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AS/400e 40S, 50S, and 53S models

AS/400e xxS systems are the 9402, 9404, and 9406 processors.

Model and processor	Announce date	General availability date	Withrawn from marketing
40S 2109	20 February 1996	01 September 1995	08/31/98
40S 2110	20 February 1996	01 September 1995	03/31/99
40S 2111	01 September 1996	01 September 1995	03/31/99
40S 2112	01 September 1996	01 September 1995	03/31/99
50S 2120	21 June 1995	01 September 1995	08/31/98
50S 2121	21 June 1995	01 September 1995	03/31/99
50S 2122	01 September 1996	01 September 1995	03/31/99
53S 2154	21 June 1995	01 September 1995	10/30/98
53S 2155	21 June 1995	01 September 1995	03/31/99
53S 2156	21 June 1995	01 September 1995	07/01/97
53S 2157	01 September 1996	01 September 1995	03/31/99

15.1 AS/400e xxS model overview

Processor	9402 40S	9402 40S	9402 40S	9402 40S	9406 50S	9406 50S	9406 50S	9406 53S	9406 53S	9406 53S	9406 53S
Feature	**#2109**	**#2110**	**#2111**	**#2112**	**#2120**	**#2121**	**#2122**	**#2154**	**#2155**	**#2156**	**#2157**
Relative system performance (CPW-V3R6)[1]											
Client/server environment	24.5	30.6	52.9	77.3	66.7	85.0	106.8	132.5	198.7	299.0	349.8
Interactive environment	8.4	12.3	18.3	26.9	18.7	26.9	26.9	26.9	26.9	26.9	26.9
Relative system performance (CPW-V3R7)[1]											
Client/server environment	27.0	33.3	59.8	87.3	77.7	104.2	130.7	162.7	278.8	459.3	509.9
Interactive environment	9.4	13.8	20.6	30.7	21.4	30.7	30.7	30.7	30.7	30.7	30.7
Relative system performance (CPW-V4)[1]											
Client/server environment	27.0	35.0	63.0	91.0	81.6	111.5	138.0	188.2	319.0	598.0	650.0
Interactive environment	9.4	14.5	21.6	32.2	22.5	32.8	32.8	32.8	32.8	32.8	32.8
Relative system performance (RAMP-C)[2]											
Client/server environment	8.3	10.6	†	†	19.7	26.6	†	43.4	66.6	101.4	†
Interactive environment	2.6	3.8	†	†	5.7	8.3	†	8.3	8.3	8.3	†
Number of n-way multiprocessors	1	1	1	1	1	1	1	1	2	4	4
Main storage (MB)	32-224		64-512		64-1024			256-4096			512-4096
Disk storage (GB)											
V3R6	1.96-23.6				1.96-318.7			1.96-520.0			
V3R7	1.96-50.3				1.96-318.7			1.96-520.0			
V4	1.96-50.3				4.19-652.8			4.19-996.4			
Maximum feature card slot	5				82			237			
Communications lines	1-20				1-96			1-200			
LAN ports	1-2				1-16			1-32			
ATM ports	0-1				0-8			0-16			
Maximum workstation controllers											
Twinax	1				1			1			
ASCII	1				1			1			
LocalTalk	1				2			4			
Maximum workstations (1 minimum)											
Twinax	7				7			7			
ASCII	6				6			6			
LocalTalk devices	31				62			124			
¼-inch cartridge tape/8mm	0-4				17			0-17			
Cartridge tape (internal)											
½-inch tape 9348/2440 (The 2440 is not supported the Model 40S)	0-4				0-4			0-4			
34xx/35xx	0-2				0-4			0-4			
8mm cartridge tape (external)	0-4				0-4			0-4			
Tape libraries	0-2				0-2			0-2			
Optical libraries	0-4				0-14			0-22			
Diskettes (5 ¼-inch or 8-inch)	0-2				0-2			0-2			
Fax adapters	0-5				0-32			0-32			
Cryptographic processors	0-1				0-1			0-1			
System I/O buses	1				1-7			0-19			

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	The relative system performance ratios are estimated based on iSeries and AS/400e environment RAMP-C workload, with a 9404 B10 with 16 MB of main storage and 945 MB of disk equalling 1.0. The ratios shown were estimated at maximum configurations running at 70% utilization. Relative system performance ratios may not be realized in all environments.
Note 3	The Model 40S supports three LAN adapters if running Firewall for AS/400 (5769-FW1).
†	Processors announced in September 1996 and later do not have any RAMP-C performance measurements.

15.2 AS/400e Advanced Server Model 40S features

See 12.1, “AS/400e 400 model overview” on page 422, for details on the layout of the Model 40S. For details on Model 40S packages, see Chapter 13, “AS/400e 4xx model packages” on page 439.

PROCESSOR		40S system unit	#7117 Integrated Expansion Unit
#2109	**8.3 RP RAMP-C Processor in Client/Server Environment, 2.6 RSP RAMP-C Processor in Interactive Environment; 24.5 RSP CPW Client/Server (OS/400 V3R6); 8.4 RSP Interactive (OS/400 VR36; 27.0 RSP CPW Client/Server (OS/400 V3R7, V4R1, V4R2, and V4R3). 9.4 RSP CPW Interactive (OS/400 V3R7, V4R2, and V4R3).** Base Memory 32 MB.	1	-
#2110	**10.6 RSP RAMP-C Processor in Client/Server Environment, 3.8 RSP RAMP-C Processor in Interactive Environment; 30.6 RSP CPW Client/Server (OS/400 V3R6), 12.3 RSP CPW Interactive (V3R6); 33.3 RSP CPW Client/Server (OS/400 V3R7), 13.8 RSP CPW Interactive (V3R7), 35.0 RSP CPW Client Server (OS/400 V4R1, V4R2, and V4R3), 14.5 RSP CPW Interactive (OS/400 V4R1, V4R2, and V4R3).** Base Memory 32 MB.	1	-
#2111	**52.9 RSP CPW Processor Client/Server Environment (OS/400 V3R6), 18.3 RSP CPW Processor in Interactive Environment (V3R6); 59.8 RSP CPW Client/Server (V3R7), 20.6 RSP CPW Interactive (V3R7), 63.0 RSP CPW Client Server (OS/400 V4R1, V4R2, and V4R3), 21.6 RSP CPW Interactive (OS/400 V4R1, V4R2, and V4R3).** **Base Memory 64 MB.** Minimum OS/400 level: V3R6 with #1988 or OS/400 V3R7, V4R1, V4R2, or V4R3	1	-
#2112	**77.7 RSP CPW Processor in Client/Server Environment (V3R6), 26.9 RSP CPW Processor in Interactive Environment (V3R6); 87.3 RSP CPW Client/Server (V3R7), 30.7 RSP CPW Interactive (V3R7), 91.0 RSP CPW Client Server (OS/400 V4R1, V4R2, and V4R3), 32.2 RSP CPW (OS/400 V4R1, V4R2, and V4R3).** **Base Memory 64 MB.** Minimum OS/400 level: V3R6 with #1988 or V3R7, V4R1, V4R2, or V4R3	1	-

POWER AND PACKAGING		40S system unit	#7117 Integrated Expansion Unit
#5135	**#5135 Feature Power Supply** The #5135 is required in these circumstances: ► If Processor #2111 or #2112 is selected. ► If a #9320 Migrated Disk Unit Package is selected. ► If a #7117 Integrated Expansion Unit is not selected and there are three or four disks installed. ► If a #7117 Integrated Expansion Unit is selected and there are three or four disks installed but no #6502/#6522/#6523/#6530/#6534 Magnetic Media Controller. ► If there are four internal tape units. ► If a #7117 Integrated Expansion Unit is selected and there are 11 or 12 disk units. ► If there is more than one #8664/#2618 Fiber Distributed Data Interface Adapter, #2620 Full Cryptographic Processor, #2628 Limited Cryptographic Processor, #2666 High-Speed Communications Adapter or #2663 I/O Attachment Processor in the #9708 Expansion Card Cage. ► If there is a #6516 to #6519, or #6529 to #6529 Integrated PC Server, formerly known as FSIOP in the #9108 Expansion Card Cage. ► If there is more than one #2617/#9617 Ethernet Adapter in the #9108 Expansion Card Cage. The #5135 Feature Power Supply replaces the #9242 Base 175W Power Supply. Card slots used: None Maximum: One	1	-
#7000	**Panel Keylock Feature** The #7000 provides a keylock to secure the door covering the system panel. Card slots used: None Maximum: One	1	-
#7117	**#7117 Integrated Expansion Unit** The #7117 can be added to the Model 40S. It provides space for adding: Four additional Feature Card Slots Up to two internal tape units (¼-inch or 8mm) Up to eight two-byte SCSI disk units Card slots used: None Maximum: One	1	-
#9108	**Expansion Card Cage** The #9108 is standard and provides two feature I/O card slots in the system unit. The #5135 Feature Power Supply may be required in high power feature combinations. Card slots used: None Maximum: One	1	-
#9116	**Two Book Cage High Performance Card Enabler** The #9116 provides a special backplane and cabling which is required for these high performance cards when installed in a #9108: #2620 Full Cryptographic Processor #2628 Limited Cryptographic Processor #2629 LAN/WAN/Workstation IOP #2810 LAN/WAN IOP #6501 Tape/Disk Device Controller #6534 Magnetic Media Controller #6616 Integrated PC Server #6516/7/8/9 Integrated PC Server #6526/7/8/9 Integrated PC Server #8716/7/8/9 Integrated PC Server #8726/7/8/9 Integrated PC Server #2663 I/O Attachment Processor Card slots used: None Maximum: One	1	0

#9242	**Base Power Supply** Base 175-watt power supply for systems without #5135 Feature Power Supply	1	-
#9244	**320 Watt Power Supply** Base 320-watt power supply for #7117	1	-
#9139	**Standard Disk Unit Package** Provides four positions in the system unit for two-byte SCSI disk units. No one-byte SCSI disk units are supported. Card slots used: none Maximum: One	1	-
#9320	**Migrated Disk Unit Package** Provides four positions in the system unit for the migrated one-byte SCSE disk units. Card slots used: none Maximum: One Prerequisite: #5135 Feature Power Supply	1	-
UPS	**Uninterruptible Power Supply** Provided instead of internal battery backup to minimum impact from power fluctuation and outages. A number of different models of the 9910 UPS are available. Specific models vary by country.		
MAIN STORAGE		**40S system unit**	**#7117 Integrated Expansion Unit**
#3110 #8210 #9110	**64 MB Main Storage** Plugs directly into the CPU. The #2109 and #2110 processors support three additional memory features. The #2111 and #2112 processors support eight. On the #2111 and #2112 processors, memory cards must be installed in pairs. The #8210 and #9110 and for #2109 and #2110 processors only.	**3 or 8**	-
#3172 #4172 #8172	**32 MB Main Storage** Plugs directly into the CPU. The #2109 and #2110 processors support three additional memory features. The #2111 and #2112 processors support eight. On the #2111 and #2112 processors, memory cards must be installed in pairs. Not supported on #2109 processor.	**3 or 8**	
#3182 #9282	**32 MB Main Storage** Plugs directly into the CPU. The #2109 and #2110 processors support three additional memory features. The #2111 and #2112 processors support eight. On the #2111 and #2112 processors, memory cards must be installed in pairs. The #9282 is supported on #2111 and #2112 processors only.	**3 or 8**	
WORKSTATION CONTROLLERS		**40S system unit**	**#7117 Integrated Expansion Unit**
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three #2669, #6149, #6181, #9249, and #9381 LAN/WAN/Workstation IOAs. The #6149, #6181, #9249, and #9381 LAN IOAs cannot occupy all three positions of the #2629. Card slots required: One Minimum OS/400 level: V4R1	1	4
#6054	**#6054 Workstation Adapter for Apple Macintosh (LocalTalk)**	1	1
#6141	**#6141 ASCII Workstation Controller**	1	1
#8054	**Workstation Adapter for Apple Macintosh (LocalTalk)**	1	-
#9171	**MFIOP/ASCII Workstation Controller**	1	-
#9172	**MFIOP/Twinaxial Workstation Controller**	1	-
#9173	**MFIOP/LocalTalk**	1	-

#9176	**#9176 Base MFIOP** MFIOP that does not include a workstation controller. Requires a #9026 or #9027 Client Access Console cable and a #2612 or #9162 one-line communications adapter to attach a PC as a console.	1	-
	COMMUNICATIONS	**40S system unit**	**#7117 Integrated Expansion Unit**
#2605	**#2605 ISDN Basic Rate Interface Adapter**	2	2
#2609	**#2609 EIA 232/V.24 Two-Line Adapter** #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) cable #9836 EIA 232/V.24 50-ft. (15m) cable	3	3
#2610	**#2610 EIA 232/V.24 Two-Line Adapter** #9021 X.21 20-ft. (6m) cable #9839 X.21 50-ft. (15m) cable	3	3
#2612	**#2612 EIA 232/V.24 One-Line Adapter** One cable must be specified (see cable features for #2609).	7	7
#2613	**#2613 V.35 One-Line Adapter** #9020 V.35 20-ft. (6m) cable #9838 V.35 50-ft. (15m) cable	4	4
#2614	**#2614 X.21 One-Line Interface Adapter** One cable must be specified (see cable features for #2610).	7	7
#2620	**#2620 Full Cryptographic Processor**	1	1
#2623	**#2623 Six-Line Communications Controller**	1	4
#2628	**#2628 Limited Cryptographic Processor**	1	1
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three #2699, #6149, #6181, #9249, and #9381 LAN/WAN/Workstation IOAs. The #6149, #6181, #9249, and #9381 IOAs cannot occupy all three positions of the #2629. Card slots required: One	1	4
#2664	**#2664 Integrated Fax Adapter (SPD)** Not supported with V5R1 and later.	1	4
#2666	**#2666 High-Speed Communications Adapter (SPD)** #9879 6m V.35 cable #9880 24m V.35 cable* #9882 6m V.36/EIA 449 cable #9883 24m V.36/EIA 449 cable** #9884 45m V.36/EIA 449 cable** #9885 6m X.21 cable *Line speeds up to 64 Kbps only. **Using these longer cables requires that the #0329 V.24/EIA 232 80-ft. (24m) cable attaching Data Communications Equipment (DCE) support the V.36 transmitter signal element timing Data Terminal Equipment (DTE) source signal.	1	1

#2699	**#2699 Two-Line WAN IOA** The #2699 supports up to two multiple protocol communications ports when any one or two of these cables are attached: #0329 V.24/EIA 232 80-ft. (24m) cable #0330 V.24/EIA 232 20-ft. (64m) cable #3331 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.24/EIA 449 50-ft. (15m) cable #0337 V.24/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 There are some restrictions on communications using #2699. For full details, see the #2699 description in 10.13, “AS/400e Model 640 and 650 features” on page 317. Prerequisite: #2629 LAN/WAN/Workstation IOP IOA slots required for #2699: One on #2629. Minimum OS/400 level: V4R1	-	-
#6054 #8054	**#6054 Workstation Adapter for Apple Macintosh (Local Talk)** #6054 attaches to the #2623 #8054 attaches to the MFIOP	1	1
#9612	**#9612 Standard EIA 232/V.24 One-Line Adapter** #9023 EIA 232/V.24 20-ft. (6m) enhanced cable #9835 EIA 232/V.24 50-ft. (15m) enhanced cable	1	-
MFIOP #9171 #9172 #9173 #9176	**Base Communications** **MFIOP/ASCII Workstation Controller** Supports two communications adapters. One communications line, with an EIA 232/V.24 adapter, is supplied as standard for use with IBM Electronic Customer Support. Further adapters are optional. Maximum communications lines for #9171: Three **MFIOP/Twinaxial Workstation Controller** Supports two communications adapters. One communications line, with an EIA 232/V.24 adapter, is supplied as standard for use with IBM Electronic Customer Support. Further adapters are optional. Maximum communications lines for #9172: Three **MFIOP/LocalTalk Workstation Controller** Supports one communications adapter. One communications line, with an EIA 232/V.23 adapter, is supplied as standard for use with IBM Electronic Customer Support. Further adapters are optional. Maximum communications lines for #9173: Two **#9176 Base MFIOP** Supports two communications adapters. A Two-Line EIA 232/V.24 adapter is supplied as standard. One line is for use with ECS and the other for attach to a Client Access or Operations Console (OS/400 V4R3). Further adapters are optional. Maximum communications lines for #9176: Two	 1 1 1	 - - -
LANS/ATM		**40S system unit**	**#7117 Integrated Expansion Unit**
#2617/ #9617	**#2617 Ethernet/IEEE 802.3 Adapter/HP (SPD)** **Supports 10 Mbps half duplex only.**	2	2
#2618 #8664	**#2618 Fiber Distributed Data Interface Adapter (SPD)**	1	1
#2619	**#2619 LAN/WAN/Workstation IOA (SPD)**	2	2

#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three #2699, #6149, #6181, #9249 and #9381 LAN/WAN/Workstation IOAs. The #6149, #6181, #9249 and #9381 LAN IOAs cannot occupy all three positions of the #2629. Card slots required: One Minimum OS/400 level: V4R1	2	4
#2663	**#2663 I/O Attachment Processor**	1	1
#2665 #8665	**Shielded Twisted-Pair Distributed Data Interface Adapter**	1	1
#2668	**#2668 Wireless LAN Adapter (SPD)** One of these antenna cables must be specified: #9814 20-ft. antenna cable #9815 50-ft. antenna cable One of these antenna must be specified: #9890 Omni-directional antenna #9891 Hemispherical antenna #9892 Directional antenna Prerequisite: #2663 I/O Attachment Processor	1	1
#2723	**#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. 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 Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. Prerequisite: #6617 Integrated PC Server or #6618 Integrated Netfinity Server. Minimum OS/400 level: V4R2	-	-
#2724	**#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 802.2 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 of cable for attachment to the RJ45 connector on the IOA can be ordered separately. The #2724 IOA is capable of operating in half or full duplex mode. Prerequisite: #6617 Integrated PC Server or #6618 Integrated Netfinity Server. Minimum OS/400 level: V4R2	-	-
#2810	**#2810 LAN/WAN IOP** The #2810 I/O processor is required to attach one #2838 PCI 100/10 Mbps Ethernet IOAA or #2811/#2812/#2815/#2816/#2818/#2819 PCI ATM IOA. Card slots required: One with any of the preceding features. Maximum: One Minimum OS/400 to support #2838/#9738: V4R1 Minimum OS/400 to support ATM IOA: V4R2	1	1
#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 Fax 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	1	1

#2812	**#2812 PCI 45 Mbps Coax T3/DS3 ATM IOA** The #2812 provides attachment into an Asynchronous Transfer Mode (ATM) network using coax cabling and the T3/DS-3 interface. The #2812 Fax 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	1	1
#2815	**#2815 PCI 155 Mbps UTP OC3 ATM IOA** 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. Card slots required: One (with #2810) Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2	1	1
#2816	**#2816 PCI 155 Mbps MMF ATM IOA** 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. Card slots required: One (with #2810) Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2	1	1
#2818	**#2818 PCI 155 Mbps SMF OC3 ATM IOA** The #2818 provides attachment into an Asynchronous Transfer Mode (ATM) network using the Singe Mode Fibre (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 (#2810) Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2	1	1
#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. Prerequisite: #2810 LAN/WAN IOP Minimum OS/400 level: V4R2	11	1
#2838 #9738	**#2838 PCI 100/10 Mbps Ethernet IOA** The #2838 provides attachment to a standard 100 Mbps high-speed Ethernet LAN and allows attachment to existing 10 Mbps Ethernet LAN. The adapter comes with an RJ45 connector for attachment to UTP-5 media. The #9738 specifies the base LAN. The Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. Maximum: One Card slots required: One (with #2810) or three (with #6617) Prerequisite: #2810 LAN/WAN IOP, #6617 Integrated PC Server or #6618 Integrated Netfinity Server. Minimum OS/400 to support with the #2810: V4R1 Minimum OS/400 to support with the #6617: V4R2	1	1

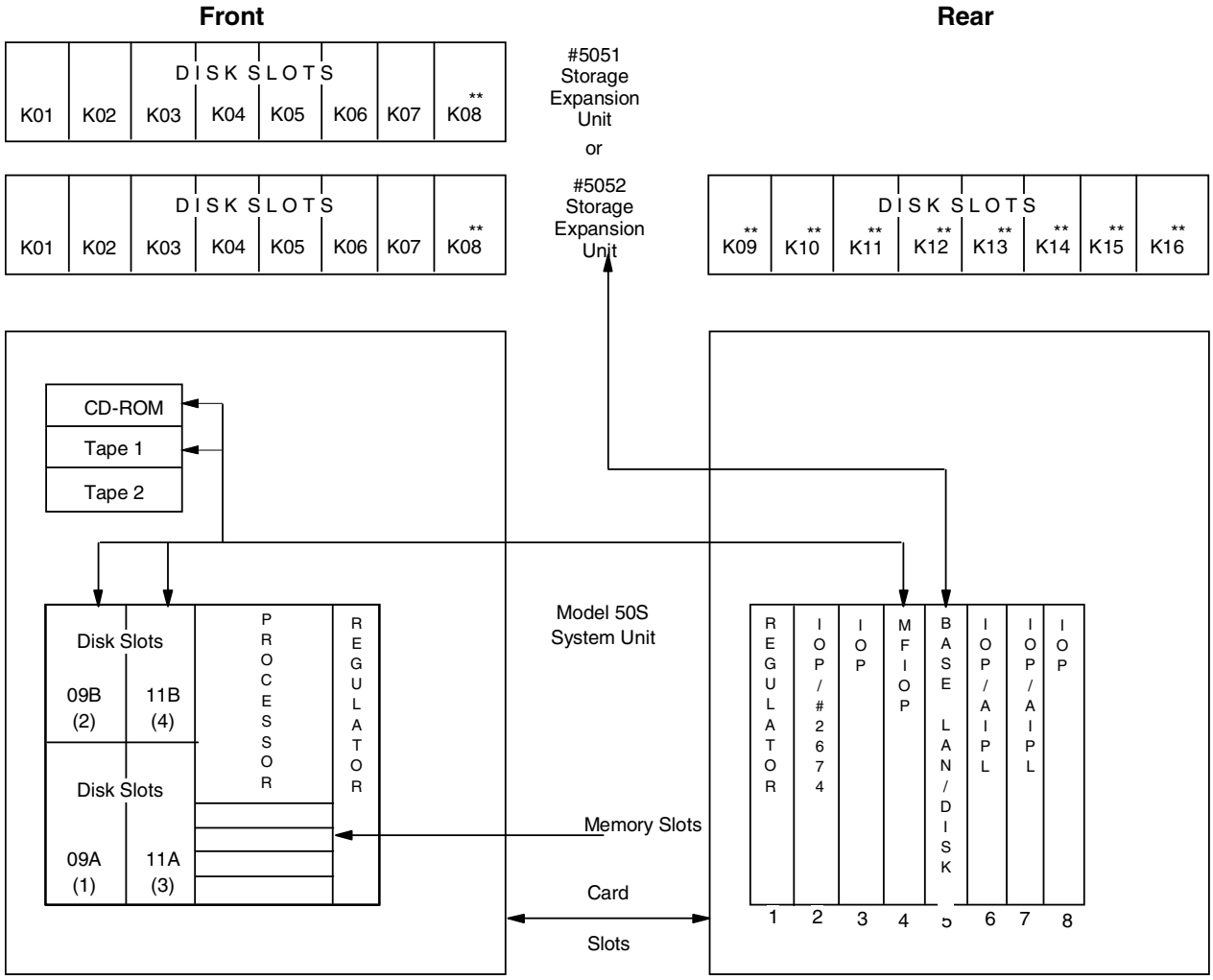
#6149 #9249	**16/4 Mbps Token Ring IOA** The #6149 provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an IOA card, internal code (supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC)), and an external 8-ft. (2.4m) token ring cable. Alternatively, a twisted pair cable for attachment to the RJ45 connector on the IOA can be ordered separately. The #6419 can operate in full or half-duplex mode. The #9249 specifies the base LAN. Card slots required: None Prerequisite: One #2629 LAN/WAN/Workstation IOP or #6616 Integrated PC Server Maximum: Two Minimum OS/400 to support in #6616: V3R7 Minimum OS/400 to support in #2629: V4R1	-	-
#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 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 #6181 can operate in full or half-duplex mode. The #9381 specifies the base LAN. Card slots required: None Maximum: Two Prerequisite: One #2629 LAN/WAN/Workstation IOP or #6616 Integrated PC Server Minimum OS/400 to support in #6616: V3R7 Minimum OS/400 to support in the #2629: V4R1	-	-
	Integrated PC Server (formerly known as FSIOP)		
#6516	16 MB One-Port Integrated PC Server	-	1
#6517	32 MB One-Port Integrated PC Server	-	1
#6518	48 MB One-Port Integrated PC Server	-	1
#6519	64 MB One-Port Integrated PC Server	-	1
#8716 to #8719	Specify for One-Port Integrated PC Server as base LAN	1	-
#8726 to #8729	Specify for Two-Port Integrated PC Server as base LAN These cables need to be specified depending on the network attaching into a Integrated PC Server Port: #9024 Token ring cable (2.44m) #9025 Ethernet Cable (3m AUI)	1	-
#6509	Additional 16 MB for Integrated PC Server	6	3
#6520	Upgrade One-Port Integrated PC Server to Two-Port Integrated PC Server	1	-
#6616	**#6616 Integrated PC Server** The #6616 contains a 166 MHz Pentium Processor, two main storage slots, and two LAN 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 LAN IOAs are supported: #9249/#6149 16/4 Mbps Token Ring IOA #9381/#6181 ASCII Workstation Controller The #9249 and #9381: One of these can be specified as the base LAN Minimum OS/400 level: V3R7 with cumulative PTF package C7029370 or later. Card slots required: Two contiguous slots	1	1

#6617	**#6617 Integrated PC Server (SPD)** The #6617 contains a 200 MHz Pentium Processor, four main storage slots, and two LAN slots for higher 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. #2723 PCI Ethernet IOA #2724 PCI 16/4 Mbps Token Ring IOA #2838 PCI 100/10 Mbps Ethernet IOA The #9738 is the base LAN. The third LAN and the second #2838/#9738 can only be used if running Windows NT on the #6617. The #0022 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, the default in the U.S.A. A display must be connected to 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/ Card slots required: Three contiguous slots. Minimum OS/400 level: V4R2	-	1
#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 — Specify #0221 is required for each#2723 ordered. #2724 PCI 16/4 Mbps Token Ring IOA — Specify #0220 is required for each #2724 ordered. #2838 PCI 100/10 Mbps Ethernet IOA — Specify #0222 is required for each #2838 ordered. Only one of these Base LAN IOAs is supported: #9723 PCI Ethernet IOA — Specify #0221 is required for each #9723 ordered. #9724 PCI Token Ring IOA — Specify #0220 is required for each #9724 ordered. #9738 PCI 100/10 Mbps Ethernet IOA — Specify #0222 is required for each #9738 ordered. 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. When running Windows NT on the #6618, 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 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 or mouse and display support, refer to the Web site at: http://www.ibm.com/eserver/iseries/windowsintegration/ When running OS/2 on the #6618, 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.		1

#6618 (cont.)	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 and only one can contain a #2838/#9738. A maximum of 256 MB IOP memory is supported. SPD slots required: Three contiguous slots. Minimum OS/400 level: V4R2 and CUM C8342420, V4R3 and CUM C8349430 or later.		
	DISK UNITS	**40S system unit**	**#7117 Integrated Expansion Unit**
#1109	**988 MB Single Disk Unit Conversion Kit**	4	-
#1602	**1.03 GB Single Disk Unit Conversion Kit**	4	-
#1603	**#1603 1.96 GB Single Disk Unit Conversion Kit**	4	-
#6109	**988 MB Additional One-Byte SCSI Disk Unit**	4	-
#6602	**1.03 GB Additional One-Byte SCSI Disk Unit** The #6602 provides a 3 ½-inch single disk unit with 1.03 GB capacity for additional disk storage. Requires #9320 Migrated Disk Unit Package. Occupies one disk unit position in the #9320. Cannot be used in #7117 Integrated Expansion Unit.	4	-
#6603	**1.96 GB Additional Two-Byte SCSI Disk Unit** The #6603 provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage. Requires #9320 Migrated Disk Unit Package. Occupies one disk unit position in the #9320. Cannot be used in #7117 Integrated Expansion Unit.	4	-
#6605 #4605	**1.03 GB Additional Two-Byte SCSI Disk Unit** The #4605 is the plant install version of #6605.	3	8
#6606 #4606	**1.96 GB Additional Two-Byte Disk Unit** The #4606 is the plant install version of #6606.	3	8
#6607 #7607	**4.19 GB Additional Two-Byte SCSI Disk Unit** The #6607 provides a 3 ½-inch single disk unit with 4.19 GB capacity for additional disk storage in the system unit or #7117 Integrated Expansion Unit. Requires the #9319 Standard Disk Unit Package or #9320 Migrated Disk Unit Package if installed in the system unit. Occupies one disk unit position in either the #9319/#9320 or #7117 Integrated Expansion Unit. The #7606 is replacement base disk. Minimum OS/400 level: V3R7.	4	8
#6652 #4652	**1.03 GB Additional Two-Byte SCSI Disk Unit** The #4652 is the plant installed version of #6652.	3	8
#8606	**1.9 GB Optional Base Two-Byte Disk Unit**	1	-
#9606	**1.96 GB Standard Two-Byte SCSI Disk Unit** The #9606 provides a 3 ½-inch single disk unit with 1.96 GB capacity as the base disk unit on new Model 40S or an upgrade to Model 40S.	1	-
	INTERNAL TAPE UNITS AND CD-ROM	**40S system unit**	**#7117 Integrated Expansion Unit**
#1378	**525 MB ¼-inch Cartridge Tape Unit Conversion Kit**	1	3
#1379	**1.2 GB ¼-inch Cartridge Tape Unit Conversion Kit**	1	3
#1380	**12.5 GB ¼-inch Cartridge Tape Unit Conversion Kit**	1	3
#6335	**#6335 840 MB ¼-inch Cartridge Mini Tape Unit**	1	3

#6380	**#6380 2.5 GB ¼-inch Cartridge Tape Unit**	1	3
#6390	**#6390 7 GB 8 mm Cartridge Tape Unit**	1	3
#9520	**Base CD-ROM**	1	-
MAGNETIC MEDIA CONTROLLERS		**40S system unit**	**#7117 Integrated Expansion Unit**
#2621	**#2621 Storage Device Controller (SPD)**	2	4
#2624	**#2624 Storage Device Controller**	1	1
#2644	**#2644 Magnetic Tape Attachment Card/HP**	1	1
#6146	**#6146 Diskette Adapter**	2	1
#6501	**#6501 Tape/Disk Device Controller**	1	1
#6502 #6522	**#6502 High Performance Controller** The #6502 has 2 MB Cache and provides RAID and mirrored protection. #6522 replaces the #6502.	-	1
#6530 #6523	**#6530 Disk Unit Controller No Cache** The #6530 provides mirrored protection.	-	1
#6534	**#6534 Magnetic Media Controller (SPD) (Ultra SCSI)** The #6534 provides attachment for one 3490E Cxx with #5040, 3490Exx, 3490Fxx, 3570, 3575, 3494 D1x or L1x, 3590, 7208, 9348, or 9427 Tape Drive or 3995 Optical Library Dataserver - Model C4x. Card slots required: One Maximum: Four Minimum OS/400 level: V4R1 Minimum OS/400 to support 3995: V4R2	1	4
#9980	**Serpentine Cable**	1	1

15.3 9406 Advanced Server Model 50S system unit

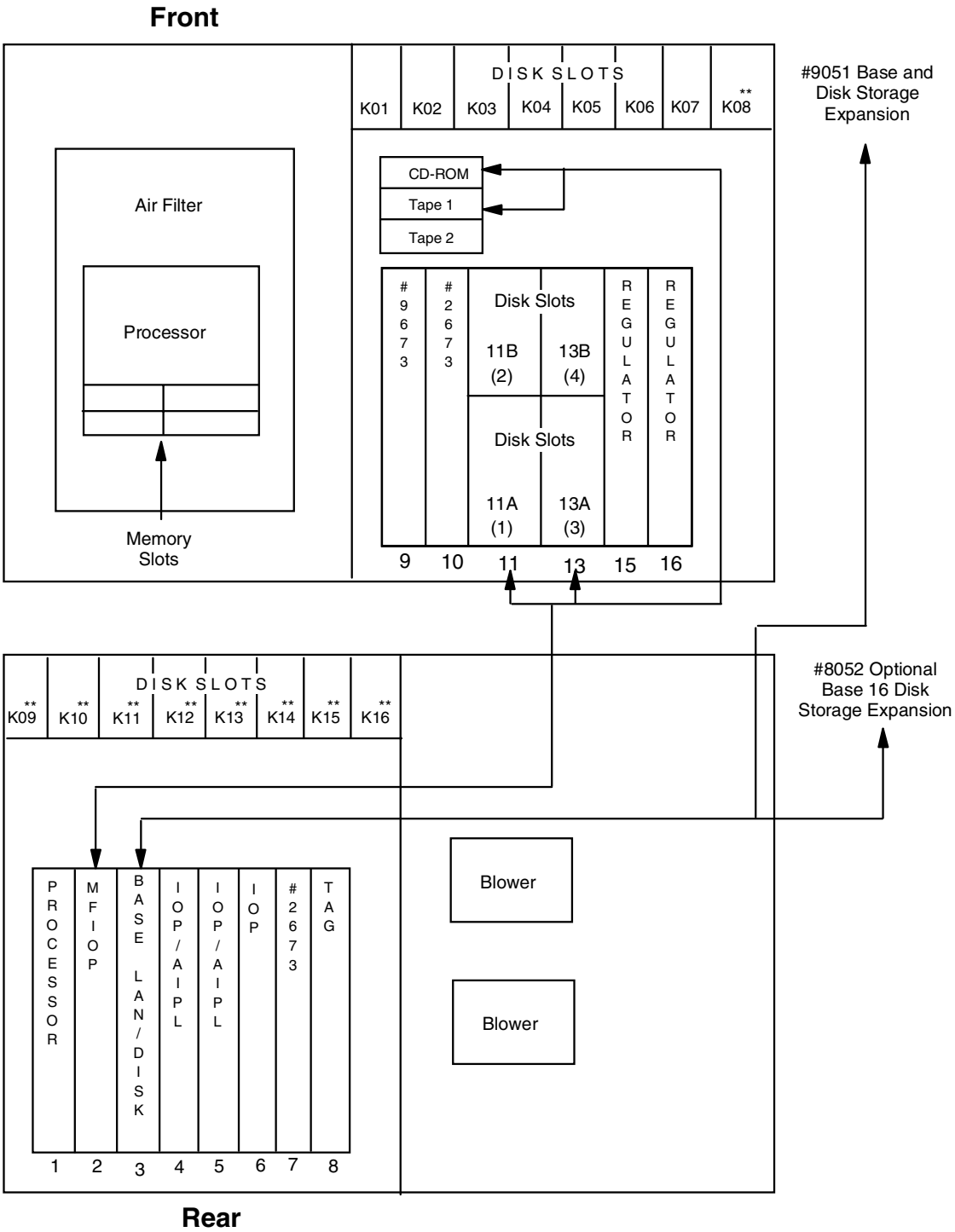


** One-byte DASD cannot be installed in disk slots 8 through 16.

Notes:

1. Slots 1 and 16 are occupied by #5142 Power Regulator. If the #9142 Power Supply is specified, these slots are not used.
2. If the #5051/#5052 Storage Expansion Unit is installed, slot 5 is occupied by the #6502, #6512, #6530, #6532, or #6533 disk controller card.
3. If the #2674 Optical Bus Adapter is installed, it must occupy slot 2.
4. If an external tape unit is used for alternate IPL, the tape controller card to which it is attached would be in slot 6 or slot 7.
5. The base 9406 Model 50S does not include a tape drive as standard. If a second internal tape is installed, a #2624 or #6513 in slot 6 is required to support it.
6. Main storage cards are installed on the processor card and require on slot each. There are four slots on the Model 50S, and main storage cards must be added in pairs of equal capacity.

15.4 9406 Advanced Server Model 53S system unit



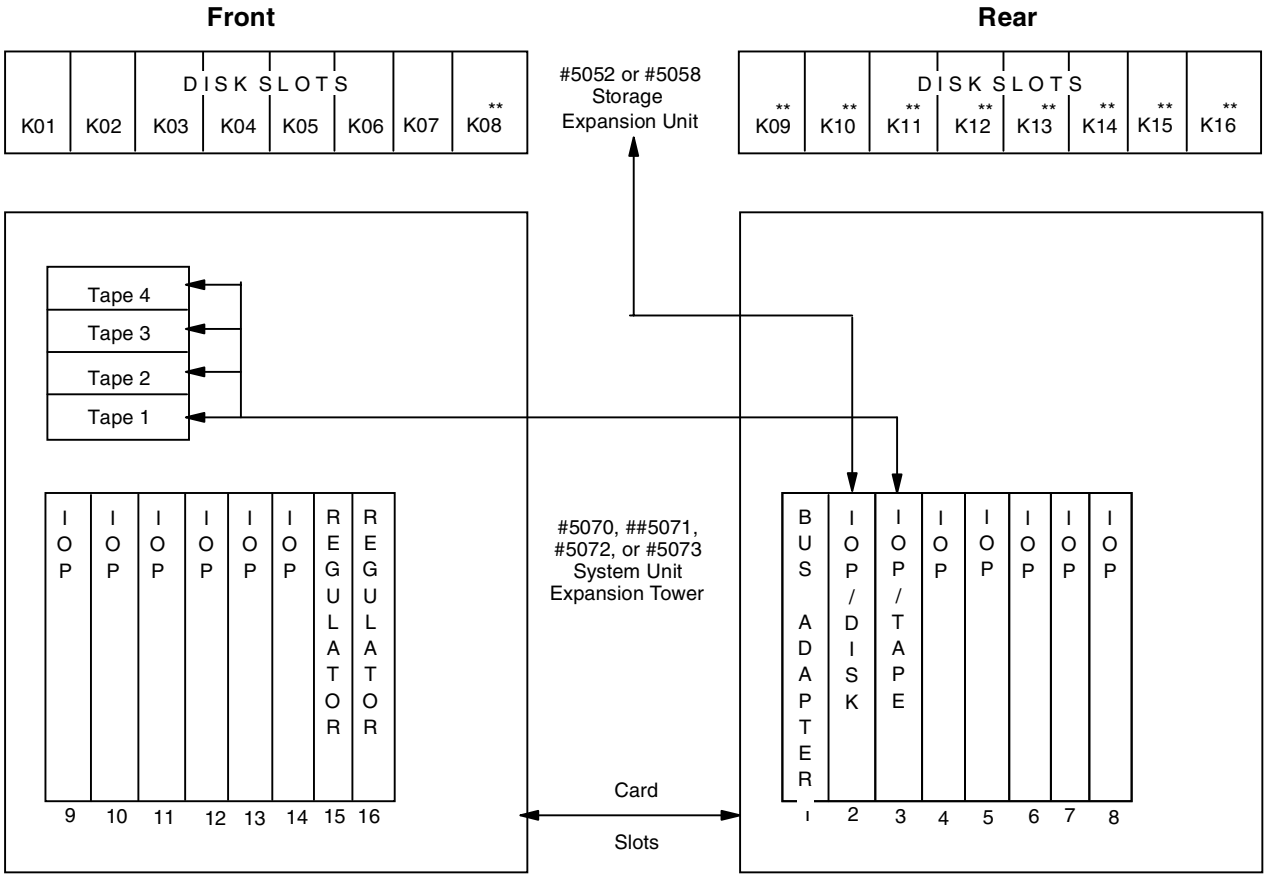
** One-byte disks cannot be installed in disk slots 8 through 16.

Notes:

1. The #8052 Optional Base 16 Disk Storage Expansion Unit increases the number of disks supported in the system unit from 8 to 16.
2. The #9673 base and #2673 Optical Bus Adapters occupy slot 9 and slot 10.

3. If a 3590 ½-inch Cartridge Tape Subsystem is attached to the system unit bus, no disk controller cards other than MFIOP would be used on Bus 0. This means that #9051 and #8052 are not supported.
4. If an external tape unit is used for alternate IPL, the tape controller card to which it is attached would be in slot 4 or slot 5.
5. The base 9406 Model 53S does not include a tape drive as standard. The #2624 or #6513 is required to support the second internal tape.
6. Main storage cards are installed on the processor card and require one slot each. There are four slots on the Model 53S, and main storage cards must be added in pairs of equal capacity.

15.5 #5070 and #5071, #5072 and #5073 9406 Model 50S and 53S System Unit Expansion Tower and Storage Expansion Unit



** One-byte disks cannot be installed in disk slots K08 through K16.

Notes:

1. The #5070 and #5071 are supported on 9406 Models 500 and 510. The #5072 and #5073 are supported on the 9406 Model 530.
2. The #5071 and #5073 support the #5058, which is Ultra SCSI. The #5070 and #5072 are fast SCSI and support the #5052.
3. Slot 1 is occupied by the bus adapter card.

4. Slot 2 is occupied by the #6502, #6512, #6530, #6532 disk unit controller card if a #5052 or #5058 is attached.
5. Slot 3 is occupied by #2624 or #6513 if the #5070, #5071, #5072, or #5073 contains internal tape units.
6. Slots 4 through 14 are available for I/O feature cards.

15.6 AS/400e Advanced Server Model 50S and 53S features

50S and 53S PROCESSORS	
#2120	**19.7 RSP RAMP-C Processor in Client/Server Environment, 5.7 RSP RAMP-C Processor in Interactive Environment; 66.7 RSP CPW Client/Server (V3R6), 18.7 RSP CPW Interactive (V3R6); 77.7 RSP CPW Client/Server (V3R7), 21.4 RSP CPW Interactive (V3R7); 81.6 RSP CPW Client/Server (V4), 22.5 RSP CPW Interactive (V4). Base Memory 64 MB.** Model 50S only.
#2121	**26.6 RSP RAMP-C Processor in Client/Server Environment, 8.3 RSP RAMP-C Processor in Interactive Environment; 85.0 RSP CPW Client/Server (V3R6), 26.9 RSP CPW Interactive (V3R6); 104.2 RSP CPW Client/Server (V3R7), 30.7 RSP CPW Interactive (V3R7); 111.1 RSP CPW Client/Server (V4), 32.8 RSP CPW Interactive (V4). Base Memory 64 MB.** Model 50S only.
#2122	**106.8 RSP CPW Processor in Client/Server Environment (V3R6), 26.9 RSP CPW Processor in Interactive Environment (V3R6); 130.7 RSP CPW Client/Server (V3R7), 30.7 RSP CPW Interactive (V3R7); 138.0 RSP CPW Client/Server (V4), 32.8 RSP CPW Interactive (V4). Base Memory 64 MB.** Model 50S only. Minimum OS/400 level: V3R6 with #1988.
#2154	**43.4 RSP RAMP-C Processor in Client/Server Environment, 8.3 RSP RAMP-C Processor in Interactive Environment; 132.5 RSP CPW Client/Server (V3R6), 26.9 RSP CPW Interactive (V3R6); 162.7 RSP CPW Client/Server (V3R7), 30.7 RSP CPW Interactive (V3R7); 188.2 RSP CPW Client/Server (V4), 32.8 RSP CPW Interactive (V4). Base Memory 256 MB.** Model 53S only.
#2155	**66.6 RSP RAMP-C 2-way Processor in Client/Server Environment, 8.3 RSP RAMP-C 2-way Processor in Interactive Environment; 198.7 RSP CPW Client/Server (V3R6), 26.9 RSP CPW Interactive (V3R6); 278.8 RSP CPW Client/Server (V3R7), 30.7 RSP CPW Interactive (V3R7); 319.0 RSP CPW Client/Server (V4), 32.8 RSP CPW Interactive (V4). Base Memory 256 MB.** Model 53S only.
#2156	**101.4 RSP RAMP-C 4-way Processor in Client/Server Environment, 8.3 RSP RAMP-C 4-way Processor in Interactive Environment; 299.0 RSP CPW Client/Server (V3R6), 26.9 RSP CPW Interactive (V3R6); 459.3 RSP CPW Client/Server (V3R7), 30.7 RSP CPW Interactive (V3R7); 598.0 RSP CPW Client/Server (V4), 32.8 RSP CPW Interactive (V4). Base Memory 256 MB.** Model 53S only.
#2157	**349.8 RSP CPW 4-way Processor in Client/Server Environment (V3R6), 26.9 RSP CPW 4-way Processor in Interactive Environment (V3R6); 509.9 RSP CPW Client/Server (V3R7), 30.7 RSP CPW Interactive (V3R7); 650.0 RSP CPW Client/Server (V4), 32.8 RSP CPW Interactive (V4). Base Memory 512 MB.** Minimum OS/400 level: V3R6 with #1988, V3R7, or V4R1, V4R2, V4R3 Model 53S only.
POWER AND PACKAGING	
#0090	**#5052 Storage Expansion Unit Located on System Unit** The #0090 feature indicates that a #5052 Storage Expansion Unit is located on the system unit of a Model 50S. It is not supported on the Model 53S.
#2673 #9673	**#2673 Optical Bus Adapter (1063 Mbps)** The #2673 allows for the addition of up to six optical buses on the Model 53S. The #2688 or #2688 are required to attach the buses. The #9673 is the base optical bus adapter on the Model 53S. Maximum: Two Card slots used: One

#2674	**#2674 Optical Bus Adapter (266 Mbps)** The #2674 allows for the addition of up to six optical buses on the Model 50S. The #2686 is required to attach the buses. Maximum: One Card slots used: One
#2686	**#2686 Optical Link Processor (266 Mbps)** The #2686 is a daughter card that allows for the addition of up to two optical buses to a #2673, #2674, or #9673 Optical Bus Adapter. It can attach up to two #5070/#5071 or #5080/#5081 or one #5044. A maximum of three #2686 are allowed per optical bus adapter. Both #2686 and #2688 may be installed on the same optical bus adapter as long as the total number does not exceed three. Card slots used: None
#2688	**#2688 Optical Link Processor (1063 Mbps)** The #2688 is a daughter card that allows for the addition of up to two optical buses to a #9673 or #2673 Optical Bus Adapter. It can attach up to two #5072/#5073 or #5082/#5083. A maximum of three #2688 are allowed per optical bus adapter. Both #2686 and #2688 may be installed on the same optical bus adapter as long as the total number does not exceed three. Card slots used: None
#5051 #9051	**#5051 Storage Expansion Unit for System Unit** The #5051/#9051 provides space for up to eight disk units. It attaches to the top of Model 50S system unit. The #9051 is the base storage expansion unit for the Model 53S. Prerequisite: #5143 Power Supply
#5052	**#5052 Storage Expansion Unit** The #5052 provides space for up to 16 disk units. It attaches to the top of Model 50S system units and #5070 and #5072 1063 Mbps System Unit Expansion Towers and #5080 and #5082 Storage Expansion Towers. Only one #5052 per tower is supported. A #5143 Power Supply may be required.
#5058	**#5058 Storage Expansion Unit (Ultra SCSI)** The #5058 provides space for up to 16 disk units. It attaches to #5071 and #5073 1063 Mbps System Unit Expansion Towers and #5081 and #5083 Storage Expansion Towers. Only one #5058 per tower is supported.
#5070	**#5070 266 Mbps System Unit Expansion Tower** The #5070 provides an I/O tower for creating additional buses on Model 50S. It includes a 266 Mbps optical bus card, 13 I/O card slots, space for up to four internal tape units, one #9245 Base Battery Backup, and two #9240/#9243 power supplies. It can support one #5052 Storage Expansion Unit with #5143 Power Supply. Due to power restrictions, there is a limitation on some high powered features housed in a #5070. This can mean that an additional #5070 is required. Prerequisite: #2686 Optical Link Processor and #2674 Optical Bus Adapter.
#5071	**#5071 266 Mbps System Unit Expansion Tower (Ultra SCSI)** The #5071 provides an I/O tower for creating additional buses on Model 50S. It includes a 266 Mbps optical bus card, 13 I/O card slots, space for up to four internal tape units, one battery backup, and two power supplies. It can support one #5058 Storage Expansion Unit. Due to power restrictions, there is a limitation on some high powered features housed in a #5071. This can mean that an additional #5071 is required. The #5071 supports Ultra SCSI disks in the #5058 and replaces the #5070 for new orders. Prerequisites: #2686 Optical Link Processor and #2674 Optical Bus Adapter.
#5072	**#5072 1063 Mbps System Unit Expansion Tower** The #5072 provides an I/O tower for creating additional buses on Model 53S. It includes a 1063 Mbps optical bus card, 13 I/O card slots, space for up to four internal tape units, one #9245 battery backup, and two #9240/#9243 power supplies. It can support one #5052 Storage Expansion Unit with #5143 Power Supply. Due to power restrictions, there is a limitation on some high powered features housed in a #5072. This can mean that an additional #5072 is required. Prerequisites: #2688 Optical Link Processor and #2673 Optical Bus Adapter
#5073	**#5073 1063 Mbps System Unit Expansion Tower (Ultra SCSI)** The #5073 provides an I/O tower for creating additional buses on Model 53S. It includes a 1063 Mbps optical bus card, 13 I/O card slots, space for up to four internal tape units, one battery backup, and two power supplies. It can support one #5058 Storage Expansion Unit. Due to power restrictions, there is a limitation on some high powered features housed in a #5073. This can mean that an additional #5073 is required. The #5073 supports Ultra SCSI disks in the #5058 and replaces the #5072 for new orders. Prerequisite: #2688 Optical Link Processor and #9673/#2673 Optical Bus Adapter

#5080	**#5080 266 Mbps Storage Expansion Tower** The #5080 provides a DASD tower on Model 50S for adding up to 16 disk units (a total of 32 disk units are possible with the addition of #5052). It includes a 266 Mbps optical bus card, two I/O card slots for the #6052, #6512, #6530, #6532, or #6533 disk IOPs one #9245 battery backup, and two #9240/#9243 power supplies. Prerequisites: #2686 Optical Link Processor and #2674 Optical Bus Adapter.
#5081	**#5081 266 Mbps Storage Expansion Tower (Ultra SCSI)** The #5081 provides a DASD tower on Model 50S for adding up to 16 disk units (a total of 32 disk units are possible with the addition of #5058). It includes a 266 Mbps optical bus card, two I/O card slots for the #6502, #6512, #6530, disk IOPs, one battery backup, and two power supplies. The #5081 supports Ultra SCSI disk units. Prerequisites: #2686 Optical Link Processor and #9673 or #2674 Optical Bus Adapter.
#5082	**#5082 Storage Expansion Tower** The #5082 provides a DASD tower on Model 53S for adding up to 16 disk units (a total of 32 disk units are possible with the addition of #5052). It includes a 1063 Mbps optical bus card, two I/O card slots for the #6502, #6512, #6530 disk IOPs, one #9245 battery backup, and two #9240/#9243 power supplies. Prerequisites: #2688 Optical Link Processor and #9673/#2673 Optical Bus Adapter
#5083	**#5083 Storage Expansion Tower (Ultra SCSI)** The #5083 provides a DASD tower on Model 53S for adding up to 16 disk units (a total of 32 disk units are possible with the addition of #5058). It includes a 1063 Mbps optical bus card, two I/O card slots for the disk IOPs (#6502, #6512, #6530, (the new #6532 or #6533 is recommended), one battery backup, and two power supplies. Prerequisites: #2688 Optical Link Processor and #9673/#2673 Optical Bus Adapter. The #5083 supports Ultra SCSI disk units.
#5143	**#5143 Power Supply** The #5143 is a 400-watt power feature required when adding a #5052 Storage Expansion Unit to a #5070 or #5072 1063 Mbps System Unit Expansion Tower or to a #5080 or #5082 Storage Expansion Tower. Only one #5143 is allowed per tower. Card slots used: None
#5144	**Additional Battery Backup (External)** The #5144 is required when the main storage capacity exceeds 384 MB on the Model 30S. It is allowed on the 50S when upgrading from a 30S. It is not required on new Model 50S. It is not supported on a Model 53S. Card slots used: None
#5145	**Additional Battery Backup (Internal)** The #5145 is available for the Model 50S where additional Continuously Powered Main Storage (CPM) time is desired, in the event of a system failure. Card slots used: None
#5146	**Redundant Power** The #5145 is a prerequisite to the installation of #5144. Not required on new Model 50S. Card slots used: None
#5149	**Redundant Power** The #5149 is a 400-watt power supply that increases the availability of the Model 50S. Card slots used: None
#8052	**#8052 Optional Base 16 Disk Storage Expansion Unit** The #8052 provides space for up to 16 disk units and is available only on the system unit of the Model 53S. Replaces #9051. The #8052 is not allowed when the 3590 Tape is the Alternate IPL device.
#9240	**400 Watt Power Supply** The #9240 is required on Model 50S and 53S system unit and #5070, #5072, #5080, and #5082 Storage Expansion Towers. Card slots used: None
#9243	**Base Feature Power Supply** The #9243 is the base battery back-up used on Models 50S and 53S system units and #5070, #5072, #5080, and #5082 Storage Expansion Towers. Model 53S system unit requires two #9243s. Card slots used: None

#9245	**#9245 Base Battery Backup** The #9245 is the base battery backup used on Models 50S and 53S system units and #5070, #5072, #5080, and #5082 Storage Expansion Towers. Model 53S system unit requires two #9245s. Card slots used: None
	MAIN STORAGE
#3152	**32 MB Main Storage** Supported by Model 50S. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#3153	**64 MB Main Storage** Supported by Model 50S. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#3154	**128 MB Main Storage** Supported by Model 50S. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#3155	**256 MB Main Storage** Supported by Model 50S. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#3162	**128 MB Main Storage** Supported by Model 53S on the #2154, #2155, or #2156 processors. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#3163	**256 MB Main Storage** Supported by Model 53S on the #2154, #2155, or #2156 processors. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#3164	**512 MB Main Storage** Supported by Model 53S on all processors. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#3165	**1024 MB Main Storage** Supported by Model 53S on all processors. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#3166	**256 MB Main Storage** Supported by Model 53S on the #2157 processor only. Must be added in pairs. Requires one dedicated memory card slot. Maximum: One pair
#7263	**Optional Base 256 MB Main Storage** Supported by Model 53S on the #2154, #2155, or #2156 processors. It provides an optional 526 MB main storage card in place of a base 128 MB card. Must be added in pairs. Requires one dedicated memory card slot.
#7264	**Optional Base 512 MB Main Storage** Supported by Model 53S on the #2154, #2155, or #2156 or #2157 processors. It provides an optional 512 MB main storage card in place of a base 128 MB card. Must be added in pairs. Requires one dedicated memory card slot.
#7265	**Optional Base 1024 MB Main Storage** Supported by Model 53S on the #2154, #2155, or #2156 or #2157 processors. It provides an optional 1024 MB main storage card in place of a base 128 MB card. Must be added in pairs. Requires one dedicated memory card slot.
#7266	**Base 256 MB Main Storage** Supported by Model 53S on the #2157 processor only. Two of these features are required to reach the system minimum main storage or 512 MB. Must be added in pairs. Requires one dedicated memory card slot.
#8253	**Optional Base 64 MB Main Storage** Supported by Model 50S. It provides an optional 64 MB main storage card in place of a base 32 MB card. Must be added in pairs. Requires one dedicated memory card slot.

#8254	**Optional Base 128 MB Main Storage** Supported by Model 50S. It provides an optional 128 MB main storage card in place of a base 32 MB card. Must be added in pairs. Requires one dedicated memory card slot.
#8255	**Optional Base 256 MB Main Storage** Supported by Model 50S. It provides an optional 256 MB main storage card in place of a base 32 MB card. Must be added in pairs. Requires one dedicated memory card slot.
#9252	**Base 32 MB Main Storage** Supported on Model 50S. Must be added in pairs. Requires one dedicated memory card slot.
#9262	**Base 32 MB Main Storage** Supported by Model 53S on #2154, #2155, or #2156 processors. Must be added in pairs. Requires one dedicated memory card slot.
	WORKSTATION CONTROLLERS
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three #2699, #6149, #6180, #6181, #9249, and #9381 IOAs. The #6149, #6180, #6181, #9249, and #9381 LAN IOAs cannot occupy all three positions of the #2629. No more than seven #2629s can be placed in one #5070 or #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 #5071 or #5073 1063 Mbps System Unit Expansion Tower. Card slots required: One Minimum OS/400 level: V4R1
#5540	**#5540 System Console on Twinaxial Workstation IOA** Prerequisite: #9162 MFIOP
#5541	**Console attached to ASCII Workstation Controller** An #9141/#6141 ASCII Workstation Controller is automatically included when #5541 is specified to control the ASCII system console. Prerequisite: #9163 MFIOP
#5542	**Console attached to LocalTalk Workstation Controller**
#5543	**Client Access/400 Console** The #5543 specifies a PC workstation to act as the system console: #9026 Console Attachment Cable (6m) #9027 Console Attachment Cable (2.5m) Prerequisite: #2612 EIA 232/V.24 One-Line Adapter or #9612 Standard EIA 232/V.24 One-Line Adapter and #9026 or #9027 console attachment cable
#6050	**#6050 Enhanced Twinaxial Workstation Controller** One eight-port workstation attachment is provided to support seven 5250-type displays or printers. Requires one I/O card slot.
#6054 #9054	**#6054 Workstation Adapter for Apple Macintosh (LocalTalk)** See the Communications section. The #9054 is plant installed only.
#6141 #9141	**#6141 ASCII Workstation Controller** The #6141 is a six-port workstation controller and workstation adapter. It supports up to six ASCII devices. Requires one I/O card slot.
#6180	**#6180 Twinaxial Workstation IOA** The #6180 is an eight-port attachment provided to support up to seven twinaxial devices. The #6180 must be placed in a #2629 LAN/WAN/Workstation IOP. Prerequisite: #2629 LAN/WAN/Workstation IOP Minimum OS/400 level: V4R1
#9149	**Twinaxial Passthru Adapter** The #9149 adapts a twinaxial cable to the twinaxial function that resides inside the #9612/#8162. It is a prerequisite of the #9162/#8162. When an external diskette drive is required on the system, the #9149 is replaced by #6147 Diskette Adapter.

#9162 #8162	**MFIOP with Twinaxial Support** Both the #9152 and #8162 allow the attachment of seven 5250-type devices and provide support for a twinaxial console. Prerequisite: #9149 Twinaxial Passthru Adapter The #8162 not available on new orders.
#9163	**MFIOP** The #9163 does not support any 5250 type devices. When one #6054/#9054 is attached, the #9163 controls a LocalTalk system console. Without #6054/#9054 attached, the system console is driven by the first workstation controller found when the system searches along the bus.
	COMMUNICATIONS
MFIOP	**Base Communications** The Multifunction I/O Processor comes as standard on the Model 50S and 53S. The #9162, #8162 or #9163 MFIOP can support two communications lines. The first line (with an EIA 232/V.24 adapter) is supplied as standard (#9612) for use with IBM Electronic Customer Support. One cable must be specified: #9023 EIA 232/V.24 enhanced cable (20-ft.) #9835 EIA 232/V.24 enhanced cable (50-ft.) Maximum aggregate data rate = 83,200 bps.
#2605	**#2605 ISDN Basic Rate Interface Adapter** The #2605 connects to the #2623 Six-Line Communications Controller to support one communications line to an ISDN network. Each adapter supports two 64 Kbps B channels and one 16 Kbps D channel. ISDN lines are full duplex. Requires no I/O card slots. **Restriction:** This adapter cannot be attached to #2623 that also attaches V.24, X.21 or V.35 adapter.
#2609	**#2609 EIA 232/V.24 Two-Line Adapter** The #2609 connects to the #2623 Six-Line Communications Controller to support two communications lines using ASYNC, BSC, SDLC or X.25 protocol. Requires no I/O card slots. Two cables must be specified: #9023 EIA/V.24 enhanced cable (20-ft.) #9835 EIA/V.24 enhanced cable (50-ft.) #9022 EIA/V.24 cable (20-ft.) #9836 EIA/V.24 cable (50-ft.)
#2610	**#2610 EIA 232/V.24 Two-Line Adapter** The #2610 connects to the #2623 Six-Line Communications Controller to support two communications lines running X.21 or X.25 networks. Requires no I/O card slots. Two cables must be specified: #9021 X.21 cable (20-ft.) #9839 X.21 cable (50-ft.)
#2612	**#2612 EIA 232/V.24 One-Line Adapter** The #2612 connects to the MFIOP and #2623 Six-Line Communications Controller to support one communications line using ASYNC, BSC, SDLC or X.25 protocol. Requires no I/O card slots. One cable must be specified (see cable features for #2609).
#2613	**#2613 V.35 One-Line Adapter** The #2613 connects to the MFIOP and #2523 supporting one V.35 line using either BSC, SDLC, or X.25 protocols. Requires no I/O card slot. #9020 V.35 cable (20-ft.) #9020 V.35 cable (20-ft.) #9838 V.35 cable (50-ft.)
#2614	**#2614 X.21 One-Line Interface Adapter** The #2614 connects to the MFIOP and #2623 to attach one communications line to an X.21 or X.25 network. Requires no I/O card slots. One cable must be specified (see cable features for #2610).
#2620	**#2620 Full Cryptographic Processor** The #2620 provides full cryptographic support for encrypting and decrypting data. The #2620 consists of an I/O processor card and cable to attach an optional #4754-001. Distribution of the #2620 is restricted by U.S. Government export regulations. In countries outside the U.S.A. and Canada, it may be marketed only to financial institutions and subsidiaries of U.S. companies. Requires one I/O card slot.
#2623	**#2623 Six-Line Communications Controller** The #2623 provides basic control and common circuits for up to six lines. Requires one I/O card slot.

#2628	**#2628 Limited Cryptographic Processor** The #2628 provides the same functions as a #2620 except for Data Encryption Standard based data scrambling. Instead, it used Commercial Data Marketing Facility for data scrambling. Supports attachment of optional #4754-L01. Does not require U.S. Customs clearance. Requires one I/O card slot.
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three #2699, #6149, #6180, #6181, #9249, and #9381 LAN/WAN/Workstation IOAs. 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 #5070 or #5072 1063 Mbps System Unit Expansion Tower. The #2629 cannot be placed in slot 14 or a #5072. There is no restriction on placing #2629 in #5071 or #5073 1063 Mbps System Unit Expansion Tower. Card slots required: One Minimum OS/400 level: V4R1
#2664	**#2664 Integrated Fax Adapter (SPD)** The #2664 provides the iSeries or AS/400e with two ports capable of transmission and receipt of facsimile data to or from a Group 3 capable Fax, another iSeries or AS/400e with an integrated Fax adapter, or PCs with approximately programmed Fax adapters. Requires one I/O card slot. Not supported with V5R1 and later.
#2666	**#2666 High-Speed Communications Adapter (SPD)** The #2666 provides the iSeries or AS/400e with one communications port capable of high-speed communication over public or private Frame Relay networks or point-to-point non-switched SDLC lines. Speeds up to 2.048 Mbps are possible. Requires one I/O card slot. One of these cables must be specified: #9879 6m V.35 cable #9880 24m V.35 cable* #9882 6m V.36/EIA 449 cable #9883 24m V.36/EIA 449 cable** #9884 45m V.36/EIA 449 cable** #9885 6m X.21 cable * Line speeds up to 64 Kbps only. ** Use of the longer cables require that the attaching Data Communications Equipment (DCE) support the V.36 transmitter signal element timing Data Terminal Equipment (DTE) source signal. **Note:** The #2666 is classed as a communications line for purpose of maximum communications lines per model.
#2699	**#2699 Two-Line WAN IOA** The #2699 supports up to two multiple protocol communications ports when any one or two of these cables are attached: #0329 V.24/EIA 232 80-ft. (24m) cable #0330 V.24/EIA 232 20-ft. (24m) cable #0331 V.24/EIA 232 50-ft. (24m) cable #0332 V.24/EIA 232 80-ft. (20m) enhanced cable #0333 V.24/EIA 232 80-ft. (50m) enhanced cable #0334 V.24/EIA 232 80-ft. (24m) enhanced cable #0335 V.36/EIA 232 449 20-ft. (6m) cable #0336 V.36/EIA 232 449 50-ft. (15m) cable #0337 V.36/EIA 232 449 150-ft. (45m) cable #0338 V.35 20-ft. (6m) cable #0338 V.35 50-ft. (15m) cable #0338 V.35 80-ft. (24m) cable #0338 X.21 20-ft. (6m) cable #0338 X.21 50-ft. (15m) cable See the #2699 description in 10.13, “AS/400e Model 640 and 650 features” on page 317, for restrictions on communications using #2699. Prerequisite for #2699: #2629 LAN/WAN/Workstation IOP IOA slots required for #2699: One on #2629. Minimum OS/400 level: V4R1

#6054 #9054	**#6054 Workstation Adapter for Apple Macintosh (LocalTalk)** The #6054 allows Apple Macintosh computer devices to attach directly to the iSeries or AS/400e. Also allows for connection to LocalTalk networks. Each adapter allows attachment of 31 Apple Macintosh devices with up to 56 sessions. The #6054 attaches to the #2623 The #9054 attaches to the MFIOP A maximum of one #6054/#9054 can be attached per #2623/MFIOP. A second adapter on the #2623 may be X.21, V.24, or V.35. The third adapter position *must not* be used. A single-line EIA 232/V.24 adapter may co-reside with #9054 on MFIOP.
#9612	**#9612 Standard EIA 232/V.24 One-Line Adapter** The #9612 provides support for one communication line using either ASYNC, BSC, SDLC, or X.25 protocol. Specify one of these cables for ECS: #9023 EIA232/V.24 enhanced cable (20-ft.) #9835 EIA232/V.24 enhanced cable (50-ft.) The #9612 may also be used in conjunction with #5543 Client Access/400 console and requires #9026/#9027 cables.
	LANS/ATM
#2617 #9617	**#2617 Ethernet/IEEE 802.3 Adapter/HP (SPD)** The #2617 provides a single attachment on one Carrier Sense Multiple Access/Collision Detect Local Area Network. The #9617 is the base LAN. The customer must procure the Attachment Unit Interface (AUI) cable, which connects between the adapter and the Ethernet/IEEE 802.3 transceiver. Supports 10 Mbps half duplex only. Requires one I/O card slot.
#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. The #8664 is the base LAN. Requires one I/O card slot. Cables: Requires multi-mode (62.5/125) micron FDDI optical fiber jumper cables to connect the FDDI adapter into the FDDI ring. These must be separately ordered.
#2619 #9619	**#2619 LAN/WAN/Workstation IOA (SPD)** The #2619 provides a single attachment to a 16 Mbps or 4 Mbps IBM Token Ring Network. It consists of an adapter card, internal code, which supplies IEEE 802.5 Media Access Control and Logical Link Control functions, and an external 2.5m cable. The #9619 is the base LAN. Requires one I/O card slot.
#2629	**#2629 LAN/WAN/Workstation IOP** The #2629 supports up to three #2699, #6149, #6180, #6181, #9249 and #9381 LAN/WAN/Workstation IOAs. 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 #5070 or #5072 1063 Mbps System Unit Expansion Tower. There is no restriction on placing #2629 in #5071 or #5073 1063 Mbps System Unit Expansion Tower. The #2629 cannot be placed in slot 14 of a #5072. Card slots required: One Minimum OS/400 level: V4R1
#2663	**#2663 I/O Attachment Processor** The #2663 provides the communications hardware base for the #2668 Wireless LAN Adapter. The #2663 is required when attaching the #2668. The #2663 and #2668 are integrated in a single hardware package to operate as a unit. Shares one I/O card slot with #2668.
#2665 #8665	**Shielded Twisted-Pair Distributed Data Interface Adapter** The #2665/#8655 provides one interface to connect an iSeries or AS/400e to an FDDI LAN which is constructed of IBM Cabling System Type 1, 2, 6, or 9 shielded twisted pair wiring. The #8665 would be the base LAN. Requires one I/O card slot. Cables: The SDDI adapter requires IBM FDDI copper jumper cables to connect the adapter into the FDDI ring. These must be separately ordered.

#2668	**#2668 Wireless LAN Adapter (SPD)** The #2668 provides wireless connectivity from iSeries or AS/400e servers to workstations or other systems connected to a wireless LAN network. The #2668 comes with an antenna and a cable for connecting the antenna to the adapter. One of these antenna cables must be specified: #9814 20-ft. antenna cable #9815 50-ft. antenna cable One of these antenna must be specified: #9890 Omni-directional antenna #9891 Hemispherical antenna #9892 Directional antenna Shares one I/O card slot with #2663. Prerequisite #2663 I/O Attachment Processor.
#2723	**#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. 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 Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. Prerequisite: #6617 Integrated PC Server or #6618 Integrated Netfinity Server Minimum OS/400 level: V4R2
#2724	**#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. The #2724 IOA is capable of operating in half or full duplex mode. Prerequisite: #6617 Integrated PC Server or #6618 Integrated Netfinity Server. Minimum OS/400 level: V4R2
#2810	**#2810 LAN/WAN IOP** The #2810 I/O processor is required to attach one #2738/#9738 PCI 100/10 Mbps Ethernet IOA or the #2811/#2812/#2815/#2816/#2818/#2819 PCI ATM IOA. Card slots required: One with any of the preceding features Minimum OS/400 to support #2838/#9738: V4R1 Minimum OS/400 to support any ATM/IOA: V4R2
#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 into an Asynchronous Transfer Mode (ATM) network using coax cabling and the T3/DS-3. The #2812 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 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. 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 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. 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
#2838 #9738	**#2838 PCI 100/10 Mbps Ethernet IOA** The #2838 provides attachment to a standard 100 Mbps high-speed Ethernet LAN and allows attachment to existing 10 Mbps Ethernet LAN. The adapter comes with an RJ45 connector for attachment to UTP-5 media. The #9738 specifies the base LAN. The Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. Card slots required: One (with #2810) or three (with #6617 or #6618) Prerequisite: #2810 LAN/WAN IOP, #6617 Integrated PC Server, or #6618 Integrated Netfinity Server Minimum OS/400 to support with the #2810: V4R1 Minimum OS/400 support with the #6617 or #6618: V4R2
#6149 #9249	**16/4 Mbps Token Ring IOA** The #6149/#9249 provides a single attachment to a 16 Mbps or a 4 Mbps Token Ring Network. It consists of an IOA car, 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. Card slots required: None Prerequisite: One #2629 LAN/WAN/Workstation IOP or #6616 Integrated PC Server Minimum OS/400 to support in the #6616: V3R7 Minimum OS/400 to support in the #2629: V4R1
#6516 #6517 #6518 #6519 #6526 #6527 #6528 #6529 #8716 to #8719 #8726 to #8729 #6509 #6520	**Integrated PC Server (formerly known as FSIOP)** The Integrated PC Server connects to the iSeries or AS/400e to provide high performance file serving to PCs attached using token ring or Ethernet networks. The I/O processor consists of an INTEL 80486 66MHZ processor and onboard main storage (16 to 64 MB). The initial order configurations can be field upgraded using the #6509 and #6520. 16 MB One-Port Integrated PC Server 32 MB One-Port Integrated PC Server 48 MB One-Port Integrated PC Server 64 MB One-Port Integrated PC Server 16 MB Two-Port Integrated PC Server 32 MB Two-Port Integrated PC Server 48 MB Two-Port Integrated PC Server 64 MB Two-Port Integrated PC Server Specify for One-Port Integrated PC Server as base LAN Specify for Two-Port Integrated PC Server as base LAN These cables need to be specified depending on the network attaching into a Integrated PC Server Port: #9024 Token ring cable (2.44m) #9025 Ethernet Cable (3m AUI) The Integrated PC Server requires two contiguous I/O card slots **Additional 16 MB for Integrated PC Server** The #6509 is used for expanding the memory of an installed Integrated PC Server. One to three #6509s may be installed per Integrated PC Server up to a maximum of 64 MB. **Upgrade One-Port Integrated PC Server to Two-Port Integrated PC Server** The #6520 cannot be used with a Two-Port Integrated PC Server.

#6616	**#6616 Integrated PC Server** The #6616 contains a 166 MHz Pentium Processor, two main storage slots, and two LAN 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 LAN IOAs are supported: #9249/#6149 16/4 Mbps Token Ring IOA #9381/#6181 ASCII Workstation Controller One #9249 or #9381 can be specified as the base LAN. Minimum OS/400 level: V3R7 with cumulative PTF package C7029370 or later. Card slots required: Two contiguous slots
#6617	**#6617 Integrated PC Server (SPD)** The #6617 contains a 200 MHz Pentium Processor, four main storage slots, and two LAN slots for higher 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 #2838/#9738. #2723 PCI Ethernet IOA #2724 PCI 16/4 Mbps Token Ring IOA #2838 PCI 100/10 Mbps Ethernet IOA The #9738 is the base LAN. The third LAN and the second #2838/#9738 can only be used if running Windows NT on the #6617. The #0022 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 or Mouse for Windows NT, the default in the U.S.A. A display must be connected to the IPCS to support Windows NT. Minimum OS/400 level: V4R2 and CUM C8342420, V4R3 and CUM C8349430 or later. For country-specific keyboard or mouse and display support, refer to the Web site at: http://www.ibm.com/iseries/windowsintegration/ Card slots required: Three contiguous slots. Cannot be placed in #5044 System Unit Expansion Rack.
#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 — Specify #0221 is required for each #2723 ordered. #2724 PCI 16/4 Mbps Token Ring IOA — Specify #0220 is required for each #2724 ordered. #2838 PCI 100/10 Mbps Ethernet IOA — Specify #0222 is required for each #2838 ordered. Only one of these Base LAN IOAs is supported: #9723 PCI Ethernet IOA — Specify #0221 is required for each #9723 ordered. #9724 PCI Token Ring IOA — Specify #0220 is required for each #9724 ordered. #9738 PCI 100/10 Mbps Ethernet IOA — Specify #0222 is required for each #9738 ordered. 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. When 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/ 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.

#6618 (cont.)	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
#1109	**988 MB Single Disk Unit Conversion Kit** The #1109 provides the conversion kit required to migrate 988MB one-byte SCSI disk units. 2.06 GB dual-disk units require two of these kits. Each kit occupies one disk slot.
#1378	**525 MB ¼-inch Cartridge Tape Unit** The #1378 provides the conversion kit required to migrate 525 MB ¼-inch cartridge tape units. Maximum: 17
#1379	**1.2 GB ¼-inch Cartridge Tape Unit** The #1379 provides the conversion kit required to migrate 1.2 GB ¼-inch cartridge tape units. Maximum: 17
#1380	**2.5 GB ¼-inch Cartridge Tape Unit** The #1580 provides the conversion kit required to migrate 2.5 GB ¼-inch cartridge tape units. Maximum: 17
#1602	**1.03 GB Single Disk Unit Conversion Kit** The #1602 provides the conversion kit required to migrate 1.03GB one-byte SCSI disk units. 1976 MB dual-disk units require two of these kits. Each kit occupies one disk slot.
#1603	**#1603 1.96 GB Single Disk Unit Conversion Kit** The #1603 provides the conversion kit required to migrate 1.96 GB one-byte SCSI disk units. 3.93 GB dual-disk units require two of these kits. Each kit occupies one disk slot.
#6109	**988 MB Additional Disk Unit** The #6109 provides a 3 ½-inch single disk unit with 988 MB capacity for additional disk storage.
#6285	**#6285 13.0 GB ¼-inch Cartridge Tape Unit** The #6285 provides full interchange of data with all standard and optional ¼-inch cartridge tape units provided on the iSeries or AS/400e server, using the proper media and density. Sustained data transfer rate is 1.5 MB per second. With hardware, data compression maximum capacity is up to 26 GB. Supported as an Alternate IPL device. Requires #6513 Internal Tape Device Controller. Maximum: 17
#6335	**#6335 840 MB ¼-inch Cartridge Mini Tape Unit** Using QIC-3040-M recording format, tape cartridge capacity on the #6335 is 840 MB. With hardware, data compression maximum capacity is up to 1.6GB. Sustained data transfer rate is 300 KB per second. Maximum: 17
#6380	**#6380 2.5 GB ¼-inch Cartridge Tape Unit** The #6380 provides full interchange of data with all standard ¼-inch cartridge tape units provided on the iSeries or AS/400e server, using the proper media and density. With hardware, data compression maximum capacity is up to 5 GB. Sustained data transfer rate is 300KB per second. Maximum: 17
#6390	**#6390 7 GB 8 mm Cartridge Tape Unit** The #6390 is an 8 mm Helical Scan tape drive which can be used for save and restore, program distribution, and alternate IPL. Has sustained data rate of 500 KB per second. With hardware, data compression maximum capacity is up to 14 GB, and data transfer rate is up to 1 MB per second. Maximum: 17
#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.
#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.
#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.

#6650	**1.96 GB Additional Two-Byte Disk Unit** The #6650 provides a 3 ½-inch single disk unit with 1.96 GB capacity for additional disk storage.
#6652	**1.03 GB Additional Two-Byte Disk Unit** The #6652 provides a 3 ½-inch single disk unit with 1.03 GB capacity for additional disk storage.
#6713 #7713	**#6713 8.58 GB Disk Unit (Ultra SCSI)** The #6713 feature provides a 3 ½-inch single disk unit with 8.58 GB capacity for additional disk storage. The #7713 is an optional 8.58 GB base disk. Minimum OS/400 level: V3R7
#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 #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in #5058 Storage Expansion Unit or #5081 or #5083 Storage Expansion Tower.
#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. For best performance, use attached to the #6532 or #6533 RAID Disk Unit Controller (Ultra SCSI) in #5058 Storage Expansion Unit or #5081 or #5083 Storage Expansion Tower.
#7607	**4.19 GB Optional Two-Byte Disk Unit** The #7607 provides a 3 ½-inch single disk unit with 4.19 GB capacity as the base disk unit in place of the #9606. This is the default base disk with OS/400 V4R1.
#9606	**1.96 GB Base Two-Byte Disk Unit** The #9606 provides a 3 ½-inch single disk unit with 1.96 GB capacity as the base disk unit on new Models 50S and 53S or as upgrades to Models 50S and 53S.
#9520	**Base CD-ROM Drive** The #9520 is used for code distribution.
	MAGNETIC MEDIA CONTROLLERS
#2621	**#2621 Storage Device Controller (SPD)** The #2621 provides attachment capability for up to two of these removable media devices with hardware data compression: 2440, 9348, 9427, 7208 and 3995. If the #2621 is to support 3995 or 9427, it must be dedicated to it. Card slots used: One
#2624	**#2624 Storage Device Controller** The #2624 can support up to two internal tape units in the system unit. As a feature on #507x, it can support up to three internal tape units. The #2624 can concurrently support a #6146 Diskette Adapter to attach an external diskette unit. With V3R7 and later, the hardware configurator defaults to the #6513 Internal Tape Device Controller unless the tape is a #1378 (525 MB QIC) or if a #2624 is available to attach to required tape. Card slots used: One Maximum: One per tower
#2644	**#2644 Magnetic Tape Attachment Card/HP** The #2644 provides attachment for all 34xx tape subsystem models (except SCSI attach 3490 models). May also require a #9980 serpentine cable. Card Slots used: One
#6146	**#6146 Diskette Adapter (SPD)** The #6146 provides support for one of these external diskette types: 9331-011 8-inch diskette unit 9331-012 ¼-inch diskette unit It requires #2624 to attach. Card slots used: none Maximum: One
#6147	**#6147 Diskette Adapter.** The #6147 provides support for one of these external diskette types: 9331-011 8-inch diskette unit 9331-012 5 ¼-inch diskette unit It attaches to #9162 or #9163 MFIOP Card slots used: None Maximum: One Also supports Twinaxial Passthru (see #9149).

#6501	**#6501 Tape/Disk Device Controller** The #6501 allows attachment of up to two SCSI attach 3490 or 35xx units. Card slots used: One
#6502	**#6502 High Performance Controller 2 MB Cache (RAID/Mirrored/Unprotected)** The #6502 provides RAID-5 protection and a 2 MB write-cache for internal disk units installed in a single #505x, #8052, or #9051 Storage Expansion Unit or installed in the #508x Storage Expansion Tower. Supports up to 16 disk units. A maximum of two RAID-5 arrays are allowed per #6502 with a maximum of ten disk units per array. All disk units in an array must be of the same capacity. A minimum of four disk units are needed for a valid RAID-5 configuration and disk units not supported in a RAID-5 array can still be attached in base or mirrored mode. Only 1.03 GB, 1.96 GB, and 4.19 GB disk units can be RAID-5 protected with this controller and parity is spread across four or eight disk units. Mutually exclusive with #6512, #6530, #6532 and #6533. One #6502/#6512/#6530/#6532/#6533 is required for each #505x, #8052, or #9051 Storage Expansion Unit or #508x Storage Expansion Tower. The #6502 does not support integrated hardware disk compression. Card slots used: One
#6512	**#6512 High Performance Controller 4 MB Cache (RAID/Mirrored/Unprotected)** The #6512 provides RAID-5 protection and a 4 MB write-cache for internal disk units installed in a single #505x, #8052 or #9051 Storage Expansion Unit or installed in the #508x Storage Expansion Tower. Supports up to 16 disk units. A maximum of two RAID-5 arrays are allowed per #6512 with a maximum of 10 disk units per array. All disk units in an array must be of the same capacity. A minimum of four disk units are needed for a valid RAID-5 configuration and disk units not supported in a RAID-5 array can still be attached in base or mirrored mode. Only 1.03 GB, 1.96 GB, and 4.19 GB disk units can be RAID-5 protected with this controller and parity is spread across four or eight disk units. Mutually exclusive with #6502, #6530, #6532, and #6533. One #6502/#6512/#6530/#6532/#6533 is required for each #505x, #8052, or #9051 Storage Expansion Unit or #508x Storage Expansion Tower. The #6512 does not support integrated hardware disk compression. Card slots used: One
#6513	**#6513 Internal Tape Device Controller** The #6513 provides support for up to two internal tape devices when installed in the system unit or up to four internal tape devices when installed in a #507x System Unit Expansion Tower. The #6513 is the default on the hardware configurator except for #1378, (525 MB QIC) or if a #2624 Storage Device Controller is available for attaching a required tape. These internal tape features are supported: #1379, #1380, #6335, #6380, #6385, and #6390. Minimum OS/400 level: V3R7 Card Slots used: One
#6530	**#6530 Disk Unit Controller No Cache (Mirrored/Unprotected)** The #6530 provides attachment for up to two internal tape devices when installed in the system unit or up to four internal tape devices when installed in a #507x System Unit Expansion Tower in either base or mirrored mode. Mutually exclusive with #6502, #6512, #6532, and #6533. One #6502/#6512/#6530/#6532/#6533 is required for each #505x, #8052, or #9051 Storage Expansion Unitt or #508x Storage Expansion Tower. The #6530 does not support integrated hardware disk compression. Card Slots used: 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 #5058 Storage Expansion Unit or #5081 or #5083 Storage Expansion Tower. Also supports disks located in #5051, #5052, #8052 or #9051 Storage Expansion Unit, or #5080 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 each array. A maximum of four arrays are allowed for each #6533. The #6532 does not support of integrated hardware disk compression. Card slots required: One Minimum OS/400 level: V4R1
#6533	**#6533 RAID Disk Unit Controller–4 MB Cache (RAID/Mirrored/Unprotected) (Ultra SCSI)** The #6533 is an Ultra SCSI Controller for up to 16 disks installed in #5058 Storage Expansion Unit or #5081 or #5083 Storage Expansion Tower. Also supports disks located in the #5051, #5052, #8052, or #9051 Storage Expansion Unit or #5080 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 each array. A maximum of four arrays are allowed for each #6533. Card slots required: One 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 the #6714/#8714 17.54 GB Disk Unit: V4R4

#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 Server. Card slots required: One Maximum: Four Minimum OS/400 level: V4R1 Minimum OS/400 to support 3995: V4R2
#9980	**Serpentine Cable** Required for attaching all #2644 supported devices (except 3490-Cxx when attached using “internal cables”). This is a 3490 feature.