the #5072/#5073 1063 Mbps System Unit Expansion Tower. Card slots required: One Maximum: Two for internal tape on SB1; two for diskette.
#2644	**#2644 Magnetic Tape Attachment Card/HP** The #2644 provides attachment for the 3422, 3430, 3480, 3490 Exx, 3490 Box, 3490 Exx, 3490E Box, 3490E Cxx, 3490E Exx Tape Subsystem Models. Also requires the #9980 Serpentine Cable except for 3490E Cxx when ordered with internal cables. Card slots required: One Maximum: Two on SB1.
#2718	**#2718 PCI Magnetic Media Controller** The #2718 provides SCSI attachment for one 7207-122 QIC-SLR Tape Bridge Box (4 GB External ¼-inch Cartridge Tape Drive) (4 GB ¼-inch cartridge external tape drive)), 7208-345 60 GB External 8mm Tape Drive, or 7210-020 CD-ROM. See 16.7.4, "#2718/#2768 PCI Magnetic Media Controller: Device cabling rules" on page 530, for information on connecting devices to the #2768. High-speed PCI slots required: One. Prerequisite: #2824 PCI Feature Controller Maximum: Three in the #5065 Storage/PCI Expansion Tower Minimum OS/400 to support 7210-020 and 7208-345: V4R5
#2729	**#2729 PCI Magnetic Media Controller** The #2729 provides SCSI attachment for one 3490E Exx, 3490E Fxx, 3490E Cxx with #5040, 3494 D1x or L1x. 3570, 3575, 3590, 7208, 9348 or 9427 Tape Drive, or 3995 C4x Optical Library Dataserver. High-speed PCI slots required: One. Prerequisite: #2824 PCI Feature Controller. Maximum: Three in the #5065 Storage/PCI Expansion Tower. Minimum OS/400 to support 3995: V4R2
#2748	**#2748 PCI RAID Disk Unit Controller–26 MB Cache (RAID Mirrored/Unprotected) (Ultra2 SCSI)** The #2748 is Ultra2 SCSI capable when installed in the #5065 Storage/PCI Expansion Tower. The #2748 has a 26 MB write-cache and provides RAID-5 protection and compression for internal disk units. It supports up to 15 disks. A minimum of four drives and a maximum of ten drives are supported in each array. A maximum of three arrays are allowed for each #2748. The #2748 supports both compression and non-compression modes. The mode is determined by a hardware jumper on the card. The #2748 also supports #6831/#4331 1.6 GB Read Cache Device. It supports up to three internal tape and CD-ROMs. In the #5065 Storage/PCI Expansion Tower, it supports up to two internal tapes and CD-ROM. Supports the #1349, #1350, #1355, #1360, #4482, #4483, #4486, #4684, #6480, #6481, #6482, #6483, #6484,#6485, #6486, or #6490 tape units. Maximum: Three per #5065 Storage/PCI Expansion Tower. High-speed PCI slots required: One Prerequisite: #5065 Storage/PCI Expansion Tower. Minimum OS/400 level: V4R4

#2778	**#2778 PCI RAID Disk Unit Controller–104 MB Cache (RAID Mirrored/Unprotected) (Ultra2 SCSI)** The #2778 is an Ultra2 SCSI controller with a maximum compressed write cache size of 104 MB that provides RAID-5 protection and compression for internal disk units and supports internal tape units and CD-ROMs. The #2778 supports both disk compression and enhanced modes. The mode of operation is determined by a hardware jumper and disk compression mode should only be used when disk compression is desired. In addition to providing RAID-5 protection for disks, the #2778 is also designed to work as a high performance controller for disks protected by system mirroring or disks with no protection. A minimum of four disk units of the same capacity are needed for a valid RAID-5 configuration. A maximum of four arrays are allowed per controller, with a maximum of 10 disk units allowed per array. All disk units in an array must be of the same capacity. The #2778 also supports the #4331 1.6 GB Read Cache Device, which is used by Extended Adaptive Cache to provide increased performance. The #4331 1.6 GB Read Cache Device is supported only when #2778 is in enhanced mode. The #2778 controller supports a maximum of 15 disk units. The #2778 controls up to two removable media devices (internal tape or CD-ROM). Minimum OS/400 level: OS/400 V5R1 Prerequisite: Available High-speed SCSI slot in #5065/#5066 PCI Expansion Tower. Maximums: Three (in combination with #2748) per #5065 Storage/PCI Expansion Tower. Six (in combination with #2748) per #5066 1.8 M I/O Tower.
#6146	**#6146 Diskette Adapter (SPD)** The #6146 provides attachment for on 9331 011 or 012 Diskette Unit. Card slots required: None Prerequisite: #2624 Storage Device Controller Maximum: Two
#6513	**#6513 Internal Tape Device Controller** The #6513 provides support for up to two internal tape drives when located in Model S40 or SB1 system unit or four internal tape drives when located in #5072/#5073 1063 Mbps System Unit Expansion Tower. The #6513 is the default controller unless a #2624 is installed. Supports #1379, #1380, #6380, #6381, #6382, #6383, #6385, #6386, and #6390 Tape Units. Card slots required: One Maximum: One on SB1.
#6534	**#6534 Magnetic Media Controller (SPD) (Ultra SCSI)** The #6534 provides attachment for one 3490E Cxx with #5040), 3490E Exx, 3490E Fxx, 3494 D1x or L1x, 3570, 3575, 3590, 7208, 9348, or 9427 Tape Drive or 3995 C4x Optical Library Dataserver. Card slots required: One Maximum: Two on SB1. Minimum OS/400 to support 3995: V4R2
#9751	**MFIOP with RAID–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #9751 is an Ultra SCSI controller for up to 20 disks installed in the system unit and #5505 or #5057 Storage Expansion Unit. Model SB1 supports a maximum of four disks. The #9751 is not capable of integrated hardware disk compression. The #9751 has CCIN 6751. Card slots required: Two Maximum: One
#9754	**#9754 MFIOP with RAID–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #9754 is an Ultra SCSI controller for up to 20 disks installed in the system unit and the #5505 or #5057 Storage Expansion Unit. Model SB1 supports a maximum of four disks. Card slots required: Two Maximum: One #9754 is standard on systems ordered with V4R2 Minimum OS/400 level: V4R2 Minimum OS/400 to support integrated hardware disk compression: V4R3 Minimum OS/400 to support integrated hardware disk compression for #6714/#8714 17.54 GB Disk Unit: V4R4 The #9754 has CCIN 6754.

11.17 Upgrades to S10, S20, S30, and S40 models

The process of upgrading to Sxx models requires careful planning due to the changes in features and software version. This table indicates the valid upgrades to Sxx models. Models 100, 135, 140, 20S, and 30S cannot be upgraded to Sxx models. The percentage values show the increase in client/server (batch) performance given by the announced upgrade paths.

From 9402/4/6		To 9402/9404/9406 Model S10, S20, S30, and S40													
Model		**S10**		**S20**				**S30**				**S40**			
	Proces-sor	#2118	#2119	#2161	#2163	#2165	#2166	#2257	#2258	#2259	#2260	#2256	#2261	#2207	#2208
	RSP CPW Client/ Server	45.4	73.1	113.8	210	464.3	759	319	583.3	998.6	1794	1794	2340	3660	4550
40S/#2109[2]	27.0	68%	171%	321%	678%										
#2110[2]	33.3		210%	242%	531%										
#2111[2]	59.8			90%	251%	676%									
#2112[2]	87.3				141%	432%	769%								
50S/#2120	77.7				170%	498%	877%	311%	651%						
#2121	104.2				102%	346%	638%	206%	460%	858%					
#2122	130.7				61%	255%	481%	144%	346%	664%					
53S/#2154	162.7							96%	259%	514%	1003%	1003%			
#2155	278.8								109%	258%	543%	543%	739%		
#2156	459.3									117%	291%	291%	409%	697%	891%
#2157	509.9									96%	252%	252%	359%	618%	792%
S10/#2118	45.4		61%	151%	363%	923%									
#2119	73.1			56%	187%	535%	938%								
S20/#2161	113.8				85%	308%	567%	180%	413%	778%					
#2163	210					121%	261%	52%	178%	376%					
#2165	464.3						63%			115%	286%	286%	404%	688%	880%
#2166	759										136%	136%	208%	382%	499%
S30/#2257	319								83%	213%	462%	462%	634%	1047%	
#2258	583.3									71%	208%	208%	301%	527%	680%
#2259	998.6										80%	80%	134%	267%	356%
#2260	1794												30%	104%	154%
S40/#2256	1794												30%	104%	154%
#2261	2340													56%	94%
#2207	3660														24%
#2208	4550														

Note 1: Relative system performance (Commercial Processing Workload) client server environment. For the Sxx models, this is based on V4R1. For the "from" model, this is based on V3R6. AS/400e servers still on V3R6, and therefore, see greater improvements.
Note 2: 40S includes package models 4SS, 4SE, 4SG, 4SL, 4TG, 4TL, 4HS, 4HE, 5HG, and 4HL.
Note 3: There are no CISC to Sxx RISC server processor upgrades available.

11.17.1 Considerations to upgrade to AS/400e S10, S20, S30, S40 models

1. V4R1, V4R2, or V4R3 is a prerequisite for all Sxx models.
2. If upgrading to the Sxx models, customers should consult *System Upgrade Roadmap (RISC to RISC),* SC41-5155.
3. For physical planning information, such as weights, dimensions and power requirements of the Sxx models, customers should consult the *Physical Planning Reference Manual*, SA41-5109.
4. Before proposing an upgrade to a Model S10, the customer's plans for growth should be considered as the S10 provides limited expansion for adapters. For example, if a fully configured Integrated PC Server (IPCS) supporting two LANs (token ring or Ethernet) is installed, space remains for four additional adapters, two of which are dedicated for use by the #2738/#9738 PCI 100/10 Mbps Ethernet IOA and #2729 PCI Magnetic Media Controller. Therefore, a Model S20 should be considered.
5. The Model S10 supports PCI cards only. Therefore, when upgrading to this model all SPD cards have to be replaced. Most functions are supported with PCI format cards. However, these IOPs and adapters are not supported with PCI cards and are not supported on the Model S10:

Cryptographic processors	Fax adapter
ASCII adapters	ISDN adapter
SDDI adapter	FDDI adapter
Wireless LAN	LocalTalk adapter

6. All upgrades to Sxx models ship new system units.
7. Memory requirements should be planned with care due to the rule that on most Sxx processors, memory must be installed in pairs or fours.
8. Disk requirements should be planned with care since these upgrades do not ship with any new disk unless ordered and Version 4 takes more space than Version 3 Release 6 or 7. Refer to *Software Installation Guide*, SC41-5120.
9. It is likely that conversion kits are required for internal tapes and disk units. Therefore, the expected placement of such units should be checked to ensure the correct number of these kits are ordered. It should be noted that the same feature code kit may contain different parts depending in which AS/400e model it is placed.
10. No 988 MB or 1976 MB (dual) disk units are supported on the Sxx model range, and these must be replaced.
11. The CD-ROM on the Sxx models is not identified by a feature. This also applies to the base memory on the S10 and S20 models.
12. Be aware of card technology changes from PCI to SPD when upgrading a Model S20 to a S30 or S40.
13. The 525 MB ¼-inch cartridge tape drive and 840 MB ¼-inch mini-cartridge tape units are not supported on the Sxx models.
14. The 9309 racks with features #9141 and #9171 can be attached to Model S20, S30, and S40 to attach external tape and disk.
15. Using a configurator is mandatory for all upgrades.

11.18 AS/400e Model SB1 upgrades

Legend for the SB1 upgrade table

The “M” values in the upgrade tables indicate the type of upgrade supported. “M” indicates MES install only. (This feature is available for field installation only.) The CE upgrades with a new manufactured CEC unit, otherwise known as a *Manufactured MES* or a *roll in/roll out*.

11.18.1 Upgrades to SB1

Model SB1				
	To	2311	2312	2313
From				
SB1				
2310		M	M	M
2311			M	M
2312				M