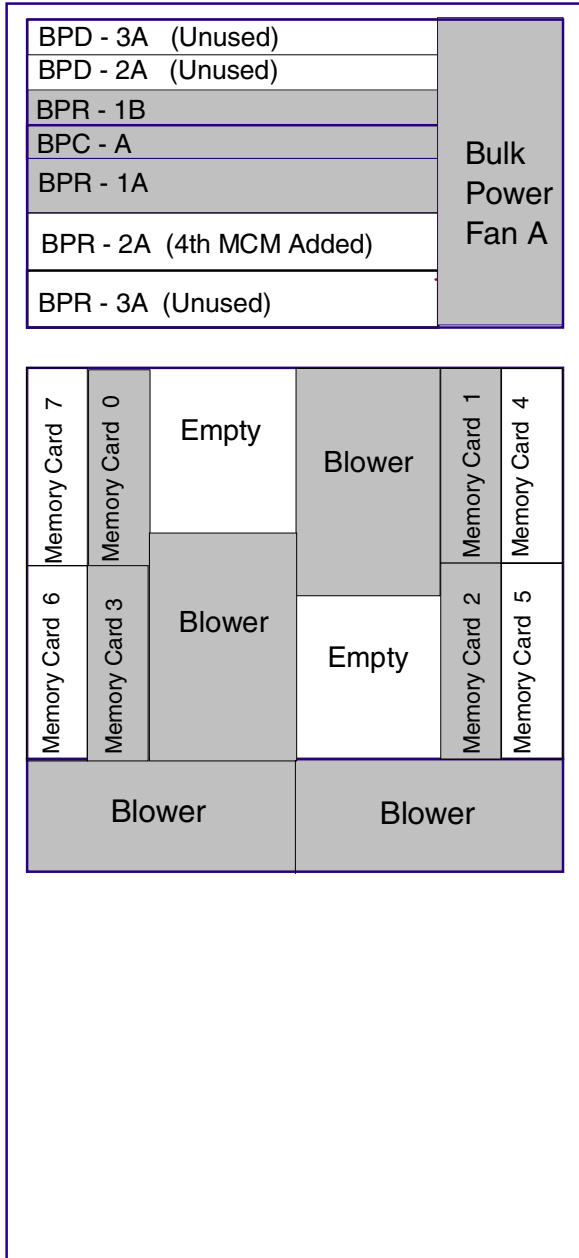


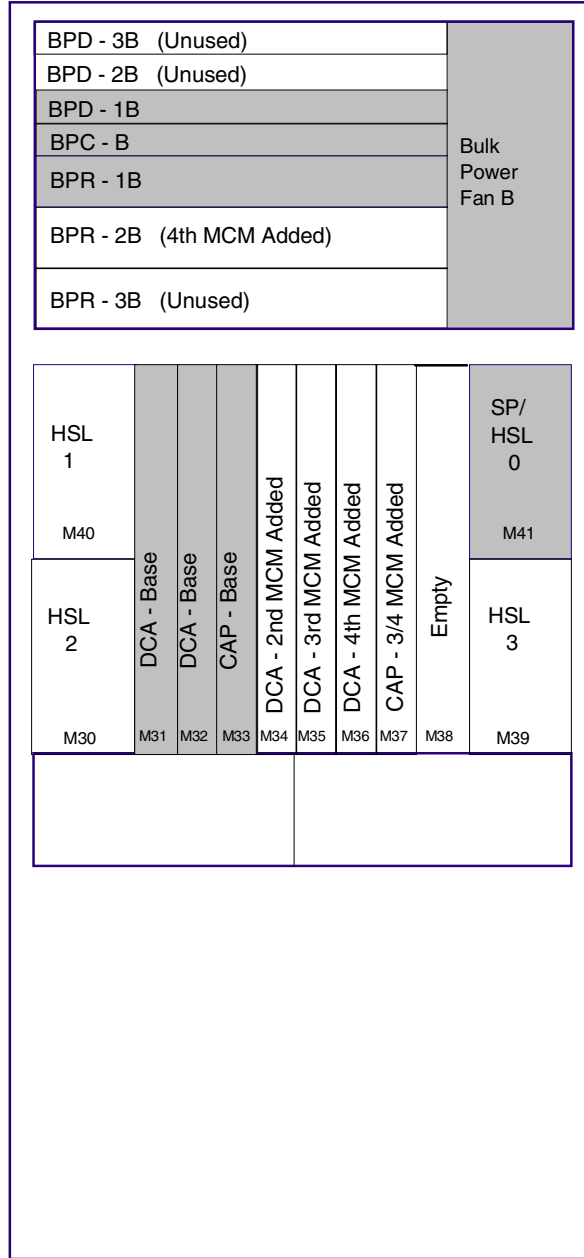
3.8 9406 Model 890 system unit

9406 Model 890 System Unit: PCI Card Placement

820, 830, 840, 890 Models

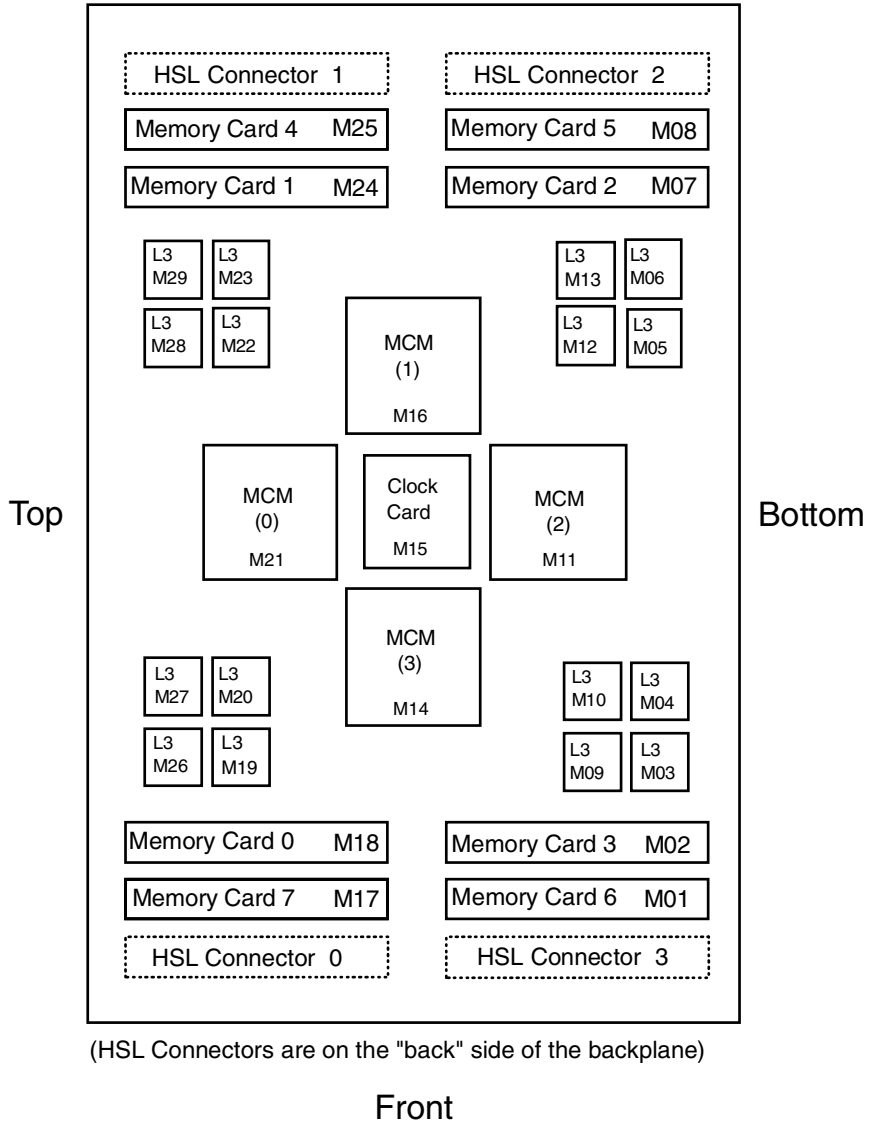


Front



Back

Model 890 CEC Back Plane



820, 830, 840, 890
Models

3.9 iSeries Model 820, 830, 840, and 890 features

PCI cards are subject to plugging rules. See Chapter 6, “PCI card placement rules for the iSeries server” on page 163, for details.

820 PROCESSORS		
#0150	none	370 CPW Uni-Processor in Client/Server Environment. 0 CPW Interactive Environment. <ul style="list-style-type: none"> ▶ Includes eight slots for main storage DIMMs that plug directly into the processor. ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots ▶ Processor CCIN 25BC
#0151	none	2400 CPW 2-way Processor in Client/Server Environment. 0 CPW Interactive Environment. <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884) ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots ▶ Processor CCIN 25BD
#0152	none	3840 CPW 4-way Processor in Client/Server Environment. 0 CPW Interactive Environment. <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884) ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots ▶ Processor CCIN 25BE
#2395	Interactive features	370 CPW Uni-Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Includes eight DIMM memory positions (plug directly into the backplane – direct attach) ▶ Includes base I/O backplane and embedded base IOP (CCIN 284C) with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots ▶ Processor CCIN 244A
	1521	Base 35 CPW in Interactive Environment. The #2395-1521 is represented by Processor Feature Code 23A1.
	1522	Optional 70 CPW in Interactive Environment. The #2395-1522 is represented by Processor Feature Code 23A2.
	1523	Optional 120 CPW in Interactive Environment. The #2395-1523 is represented by Processor Feature Code 23A3.
	1524	Optional 240 CPW in Interactive Environment. The #2395-1524 is represented by Processor Feature Code 23A4.
#2396	Interactive features	950 CPW Uni-Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Includes eight DIMM memory positions (plug directly into the backplane – direct attach). If more than eight DIMMs total are required, a #2884 Main Storage Expansion Riser Card must be used and all DIMMs must then reside on the #2884 ▶ Includes base I/O backplane and embedded base IOP (CCIN 284C) with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots ▶ Processor CCIN 245A
	1521	Base 35 CPW in Interactive Environment. The #2396-1521 is represented by Processor Feature Code 23A9.
	1522	Optional 70 CPW in Interactive Environment. The #2396-1522 is represented by Processor Feature Code 23AA.
	1523	Optional 120 CPW in Interactive Environment. The #2396-1523 is represented by Processor Feature Code 23AB.
	1524	Optional 240 CPW in Interactive Environment. The #2062-1524 is represented by Processor Feature Code 23AC.
	1525	Optional 560 CPW in Interactive Environment. The #2062-1525 is represented by Processor Feature Code 23AD.
#2397	Interactive features	2000 CPW 2-way Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions with the base main storage expansion card (CCIN 2884) ▶ Includes base I/O backplane and embedded base IOP (CCIN 284C) with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots ▶ Processor CCIN 244D
	1521	Base 35 CPW in Interactive Environment. The #2397-1521 is represented by Processor Feature Code 23B1.

820, 830, 840, 890 Models

#2397 (cont.)	1522	Optional 70 CPW in Interactive Environment. The #2397-1522 is represented by Processor Feature Code 23B2
	1523	Optional 120 CPW in Interactive Environment. The #2397-1523 is represented by Processor Feature Code 23B3.
	1524	Optional 240 CPW in Interactive Environment. The #2397-1524 is represented by Processor Feature Code 23B4.
	1525	Optional 560 CPW in Interactive Environment. The #2397-1525 is represented by Processor Feature Code 23B5.
	1526	Optional 1050 CPW in Interactive Environment. The #2397-1526 is represented by Processor Feature Code 23B6.
#2398	Interactive features	3200 CPW 4-way Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884) ▶ Includes base I/O backplane and embedded base IOP (CCIN 284C) with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots <ul style="list-style-type: none"> ▶ Processor CCIN 244E
	1521	Base 35 CPW in Interactive Environment. The #2398-1521 is represented by Processor Feature Code 23B8.
	1522	Optional 70 CPW in Interactive Environment. The #2398-1522 is represented by Processor Feature Code 23B9.
	1523	Optional 120 CPW in Interactive Environment. The #2398-1523 is represented by Processor Feature Code 23BA.
	1524	Optional 240 CPW in Interactive Environment. The #2398-1524 is represented by Processor Feature Code 23BB.
	1525	Optional 560 CPW in Interactive Environment. The #2398-1525 is represented by Processor Feature Code 23BC.
	1526	Optional 1050 CPW in Interactive Environment. The #2398-1526 is represented by Processor Feature Code 23BD.
#2435	Interactive features	600 CPW Uni-Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Includes eight slots for main storage DIMMs that plug directly into the processor ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots <ul style="list-style-type: none"> ▶ Processor CCIN 25BC
	1521	Base 35 CPW in Interactive Environment. The #2435-1521 is represented by Processor Feature Code 249B.
	1522	Optional 70 CPW in Interactive Environment. The #2435-1522 is represented by Processor Feature Code 249C.
	1523	Optional 120 CPW in Interactive Environment. The #2435-1523 is represented by Processor Feature Code 249D.
	1524	Optional 240 CPW in Interactive Environment. The #2435-1524 is represented by Processor Feature Code 249E.
#2436	Interactive features	1100 CPW Uni-Processor in Client/Server Environment. Required Minimum Memory 256 MB. <ul style="list-style-type: none"> ▶ Includes eight slots for main storage DIMMs that plug directly into the processor ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots <ul style="list-style-type: none"> ▶ Processor CCIN 25BC
	1521	Base 35 CPW in Interactive Environment. The #2436-1521 is represented by Processor Feature Code 24A8.
	1522	Optional 70 CPW in Interactive Environment. The #2436-1522 is represented by Processor Feature Code 24A9.
	1523	Optional 120 CPW in Interactive Environment. The #2436-1523 is represented by Processor Feature Code 24AA.
	1524	Optional 240 CPW in Interactive Environment. The #2436-1524 is represented by Processor Feature Code 24AB.
	1525	Optional 560 CPW in Interactive Environment. The #2436-1525 is represented by Processor Feature Code 24AC.

#2437	Interactive features	2350 CPW 2-way Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884) ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots <ul style="list-style-type: none"> ▶ Processor CCIN 25BD
	1521	Base 35 CPW in Interactive Environment. The #2437-1521 is represented by Processor Feature Code 24B0.
	1522	Optional 70 CPW in Interactive Environment. The #2437-1522 is represented by Processor Feature Code 24B1.
	1523	Optional 120 CPW in Interactive Environment. The #2437-1523 is represented by Processor Feature Code 24B2.
	1524	Optional 240 CPW in Interactive Environment. The #2437-1524 is represented by Processor Feature Code 24B3.
	1525	Optional 560 CPW in Interactive Environment. The #2437-1525 is represented by Processor Feature Code 24B4.
	1526	Optional 1050 CPW in Interactive Environment. The #2437-1526 is represented by Processor Feature Code 24B5.
#2438	Interactive features	3700 CPW 4-way Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884) ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots <ul style="list-style-type: none"> ▶ Processor CCIN 25BE
	1521	Base 35 CPW in Interactive Environment. The #2438-1521 is represented by Processor Feature Code 24B8.
	1522	Optional 70 CPW in Interactive Environment. The #2438-1522 is represented by Processor Feature Code 24B9.
	1523	Optional 120 CPW in Interactive Environment. The #2438-1523 is represented by Processor Feature Code 24BA.
	1524	Optional 240 CPW in Interactive Environment. The #2438-1524 is represented by Processor Feature Code 24BB.
	1525	Optional 560 CPW in Interactive Environment. The #2438-1525 is represented by Processor Feature Code 24BC.
	1526	Optional 1050 CPW in Interactive Environment. The #2438-1526 is represented by Processor Feature Code 24BD.
	1527	Optional 2000 CPW in Interactive Environment. The #2438-1527 is represented by Processor Feature Code 24BE.
#2425	Dedicated Domino Processor	Dedicated Domino Processor Uni, 4250 Simple Mail Users, 2620 Mail and Calendaring Users. 100 CPW (Non-Domino Workload), 0 CPW (Interactive Environment). <ul style="list-style-type: none"> ▶ Includes eight DIMM memory positions (plug directly into the processor – direct attach) ▶ Includes base I/O backplane (CCIN 282D) and embedded base IOP (CCIN 284C) ▶ Includes Common Service Processor The #2425 is represented by Processor Feature Code 2425 <ul style="list-style-type: none"> ▶ Processor CCIN 245A
#2426	Dedicated Domino Processor	Dedicated Domino Processor 2-way, 8000 Simple Mail Users, 4950 Mail and Calendaring Users. 200 CPW (Non-Domino Workload), 0 CPW (Interactive Environment). <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884) ▶ Includes base I/O backplane (CCIN 282D) and embedded base IOP (CCIN 284C) ▶ Includes Common Service Processor The #2426 is represented by Processor Feature Code 2426 <ul style="list-style-type: none"> ▶ Processor CCIN 244D
#2427	Dedicated Domino Processor	Dedicated Domino Processor 4-way, 14400 Simple Mail Users, 8910 Mail and Calendaring Users. 300 CPW (Non-Domino Workload), 0 CPW (Interactive Environment). <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884) ▶ Includes base I/O backplane (CCIN 282D) and embedded base IOP (CCIN 284C) ▶ Includes Common Service Processor The #2427 is represented by Processor Feature Code 2427 <ul style="list-style-type: none"> ▶ Processor CCIN 244E

#2456	Dedicated Domino Processor	<p>Dedicated Domino Processor Uni, 3110 Mail and Calendaring Users. 120 CPW (Non-Domino Workload), 0 CPW (Interactive Environment).</p> <ul style="list-style-type: none"> ▶ Includes eight slots for main storage DIMMs that plug directly into the processor ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) ▶ Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots. ▶ Processor CCIN 25BCThe #2456 is represented by Processor Feature Code 2456.
#2457	Dedicated Domino Processor	<p>Dedicated Domino Processor 2-way, 6660 Mail and Calendaring Users. 240 CPW (Non-Domino Workload), 0 CPW (Interactive Environment).</p> <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884). ▶ Includes base I/O backplane with Common Service Processor (CSP) (CCIN 282D) ▶ Provides support for the Service Processor, nine 32-bit and three 32- or 64-bit PCI slots. ▶ Processor CCIN 25BDThe #2457 is represented by Processor Feature Code 2457.
#2458	Dedicated Domino Processor	<p>Dedicated Domino Processor 4-way, 11800 Mail and Calendaring Users. 380 CPW (Non-Domino Workload), 0 CPW (Interactive Environment).</p> <ul style="list-style-type: none"> ▶ Includes 16 DIMM memory positions via the base main storage expansion card (CCIN 2884). ▶ Includes base I/O backplane (CCIN 282D) and embedded base IOP (CCIN 284C). ▶ Includes Common Service Processor. ▶ Processor CCIN 25BEThe #2458 is represented by Processor Feature Code 2458.
830 PROCESSORS		
#0153	Interactive features	<p>7350 CPW 8-way Processor in Client/Server Environment. Required Minimum Memory 1 GB.</p> <p>Base features include:</p> <ul style="list-style-type: none"> ▶ Main Storage Expansion Card (Slot M02) (CCIN 2881) ▶ #9754 Bus Expansion Clock Card—Eight HSL Ports Cluster Enabled (CCIN 2754) Specify with processor #0153 ▶ PCI and CSP Card (CCIN 28AA) ▶ Bus Adapter (CCIN 2681) ▶ Operator Panel (CCIN 247A) ▶ Processor Capacity Card (CCIN 0153) ▶ Processor 0 (CCIN 245D) ▶ Processor 1 (CCIN 245D)
#2349	Interactive features	<p>4200/7350 CPW 4/8-way Processor in Client/Server Environment. Required Minimum Memory 1 GB.</p> <p>Base features include:</p> <ul style="list-style-type: none"> ▶ Main Storage Expansion Card (Slot M02) (CCIN 2881) ▶ #9754 Bus Expansion Clock Card—Eight HSL Ports Cluster Enabled (CCIN 2754) Specify with processor #2349 ▶ Processor Capacity Card (CCIN 2349) 8-way ▶ Processor 0 (CCIN 245D) ▶ Processor 1 (CCIN 245D) <p>#1605 is the POD activation code (up to four on the #2349) Minimum OS/400 level: V5R1 OS/400 must be refreshed with feature code #2690</p>
1531		<p>Base 70 CPW in Interactive Environment.</p> <p>The #2349-1531 is represented by Processor Feature Code 24D8.</p>
1532		<p>Optional 120 CPW in Interactive Environment.</p> <p>The #2349-1532 is represented by Processor Feature Code 24D9.</p>
1533		<p>Optional 240 CPW in Interactive Environment.</p> <p>The #2349-1533 is represented by Processor Feature Code 24DA.</p>
1534		<p>Optional 560 CPW in Interactive Environment.</p> <p>The #2349-1534 is represented by Processor Feature Code 24DB.</p>
1535		<p>Optional 1050 CPW in Interactive Environment.</p> <p>The #2349-1535 is represented by Processor Feature Code 24DC.</p>
1536		<p>Optional 2000 CPW in Interactive Environment.</p> <p>The #2349-1536 is represented by Processor Feature Code 24DD.</p>
1537		<p>Optional 4550 CPW in Interactive Environment.</p> <p>The #2349-1537 is represented by Processor Feature Code 24DE.</p>

#2400	Interactive features	1850 CPW 2-way Processor in Client/Server Environment. Base features include: <ul style="list-style-type: none"> ▶ Main Storage Expansion Card (Slot M02) (CCIN 2881) ▶ #9732 Bus Expansion/Clock Card—Eight HSL Ports (CCIN 25AB) Specify with processor #2400 for V4R5 ▶ #9777 Bus Expansion Clock Card—Eight HSL Ports Cluster Enabled (CCIN 2754) Specify with processor #2400 for V5R1 and later ▶ Processor Capacity Card (CCIN 2400) ▶ Processor 0 (CCIN 245C)
	1531	Base 70 CPW in Interactive Environment. The #2400-1531 is represented by Processor Feature Code 23C1.
	1532	Optional 120 CPW in Interactive Environment. The #2400-1532 is represented by Processor Feature Code 23C2.
	1533	Optional 240 CPW in Interactive Environment. The #2400-1533 is represented by Processor Feature Code 23C3.
	1534	Optional 560 CPW in Interactive Environment. The #2400-1534 is represented by Processor Feature Code 23C4.
	1535	Optional 1050 CPW in Interactive Environment. The #2400-1535 is represented by Processor Feature Code 23C5.
#2402	Interactive features	4200 CPW 4-way Processor in Client/Server Environment. Base features include: <ul style="list-style-type: none"> ▶ Main Storage Expansion Card (Slot M02) (CCIN 2881) ▶ #9733 Bus Expansion/Clock Card—Eight HSL Ports (CCIN 25AD) Specify with processors #2402 for V4R5 ▶ #9754 Bus Expansion Clock Card—Eight HSL Ports Cluster Enabled (CCIN 2754) Specify with processor #2402 for V5R1 and later ▶ Processor Capacity Card (CCIN 2402) ▶ Processor 0 (CCIN 245D)
	1531	Base 70 CPW in Interactive Environment. The #2402-1531 is represented by Processor Feature Code 23D1.
	1532	Optional 120 CPW in Interactive Environment. The #2402-1532 is represented by Processor Feature Code 23D2.
	1533	Optional 240 CPW in Interactive Environment. The #2402-1533 is represented by Processor Feature Code 23D3.
	1534	Optional 560 CPW in Interactive Environment. The #2402-1534 is represented by Processor Feature Code 23D4.
	1535	Optional 1050 CPW in Interactive Environment. The #2402-1535 is represented by Processor Feature Code 23D5.
	1536	Optional 2000 CPW in Interactive Environment. The #2402-1536 is represented by Processor Feature Code 23D6.
#2403	Interactive features	7350 CPW 8-way Processor in Client/Server Environment. Required Minimum Memory 1 GB. Base features include: <ul style="list-style-type: none"> ▶ Main Storage Expansion Card (Slot M02) (CCIN 2881) ▶ #9733 Bus Expansion/Clock Card—Eight HSL Ports (CCIN 25AD) Specify with processors #2403 for V4R5 ▶ #9754 Bus Expansion Clock Card—Eight HSL Ports Cluster Enabled (CCIN 2754) Specify with processor #2403 for V5R1 and later ▶ Processor Capacity Card (CCIN 2403) ▶ Processor 0 (CCIN 245D) ▶ Processor 1 (CCIN 245D)
	1531	Base 70 CPW in Interactive Environment. The #2403-1531 is represented by Processor Feature Code 23D8.
	1532	Optional 120 CPW in Interactive Environment. The #2403-1532 is represented by Processor Feature Code 23D9.
	1533	Optional 240 CPW in Interactive Environment. The #2403-1533 is represented by Processor Feature Code 23DA.
	1534	Optional 560 CPW in Interactive Environment. The #2403-1534 is represented by Processor Feature Code 23DB.
	1535	Optional 1050 CPW in Interactive Environment. The #2403-1535 is represented by Processor Feature Code 23DC.

#2403 (cont.)	1536	Optional 2000 CPW in Interactive Environment. The #2403-1536 is represented by Processor Feature Code 23DD.
	1537	Optional 4550 CPW in Interactive Environment. The #2403-1537 is represented by Processor Feature Code 23DE.
840 PROCESSORS		
#0158	Interactive features	12000 CPW 12-way Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 0158) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) ▶ Processor 2 (CCIN 245E) ▶ Processor 3 (CCIN 245E)
#0159	Interactive features	20200 CPW 24-way Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 0159) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) ▶ Processor 2 (CCIN 245E) ▶ Processor 3 (CCIN 245E)
#2352	Interactive features	9000/12000 CPW 8/12-way POD Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2352) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) #1604 is a POD activation code (up to four on the #2352)
	1540	Optional 120 CPW in Interactive Environment. The #2352-1540 is represented by Processor Feature Code 26B0.
	1541	Optional 240 CPW in Interactive Environment. The #2352-1541 is represented by Processor Feature Code 26B1.
	1542	Optional 560 CPW in Interactive Environment. The #2352-1542 is represented by Processor Feature Code 26B2.
	1543	Optional 1050 CPW in Interactive Environment. The #2352-1543 is represented by Processor Feature Code 26B3.
	1544	Optional 2000 CPW in Interactive Environment. The #2352-1544 is represented by Processor Feature Code 26B4.
	1545	Optional 4550 CPW in Interactive Environment. The #2352-1545 is represented by Processor Feature Code 26B5.
	1546	Optional 10000 CPW in Interactive Environment. The #2352-1546 is represented by Processor Feature Code 26B6.
#2353	Interactive features	12400/16500 CPW 12/18-way POD Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2353) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) ▶ Processor 2 (CCIN 245E) #1604 is a POD activation code (up to six on the #2353) Minimum OS/400 level: V5R1
	1540	Optional 120 CPW in Interactive Environment. The #2353-1540 is represented by Processor Feature Code 26B8.
	1541	Optional 240 CPW in Interactive Environment. The #2353-1541 is represented by Processor Feature Code 26B9.
	1542	Optional 560 CPW in Interactive Environment. The #2353-1542 is represented by Processor Feature Code 26BA.
	1543	Optional 1050 CPW in Interactive Environment. The #2353-1543 is represented by Processor Feature Code 26BB.
	1544	Optional 2000 CPW in Interactive Environment. The #2353-1544 is represented by Processor Feature Code 26BC.
	1545	Optional 4550 CPW in Interactive Environment. The #2353-1545 is represented by Processor Feature Code 26BD.
	1546	Optional 10000 CPW in Interactive Environment. The #2353-1546 is represented by Processor Feature Code 26BE.
	1547	Optional 16500 CPW in Interactive Environment. The #2353-1547 is represented by Processor Feature Code 26BF.

#2354	Interactive features	16500/20400 CPW 18/24-way POD Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2354) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) ▶ Processor 2 (CCIN 245E) ▶ Processor 3 (CCIN 245E) #1604 is a POD activation code (up to six on the #2354) Minimum OS/400 level: V5R1
	1540	Optional 120 CPW in Interactive Environment. The #2354-1540 is represented by Processor Feature Code 26C0.
	1541	Optional 240 CPW in Interactive Environment. The #2354-1541 is represented by Processor Feature Code 26C1.
	1542	Optional 560 CPW in Interactive Environment. The #2354-1542 is represented by Processor Feature Code 26C2.
	1543	Optional 1050 CPW in Interactive Environment. The #2354-1543 is represented by Processor Feature Code 26C3.
	1544	Optional 2000 CPW in Interactive Environment. The #2354-1544 is represented by Processor Feature Code 26C4.
	1545	Optional 4550 CPW in Interactive Environment. The #2354-1545 is represented by Processor Feature Code 26C5.
	1546	Optional 10000 CPW in Interactive Environment. The #2354-1546 is represented by Processor Feature Code 26C6.
	1547	Optional 16500 CPW in Interactive Environment. The #2354-1547 is represented by Processor Feature Code 26C7.
	1548	Optional 20400 CPW in Interactive Environment. The #2354-1548 is represented by Processor Feature Code 26C8.
#2416	Interactive features	7800/10000 CPW 8/12-way POD Processor in Client/Server Environment. The standard features include: <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2416) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) #1604 is a POD activation code (up to four on the #2416)
	1540	Optional 120 CPW in Interactive Environment. The #2416-1540 is represented by Processor Feature Code 24C0.
	1541	Optional 240 CPW in Interactive Environment. The #2416-1541 is represented by Processor Feature Code 24C1.
	1542	Optional 560 CPW in Interactive Environment. The #2416-1542 is represented by Processor Feature Code 24C2.
	1543	Optional 1050 CPW in Interactive Environment. The #2416-1543 is represented by Processor Feature Code 24C3.
	1544	Optional 2000 CPW in Interactive Environment. The #2416-1544 is represented by Processor Feature Code 24C4.
	1545	Optional 4550 CPW in Interactive Environment. The #2416-1545 is represented by Processor Feature Code 24C5.
	1546	Optional 10000 CPW in Interactive Environment. The #2416-1546 is represented by Processor Feature Code 24C6 Restrictions: Cannot be fully utilized on #2416 unless all processors are activated.
#2417	Interactive features	10000/13200 CPW 12/18-way POD Processor in Client/Server Environment. The standard features include: <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2417) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) ▶ Processor 2 (CCIN 245E) #1604 is a POD activation code (up to six on the #2417)
	1540	Optional 120 CPW in Interactive Environment. The #2416-1540 is represented by Processor Feature Code 24C8.
	1541	Optional 240 CPW in Interactive Environment. The #2416-1541 is represented by Processor Feature Code 24C9.
	1542	Optional 560 CPW in Interactive Environment. The #2416-1542 is represented by Processor Feature Code 24CA.

#2417 (cont.)	1543	Optional 1050 CPW in Interactive Environment. The #2416-1543 is represented by Processor Feature Code 24CB.
	1544	Optional 2000 CPW in Interactive Environment. The #2416-1544 is represented by Processor Feature Code 24CC.
	1545	Optional 4550 CPW in Interactive Environment. The #2416-1545 is represented by Processor Feature Code 24CD.
	1546	Optional 10000 CPW in Interactive Environment. The #2416-1546 is represented by Processor Feature Code 24CE.
#2418	Interactive features	10000 CPW 12-way Processor in Client/Server Environment. Standard features include: <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2418) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E)
	1540	Optional 120 CPW in Interactive Environment. The #2418-1540 is represented by Processor Feature Code 23E8.
	1541	Optional 240 CPW in Interactive Environment. The #2418-1541 is represented by Processor Feature Code 23E9.
	1542	Optional 560 CPW in Interactive Environment. The #2418-1542 is represented by Processor Feature Code 23EA.
	1543	Optional 1050 CPW in Interactive Environment. The #2418-1543 is represented by Processor Feature Code 23EB.
	1544	Optional 2000 CPW in Interactive Environment. The #2418-1544 is represented by Processor Feature Code 23EC.
	1545	Optional 4550 CPW in Interactive Environment. The #2418-1545 is represented by Processor Feature Code 23ED.
	1546	Optional 10000 CPW in Interactive Environment. The #2418-1546 is represented by Processor Feature Code 23EE.
#2419	Interactive features	13200/16500 CPW 18/24-way POD Processor in Client/Server Environment. The standard features include: <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2419) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) ▶ Processor 2 (CCIN 245E) ▶ Processor 3 (CCIN 245E) #1604 is a POD activation code (up to six on the #2419)
	1540	Optional 120 CPW in Interactive Environment. The #2418-1540 is represented by Processor Feature Code 24D0.
	1541	Optional 240 CPW in Interactive Environment. The #2418-1541 is represented by Processor Feature Code 24D1.
	1542	Optional 560 CPW in Interactive Environment. The #2418-1542 is represented by Processor Feature Code 24D2.
	1543	Optional 1050 CPW in Interactive Environment. The #2418-1543 is represented by Processor Feature Code 24D3.
	1544	Optional 2000 CPW in Interactive Environment. The #2418-1544 is represented by Processor Feature Code 24D4.
	1545	Optional 4550 CPW in Interactive Environment. The #2418-1545 is represented by Processor Feature Code 24D5.
	1546	Optional 10000 CPW in Interactive Environment. The #2418-1546 is represented by Processor Feature Code 24D6.
	1547	Optional 16500 CPW in Interactive Environment. The #2420-1547 is represented by Processor Feature Code 24D7. Restrictions: Cannot be fully utilized on #2419 unless all processors are activated.

#2420	Interactive feature	16500 CPW 24-way Processor in Client/Server Environment. The standard features include: ▶ Processor Capacity Card (CCIN 2420) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) ▶ Processor 2 (CCIN 245E) ▶ Processor 3 (CCIN 245E)
	1540	Optional 120 CPW in Interactive Environment. The #2420-1540 is represented by Processor Feature Code 23F8.
	1541	Optional 240 CPW in Interactive Environment. The #2420-1541 is represented by Processor Feature Code 23F9.
	1542	Optional 560 CPW in Interactive Environment. The #2420-1542 is represented by Processor Feature Code 23FA.
	1543	Optional 1050 CPW in Interactive Environment. The #2420-1543 is represented by Processor Feature Code 23FB.
	1544	Optional 2000 CPW in Interactive Environment. The #2420-1544 is represented by Processor Feature Code 23FC.
	1545	Optional 4550 CPW in Interactive Environment. The #2420-1545 is represented by Processor Feature Code 23FD.
	1546	Optional 10000 CPW in Interactive Environment. The #2420-1546 is represented by Processor Feature Code 23FE.
	1547	Optional 16500 CPW in Interactive Environment. The #2420-1547 is represented by Processor Feature Code 23FF.
#2461	Interactive feature	20200 CPW 24-way Processor in Client/Server Environment. ▶ Processor Capacity Card (CCIN 2461) ▶ Processor 0 (CCIN 245F) ▶ Processor 1 (CCIN 245E) ▶ Processor 2 (CCIN 245E) ▶ Processor 3 (CCIN 245E) Minimum OS/400 level: V5R1
	1540	Optional 120 CPW in Interactive Environment. The #2461-1540 is represented by Processor Feature Code 26D0.
	1541	Optional 240 CPW in Interactive Environment. The #2461-1541 is represented by Processor Feature Code 26D1.
	1542	Optional 560 CPW in Interactive Environment. The #2461-1542 is represented by Processor Feature Code 26D2.
	1543	Optional 1050 CPW in Interactive Environment. The #2461-1543 is represented by Processor Feature Code 26D3.
	1544	Optional 2000 CPW in Interactive Environment. The #2461-1544 is represented by Processor Feature Code 26D4.
	1545	Optional 4550 CPW in Interactive Environment. The #2461-1545 is represented by Processor Feature Code 26D5.
	1546	Optional 10000 CPW in Interactive Environment. The #2461-1546 is represented by Processor Feature Code 26D6.
	1547	Optional 16500 CPW in Interactive Environment. The #2461-1547 is represented by Processor Feature Code 26D7.
1548	Optional 20200 CPW in Interactive Environment. The #2461-1548 is represented by Processor Feature Code 26D8.	
890 PROCESSORS		
#0197	Interactive features	29300 CPW 24-way Processor in Client/Server Environment. ▶ Processor Capacity Card (CCIN 0197) ▶ Processor 0 (CCIN 25D5) ▶ Processor 1 (CCIN 25D5) ▶ Processor 2 (CCIN 25D5) The #0197 is represented by Processor Feature Code 25D3.
#0198	Interactive features	37400 CPW 32-way Processor in Client/Server Environment. ▶ Processor Capacity Card (CCIN 0198) ▶ Processor 0 (CCIN 25D5) ▶ Processor 1 (CCIN 25D5) ▶ Processor 2 (CCIN 25D5) ▶ Processor 3 (CCIN 25D5) The #0198 is represented by Processor Feature Code 25D5.

#2487	Interactive features	20000-29300 CPW 16/24-way POD Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2487) ▶ Processor 0 (CCIN 25D5) ▶ Processor 1 (CCIN 25D5) ▶ Processor 2 (CCIN 25D5) #1610 is a POD activation code (up to eight on the #2487)
	1576	Optional 120 CPW in Interactive Environment. The #2487-1576 is represented by Processor Feature Code 2AF0.
	1577	Optional 240 CPW in Interactive Environment. The #2487-1577 is represented by Processor Feature Code 2AF1.
	1578	Optional 560 CPW in Interactive Environment. The #2487-1578 is represented by Processor Feature Code 2AF2.
	1579	Optional 1050 CPW in Interactive Environment. The #1579-1579 is represented by Processor Feature Code 2AF3.
	1581	Optional 2000 CPW in Interactive Environment. The #2487-1581 is represented by Processor Feature Code 2AF5.
	1583	Optional 4550 CPW in Interactive Environment. The #2487-1583 is represented by Processor Feature Code 2AF7.
	1585	Optional 10000 CPW in Interactive Environment. The #2487-1585 is represented by Processor Feature Code 2AF9.
	1587	Optional 116500 CPW in Interactive Environment. The #2487-1587 is represented by Processor Feature Code 2AFB.
	15885	Optional 20200 CPW in Interactive Environment. The #2487-1588 is represented by Processor Feature Code 2AFC.
#2488	Interactive features	29300-37400 CPW 24-32Way POD Processor in Client/Server Environment. <ul style="list-style-type: none"> ▶ Processor Capacity Card (CCIN 2488) ▶ Processor 0 (CCIN 25D5) ▶ Processor 1 (CCIN 25D5) ▶ Processor 2 (CCIN 25D5) ▶ Processor 3 (CCIN 25D5) #1610 is a POD activation code (up to eight on the #2488)
	1576	Optional 120 CPW in Interactive Environment. The #2488-1576 is represented by Processor Feature Code 2AD0.
	1577	Optional 240 CPW in Interactive Environment. The #2488-1577 is represented by Processor Feature Code 2AD1.
	1578	Optional 560 CPW in Interactive Environment. The #2488-1578 is represented by Processor Feature Code 2AD2.
	1579	Optional 560 CPW in Interactive Environment. The #2488-1579 is represented by Processor Feature Code 2AD3.
	1581	Optional 560 CPW in Interactive Environment. The #2488-1581 is represented by Processor Feature Code 2AD5.
	1583	Optional 560 CPW in Interactive Environment. The #2488-1583 is represented by Processor Feature Code 2AD7.
	1585	Optional 560 CPW in Interactive Environment. The #2488-1585 is represented by Processor Feature Code 2AD9.
	1587	Optional 560 CPW in Interactive Environment. The #2488-1587 is represented by Processor Feature Code 2ADB.
	1588	Optional 560 CPW in Interactive Environment. The #2488-1588 is represented by Processor Feature Code 2ADC.
	1591	Optional 560 CPW in Interactive Environment. The #2488-1591 is represented by Processor Feature Code 2ADF.

Note: The darker shaded cells in the left-hand column indicate the base features.

POWER AND PACKAGING	
<p>Note: You can find the power and packaging information relative to 820, 830, 840, and 890 processors in Chapter 4, “iSeries Model 8xx towers and features” on page 103.</p>	
#0140	<p>Logical Partitioning Specify The #0140 is used to specify that this system is to be logically partitioned. The #0140 is only valid on n-way processors with OS/400 V4R5. Starting with OS/400 V5R1, #0140 is valid on selected uni-processors (IStar and SStar processors only). The marketing configurator adds a quantity of one #0140 to the order for each logical partition required.</p>
#0141	<p>#0141 HSL OptiConnect Specify The #0141 is used to specify that this system is to be part of a cluster using HSL OptiConnect. This feature is used to allow the ordering of additional HSL cables to connect the systems that have OptiConnect. Prerequisite: HSL OptiConnect capable system. Maximum - One Minimum OS/400 level: V5R1</p>
#0142	<p>Linux Partition Specify The #0142 is used to specify that this system is to be logically partitioned with a Linux partition. Specify one #0142 for each Linux partition required. Only Linux direct attached features are allowed within a Linux partition. Note: There are no minimum number of Linux direct attached features required per Linux partition. A Linux partition can exist without any Linux direct attached features in it (in this case, all I/O is virtualized through the iSeries server).</p> <p>Linux Direct Attach Features These features can be directly attached to a Linux partition. Linux direct attached features cannot be accessed by OS/400 partitions.</p> <ul style="list-style-type: none"> #0601 - Linux Direct Attach - #2743 #0602 - Linux Direct Attach - #2760 #0603 - Linux Direct Attach - #2744 #0604 - Linux Direct Attach - #2763 #0605 - Linux Direct Attach - #4748 #0606 - Linux Direct Attach - #4778 #0607 - Linux Direct Attach - #4838 #0608 - Linux Direct Attach - #2745* #0609 - Linux Direct Attach - #2772* #0610 - Linux Direct Attach - #2773* (AP only) #0612 - Linux Direct Attach - #2766* #0613 Linux Direct Attach #2742* #0614 Linux Direct Attach #2793* #0615 Linux Direct Attach #2794* #0616 - Linux Direct Attach - #2805* #0617 - Linux Direct Attach - #2806* (AP only) #0623 Linux Direct Attach #2849* <p>See the descriptions of the individual feature to understand the capabilities and PCI slot limitations of the features directly attached to Linux partitions.</p> <p>Linux direct attach features do not use or require PCI IOPs. Linux direct attach features are only supported in a secondary LPAR partition and require OS/400 V5R1 running in the primary partition.</p> <p>The #0605 is withdrawn from marketing for new orders. It can still be ordered as the target of feature conversions.</p> <p>Co-requisite: #0140 Logical Partition Specify. Maximum: Up to one less than the total number of partitions allowed on system/processor. Minimum OS/400 level: V5R1 Minimum OS/400 level: V5R2 for features marked with an asterisk (*)</p>

#0382	<p>#0382 Remote Control Panel Cable</p> <p>To connect the #0382 Remote Control Panel Cable to the iSeries servers 270, 820, 830, or 840, an available parallel port (LPT) is needed on the PC instead of a COM port. The parallel port must be configured to use Enhanced Parallel Port 1.9 (EPP) support, which may require a change in the PCs Basic Input/Output Services (BIOS). Check with your PC manufacturer for any assistance.</p> <p>The Remote Control Panel is installed and used from PCs running the Windows NT 4.0 or Windows 2000 Professional PC operating system.</p> <p>Note: Some PCs may not support this function due to BIOS or hardware incompatibilities.</p> <p>The #0382 Remote Control Panel Cable was withdrawn from marketing 12 February 2002.</p> <p>The #0382 is a Customer Install Feature (CIF).</p>
MAIN STORAGE	
Base	There is no base memory on 8xx models.
Model 820 memory rules	<p>For the #2395 and #2435 processors, main storage DIMMs must be in pairs of the same capacity and technology. These DIMMs plug directly into the processor and do not use #2884 Main Storage Expansion Riser Cards.</p> <p>For the #0150, #2396, #2425, #2436, and #2456 processors, the DIMMs can be plugged directly into the processor, but if more than eight DIMMs total are required, a #2884 Main Storage Expansion Riser Card must be used and <i>all</i> DIMMs must then reside on the #2884. Without the #2884, the DIMMs must be paired. With the #2884, the DIMMs must be in sets of four (quads) of the same capacity and technology (Note: A single pair of DIMMs is not supported on a #2884). In addition, the #2884 can be ordered/installed, at any time, even with eight or fewer DIMMs present. If a #2884 is installed, all DIMMs must be placed on it.</p> <p>For the #0151, #0152, #2397, #2398, #2426, #2427, #2437, #2438, #2457 and #2458 processors, main storage DIMMs must be plugged onto a main storage expansion card (CCIN 2884 and #2884) and must be added in sets of four (quads) of the same capacity and technology. There is an exception that allows a single set of two main storage DIMMs if these are the only two on the system (Note: A single pair of DIMMs is not allowed on these systems with a feature #2884 ordered/present). If any additional DIMMs are added above the initial two, the initial two must be paired up to make a quad and then only DIMM quads can subsequently be added. A feature #2884 can be ordered/installed at any time, even if the the base main storage expansion card is not full. (For these processors, if a #2884 is ordered, a #5157 Feature Power Supply must be either present or ordered).</p> <p>When a feature #2884 is present (for a total of two memory expansion cards on the system), manufacturing spreads the DIMMS across both memory expansion cards.</p> <p>See the tower diagrams for placement of memory.</p>
Model 830 and 840 memory rules	<p>All main storage cards must be added in sets of eight on the 830 (octals) and sets of four (quads) on the 840. All memory sets must be of the same feature code.</p> <p>There is a total of 64 slots on the 830, 32 in base and an additional 32 when the priced #2884 Main Storage Expansion Riser Card is installed. There is a total of 16 slots available on the 840. For memory increments of 65536 MB and greater, all main storage slots (16) must be filled.</p> <p>See the tower diagrams for placement of memory.</p> <p>Model 830 only.</p>
Model 890 memory rules	<p>There are eight new memory cards/features serving four capacity points of 4GB, 8GB, 16GB and 32GB. Each capacity point has both "inner" and "outer" card features. The correct plugging is to mirror images to fit physically different memory slots as follows:</p> <p>For the inner slots (slots 0, 1, 2, and 3), the following feature codes must be used in pairs:</p> <ul style="list-style-type: none"> 4 GB = #3020 8 GB = #3015 16 GB = #3035 32 GB = #3017 <p>For the outside slots (slots 4, 5, 6, and 7), the following feature codes must be used in pairs:</p> <ul style="list-style-type: none"> 4 GB = #3021 8 GB = #3016 16 GB = #3036 32 GB = #3018 <p>Additional plugging rules:</p> <ul style="list-style-type: none"> ▶ Plug in pairs. Each pair must use identical features. ▶ On the Model 890 only two different sizes of memory cards are allowed. On top of this rule, when there are different size memory cards in a given configuration the different sizes must be adjacent in size. This means that you cannot have for example 4 GB and 16 GB cards in a memory configuration. Allowed combinations are: all pairs of the same size, 4 GB pairs with pairs of 8 GB, 8 GB pairs with 16 GB pairs and pairs of 16 GB with 32 GB pairs. ▶ All slots should always be filled. Exception allowed for 16 GB 24-way and 24 GB for 32-way.

Model 890 memory rules (cont.)	*		
	890	# slots	Memory Capacity Offerings (GB)
	#0197 #2487	6	16 [*] , 24, 32, 40, 48, 64, 80, 96, 128, 160, 192
#0198 #2488	8	24 [*] , 32, 40, 48, 56, 64, 80, 96, 112, 128, 160, 192, 224, 256	
*The smallest memory capacities are not recommended for most customer configurations and should only be used when performance degradation is not of concern, perhaps in environments with very low CPU utilization. With these capacities, the inner slots must be filled first and then slots 4 and 5.			
#2881	Main Storage Expansion The #2881 provides an additional 32 slots. Required for the minimum functional server on the #0153/#2403/#2349 processors. Maximum: One on processors #2400/#2402.		
#2884	#2884 Main Storage Expansion Riser Card The #2884 mounts additional main storage cards. It contains 16 sockets for placement of 128 MB, 256 MB, or 512 MB cards. For placement, an initial pair of memory cards is allowed (in Slot A and Slot B) without quads. Before any further memory upgrade, this pair must be completed to a quad. After that, all cards must be plugged in quads starting from the outer four corners going toward the center (A, B, C, D, then E, F, G, H, etc.). Use of the same feature code number within a quad is required. See the tower diagrams for placement of memory. Mixing of quad "groups" on the same riser card is also allowed. Maximum: One on the #0150, #2396, #2425, #2436, and #2456 processors. Maximum: Two on the #0151, #0152, #2397, #2398, #2426, #2427, #2437, #2438, #2457 and #2458 processors (one shipped as "base"). For these processors, if a #2884 is ordered, a #5157 Feature Power Supply must be present or ordered) Not supported on the #2395 and #2435 processors. The #2884 is a Customer Install Feature (CIF). Model 820 only.		
#3000	128 MB Main Storage DIMM The #3000 represents the base memory for Models 620, S20, and 720 migrated to the 820 and 830. No associated feature number on source system. Supported for migration only. Plugs directly into the CPU or #2884. Supported in quads with #3002 on the Model 820. Supported in octals with #3062 on the Model 830. Reports as CCIN 3002. See "Model 820 memory" on page 83 and "Model 830 and 840 memory rules" on page 83. Maximum: Two		
#3002	128 MB Main Storage DIMM 64 Mb technology. See "Model 820 memory" on page 83 for memory rules. The #3002 cannot be mixed with #3009 in pairs or quads. The #3002 is a Customer Install Feature (CIF). Model 820 only. All processors.		
#3004	256 MB Main Storage DIMM 128 Mb technology. Plugs directly into the CPU or #2884. See "Model 820 memory" on page 83 for memory rules. The #3004 is a Customer Install Feature (CIF). Model 820 only. All processors.		
#3005	512 MB Main Storage DIMM 128 Mb technology Plugs directly into the CPU or #2884. See "Model 820 memory" on page 83 for memory rules. The #3006 cannot be mixed with #3005 in pairs or quads. The #3005 is a Customer Install Feature (CIF). Model 820 only. All processors.		

#3006	<p>512 MB Main Storage DIMM 256 Mb technology Plugs directly into the CPU or #2884. See “Model 820 memory” on page 83 for memory rules. The #3006 cannot be mixed with #3005 in pairs or quads. The #3006 is a Customer Install Feature (CIF). Model 820 only. All processors.</p>
#3007	<p>1 GB Main Storage DIMM 256 Mb technology Plugs directly into the CPU or #2884. See “Model 820 memory” on page 83 for memory rules. The #3007 is a Customer Install Feature (CIF). Model 820 only. For processors: #0150, 0151, #0152, #2435, #2436, #2437, #2438, #2456, #2457, #2458</p>
#3009	<p>128 MB Main Storage DIMM 128 Mb technology. Plugs directly into the CPU or #2884. See “Model 820 memory” on page 83 for memory rules. The #3009 cannot be mixed with #3002 in pairs or quads. The #3009 is a Customer Install Feature (CIF). Model 820 only. For processors: #0150, 0151, #0152, #2435, #2436, #2437, #2438, #2456, #2457, #2458</p>
#3015	<p>8192 MB Main Storage Card PSIMM The #3015 is used in the iSeries Model 890. The #3015 can be placed in an “inside” main storage card slot only (slots 0, 1, 2, and 3).</p>
#3016	<p>8192 MB Main Storage Card PSIMM The #3015 is used in the iSeries Model 890. The #3016 can be placed in an “outside” main storage card slot only (slots 4, 5, 6, and 7).</p>
#3017	<p>32768 MB Main Storage Card PSIMM The #3017 is used in the iSeries Model 890. The #3017 can be placed in an “inside” main storage card slot only (slots 0, 1, 2, and 3).</p>
#3018	<p>32768 MB Main Storage Card PSIMM The #3018 is used in the iSeries Model 890. The #3018 can be placed in an “outside” main storage card slot only (slots 4, 5, 6, and 7).</p>
#3020	<p>4096 MB Main Storage Card PSIMM The #3020 is used in the iSeries Model 890. The #3020 can be placed in an “inside” main storage card slot only (slots 0, 1, 2, and 3).</p>
#3021	<p>4096 MB Main Storage Card PSIMM The #3021 is used in the iSeries Model 890. The #3021 can be placed in an “outside” main storage card slot only (slots 4, 5, 6, and 7).</p>
#3035	<p>16384 MB Main Storage Card PSIMM The #3035 is used in the iSeries Model 890. The #3035 can be placed in an “inside” main storage card slot only (slots 0, 1, 2, and 3).</p>
#3036	<p>16384 MB Main Storage Card PSIMM The #3036 is used in the iSeries Model 890. The #3036 can be placed in an “outside” main storage card slot only (slots 4, 5, 6, and 7).</p>
#3062	<p>128 MB Main Storage DIMM 64 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Maximum: 64. Model 830 only.</p>
#3064	<p>256 MB Main Storage DIMM 128 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Maximum: 64. Model 830 only.</p>

#3065	<p>512 MB Main Storage DIMM 128 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Maximum: 64. Model 830 only.</p>
#3066	<p>512 MB Main Storage DIMM 256 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Replaces the #3065 512 MB main storage DIMM. Maximum: 64. Model 830 only.</p>
#3067	<p>1 GB Main Storage DIMM 256 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Maximum: 64. Model 830 only.</p>
#3195	<p>4096 MB Main Storage Card 64 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Maximum: 16. Model 840 only.</p>
#3196	<p>8192 MB Main Storage Card 256 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Can be selected only to achieve 81920 MB and 98304 MB main storage increments. Prerequisite: #2730 Programmable Regulator. Maximum: 16. Model 840 only.</p>
#3197	<p>1024 MB Main Storage Card 64 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Maximum: 16. Model 840 only.</p>
#3198	<p>2048 MB Main Storage Card 64 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Maximum: 16. Model 840 only.</p>
#3612	<p>1024 MB Main Storage Card 256 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Replaces #3197 1024 MB main storage card. Maximum: 16. Model 840 only.</p>
#3613	<p>2048 MB Main Storage Card 256 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Replaces the #3198 2048 MB main storage card. Maximum: 16. Model 840 only.</p>
#3614	<p>4096 MB Main Storage Card 256 Mb technology. See “Model 830 and 840 memory rules” on page 83 for memory rules. Replaces the #3195 4096 MB main storage card. Maximum: 16. Model 840 only.</p>

PCI IOP CONTROLLERS	
Embedded IOP	<p>Embedded 32 MB BASE PCI IOP (CCIN 284C)</p> <p>The embedded IOP is standard on every System 820 system tower and the #5075 PCI Expansion Tower. This IOP is embedded and, therefore, does not require a PCI card slot. Provides support for maximum of up to four IOAs, including the #9767 Base PCI Disk Unit Controller SCSI IOA, the #9771 Base PCI Two-Line WAN with integrated modem and the System Console IOA.</p> <p>See the #2843 for a list of other supported cards.</p>
#9943 Base IOP	<p>#9943 Base PCI IOP</p> <p>The #9943 (CCIN 2843) is included as the base IOP for Models 830 (in the #9074), 840 (in either the #9079 Base I/O Tower or the #8079 Optional Base 1.8 M I/O Rack), and 890 (in either the #9094 Base PCI I/O Enclosure or #8093 Optional 1.8 M I/O Rack) and #5074 PCI Expansion Tower and #5079 1.8 M I/O Tower.</p> <p>The #5079, #8079, and #8093 include two base IOPs.</p> <p>See the #2843 a list of other supported cards.</p>
#2843 #9943	<p>#2843 PCI IOP</p> <p>The #2843 is a PCI I/O processor with 64 MB of memory that drives PCI IOA adapters on Models 820, 830, 840, 890, the #5075 PCI Expansion Tower when attached to the Model 820, the #5074 PCI Expansion Tower, and the #5079 1.8 M I/O Tower. The #2843 can drive up to four IOAs. These IOAs are supported (driven) by the #2843/#9943 PCI IOP:</p> <ul style="list-style-type: none"> #2742 Two-Line WAN IOA #2743 1 Gbps PCI Ethernet IOA #2744 PCI 100 Mbps Token Ring IOA #2749 PCI Ultra Magnetic Media Controller #2760 PCI 1 Gbps Ethernet UTP Adapter #2763 PCI RAID Disk Unit Controller (Model 820 only) #2765 PCI Fibre Channel Tape Controller #2766 PCI Fibre Channel Disk Controller #2768 PCI Magnetic Media Controller #2772 PCI Dual WAN/Modem IOA #2773 PCI Dual WAN/Modem IOA (ANSI) #2793 Two-Line WAN IOA with Modem #2794 Two-Line WAN IOA with Modem #2805 PCI Quad Modem IOA #2806 PCI Quad Modem (CIM) (ANSI) #2817 PCI 155 Mbps MMF ATM IOA #2849 10/100 Mbps Ethernet Adapter #4723 PCI 10 Mbps Ethernet Adapter #4745 PCI 2-line WAN IOA #4746 PCI Twinaxial IOA #4748 PCI RAID Disk Unit Controller #4750 PCI ISDN BRI U IOA #4751 PCI ISDN BRI S/T IOA #4761 PCI Integrated Analog Modem #4778 PCI RAID Disk Unit Controller #4801 PCI Cryptographic Coprocessor #4805 Cryptographic Accelerator #4815 PCI ATM 155 Mbps UTP OC3 #4816 PCI ATM 155 Mbps MMF #4818 PCI ATM 155 Mbps SMF OC3 #4838 PCI 100/10 Mbps Ethernet IOA #9771 Base PCI Two-Line WAN with integrated modem #9778 Base PCI RAID Disk Unit Controller (Model 840) #9793 Two-Line WAN IOA with Modem #9794 Two-Line IOA with Modem <p>Maximum: Five in the 820 system tower. Four in the base I/O tower of the Model 830, 840, and 890. Three in a #5075 PCI Expansion Tower when attached to a Model 820. Six in a #5074 PCI Expansion Tower. Twelve in a #5079 1.8 M I/O Tower.</p> <p>Note: #9943 Base PCI IOP not counted in these maximums.</p> <p>The #2843 is a Customer Install Feature (CIF).</p>

<p>#2790 #2791 #2799</p>	<p>#2790 PCI Integrated Netfinity Server or Integrated xSeries Server</p> <p>The #2790 PCI Integrated Netfinity Server contains a 700 MHz processor, the #2791 contains a 850 MHz processor, and the #2799 contains a 1 GHz Pentium III processor. Each processor contains four main storage slots. The #2790/#2791/#2799 is supported in the system tower of the 8xx Models and in a #5074, #5075, #5078, and #5079.</p> <p>Each main storage slot of the #2790/#2791/#2799 can contain either a 128 MB main storage card, a 256 MB main storage card, or a 1024 MB main storage card providing a total main storage capacity ranging from 128 MB to 4096 MB (4 GB). At least one main storage card is required. When the maximum memory is installed, only 3712 MB is addressable.</p> <p>These main storage cards provide memory for the #2790/#2791/#2799 when installed in an 8xx system or attachable HSL towers:</p> <ul style="list-style-type: none"> #2795 - 128 MB IOP Memory #2796 - 256 MB IOP Memory #2797 - 1 GB IOP Memory <p>The #2790/#2791/#2799 can support PCI 100/16/4 Mbps Token Ring IOAs, PCI 100/10 Mbps Ethernet IOAs, or PCI 1 Gbps Ethernet IOAs in any combination. At least one LAN IOA is required. The features for the LAN IOAs are as follows:</p> <ul style="list-style-type: none"> #4838 PCI 100/10 Mbps Ethernet IOA #2744 PCI 100 Mbps Token Ring IOA #2743 1 Gbps PCI Ethernet IOA #2760 PCI 1 Gbps Ethernet UTP Adapter <p>When a #2790/#2791/#2799 is on the order, if the #4838 is selected, specify code #0224 is required for each #4838 selected to run on the #2790/#2791/#2799. If the #2744 is selected, specify code #0223 is required for each #2744 selected to run on the #2790/#2791/#2799. If the #2743/#2760 is selected, specify code #0225 is required for each #2743/#2760 selected to run on the #2790/#2791/#2799.</p> <p>Up to three IOA LAN features can be supported by the #2790/#2791/#2799, depending on which system or expansion tower position the #2790/#2791/#2799 is placed. The #2790/#2791/#2799 requires three PCI slots. One slot is consumed. The second slot is unusable, and the third slot is reduced to a short LAN card (which is used by the first attached LAN IOA card).</p> <p>The #2790/#2791/#2799 does not require a #2843 or #9943, but placement is limited to specific slots within the various system towers and expansion towers. The #2790/#2791/#2799 supports only the Windows NT and Windows 2000 operating systems. These rules apply:</p> <ul style="list-style-type: none"> #0325 (IPCS Extension Cable for Windows) is the default (but can be removed). #1700 (IPCS Keyboard/Mouse for Windows) is the default (in those countries offering it). <p>A display must be connected to the #2790 PCI Integrated Netfinity Server to support Windows. For non-U.S. keyboard/mouse and display, see: http://www.ibm.com/eserver/series/windowsintegration/</p> <p>Restrictions: Native OS/400 functions are not supported. The #2790/#2791/#2799 does not support external host LAN. The #2849 is not supported on any Integrated Netfinity Server/Integrated xSeries Server. Minimum OS/400 level: #2790/#2791 - V4R5 with Cumulative Package C1005450. #2799 - V5R1 plus PTFs listed in Information APAR II13105. Minimum OS/400 to support #2743 or #2760 on #2790/#2791/#2799: V5R1 The #2790/#2791/#2799 is a Customer Install Feature (CIF).</p>
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WORKSTATION CONTROLLERS

<p>#4746</p>	<p>#4746 PCI Twinaxial IOA</p> <p>The #4746 Twinaxial Workstation IOA provides support for up to 40 active twinaxial displays and printers addresses or up to 120 active shared sessions. A 20-ft. (6.2 m) cable with an eight-port expansion (breakout) box is included with this adapter. Each port supports seven attached devices, allowing for 56 total attached devices, of which only 40 can be active. The #4746 is a Customer Install Feature (CIF).</p>
<p>#5540</p>	<p>#5540 System Console on Twinaxial Workstation IOA</p> <p>A system console specify code must be selected on each new order. When the #5540 is on the order, the system console is driven by a #4746 PCI Twinaxial IOA.</p>
<p>#5544</p>	<p>#5544 System Console on Operations Console</p> <p>A system console specify code must be selected on each new order. When a #5544 is on the order, the system console can be connected to a #0367 Operations Console PCI Cable attached to a #4745 PCI 2-line WAN IOA or a #9771/#9793/#9794 Base PCI Two-Line WAN with integrated modem.</p>

#5546	<p>#5546 System Console on 100 Mbps Token Ring</p> <p>A system console specify code must be selected on each new order. When the #5546 is on the order, the system console is LAN attached to a #2744 PCI 100 Mbps Token Ring IOA. This LAN adapter must be dedicated to console functions and cannot be used for any other purpose.</p> <p>Co-requisite: One #0367 Operations Console PCI Cable on the order or present on the system. One #0367 per system is sufficient, regardless of the number of "LAN consoles" (via LPAR) defined per system.</p> <p>Minimum OS/400 level: V5R1</p>
#5548	<p>#5548 System Console on 100 Mbps Ethernet</p> <p>A system console specify code must be selected on each new order. When the #5548 is on the order, the system console is LAN attached to a #4838 PCI 100/10 Mbps Ethernet IOA or a #2849 10/100 Mbps Ethernet Adapter. This LAN adapter must be dedicated to console functions and cannot be used for any other purpose.</p> <p>Co-requisite: One #0367 Operations Console PCI Cable on the order or present on the system. One #0367 per system is sufficient, regardless of the number of "LAN consoles" (via LPAR) defined per system.</p> <p>Minimum OS/400 level: V5R1</p>
LAN/WAN ADAPTERS	
Comm. Restrictions	See "Comm. Restrictions" on page 34 for communications rules and restrictions.
#2742	<p>#2742 Two-Line WAN IOA</p> <p>The #2742 is a WAN IOA that supports up to two multiple protocol communications (RVX) ports when one or two (in any combination) of the following cables are attached. Select one of the following cables to attach to port 1 or 2 (RVX port):</p> <ul style="list-style-type: none"> #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0353 V.35 20-ft. PCI cable #0354 V.35 50-ft. PCI cable #0355 V.35 80-ft./24m PCI cable #0356 V.36 20-ft. PCI cable #0358 V.36 150-ft./45m PCI cable #0359 X.21 20-ft. PCI cable #0360 X.21 50-ft. PCI cable #0365 V.24/EIA232 80-ft. PCI cable #0367 Operations Console PCI Cable <p>Note: The #0367 cable ships with a 25 pin to 9 pin adapter.</p> <p>When #0140 logical partitioning is specified, multiple #0367 cables may be ordered to connect the operations console in each partition.</p> <p>One #0367 cable per #2742.</p> <p>When #2742 is selected to support ECS, one of following cables must be specified:</p> <ul style="list-style-type: none"> #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0367 Operations Console PCI Cable <p>The #2742 does not support Remote Power On.</p> <p>Minimum OS/400 level: V5R2</p> <p>The #2742 is a Customer Install Feature (CIF).</p>
#2743	<p>#2743 1 Gbps PCI Ethernet IOA</p> <p>The #2743 PCI 1 Gbps Ethernet IOA feature allows the iSeries server to attach to IEEE standard 802.3Z high speed Ethernet LANs (1 Gbps). It can also be used to connect to existing 100 Mbps Ethernet LANs using switches with 10/100/1000 Mbps ports.</p> <p>The adapter supports multi-mode fiber media attachment to customer-supplied cabling. The multi-mode interface has a 62.5/125 micron or 50.0/125 micron cable requirement with a SC connector.</p> <p>Restrictions: The #2743 requires a gigabit-capable switch with at least one port that supports a 1000BASE-SX interface with IEEE 802.3z and 802.3u compliance. It supports only a multi-mode fiber optic cable connection from the adapter to the switch. The #2743 supports 1000 MBps (1 Gbps) full duplex interface only. Cannot negotiate down to a lower speed. Stations on the 10 Mb and 100 Mb switched LANs can communicate with the #2743 through a switch that is capable of handling all these speeds. In this case, the switch handles the speeds.</p> <p>If a #2743 is controlled by a #2790/ #2791/#2799, then one specify code #0225 - 1 Gbps Ethernet Specify, must be ordered for each #2743 controlled by an Integrated Server.</p> <p>The #2743 can be directly attached to a Linux partition. When ordered as #0601 Linux Direct Attach - #2743, an IOP is not required. When direct attached to a Linux partition, the #2743 cannot be accessed by OS/400 partitions.</p> <p>Requires a 64-bit card slot.</p>

<p>#2743 (cont.)</p>	<p>Protocols supported: TCP/IP only. SNA and IPX connections are not supported. Maximum: One per Multi-Adapter Bridge boundary. Minimum OS/400 level: V4R5 Minimum OS/400 level when used with the #2790/#2791: V4R5 with Cumulative Package C1005450. Minimum OS/400 level when used with the #2799: V5R1 plus PTFs as listed in Information APAR I113105. The #2743 is a Customer Install Feature (CIF).</p>
<p>#2744</p>	<p>#2744 PCI 100 Mbps Token Ring IOA The #2744 PCI 100 Mbps Token Ring IOA provides a single attachment to a 100 Mbps, 16 Mbps, or 4 Mbps IBM Token Ring Network. The feature consists of an IOA card, with internal code that supplies IEEE 802.5 Media Access Control (MAC) and IEEE 802.2 Logical Link Control (LLC) functions. The 100/16/4 Token Ring IOA is capable of operating in half or full duplex mode. A 2.44 meter (8 ft.) Token Ring Type 1 cable is included with the #2744. As an alternative, the customer can attach a separately priced twisted pair cable to the RJ45 connection on the IOA. IBM Cabling System patch cables, included with the #2744, can increase the length as required. If the #2744 is selected to run on the #2790 PCI Integrated Netfinity Server or the #2791/#2799 PCI Integrated xSeries Server, specify code #0223 is required for each #2744 selected to run on the #2790/#2791/#2799. The #2744 can be directly attached to a Linux partition. When ordered as #0603 Linux Direct Attach - #2744, an IOP is not required. When direct attached to a Linux partition, the #2744 cannot be accessed by OS/400 partitions. The #2744 is a Customer Install Feature (CIF).</p>
<p>#2760</p>	<p>#2760 PCI 1 Gbps Ethernet UTP Adapter The #2760 PCI 1 Gbps Ethernet UTP Adapter feature allows the iSeries server to attach to IEEE standard 802.3Z high-speed Ethernet LANs (1 Gbps) to provide a significant performance improvement over other LAN solutions. The adapter supports a UTP CAT 5 media interface. When driven by a #2843 PCI IOP, this adapter only supports TCP/IP. This adapter can directly attach to 10 Mbps or 100 Mbps networks. The #2760 is supported by a #2790/#2791/#2799 PCI Integrated xSeries Server. If a #2760 is controlled by a #2790/#2791/#2799, then one specify code #0225 - 1 Gbps Ethernet Specify, must be ordered for each #2760 controlled by an Integrated Server. Maximum: One per Multi-Adapter Bridge boundary. Ignore this max for any #2760 controlled/driven by an Integrated Server. Combinations of Integrated Server controlled and PCI IOP controlled #2760s within Multi-Adapter Bridge boundaries are permitted. The #2760 can be directly attached to a Linux partition. When ordered as #0602 Linux Direct Attach - #2760, an IOP is not required. When direct attached to a Linux partition, the #2760 cannot be accessed by OS/400 partitions. PCI slots required: One 64 bit. Note: There are exceptions for 32-bit slot placement in the Model 270 and 820 system units. Protocols supported: TCP/IP only. SNA and IPX connections are not supported. Minimum OS/400 level: V5R1 The #2760 is a Customer Install Feature (CIF).</p>
<p>#2772</p>	<p>#2772 PCI Dual WAN/Modem IOA The #2772 is a 2-line WAN adapter, with two ports (RJ11) supporting V.90 56K Async PPP and Fax applications at data rates up to 14.4K via internal modems. Connection to the V.90 ports is via telephone cable. This is the non-Complex Impedance Matching (CIM) version of the #2772/#2773 card. The #2772 does <i>not</i> ship with country-specific telephone cables. A minimum of one modem cable, or a maximum of two, must be selected/ordered for each #2772. All modem cables ordered or present on a system must be the same feature number. <ul style="list-style-type: none"> #1010 Modem Cable-Austria #1011 Modem Cable-Belgium #1012 Modem Cable-Africa #1013 Modem Cable-Israel #1014 Modem Cable-Italy #1015 Modem Cable-France #1016 Modem Cable-Germany #1017 Modem Cable-United Kingdom #1018 Modem Cable-Iceland/Sweden #1021 Modem Cable-Finland/Norway #1022 Modem Cable-Netherlands #1023 Modem Cable-Swiss #1024 Modem Cable-Denmark #1025 Modem Cable-U.S./Canada <p>The feature is country-specific. Remote ring indicate is not supported. PCI card slots required: One. Minimum OS/400 level: V5R1 The #2772 is a Customer Install Feature (CIF).</p> </p>

<p>#2773</p>	<p>#2773 PCI Dual WAN/Modem IOA</p> <p>The #2773 is a 2-line WAN adapter, with two ports (RJ11) supporting V.90 56K Async PPP and Fax applications at data rates up to 14.4K via internal modems. Connection to the V.90 ports is via telephone cable. This is the Complex Impedance Matching (CIM) version of this #2772/#2773 card.</p> <p>The #2773 does <i>not</i> ship with country-specific telephone cables. A minimum of one modem cable, or maximum of two, must be selected/ordered for each #2773. All modem cables ordered/present on a system must be the same feature number.</p> <ul style="list-style-type: none"> #1019 Modem Cable-Australia #1020 Modem Cable-China (Hong Kong S.A.R.)/New Zealand <p>The feature is country-specific.</p> <p>Remote ring indicate is not supported.</p> <p>PCI card slots required: One.</p> <p>Minimum OS/400 level: V5R1</p> <p>The #2773 is a Customer Install Feature (CIF).</p>
<p>#2793 #9793</p>	<p>#2793 Two-Line WAN IOA with Modem</p> <p>The #2793/#9793 is a two-line WAN with modem adapter and is the non-Complex Impedance Matching (CIM) version that is offered in all countries except Australia and New Zealand. Port 0 is the modem port and supports V.92 56K Async PPP, V.92 data modem, V.44 data compression, and V.34 FAX modem and FAX functions such as ECM and 2D/1D conversion. Port 0 does not provide sync modem capabilities (SDLC and Sync PPP). Port 1 is the RVX port and supports multiple communications protocols.</p> <p>Select one of the following cables to attach to port 0 (modem port):</p> <ul style="list-style-type: none"> #1010 Modem Cable-Austria #1011 Modem Cable-Belgium #1012 Modem Cable-Africa #1013 Modem Cable-Israel #1014 Modem Cable-Italy #1015 Modem Cable-France #1016 Modem Cable-Germany #1017 Modem Cable-United Kingdom #1018 Modem Cable-Iceland/Sweden #1021 Modem Cable-Finland/Norway #1022 Modem Cable-Netherlands #1023 Modem Cable-Swiss #1024 Modem Cable-Denmark #1025 Modem Cable-U.S./Canada <p>Select one of the following cables to attach to port 1 (RVX port):</p> <ul style="list-style-type: none"> #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0353 V.35 20-ft. PCI cable #0354 V.35 50-ft. PCI cable #0355 V.35 80-ft./24m PCI cable #0356 V.36 20-ft. PCI cable #0358 V.36 150-ft./45m PCI cable #0359 X.21 20-ft. PCI cable #0360 X.21 50-ft. PCI cable #0365 V.24/EIA232 80-ft. PCI cable #0367 Operations Console PCI Cable <p>Note: The #0367 cable ships with a 25 pin to 9 pin adapter.</p> <p>When #0140 logical partitioning is specified, multiple #0367 cables may be ordered to connect the operations console in each partition.</p> <p>ECS is supported from the RVX port and one of the following cables is required to support ECS: #0348, #0349, or #0365. ECS is supported from the Modem port (OS/400 V5R1 or later).</p> <p>The #2793 does not support the remote ring indicate function.</p> <p>For further configuration information, see: http://www.iseries.ibm.com/tstudio/planning/esa/esa.htm</p> <p>For communication restrictions using the #2793/#9793, see 6.5, "Soft rules: iSeries IOA requirements" on page 179.</p> <p>Minimum OS/400 level: V5R2</p>

<p>#2794 #9794</p>	<p>#2794 Two-Line WAN IOA with Modem</p> <p>The #2794/#9794 is a 2-line WAN with modem adapter and is the Complex Impedance Matching (CIM) version that is offered only in Australia and New Zealand. Port 0 is the modem port and supports V.92 56K Async PPP, V.92 data modem, V.44 data compression, and V.34 FAX modem and FAX functions such as ECM and 2D/1D conversion. Port 0 does not provide sync modem capabilities (SDLC and Sync PPP). Port 1 is the RVX port and supports multiple communications protocols. Select one of the following cables to attach to port 0 (modem port):</p> <ul style="list-style-type: none"> #1019 Modem Cable-Australia #1020 Modem Cable-China (Hong Kong S.A.R.)/New Zealand <p>Select one of the following cables to attach to port 1 (RVX port): #0348, #0349, #0353, #0354, #0356, #0359, #0360, #0365 or #0367. Select one of the following cables to attach to port 1 (RVX port):</p> <ul style="list-style-type: none"> #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0353 V.35 20-ft. PCI cable #0354 V.35 50-ft. PCI cable #0355 V.35 80-ft./24m PCI cable #0356 V.36 20-ft. PCI cable #0358 V.36 150-ft./45m PCI cable #0359 X.21 20-ft. PCI cable #0360 X.21 50-ft. PCI cable #0365 V.24/EIA232 80-ft. PCI cable #0367 Operations Console PCI Cable <p>Note: The #0367 cable ships with a 25 pin to 9 pin adapter.</p> <p>When #0140 logical partitioning is specified, multiple #0367 cables may be ordered to connect the operations console in each partition.</p> <p>ECS is supported from the RVX port and one of the following cables is required to support ECS; #0348, #0349 or #0365. ECS is supported from the Modem port (OS/400 V5R1 or later).</p> <p>The #2794 does not support the remote ring indicate function.</p> <p>For further configuration information, see: http://www.iseries.ibm.com/tstudio/planning/esa/esa.htm For communication restrictions using the #2794/#9794, see 6.5, "Soft rules: iSeries IOA requirements" on page 179. Minimum OS/400 level: V5R2</p>
<p>#2805</p>	<p>#2805 PCI Quad Modem IOA</p> <p>The #2805 is a 4-line WAN adapter with four WAN ports with internal modems. Connection to the ports is via telephone cable (RJ-11). This is the non-Complex Impedance Matching (CIM) version of the IOA.</p> <p>Supported protocols are:</p> <ul style="list-style-type: none"> V. 92 56K Async PPP Fax applications at data rates up to 33.6K <p>The V.92 functions offer increased upload throughput, improved V.44 data compression, and shortened modem synchronization periods.</p> <p>Co-requisite: Country-specific telephone cables must be ordered. A minimum of one modem cable and a maximum of four must be selected for each #2805. All modem cables on a system must be the same feature number. The supported modem cables are:</p> <ul style="list-style-type: none"> #1010 Modem Cable-Austria #1011 Modem Cable-Belgium #1012 Modem Cable-Africa #1013 Modem Cable-Israel #1014 Modem Cable-Italy #1015 Modem Cable-France #1016 Modem Cable-Germany #1017 Modem Cable-United Kingdom #1018 Modem Cable-Iceland/ Sweden #1021 Modem Cable-Fin/ Nor #1022 Modem Cable-Netherlands #1023 Modem Cable-Swiss #1024 Modem Cable-Denmark #1025 Modem Cable-U.S./Canada <p>Note: The feature is country-specific. Contact your IBM representative or Business Partner for details on availability.</p>

#2805 (cont.)	<p>Restrictions: The call waiting and modem on hold functions associated with V.92 is not supported. Remote Power On via ring-indicator, SDLC, and synchronous PPP are not supported.</p> <p>PCI card slots required: One.</p> <p>Minimum OS/400 level: OS/400 V5R1 with PTFs s required. For required PTF information, availability, and ordering information, refer to Information APAR II13079 at: http://www-912.ibm.com/supporthome.nsf/document/10000035</p> <p>The #2805 is a Customer Install Feature (CIF).</p>
#2806	<p>#2806 PCI Quad Modem (CIM)</p> <p>The #2806 is a 4-line WAN adapter with four WAN ports with internal modems. Connection to the ports is via telephone cable (RJ-11). This is the Complex Impedence Matching (CIM) version of the IOA. Supported protocols are:</p> <ul style="list-style-type: none"> V. 92 56K Async PPP <p>Fax applications at data rates up to 33.6K</p> <p>The V.92 functions offer increased upload throughput, improved V.44 data compression, and shortened modem synchronization periods.</p> <p>Co-requisite: Country-specific telephone cables must be ordered. A minimum of one modem cable and a maximum of two must be selected for each #2806. All modem cables on a system must be the same feature number. The supported modem cables are:</p> <ul style="list-style-type: none"> #1019 Modem Cable- Australia #1020 Modem Cable- China (Hong Kong S.A.R.)/New Zealand <p>Note: The #2806 is country-specific. Contact your IBM representative or Business Partner for details on availability.</p> <p>Restrictions: The call waiting and modem on hold functions associated with V.92 are not supported. Remote Power On via ring-indicator, SDLC, and synchronous PPP are not supported.</p> <p>PCI card slots required: One.</p> <p>Minimum OS/400 level: OS/400 V5R1 with PTFs. For required PTF information, availability and ordering information, refer to Information APAR II13079 at: http://www-912.ibm.com/supporthome.nsf/document/10000035</p> <p>The #2806 is a Customer Install Feature (CIF).</p>
#2817	<p>#2817 PCI 155 Mbps MMF ATM IOA</p> <p>The #2817 is a 155 Mbps Asynchronous Transfer Mode (ATM) PCI card that allows the server to be attached to an 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 #2817 is typically used where 155 Mbps speeds are required over distances of less than 2Km.</p> <p>The #2817 is capable of supporting both multiple emulated LAN environments and enhanced TCP/IP performance with OS/400 V5R1. The #2817 is a 64-bit card, but is allowed to plug into any 32-bit or 64-bit slot. Feature maximums can be limited when used in combination with other LAN/ATM IOPs.</p> <p>PCI card slots required: One.</p> <p>Minimum OS/400 level: V5R1</p> <p>The #2817 is a Customer Install Feature (CIF).</p>
#2849	<p>#2849 10/100 Mbps Ethernet Adapter</p> <p>The #2849 allows an iSeries server to attach to standardized 100 Mbps high-speed Ethernet LANs and allows attachment to existing 10Mbps Ethernet LANs. The adapter comes standard 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. Maximum cable length is 100 meters.</p> <p>The #2849 is a Customer Install Feature (CIF).</p> <p>Minimum OS/400 level: V5R2</p> <p>The #2849 is not supported on any Integrated Netfinity Server/Integrated xSeries Server.</p>
#4723	<p>#4723 PCI 10 Mbps Ethernet Adapter</p> <p>The #4723 PCI Ethernet IOA provides single attachment to one Carrier Sense Multiple Access/Collision Detect Local Area Network. The feature 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. The Ethernet/IEEE 802.3 IOA is capable of operating in half or full duplex mode. The #4723 has an RJ45 connector and a 15 pin D-Shell connector for attachment to customer supplied cabling. A vendor AUI Ethernet cable or RJ45 twisted pair cable must be ordered separately.</p> <p>Restrictions: The #4723 is not supported by the #2790 PCI Integrated Netfinity Server or the #2791/#2799 PCI Integrated xSeries Server.</p> <p>The #4723 is a Customer Install Feature (CIF).</p>

<p>#4745</p>	<p>#4745 PCI 2-line WAN IOA</p> <p>The #4745 supports up to two multiple protocol communications ports when one or two of these cables are attached:</p> <ul style="list-style-type: none"> #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0353 V.35 20-ft. PCI cable #0354 V.35 50-ft. PCI cable #0355 V.35 80-ft. PCI cable #0356 V.36 20-ft. PCI cable #0358 V.36 150-ft. PCI cable #0359 X.21 20-ft. PCI cable #0360 X.21 50-ft. PCI cable #0365 V.24/EIA232 80-ft. PCI cable #0367 Operations Console PCI Cable <p>When #0140 logical partitioning is specified, multiple #0367 cables may be ordered to connect the operations console in each partition.</p> <p>One #0367 cable per #4745.</p> <p>When the #4745 is selected to support ECS, one of these cables must be specified:</p> <ul style="list-style-type: none"> #0348 V.24/EIA232 20-ft. (6m) PCI cable (Default) #0349 V.24/EIA232 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. PCI cable <p>The #4745 is a Customer Install Feature (CIF).</p>
<p>#4750</p>	<p>#4750 PCI ISDN BRI U IOA</p> <p>The #4750 is a four-port (8 channel) ISDN BRI (basic rate) full sized PCI card. Each port consists of 2B+D configuration. The #4750 is the "U"-bus (2 wire) version of the ISDN BRI PCI card. The #4750 supports these protocols:</p> <ul style="list-style-type: none"> PPP (communicates with remote analog modems (V.90) as well as with remote ISDN devices) IDLC Fax <p>Four 30-ft. (9.3 m) RJ-45 to RJ-45 network cables are shipped with each #4750. For configuration purposes, each #4750 counts as eight lines (two lines per port) toward the system communication maximums. Supports full duplex.</p> <p>Requirements: The #4750 requires country certification or homologation.</p> <p>Full sized PCI card slot.</p> <p>Maximum: One per IOP.</p> <p>The #4750 is a Customer Install Feature (CIF).</p>
<p>#4751</p>	<p>#4751 PCI ISDN BRI S/T IOA</p> <p>The #4751 is a four-port (eight channel) ISDN BRI (basic rate) full sized PCI card. Each port consists of 2B+D configuration. The #4751 is the "S/T"-bus (four wire) version of the ISDN BRI PCI card.</p> <p>Note: The #4751 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.</p> <p>The #4751 supports these protocols:</p> <ul style="list-style-type: none"> PPP (communicates with remote analog modems (V.90) as well as with remote ISDN devices) IDLC Fax <p>Four 30-ft. (9.3 m) RJ-45 to RJ-45 network cables are shipped with each #4751. For configuration purposes, each #4751 counts as eight lines (two lines per port) towards the system communication maximums. Supports full duplex.</p> <p>Requirements: The #4751 requires country certification or homologation.</p> <p>Full sized PCI card slot.</p> <p>Maximum: One per IOP.</p> <p>The #4751 is a Customer Install Feature (CIF).</p>

#4761	<p>#4761 PCI Integrated Analog Modem</p> <p>The #4761 allows the modem function to be integrated into the IOA and supports multiple analog modem ports (eight phone lines). The #4761 runs these protocols without the need for an external modem:</p> <ul style="list-style-type: none"> SLIP/PPP uses V.90, so the maximum line speed is 56 Kbps. SDLC uses V.34, so the maximum line speed is 33.6 Kbps. Fax uses V.17 to achieve a 14.4 Kbps maximum line speed. <p>V5R1 is the last release to support non-Fax functions on the #4761.</p> <p>An asynchronous line description is required for Fax and can only be used for Fax. ECS line is not supported. Eight 30-ft. (8 m) phone cables are shipped with each #4761. To the iSeries server, the #4761 appears like a single IOA with eight individual resources available. For configuration purposes, each #4761 counts as eight communications lines. Supports full duplex.</p> <p>Requirements: The #4761 requires country certification or homologation.</p> <ul style="list-style-type: none"> Full sized PCI card slot. <p>Maximum: One per IOP</p> <p>The #4761 is a Customer Install Feature (CIF).</p>
#4801	<p>#4801 PCI Cryptographic Coprocessor</p> <p>The #4801 is a hardware cryptography solution. The #4801 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 and triple DES capability. The #4801 is available worldwide. The level of cryptographic function is determined by the Cryptographic Access Provider licensed program that is downloaded to the adapter.</p> <p>Due to temperature requirements (card temperature must not drop below 5 F (-15 C)), the #4801 is shipped separately from the system in a special package.</p> <p>The #4801 is a Customer Install Feature (CIF).</p>
#4805	<p>#4805 Cryptographic Accelerator</p> <p>The #4805 provides improved performance for high transaction rate secure Web applications that use the secure sockets layer (SSL) or transport layer security (TLS) protocols. The process of using SSL/TLS secure Web connections, is very compute intensive. The Cryptographic Accelerator can be used to off-load cryptographic processing from main CPU. SSL/TLS secure Web connections are used to protect information (for example, credit card number) as it is transferred over the Internet – such as between a Web browser and a server.</p> <p>The Cryptographic Accelerator is targeted to high transaction rate secure Web applications using SSL/TLS. If your application requires a FIPS 140-1 certified, tamper-resistant module for storing cryptographic keys and/or requires financial PIN processing, then the #4801 PCI Cryptographic Coprocessor should be your choice.</p> <p>Note: Federal Information Processing Standard (FIPS) 140-1 is a U.S. Government National Institute of Standards and Technology (NIST) administered standard and certification program for cryptographic modules.</p> <p>There is a maximum of two per IOP.</p> <p>Prerequisites: Available PCI card slot under a feature IOP (not under a base or embedded IOP in the system unit).</p> <p>The #4805 is a Customer Install Feature (CIF).</p> <p>Minimum OS/400 level: V5R2</p>
#4815	<p>#4815 PCI ATM 155 Mbps UTP OC3</p> <p>The #4815 is a 155 Mbps Asynchronous Transfer Mode (ATM) PCI card that allows the iSeries or AS/400e server to be attached to an 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 #4815 is typically used where 155 Mbps speeds are required over distances of less than 100 meters. Technical specifications and industry standards supported are available at the ATM Forum Web site: http://www.atmforum.com</p> <p>The #4815 is a Customer Install Feature (CIF).</p>
#4816	<p>#4816 PCI ATM 155 Mbps MMF</p> <p>The #4816 is a 155 Mbps Asynchronous Transfer Mode (ATM) PCI card that allows the iSeries or AS/400e server to be attached into an 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 #4816 is typically used where 155 Mbps speeds are required over distances of less than 2 km. Technical specifications and industry standards supported are available at the ATM Forum Web site: http://www.atmforum.com</p> <p>Note: The #4816 is orderable for use in V4R5 secondary partitions. For V5R1 systems or partitions, the #2817 PCI 155 Mbps MMF ATM IOA should be ordered.</p> <p>The #4816 is a Customer Install Feature (CIF).</p>
#4818	<p>#4818 PCI ATM 155 Mbps SMF OC3</p> <p>The #4818 is a 155 Mbps Asynchronous Transfer Mode (ATM) PCI card that allows the iSeries or AS/400e server to be attached to an ATM network using the Single-Mode Fiber (SMF) 9 micron interface. This interface is intended primarily for direct connection to service provider equipment. The #4818 is typically used where 155 Mbps speeds are required over distances of from 16 to 40 km. Technical specifications and industry standards supported are available at the ATM Forum Web site: http://www.atmforum.com</p> <p>The #4818 is a Customer Install Feature (CIF).</p>

<p>#4838</p>	<p>#4838 PCI 100/10 Mbps Ethernet IOA</p> <p>The #4838 PCI 100/10 Mbps Ethernet IOA feature allows the iSeries or AS/400e server to attach to standardized 100 Mbps high-speed Ethernet LANs and to attach to existing 10 Mbps Ethernet LANs. The adapter comes standard 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. The maximum cable length is 100 meters. This Ethernet IEEE 802.3 IOA is capable of operating in half or duplex mode. If the #4838 is selected to run on the #2790 PCI Integrated Netfinity Server or #2791/#2799 PCI Integrated xSeries Server, then specify code #0224 is required for each #4838 selected to run on the #2790/ #2791/#2799.</p> <p>The #4838 can be directly attached to a Linux partition. When ordered as #0607 Linux Direct Attach - #4838, an IOP is not required. When direct attached to a Linux partition, the #4838 cannot be accessed by OS/400 partitions. The #4838 is a Customer Install Feature (CIF).</p>
<p>#9771</p>	<p>#9771 Base PCI Two-Line WAN with integrated modem</p> <p>The #9771 is a two-line WAN adapter. One port supports V.90 56K async data on PPP via an internal modem. The second port supports multiple protocol communications (WAN). Connection to the V.90 port uses a telephone cable. Connection to the WAN communication port is through one of these cables:</p> <ul style="list-style-type: none"> #0348 V.24/EIA232 20-ft. (6m) PCI cable #0349 V.24/EIA232 50-ft. (15m) PCI cable #0353 V.35 20-ft. PCI cable #0354 V.35 50-ft. PCI cable #0355 V.35 80-ft./24m PCI cable #0356 V.36 20-ft. PCI cable #0358 V.36 150-ft./45m PCI cable #0359 X.21 20-ft. PCI cable #0360 X.21 50-ft. PCI cable #0365 V.24/EIA232 80-ft. PCI cable #0367 Operations Console PCI Cable <p>The #9771 supports the #0367 Operations Console PCI Cable on the WAN (RVX) port to directly connect the Operations Console for V5R1 or later or with V4R5 and PTF MF25397 (not in cumulative PTF). Direct connection of the Operations Console is mutually exclusive with V.90 support of the dial-in Operations Console.</p> <p>The #9771 supports the #5544 System Console on Operations Console on the V.90 port for <i>dial-in</i> Operations Console with V5R1. An additional #4745 is required on V4R5 systems for <i>dial-in</i> Operations Console support.</p> <p>The #9771 ships with a country-specific telephone cable. No modem cable feature is required on the order.</p> <p>ECS is supported over TCP/IP on the V.90 telephone cable port with V5R1, or with V4R5 and PTF SF64124. Fax is supported on the V.90 port with V5R1, or with V4R5 and PTFs MF25290 and SF64604.</p> <p>To support ECS on the WAN port of the #9771, specify one of these cables:</p> <ul style="list-style-type: none"> #0348 V.24/EIA232 20-ft. (6m) PCI cable (default) #0349 V.24/EIA232 50-ft. (15m) PCI cable #0365 V.24/EIA232 80-ft. PCI cable <p>ECS operates on the WAN port of the #9771 by changing the *RSRCNAME parameter of the QESLINE and QTILINE line descriptions to that of the WAN port on the #9771 card.</p> <p>Remote Power On is not supported. The #9771 does not support the remote ring indicate function.</p> <p>For further configuration information, see: http://www.iseries.ibm.com/tstudio/planning/esa/esa.htm For communication restrictions using the #9771, see 6.5, "Soft rules: iSeries IOA requirements" on page 179.</p> <p>Minimum OS/400 level: V4R5 with supporting PTFs</p>

DISK UNITS	
#08xx	<p>Load Source Specify Codes</p> <p>Starting with the V5R1 announcement, one of these specify codes is required on all initial order Model 270s, 8xxs. In addition, one of these specify codes is required on all upgrades into the 8xx models from non-8xx models:</p> <ul style="list-style-type: none"> #0826 - #4314 Load Source specify #0827 - #4324 Load Source specify #0828 - #4317 Load Source specify #0829 - #4318 Load Source specify #0830 - #4319 Load Source specify <p>Manufacturing uses the #08xx specify to place a corresponding disk unit feature in the load source position. Initial orders and model upgrade orders into 8xx models from non-8xx models that contain a load source specify but no corresponding disk unit feature are invalid orders. These specify codes can be changed on model upgrades or on simple MES orders.</p>
#4314	<p>#4314 8.58 GB Disk Unit (Ultra SCSI)</p> <p>The #4314 provides an additional 3 ½-inch two-byte single disk unit with 8.58 GB capacity (7200 RPM). The #4314 is a Customer Install Feature (CIF).</p>
#4317	<p>#4317 8.58 GB Disk Unit 10k RPM (Ultra2 SCSI)</p> <p>The #4317 provides an additional 3 ½-inch single disk unit with 8.58 GB capacity. The #4317 is a Customer Install Feature (CIF). Feature Conversions: During MES upgrades, #6717, #6817, #8617, and #8817 8.58 GB Disk Units can be converted to #4317s. Withdrawn from marketing for new orders effective 03 December 2002. Feature conversions to #4317 remain available.</p>
#4318	<p>#4318 17.54 GB Disk Unit 10k RPM (Ultra2 SCSI)</p> <p>The #4318 provides an additional 3 ½-inch single disk unit with 17.54 GB capacity. Feature Conversions: During MES upgrades, #6718, #6818, #8618, and #8818 8.58 GB Disk Units can be converted to #4318s. The #4318 is a Customer Install Feature (CIF).</p>
#4319	<p>#4319 35.16 GB 10k RPM Disk Unit (Ultra2 SCSI)</p> <p>The #4319 provides an additional 3 ½-inch single disk unit with 35.16 GB capacity. Minimum OS/400 level: V5R1 with PTFs. Refer to Information APAR II13102 for more information. Restrictions: #4319 cannot be mounted in a #5065 Storage/PCI Expansion Tower. The #4319 is a Customer Install Feature (CIF).</p>
#4324	<p>#4324 17.54 GB Disk Unit (Ultra SCSI)</p> <p>The #4324 provides a 3 ½-inch single disk unit with 17.54 GB capacity for additional disk storage (7200 RPM). Minimum OS/400 level: V4R4. The #4324 is a Customer Install Feature (CIF).</p>
#4331	<p>#4331 1.6 GB Read Cache Device</p> <p>The #4331 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 #4748/#4778 PCI RAID Disk Unit Controller.</p> <p>Note: Because the #4331 is 1.6-inches wide, placement rules apply. The #4331 cannot be placed in disk unit slot D01 of the #5075 PCI Expansion Tower. It cannot be placed in disk unit slots D14 or D20 of the #7104 and cannot be placed in disk unit slots D01 or D07 of the Model 820. The #4331 can be placed in disk unit slots D02 through D06 of the #5075 PCI Expansion Tower and can be placed in disk unit slots D02 through D07 and D08 through D12 of Model 820. However, the #4331 takes up the disk unit slot in which it is installed and takes up the adjacent disk unit slot to its left. For example, if the #4331 is installed in disk unit slot D02, it takes up disk unit slot D02 and disk unit slot D01. For HSL attached towers on the 8xx, the #4331 is installed in the left-most slot of each five-pack and only takes up one disk unit position. Maximum: One per #4748/#4778. The #4331 is a Customer Install Feature (CIF).</p>
#75xx	<p>Quantity 150 of Feature #43xx</p> <p>The #75xx features cause 150 of the specified disk units to be shipped. When over 150 disk units are requested in the configurator, a #75xx feature is automatically added for each group of 150 specified. For example, if 180 #4314 8.58 GB Disk Unit are requested, the configurator adds one #7500 and 30 #4314s to the order.</p> <ul style="list-style-type: none"> #7500 Quantity 150 of Feature #4314 #7501 Quantity 150 of Feature #4317 #7502 Quantity 150 of Feature #4318 #7503 Quantity 150 of Feature #4324 #7504 Quantity 150 of Feature #4319

<p>RPQ 847102</p>	<p>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.</p>
<p>INTERNAL TAPE UNITS AND CD-ROM</p>	
<p>#4425 #4525</p>	<p>#4425 CD-ROM/#4525 CD-ROM The #4425 is a feature CD-ROM device that can be mounted in the base PCI enclosure of Models 830, 840, 890, and in the #5074/#5079 PCI Expansion Towers. The #4525 is a feature CD-ROM device that can be mounted in the system unit of Models 820. The #4425/#4525 can be used for alternate IPL (IBM distributed CD-ROM media only) and program distribution. A CD-ROM or DVD-RAM is required for each system. The #4425/#4525 is a Customer Install Feature (CIF).</p>
<p>#4430 #4530</p>	<p>#4430 DVD-RAM/#4530 DVD-RAM The #4430 is a feature DVD-RAM device that can be mounted in the base PCI enclosure of Models 830, 840, in the #5074/#5079 PCI Expansion Towers and #8093 and the #9094 Base PCI I/O Enclosure of the Model 890. The #4530 is a feature DVD-RAM device that can be mounted in the system unit of Model 820. The #4430/#4530 is a 5.25" half-high device which installs in a removable media slot. The #4430/#4530 is capable of writing and reading 4.7 GB on a single disk (single side). For double sided media, the media must be manually flipped. The #4430/#4530 is also capable of reading 650 MB CD-ROM disks. The #4430/#4530 can be used for alternate IPL, program distribution and data interchange. The #4430/#4530 is not supported as an Alternate Installation Device (by selection via DST Boot Manager) with OS/400 V5R1. A CD-ROM or DVD-RAM is required for each system. Prerequisites: A disk unit controller in the CEC/tower where the device is mounted. Minimum OS/400 level: V4R5 with PTFs or OS/400 V5R1 The #4430/#4530 is a Customer Install Feature (CIF).</p>
<p>#4482 #4582</p>	<p>#4482 4 GB ¼-inch Cartridge Tape Unit/#4582 4 GB ¼-inch Cartridge Tape Unit The #4482/#4582 can be used for save/restore, alternate IPL, migration, and ¼-inch cartridge tape exchange using the appropriate media and density. The #4482 is a 4 GB ¼-inch cartridge tape unit that can be mounted in the base PCI enclosure of Models 830, 840 and in the #5074/#5079 PCI Expansion Towers, #8093 and the #9094 Base PCI I/O Enclosure of the Model 890. The #4582 can be mounted in the system unit of Models 820. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. See 16.8, "QIC format compatibility for iSeries and AS/400e systems" on page 531, for supported media types. The #4482/#4582 is a Customer Install Feature (CIF).</p>
<p>#4483 #4583</p>	<p>#4483 16 GB ¼-inch Cartridge Tape Unit/#4583 16 GB ¼-inch Cartridge Tape Unit With a data rate of 1.5 Mbps and capacity of 16 GB per cartridge (3 MB/sec and 32 GB per cartridge with data compaction), the #4483/#4583 provides a growth path for the large number of iSeries or AS/400e servers that use QIC tape technology for save/restore. Can be used for save/restore, alternate IPL, migration. See 16.8, "QIC format compatibility for iSeries and AS/400e systems" on page 531, for supported media types. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4483 tape unit can be mounted in the base PCI enclosure of Models 830, 840, and in the #5074/#5079 PCI Expansion Towers. The #4583 can be mounted in the system unit of Models 820. The #4483/#4583 is a Customer Install Feature (CIF).</p>
<p>#4584 #4684</p>	<p>#4584 30 GB ¼-inch Cartridge Tape Unit/#4684 30 GB ¼-inch Cartridge Tape Unit The #4584/#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. The #4684 is a 30 GB ¼-inch cartridge tape unit that can be mounted in the base PCI enclosure of Models 830, 840, in the #5074/#5079 PCI Expansion Towers, #8093 and the #9094 Base PCI I/O Enclosure of the Model 890. The #4584 can be mounted in the system unit of the Model 820. The #4584/#4684 is a Customer Install Feature (CIF).</p>

<p>#4486 #4586</p>	<p>#4486 25 GB ¼-inch Cartridge Tape Unit/ #4586 25 GB ¼-inch Cartridge Tape Unit With a data rate of 2 Mbps and capacity of 25 GB per cartridge (4 MB/sec and 50 GB per cartridge with data compaction), the #4486/#4586 provides a growth path for iSeries or AS/400e servers that use QIC tape technology for save/restore, alternate IPL and migration. See 16.8, "QIC format compatibility for iSeries and AS/400e systems" on page 531, for supported media types. This tape unit is not compatible with System/36 ¼-inch cartridge tape units. The #4486 is a 25 GB ¼-inch cartridge tape unit that can be mounted in the s base PCI enclosure of Models 830, 840, 890, and in the #5074/#5079 PCI Expansion Towers. The #4586 can be mounted in the system unit of the Model 820. The #4486/#4586 is a Customer Install Feature (CIF).</p>
<p>#4487 #4587</p>	<p>#4487/#4587 50 GB ¼-inch Cartridge Tape Unit The #4487/#4587 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. The #4487 can be mounted in the base PCI enclosure of Models 830, 840, in the #5074/#5079 PCI Expansion Towers and #8093 and the #9094 Base PCI I/O Enclosure of the Model 890. The #4587 can be mounted in the system unit of the 820. Prerequisite: A disk unit controller in CEC/tower where device is mounted. Minimum OS/400 level: V5R1 The #4487/#4587 is a Customer Install Feature (CIF).</p>
<p>MAGNETIC MEDIA CONTROLLERS</p>	
<p>#0208</p>	<p>No Alternate Install Device Use Required Having the #0208 specify on an order forces manufacturing to place the external tape adapter on the first Multi-Adapter Bridge. Having the external tape adapter on the first Multi-Adapter Bridge, does not require a customer to select or use the Alternative Installation Device option in conjunction with a D-mode IPL (using Boot Manager in DST). Forcing the external tape adapter on the first Multi-Adapter Bridge can result in a higher cost system configuration due to the need of additional PCI controller cards. Marketing Configurator requirements: Allow the selection of the #0208 specify. If the #0208 has been selected (or is present), the external alternate IPL tape controller must be placed on the first Multi-Adapter Bridge boundary of the system unit. If due to other system constraints the placement of the alternate IPL tape controller on the first Multi-Adapter Bridge is not possible, then the order is not valid and flagged as such. Minimum OS/400 level: V4R5 on the initial order and simple MES orders for Model 820, 830, 840, and model upgrades into Model 8xx from non-8xx models.</p>
<p>#2749</p>	<p>#2749 PCI Ultra Magnetic Media Controller The #2749 is an Ultra SCSI IOA that provides attachment capability for external tape devices and external optical devices. The #2749 can attach one tape drive or one optical drive. These tape devices can be attached:</p> <ul style="list-style-type: none"> ▶ 3490E E01/E11 ½-inch cartridge tape subsystem ▶ 3490 F00/F01/F11/F1A ½-inch cartridge tape subsystem ▶ 3490E C11/C22/C1A/C2A with feature #5040 ▶ 3494 Tape Library Dataserver <ul style="list-style-type: none"> L10 Library Control Unit Frame 1 3490E C1A/C2A with #5040 or 1-2 3490E F1A L12 Library Control Unit Frame 1-2 3590 B1A D10 Device Frame 1 3490E C1A/C2A with #5040 or 1-2 3490E F1A, 300 cartridges D12 Device Frame 1-6 3590 B1A, 300 cartridges HA1 (High Availability) - two L1X and two D1X for redundancy ▶ 3570 0.31-inch Cartridge Tape Subsystem <ul style="list-style-type: none"> Model B0x (standalone) Model B1x (rack mount) Model B1A(mounts in 3575) Model C0x (standalone) Model C1x (rack mount) Model C1A(mounts in 3575) ▶ 3575 0.31-inch Cartridge Tape Subsystem <ul style="list-style-type: none"> Model Lxx ▶ 3580-H11 Ultrium Tape Drive ▶ 3581-H17 Ultrium Tape Autoloader ▶ 3583-Lxx Ultrium Scalable Tape Library ▶ 3584-L32 or D32 Ultrascalable Tape Library ▶ 3590 ½-inch Cartridge Tape Subsystem <ul style="list-style-type: none"> Model B11 (mounts into 9309 rack) Model B1A (mounts into 3494 library) Model E11 (mounts into 9309 rack) Model E1A (mounts into 3494 library)

<p>#2749 (cont.)</p>	<ul style="list-style-type: none"> ▶ 3995 Optical Library Dataserver - Model Cxx ▶ 7208-012 5.0 GB 8mm cartridge tape unit ▶ 7208-222 7.0 GB 8mm cartridge tape unit ▶ 7208-232 8MM Dual 5.0 GB cartridge tape subsystem <ul style="list-style-type: none"> #0501 counts as one 7208 #0502 counts as two 7208 Counts as two 7208s ▶ 7208-342 20.0 GB 8mm Cartridge Tape Bridge Box ▶ 9348-00x ½-inch Reel Tape Unit - Rack Mount ▶ 9427-2108 8 mm Library Attach <p>The #2749 is a Customer Install Feature (CIF).</p>
<p>#2763</p>	<p>#2763 PCI RAID Disk Unit Controller–10 MB The #2763 is an Ultra2 SCSI controller with a 10 MB write-cache that provides RAID-5 protection for internal disk units and supports up to two removable media devices (internal tape units and CD-ROM units).</p> <p>In addition to providing RAID-5 protection for disks, the #2763 is also designed to work as a high performance controller for disks protected by system mirroring or disks with no protection. The #2763 controller supports a maximum of 12 disk units and is only available on the Model 820 and #5075 PCI Expansion Tower.</p> <p>A minimum of four disk units of the same capacity are needed for a valid RAID-5 configuration. A maximum of three arrays are allowed per controller, with a maximum of ten disk units allowed per one array. All disk units in an array must be of the same capacity. Parity is spread across four disk units for arrays of four to ten. The #2763 does not support hardware disk compression. The #2763 does not support the #4331 1.6 GB Read Cache Device.</p> <p>The #2763 can be directly attached to a Linux partition. When ordered as #0604 Linux Direct Attach - #2763, an IOP is not required. When direct attached to a Linux partition, the #2763 cannot be accessed by OS/400 partitions. When Directly attached to a Linux partition the #2763, it does not support RAID nor hardware disk compression.</p> <p>Restrictions: Requires long PCI card slot. The #2763 is a Customer Install Feature (CIF). Model 820 only.</p>
<p>#2765</p>	<p>#2765 PCI Fibre Channel Tape Controller The #2765 provides fibre channel attachment capability for external tape devices. The #2765 supports point-to-point and arbitrated loop topologies and has an LC type cable connector. Each #2765 is shipped with a wrap connector (P/N 05N6767). The devices supported for fibre channel attachment are:</p> <ul style="list-style-type: none"> ▶ 3534-1RU SAN Fibre Channel Managed Hub (1 Gbps) ▶ Fiber Channel Switches: <ul style="list-style-type: none"> – 2109 S08/S16 (1 Gbps) – 2109 F16 (2 Gbps) – 3534 F08 (2 Gbps) ▶ 3583-Lxx Ultrium Scalable Tape Library with #8005 (SAN Data Gateway Module) ▶ 3584-L32 or D32 Ultrascalable Tape Library ▶ 3590 ½-inch Cartridge Tape Subsystem Models E11 and E1A <p>The #0163 Fibre Channel Attach Specify is required for each device attaching to an iSeries server via a #2765. These adapter kits are required when connecting SC type cables to the #2765:</p> <ul style="list-style-type: none"> ▶ #0371 - LC-SC Adapter Kit (50um) can be ordered, both on initial, model upgrades, and simple MES orders. This optional kit is used to attach SC- type fibre (50 micron) cables to a #2765. This kit contains a 2m LC-ST cable and ST-SC adapter for 50 micron fiber. ▶ #0372 - LC-SC Adapter Kit (62.5um) can be ordered, both on initial, model upgrades, and simple MES orders. This optional kit is used to attach SC-type fibre (62.5 micron) cables to a #2765. This kit contains a 2m LC-ST cable and ST- SC adapter for 62.5 micron fiber. <p>Note: An optics cleaning kit (P/N 46G6844) and instruction sheet instruction sheet (P/N 21P6238, form number SY27-2604) are supplied, one per system, when a #2765/#2766 is ordered.</p> <p>Multi-target support with a maximum of 16 targets with V5R2. Minimum OS/400 level: V5R1 The #2765 is a Customer Install Feature (CIF).</p>

<p>#2766</p>	<p>#2766 PCI Fibre Channel Disk Controller</p> <p>The #2766 provides fibre channel attachment capability for external disk devices. The #2766 supports point-to-point and arbitrated loop topologies and has an LC type cable connector. Each #2766 is shipped with a wrap connector (P/N 05N6767). The devices supported for fibre channel attachment are:</p> <ul style="list-style-type: none"> ▶ 2105-F10/F20 Enterprise Storage Server (SHARK) ▶ 3534-1RU SAN Fibre Channel Managed Hub (1 Gbps) ▶ Fiber Channel Switches: <ul style="list-style-type: none"> – 2109 S08/S16 (1 Gbps) – 2109 F16 (2 Gbps) – 3534 F08 (2 Gbps) <p>These adapter kits are required when connecting SC type cables to the #2766:</p> <ul style="list-style-type: none"> ▶ #0371 - LC-SC Adapter Kit (50um) can be ordered, both on initial, model upgrades, and simple MES orders. This optional kit is used to attach SC-type fibre (50 micron) cables to a #2766. This kit contains a 2m LC-ST cable and ST-SC adapter for 50 micron fiber. ▶ #0372 - LC-SC Adapter Kit (62.5 micron) can be ordered, both on initial, model upgrades, and simple MES orders. This optional kit is used to attach SC-type fiber (62.5 micron) cables to a #2766. This kit contains a 2m LC-ST cable and ST-SC adapter for 62.5 micron fiber. <p>Note: An optics cleaning kit (P/N 46G6844) and instruction sheet (P/N 21P6238, form number SY27-2604) are supplied, one per system, when a #2765/#2766 is present/ordered.</p> <p>Note: The #2766 requires a dedicated IOP. No other IOA is allowed on an IOP with the #2766.</p> <p>Restrictions: Customers must supply all fibre channel cables for this controller. See 6.4, “Hard rules: iSeries IOA capabilities” on page 174, for additional restrictions.</p> <p>Co-requisite: The #2766 requires RPQ 847126. Read and understand RPQ 847126 before ordering the #2766. Any order for a #2766 must be manually modified to add RPQ 847126.</p> <p>Multi-target support with maximum of 32 targets with V5R2.</p> <p>Minimum OS/400 level: V5R1</p> <p>The #2766 is a Customer Install Feature (CIF).</p>
<p>#2768</p>	<p>#2768 PCI Magnetic Media Controller</p> <p>The #2768 provides Ultra SCSI attachment capability for an external tape or an external CD-ROM device that has a Single Ended SCSI interface. The #2768 supports these devices:</p> <ul style="list-style-type: none"> 7207-122 QIC-SLR Tape Bridge Box (4 GB External ¼-inch Cartridge Tape Drive) 7208-345 60 GB External 8mm Tape Drive 7329-308 SLR100 ¼-inch Tape Autoloader 7210-020 CD-ROM Bridge Box 7210-025 DVD-RAM Drive <p>See 16.7.4, “#2718/#2768 PCI Magnetic Media Controller: Device cabling rules” on page 530, for information on connecting devices to the #2768.</p> <p>Minimum OS/400 to support the 7329-308 and 7208-345: V4R5</p> <p>Minimum OS/400 to support the 7210-020 and 7210-025: V5R1</p> <p>The #2768 is a Customer Install Feature (CIF).</p>
<p>#4748 #9748</p>	<p>#4748 PCI RAID Disk Unit Controller–26 MB Cache</p> <p>The #4748/#9748 is an Ultra2 SCSI controller with a 26 MB write-cache that provides RAID-5 protection and compression for internal disk units and supports internal tape units and CD-ROM units. The #4748/#9748 supports both compression and non-compression modes. The mode of operation is determined by a hardware jumper. The #4748/#9748 is shipped in non-compression mode. By moving the hardware jumper, the controller functions in compression mode. In addition to providing RAID-5 protection for disks, the #4748/#9748 is also designed to work as a high performance controller for disks protected by system mirroring or disks with no protection. The #4748 also supports #4331 1.6 GB Read Cache Device, which provides increased performance. The #4331 1.6 GB Read Cache Device is supported only when #4748/#9748 is <i>not</i> in compression mode.</p> <p>Note: The #4748 does not support data compression on 35 GB disk units.</p> <p>The #4748 controller supports a maximum of 15 disk units.</p> <p>The #9748 is the base disk controller for Models 830, 840.</p> <p>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. Parity is spread across four disk units for arrays of four to seven disk units. Parity can be spread across either four or eight disk units for arrays of 8 to 10 disk units. For systems started with 8 to 10 disk units in an array, the parity for that array is spread across eight disk units. For systems that are started with less than eight disk units in an array and later MES upgraded to 8, 9, or 10 disk units, the RAID function must be stopped and then started before the parity is spread across eight disk units.</p> <p>The #4748/#9748 controls up to two removable media devices (internal tape or CD-ROM).</p> <p>The #4748 can be directly attached to a Linux partition. When ordered as #0605 Linux Direct Attach - #4748, an IOP is not required. When direct attached to a Linux partition, the #4748 cannot be accessed by OS/400 partitions. When directly attached to a Linux partition, the #4748 does not support RAID or hardware disk compression.</p>

<p>#4748 #9748 (cont.)</p>	<p>Restrictions: Requires long PCI card slot. Minimum OS/400 level: V4R5 The #4748/#9748 is a Customer Install Feature (CIF). Withdrawn from marketing effective 02 July 2002 for new orders. Feature conversions to #4748 or #9748 remain available.</p>
<p>#4778 #9778</p>	<p>#4778 PCI RAID Disk Unit Controller–104 MB Cache The #4778/#9778 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, CD-ROM and DVD-RAM units. The #4778/#9778 supports both disk compression and enhanced modes. The mode of operation is determined by a hardware jumper. The #4778/#9778 is shipped in enhanced mode, which enables compression of the write cache and Extended Adaptive Cache (a Read Cache Device is needed for Extended Adaptive Cache). By moving the hardware jumper, the controller functions in disk compression mode. Disk compression mode should only be used when disk compression is desired. In addition to providing RAID-5 protection for disks, #4778/#9778 is also designed to work as a high performance controller for disks protected by system mirroring or disks with no protection. In the RAID-5 configuration, disk unit protection is provided at less cost than mirroring, and with greater performance than system checksums.</p> <p>The #4778/#9778 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 #4778/#9778 is in enhanced mode.</p> <p>The #4778/#9778 controller supports a maximum of 18 disk units. Note: Due to system unit and external tower disk unit cage SCSI bus designs, only the Model 270 has a suitable system configuration to allow 18 disk units to attach to a single #4778. All other CEC and tower disk unit configurations restricts the number of attaching disk units to 15 or less.</p> <p>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. Parity is spread across 4 disk units for arrays of 4 to 7 disk units. Parity can be spread across either 4 or 8 disk units for arrays of 8 to 10 disk units. For systems started with 8 to 10 disk units in an array the parity, for that array, is spread across eight disk units. For systems that are started with less than eight disk units in an array and later MES upgraded to 8, 9, or 10 disk units, the RAID function must be stopped and then started before the parity is spread across eight disk units. The #4778/#9778 controls up to two removable media devices (internal tape, CD-ROM or DVD-RAM). The #4778/#9778 is the only disk unit controller that supports compression on 35.16 GB disk units.</p> <p>The #4778 can be directly attached to a Linux partition. When ordered as #0606 Linux Direct Attach - #4778, an IOP is not required. When direct attached to a Linux partition, the #4778 cannot be accessed by OS/400 partitions. When directly attached to a Linux partition, the #4778 does not support RAID or hardware disk compression.</p> <p>Minimum OS/400 level: V5R1 The #4778 is a Customer Install Feature (CIF).</p>
<p>#9767</p>	<p>#9767 Base PCI Disk Unit Controller The #9767 is disk unit and removable media device controller that provides Ultra2 SCSI attachment capability. The #9767 does not support RAID. The #9767 is the default controller in the Model 820 when RAID is not selected and controls up to six disk units and up to two removable media devices (internal tape, CD-ROM, and/or DVD-RAM). Limitations: For V4R5 processors (regardless of operating system level): The #9767 can drive up to six disk units when placed in the system unit. The #9767 can drive up to four disk units when placed in a #5075 PCI Expansion Tower. For V5R1 processors, the #9767 can drive up to four disk units when placed in the system unit or in a #5075 PCI Expansion Tower. Model 820 only.</p>

iSeries Model 8xx towers and features

iSeries 820, 830, 840, and 890 models support upgrades of existing system units and expansion towers from 7xx, 6xx, and Sxx models. This is achieved by converting the system tower of those systems into either a #5033, #5034, #5035 Migration Tower I, or #5077 Migration Tower II. However, with the withdrawal of upgrade paths from 6xx and Sxx models into 8xx servers, it is no longer possible to obtain a #5033 Migration Tower I. With OS/400 V5R1 and later, #5035 Migration Tower I can be obtained via RPQ 837120.

The #5074, #5075, #5078/#0578, #5079, #8079, #8093, #9074, #9079, and #9094 are HSL Bus attached towers. Migration Towers I and II are HSL attached but contain SPD buses only.

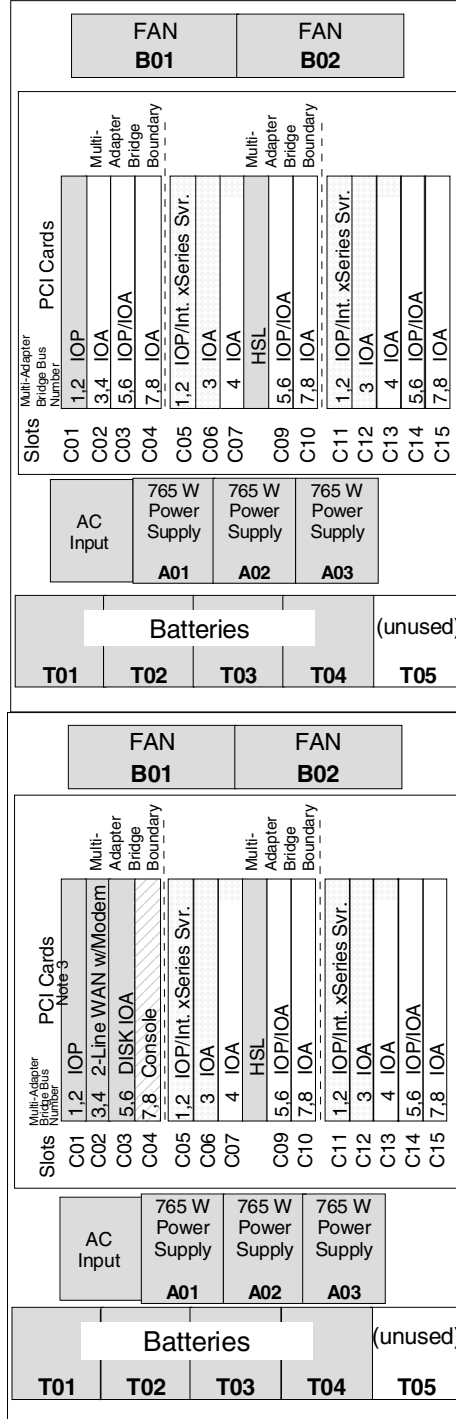
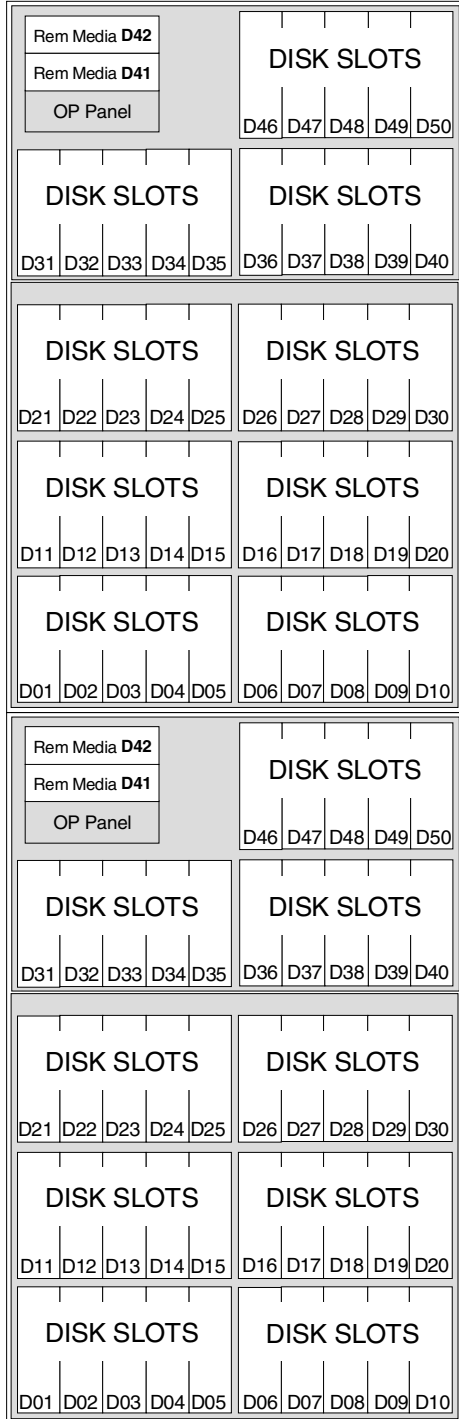
This chapter identifies the system diagrams for the towers supported by the 8xx systems and the power and packaging features for the towers. It also discusses the HSL considerations, PCI card placement rules, and upgrade options for the 8xx processors.

Model	General availability	Withdrawn from marketing
#0578 PCI Expansion Unit in Rack	23 April 2001	---
#5074 PCI Expansion Tower	12 June 2000	---
#5075 PCI Expansion Tower	12 June 2000	---
#5077 Migration Tower II	12 June 2000	---
#5078 PCI Expansion Unit	23 April 2001	---
#5079 1.8 M I/O Tower	12 June 2000	---
#8079 Optional Base 1.8 M I/O Rack	3 October 2000	---
#8093 Optional 1.8 M I/O Rack	14 May 2002	---
#9057 Storage Expansion Unit	19 August 1997	---
#9074 Base I/O Tower	12 June 2000	---
#9079 Base I/O Tower	12 June 2000	---
#9094 Base PCI I/O Enclosure	14 May 2002	---

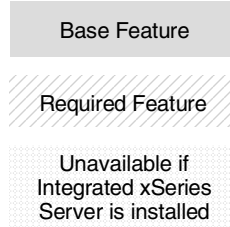
4.1 9406 Model 840 racks and expansion units

#8079 Optional Base Rack: PCI Card Placement

Note: The total of number of disk bays is 2 x 45.



Legend



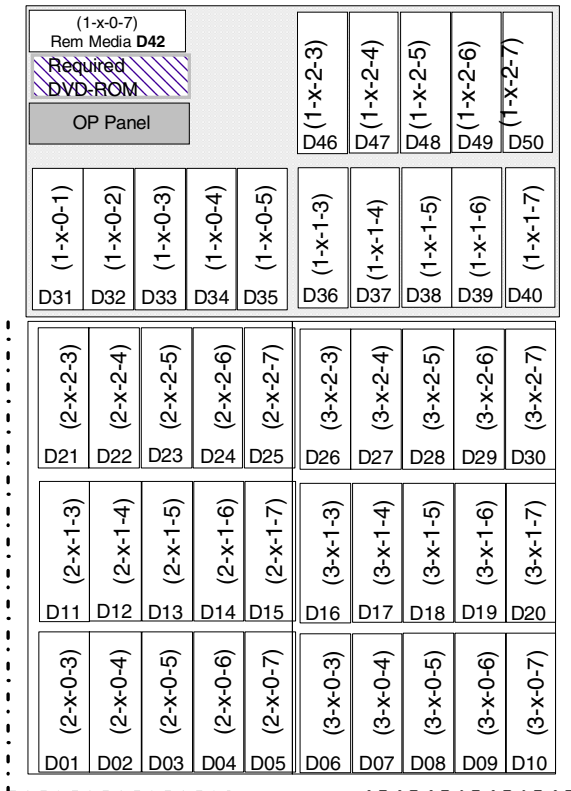
Note 1: If C05 has an Integrated xSeries Server, slot C06 is unavailable, and slot C07 is available only as a short slot.

Note 2: If C11 has an Integrated xSeries Server, slot C12 is not available, and slot C13 is available only as a short slot.

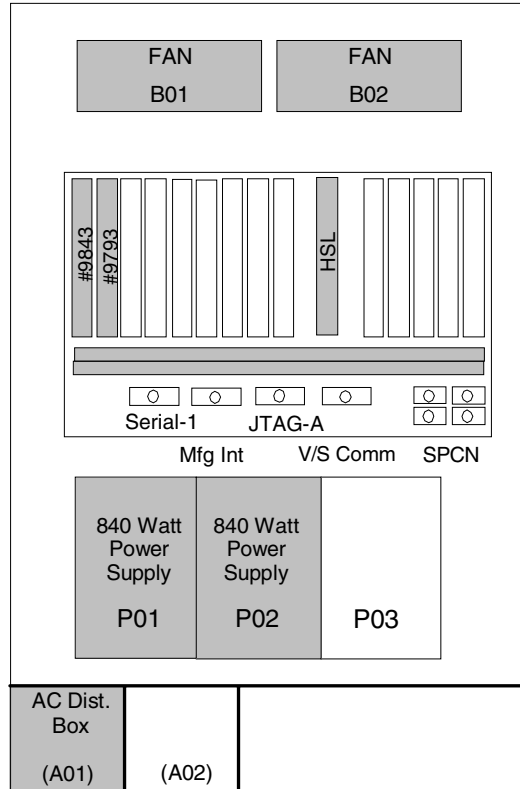
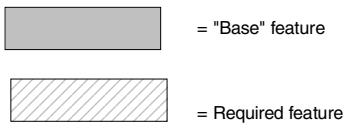
Note 3: The position of the cards may change depending on the console and other features selected.

4.2 9406 Model 890 racks and expansion units

9406 Model 890: PCI Card Placement #9094 Base PCI I/O Enclosure

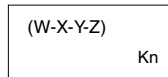


#5107
FRONT



BACK

LEGEND

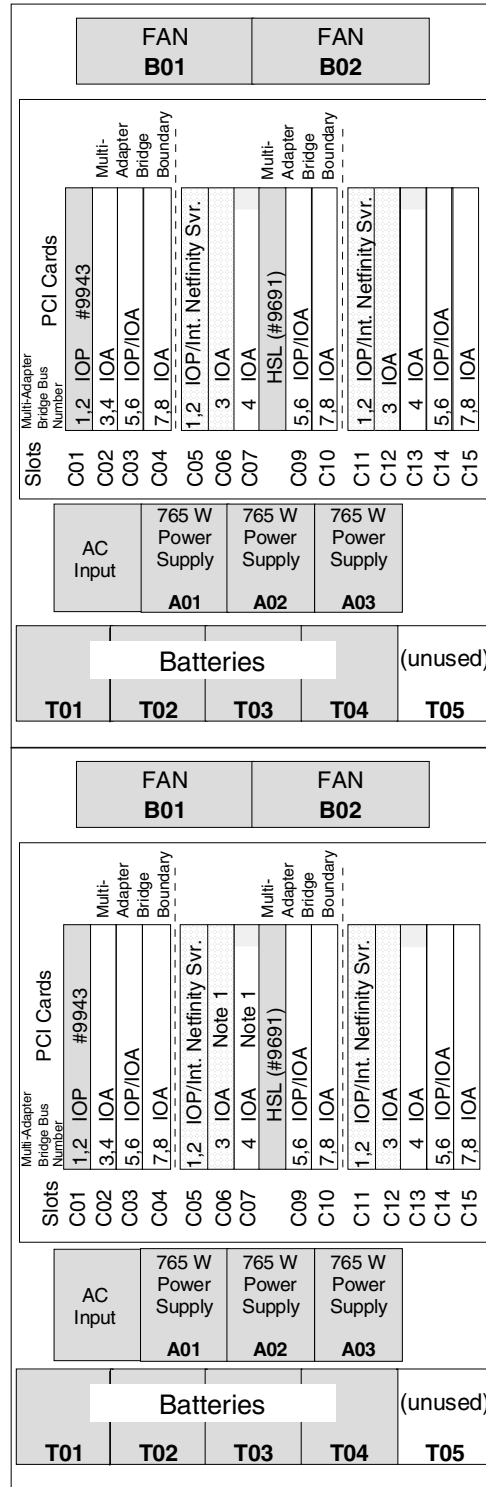
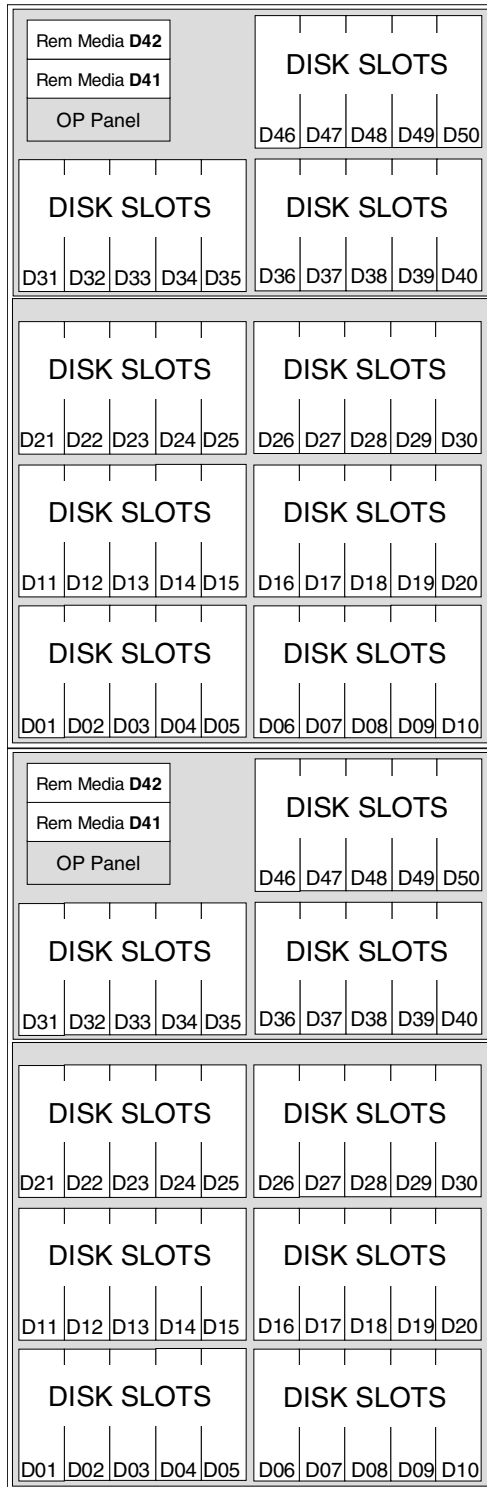


W = DSCard Address
X = IOA number
Y = SCSI bus number
Z = AS/400 Drive Address
Kn = PHYSICAL ADDRESS

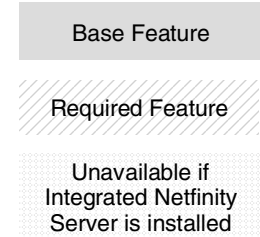
See the PCI-X Card Cage Layout for details of PCI-X card slots

#5079 PCI Expansion Tower

Note: The total of number of disk bays is 2 x 45.



Legend

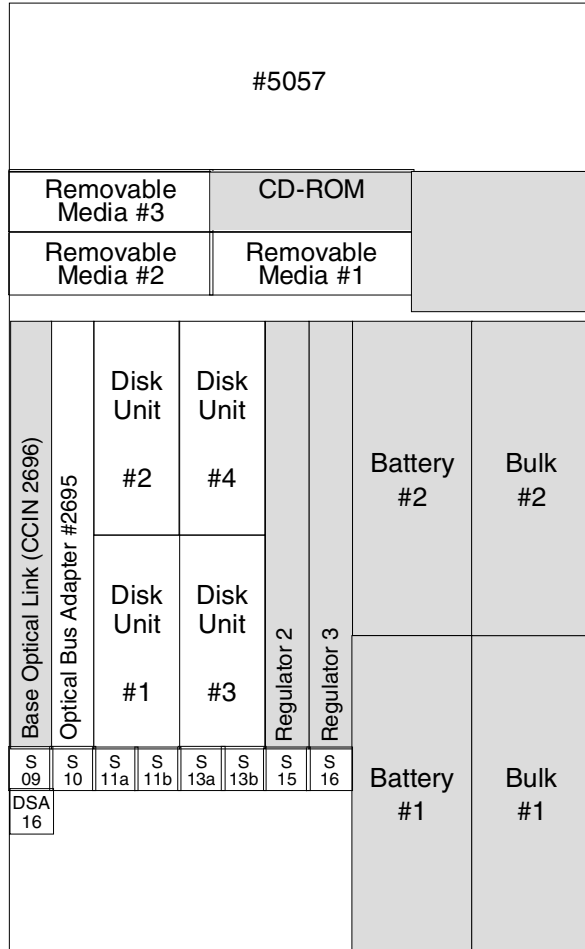


Note 1: If C05 has an Integrated Netfinity Server, slot C06 is unavailable, and slot C07 is available only as a short slot.

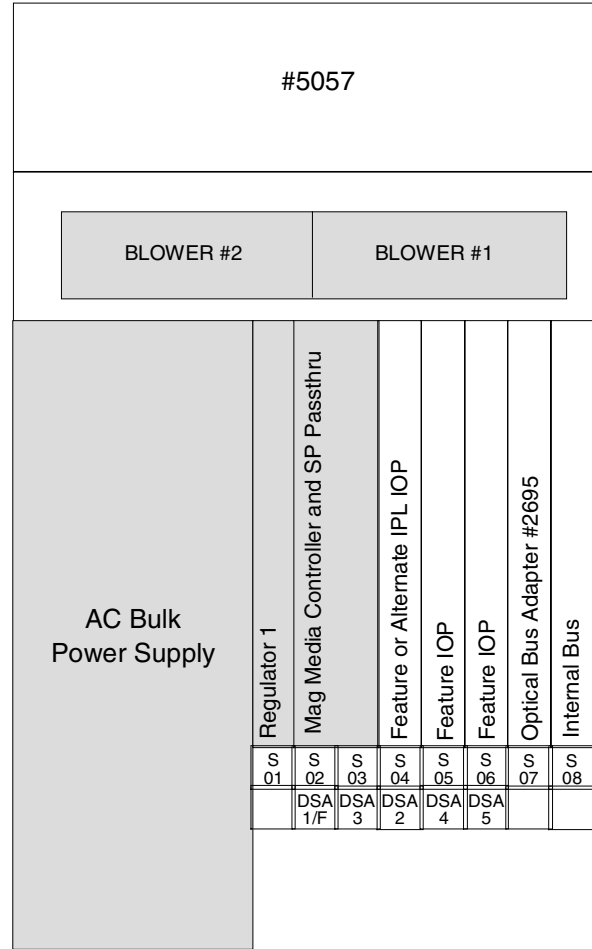
Note 2: If C11 has an Integrated Netfinity Server, slot C12 is not available, and slot C13 is available only as a short slot.

4.4 9406 migration towers

#5077 Migration Tower II



Front



Back

Legend

Base Feature

Note: The #5033, #5034, and #5035 Migration Tower I units are not shown in this publication. The layout of the #5033 is equivalent to the Model 600 system unit without processor cards. The layout of the #5034 and #5035 is equivalent to the Model 720 system unit without processor cards. Refer to Chapter 10, "AS/400e 6xx models" on page 273, and 9.4, "9406 Model 720 system unit (#2061 processor)" on page 228, and 9.5, "9406 Model 720 system unit (#2062, #2063, #2064 processors)" on page 229, for equivalent system drawings.

4.5 iSeries Model 8xx tower features

This section identifies features associated with migrating to an 820, 830, 840, and 890 iSeries processor. It includes those cards that are no longer supported by earlier AS/400e servers or 8xx tower structures.

POWER AND PACKAGING	
#0092	<p>External xSeries Attach Specify</p> <p>The #0092 is used to specify the number of External xSeries Servers connected to the system. The configurators use this specify code to determine the number of HSL and SPCN cables required and to ensure that the number of External xSeries Servers does not exceed the system limit. Each External xSeries Server is cabled with HSL cables and attached to the SPCN string like all other HSL attached I/O towers.</p> <p>Prerequisite: A 1519-100 Integrated xSeries Adapter for iSeries is required in each External xSeries Server attached.</p> <p>Minimum OS/400 level: V5R1</p>
#0123	<p>#5074 Lower Unit in Rack</p> <p>The #0123 feature specifies that one #5074 PCI Expansion Tower is to be mounted in the bottom of a #0551 iSeries Rack. The #0123 can be specified on initial orders and on MES orders, but support for field merging a #5074 into a #0551 iSeries Rack is not offered (due to the weight of the #5074).</p> <p>A line cord for the #5074 must be ordered with the #5074.</p> <p>Co-requisites:</p> <ul style="list-style-type: none"> #0551 iSeries Rack #5074 PCI Expansion Tower #5101/#5111 - 30-Disk Expansion Feature
#0126	<p>890 EIA Reduction Option</p> <p>The #0125 indicates that the model 890 CEC tower is to be shipped in two pieces and to be fully assembled at the customer's location.</p>
#0125	<p>#9079 Lower Unit in Rack</p> <p>The #0125 feature specifies that one #9079 Base I/O Tower for a Model 840 is to be mounted in the bottom of a #0551 iSeries Rack. The #0125 can be specified on initial orders and on MES orders, but support for field merging a #9079 into a #0551 is not offered (due to the weight of the #9079).</p> <p>A line cord for the #9079 must be ordered with the Model 840 system unit.</p> <p>Co-requisites:</p> <ul style="list-style-type: none"> #0551 iSeries Rack #9079 Base I/O Tower #5101/#5111 30 Disk Expansion with Dual Line Cord
#0550	<p>#0550 iSeries Rack - 830 Rack</p> <p>The #0550 provides a 1.8 meter rack for housing the Model 830 CEC. The #5101 30 Disk Unit Expansion is included in the CEC (no #5101 is required on the order). 10 EIA units of space remains, which is not managed by the marketing configurators. This space is filled with one 5-EIA unit filler panel, one 3-EIA unit filler panel and two 1-EIA unit filler panels.</p> <p>One to two Power Distribution Units (PDU) can be ordered with the #0550. The PDUs can be on initial orders, model upgrades or on simple MES orders. Each PDU has six power sockets that can be used to provide power for rack mounted devices installed in the #0550 iSeries Rack using #1422 PDU Line Cords.</p> <p>These PDUs are available:</p> <ul style="list-style-type: none"> ▶ #5160 Power Distribution Unit 1 Phase NEMA <ul style="list-style-type: none"> These line cords are supported on the #5160: #1424 - 200V 6-ft. Locking Line Cord #1425 - 200V 6-ft. Water Tight Line Cord #1426 - 200V 14-ft. Locking Line Cord #1427 - 200V 14-ft. Water Tight Line Cord #1446 - 4.3m 200V/30A Power Cd Korea #1447 - 4.3m 200V/30A Power Cd AU #1448 - 4.3m 200V/30A Power Cd NZ ▶ #5161 Power Distribution Unit 1 Phase IEC <ul style="list-style-type: none"> These line cords are supported on the #5161: #1449 - 4.3m 200V/32A Power Cd EU 1-PH

#0550 (cont.)	<ul style="list-style-type: none"> ▶ #5162 Power Distribution Unit 2 of 3 Phase <p>These line cords are supported on the #5162: #1450 - 4.3m 200V/16A Power Cd EU 2-PH</p> <p>The Model 830 CEC cannot connect to a PDU and therefore requires a Model 830 line cord. The #0550 is a plant install feature only.</p>
#0551	<p>#0551 iSeries Rack</p> <p>The #0551 provides an empty 1.8 meter rack which contains 36 EIA units of space. The following features specify the means of populating the #0551:</p> <ul style="list-style-type: none"> #0121 Lower Unit in Rack Specify (270) #0122 Upper Unit in Rack Specify (270) #0123 - #5074 Lower Unit in Rack #0125 - #9079 Lower Unit in Rack #0127 - 270 Field Install in Rack #0578 PCI Expansion Unit in Rack <p>Note: The #0578 can be installed in the same rack as a Model 270 but cannot be connected to the Model 270.</p> <p>One to four Power Distribution Units (PDUs) can be ordered with the #0551. The PDUs can be on initial orders, model upgrades or on simple MES orders. Each PDU has six power sockets that can be used to provide power for devices installed in the #0551 iSeries Rack using the #1422 PDU Line Cord.</p> <p>These PDUs are available:</p> <ul style="list-style-type: none"> ▶ #5160 Power Distribution Unit 1 Phase NEMA <p>These line cords are supported on the #5160 for connection to utility power:</p> <ul style="list-style-type: none"> #1424 - 200V 6-ft. Locking Line Cord #1425 - 200V 6-ft. Watertight Line Cord #1426 - 200V 14-ft. Locking Line Cord #1427 - 200V 14-ft. Watertight Line Cord #1446 - 4.3m 200V/30A Power Cord Korea #1447 - 4.3m 200V/30A Power Cord AU #1448 - 4.3m 200V/30A Power Cord NZ #5161 Power Distribution Unit 1 Phase IEC <ul style="list-style-type: none"> ▶ The #5161 supports the #1449 - 4.3m 200V/ 32A Power Cord EU 1-Phase for connection to utility power. ▶ #5162 Power Distribution Unit 2 of 3 Phase <p>The #5162 supports the #1450 - 4.3m 200V/ 16A Power Cord EU 2-Phase for connection to utility power.</p> <p>Prerequisite: None Co-requisite: None</p>
#0578	<p>#0578 PCI Expansion Unit in Rack</p> <p>The #0578 feature is the equivalent of a #5078 PCI Expansion Unit, but the #0578 is mounted in a #0550/#0551 iSeries Rack. A #0578 is eight EIA units high. Conversions between a #0578 and a #5078 are not allowed. The #0578 has 14 PCI slots, which allows up to 11 PCI IOAs to be added. Disk units and removable media devices are not supported and may not be installed in the #0578. The PCI IOAs are supported (driven) by #2843 PCI IOPs, #2790 PCI Integrated Netfinity Server, and/or #2791/#2799 PCI Integrated xSeries Servers. The #0578 includes a bus adapter to provide the HSL interface to the system (configurator should add to the order and defaults to copper HSL):</p> <ul style="list-style-type: none"> #2739 Optical Bus Adapter (Optical HSL) #9691 Base Bus Adapter (Copper HSL) #9739 Base Optical Bus Adapter (HSL) <p>Up to four #0578s can be mounted in a #0551 iSeries Rack (depending on the amount of existing empty space in the #0551) and one #0578 can be mounted in a #0550. The #0578 can be ordered on initial, upgrades and simple MES orders.</p> <p>A minimum of one PDU is required if one, two, or three #0578s are ordered to be installed in the same #0551. A minimum of two PDUs are required if four #0578s are ordered for the same #0551. One PDU is required for a #0578 in a #0550. Each PDU has six power sockets for connecting rack mounted devices via #1422 PDU Line Cords. Each #0578 comes with two integrated PDU compatible line cords. The #1422 PDU Line Cords are <i>not</i> usable with this expansion unit. See the #0551 for a description of available PDUs.</p> <p>Select two HSL cables (any combination) if the #0578 is the first/only expansion tower/unit on an HSL loop, select one HSL cable if the #5078 coexists with other expansion tower(s)/unit(s) on an HSL loop:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable #1470 - 6m Optical HSL Cable (Models 830, 840 and 890 only)

#0578 (cont.)	<p>#1471 - 30m Optical HSL Cable (Models 830, 840 and 890 only) #1472 - 100m Optical HSL Cable (Models 830, 840 and 890 only) #1473 - 250m Optical HSL Cable (Models 830, 840 and 890 only) #1474 - 6m HSL to HSL-2 Cable (Models 890 only) #1475 - 10m HSL to HSL-2 Cable (Models 890 only)</p> <p>Select one of these SPCN cables per expansion unit: #0369 100m Optical SPCN Cable #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable #1468 - 250m Optical SPCN Cable</p> <p>Prerequisite: #0550/#0551 on same order or an existing #0550/#0551 with available space. Co-requisite: #5160, #5161, or #5162 on the same order or existing within the #0550/#0551 that the #0578 is placed. Restrictions: #1462 cannot be used to connect to HSL port A1 on a Model 820.</p>
#2739	<p>#2739 Optical Bus Adapter</p> <p>The #2739 is used in the #5074, #5079, and the #5078/#0578 to connect via optical HSL. The #2739 supports clustering (HSL OptiConnect). Optical HSL is available on 830, 840, and 890 system units only. Minimum OS/400 level: V5R1 for 830 and 840. Minimum OS/400 level: V5R2 for the 890</p>
#5033	<p>#5033 Migration Tower I</p> <p>The #5033 is a converted 600/S10 system tower used for migration of PCI cards, disk units, and removable media devices. See the 600 and S10 chapters for supported cards and devices. Additional features can be ordered to use vacant card/device slots in this tower. The #5033 can only attach to Models 820 and 830. Select two (any combination) of these HSL cable features for this tower: #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable</p> <p>Select one of these SPCN cables: #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable</p> <p>One JTAG-E cable (6m) is included with the #5033. One #14xx power cord must be specified (geography dependent). Maximum: One #5033 on a Model 820 or 830. The #5033 is mutually exclusive with the #5034, #5035, and #5077.</p>
#5034	<p>#5034 Migration Tower I</p> <p>The #5034 is a converted 620/S20/720 system tower with 10 possible disk positions and any #5064/#9364 System Unit Expansion. It is used for migration of PCI and SPD cards, disk units, and removable media devices along with any attached PCI/SPD towers. See the 620, S20, and 720 chapters for supported cards and devices. Additional features can be ordered to use vacant card/device slots in this tower. The #5034 can only attach to Models 820 and 830. Select two (any combination) of these HSL cable features for this tower: #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable</p> <p>Select one of these SPCN cables: #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable</p> <p>One JTAG-E cable (6m) is included with the #5034. One #14xx power cord must be specified (geography dependent). Maximum: One #5034 on a Model 820 or 830. The #5034 is mutually exclusive with #5033, #5035, and #5077.</p>

#5035	<p>#5035 Migration Tower I</p> <p>The #5035 is a converted 620/S20/720 system tower with 15 possible disk positions and any #5064/#9364 System Unit Expansion. It is used for migration of PCI and SPD cards, disk units, and removable media devices along with any attached PCI/SPD towers.</p> <p>See the 620, S20, and 720 chapters for supported cards and devices. Additional features can be ordered to use vacant card/device slots in this tower.</p> <p>The #5035 can only attach to Models 820 and 830.</p> <p>Select two (any combination) of these HSL cable features for this tower:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable <p>Select one of these SPCN cables:</p> <ul style="list-style-type: none"> #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable <p>One JTAG-E cable (6m) is included with the #5035.</p> <p>One #14xx power cord must be specified (geography dependent).</p> <p>Maximum: One #5035 on a Model 820 or 830.</p> <p>The #5035 is mutually exclusive with #5033, #5034, and #5077.</p> <p>A new #5035 can be obtained with RPQ 847120.</p>
#5057	<p>#5057 Storage Expansion Unit (Ultra SCSI)</p> <p>The #5057 provides space for up to 16 disk units on the #5077 Migration Tower II. The #5057 is shipped on all new order #5077s when migrating from a Model 640/S30/730 that does not have a #5055. When migrating from a Model 640, S30, and 730 that has a #5055, the #5055 is converted to a #5057.</p> <p>Feature conversions to #5057 remain available.</p>
#5074	<p>#5074 PCI Expansion Tower</p> <p>The #5074 is attached to Models 820, 830, and 840 for adding up to 45 disk units (15 are "base", 30 additional with #5101 or #5111), up to 11 PCI IOAs and up to two removable media units. The #5074 includes #9691 (or #2739/#9739 should be ordered for optical HSL) bus adapter to provide the HSL interface to the system, a #9943 Base PCI IOP, space for two removable media devices, one battery backup, and redundant/hot swap power supplies. The #5074 is capable of controlling Ultra2 SCSI disk units.</p> <p>Select two (any combination) of these HSL cables for the first tower on an HSL loop. For additional towers on an HSL loop, select one HSL cable per tower:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable #1470 - 6m Optical HSL Cable (Models 830, 840 and 890 only) #1471 - 30m Optical HSL Cable (Models 830, 840 and 890 only) #1472 - 100m Optical HSL Cable (Models 830, 840 and 890 only) #1473 - 250m Optical HSL Cable (Models 830,840 and 890 only) #1474 - 6m HSL to HSL-2 Cable (Models 890 only) #1475 - 10m HSL to HSL-2 Cable (Models 890 only) <p>The #1462 is not allowed to attach the #5074 directly to system port A1 on the Model 820.</p> <p>When a #5074 is present, one #1460 or #1461 must be selected.</p> <p>Select one of these SPCN cables per tower:</p> <ul style="list-style-type: none"> #0369 100m Optical SPCN Cable #1468 - 250m Optical SPCN Cable #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable <p>One #14xx power cord must be specified (geography dependent).</p> <p>Maximum: Five on the Model 820. Thirteen on the 830 model. Twenty-three on the 840 models. Forty-seven on the 890.</p> <p>The #5074 is a Customer Install Feature (CIF).</p>

#5075	<p>#5075 PCI Expansion Tower</p> <p>The #5075 is attached to Models 820 for adding up to six disk units and up to seven PCI IOAs. The #5075 includes a 32 MB PCI IOP embedded in the tower. The seven PCI IOAs are supported (driven) by an embedded 32 MB PCI IOP and by #2843 PCI IOPs, #2790 PCI Integrated Netfinity Server or #2791/#2799 PCI Integrated xSeries Server. The #5156 can be added to provide a redundant power supply and cooling fan.</p> <p>Select two (any combination) of these HSL cables for the first tower on the Model 820. For additional towers, select one HSL cable per tower:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable <p>The #1462 is not allowed to attach the #5075 directly to system port A1 on the Model 820. When a #5075 is present, one #1460 or #1461 must be selected.</p> <p>Select one #1460 or #1461 and two of these HSL cables, only when the Model 820 is in a clustered loop with the Model 890:</p> <ul style="list-style-type: none"> #1474 - 6m HSL to HSL-2 Cable (Cluster with Model 890 only) #1475 - 10m HSL to HSL-2 Cable (Cluster with Model 890 only) <p>Select one of these SPCN cables per tower:</p> <ul style="list-style-type: none"> #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable <p>The #5075 is capable of controlling Ultra2 SCSI disk units. One #14xx power cord must be specified (geography dependent). Maximum: Five.</p> <p>The #5075 is a Customer Install Feature (CIF). Model 820 only.</p>
#5077	<p>#5077 Migration Tower II</p> <p>The #5077 is a feature I/O tower that supports SPD I/O cards and attaches SPD Expansion Towers and #5065/#5066 PCI Expansion Tower. The #5077 is supported on Models 830 and 840.</p> <p>When upgrading from a Model 640, S30, or 730 to a Model 830 or 840, the #5077 is a manufactured unit, and is shipped without a "base" CD-ROM and without a base optical link card (CCIN 2696). The CD-ROM and optical link cards are migrated. If upgrading from a Model 640, S30 or 730 without a #5055 Storage Expansion Unit installed, by default, the #5077 is shipped with a #5057 Storage Expansion Unit (for 16 disk units). The #5057 can be removed from the order. If upgrading from a Model 640, S30, or 730 with #5055 installed, a #5055 to #5057 conversion is performed.</p> <p>When upgrading from a Model 650, S40, or 740, the #9251 Base I/O Tower on these models is converted to the #5077. When upgrading from a Model 820 or 830 with #503X Migration Tower I, which has SPD cards or SPD towers attached, the #5077 is a manufactured unit and is shipped with a "base" CD-ROM and with a base optical link card (CCIN 2696). The #5077 may also be ordered to support clustering on the Models 830, 840. In this case, the #5077 is shipped as a manufactured unit shipped with a "base" CD-ROM and with a base optical link card (CCIN 2696). See the 640, 650, S30, S40, 730, and 740 sections for supported cards and devices.</p> <p>One or two feature #2695 Optical Bus Adapter can be ordered for the #5077. Select one of these HSL cables if the #5077 has just the base optical link card installed. Select one or two (any combination) of these HSL cables if the #5077 has one or two #2695 Optical Bus Adapters installed:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable <p>Select one of these SPCN cables per tower:</p> <ul style="list-style-type: none"> #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable <p>One JTAG-E cable (6m) is included with the #5077.</p> <p>One #14xx power cord must be specified (geography dependent). Maximum: One #5077 on Models 830 and 840.</p> <p>The #5077 is mutually exclusive with #5033, #5034, and #5035.</p>

<p>#5078</p>	<p>#5078 PCI Expansion Unit</p> <p>The #5078 PCI Expansion Unit is a “top hat” that installs on top of the #9079 Base I/O Tower and on top of the #5074 PCI Expansion Tower. The #5078 has 14 PCI slots, which allows up to 11 PCI IOAs to be added. The PCI IOAs are supported (driven) by #2843 PCI IOPs, #2790 PCI Integrated Netfinity Server, and/or #2791/#2799 PCI Integrated xSeries Servers. The #5078 is supported in the Model 840 only. Disk units and removable media devices are not supported and may not be installed in the #5078.</p> <p>The #5078 includes a bus adapter to provide the HSL interface to the system (configurator should add to the order and defaults to copper HSL):</p> <ul style="list-style-type: none"> #2739 Optical Bus Adapter (Optical HSL) #9691 Base Bus Adapter (Copper HSL) #9739 Base Optical Bus Adapter (HSL) <p>The #5078 includes two electrical cables to connect to a #5074/#9079 power source. The #5078 can be ordered with a #5074/#9079 on initial orders and the #5074/#9079 ships with the #5078 installed. The #5078 may also be ordered as an MES install on an existing #5074/#9079.</p> <p>The #5078 can be on the same HSL loop as the #5074/#9079, or it can be on a separate HSL loop from the #5074/#9079. If the #5078 and the #5074/#9079 are on the same HSL loop, then a #1460 - 3m Copper HSL Cable should be included in the order (for both initial orders and for MES orders) to connect the #5078 and the #5074/#9079. If the #5074/#9079 and the #5078 are on separate HSL loops, then one or two of these HSL cables must be on the order. Select two HSL cables if the #5078 is the first or only expansion tower/unit on an HSL loop. Select one HSL cable if the #5078 coexists with other expansion tower(s)/unit(s) on an HSL loop:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable #1470 - 6m Optical HSL Cable (Models 830, 840, and 890 only) #1471 - 30m Optical HSL Cable (Models 830, 840, and 890 only) #1472 - 100m Optical HSL Cable (Models 830, 840, and 890 only) #1473 - 250m Optical HSL Cable (Models 830, 840, and 890 only) #1474 - 6m HSL to HSL-2 Cable (Model 890 only) #1475 - 10m HSL to HSL-2 Cable (Model 890 only) <p>Select one of these SPCN cables per expansion unit:</p> <ul style="list-style-type: none"> #0369 100m Optical SPCN Cable #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable #1468 - 250m Optical SPCN Cable <p>The #5078 is not supported on #5079 or #8079.</p> <p>Prerequisite: #5074 PCI Expansion Tower (1.8m) or #9079 Base I/O Tower</p> <p>Maximum: One per #5074 PCI Expansion Tower, one per #9079 Base I/O Tower</p> <p>Restrictions: #1462 cannot be used to connect to HSL port A1 on the Model 820.</p>
<p>#5079</p>	<p>#5079 1.8 M I/O Tower (PCI I/O Expansion Tower)</p> <p>The #5079 is attached to Models 820, 830, and 840 for adding up to 90 disk units, up to 22 PCI IOAs, and up to four removable media units. The #5079 includes two #9691 (or #2739/#9739 for optical HSL) bus adapters to provide the HSL interface to the system. The #5079 is essentially two #5074 PCI Expansion Towers, stacked in a single 1.8m tower.</p> <p>Note: Each ordered #5079 counts as two #5074s toward the system model maximums.</p> <p>The #5079 is capable of controlling Ultra2 SCSI disk units.</p> <p>Select two, three, or four (any combination) of these HSL cables for each tower:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable #1470 - 6m Optical HSL Cable (Models 830, 840 and 890 only) #1471 - 30m Optical HSL Cable (Models 830, 840 and 890 only) #1472 - 100m Optical HSL Cable (Models 830, 840 and 890 only) #1473 - 250m Optical HSL Cable (Models 830, 840 and 890 only) #1474 - 6m HSL to HSL-2 Cable (Model 890) #1475 - 10m HSL to HSL-2 Cable (Model 890) <p>The #1462 cannot be used to connect the #5079 directly to HSL port A1 on the Model 820.</p> <p>When a #5079 is present, one #1460 or #1461 must be selected.</p> <p>Select two of these SPCN cables per tower:</p> <ul style="list-style-type: none"> #0369 100m Optical SPCN Cable #1463 - 2m SPCN Cable

#5079 (cont.)	<p>#1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable #1468 - 250m Optical SPCN Cable</p> <p>Two #14xx power cords must be specified (geography dependent). Maximum towers: Two on the Model 820. Six on the Model 830. Eleven on the Model 840. Note: Each #5079 counts as two towers. The #5079 is a Customer Install Feature (CIF).</p>
#5101	<p>#5101 30 Disk Unit Expansion</p> <p>The #5101 is a disk unit expansion enclosure feature for the #5074 PCI Expansion Tower, the #9074 Base I/O Tower, and the #9074/#9079 Base I/O Tower. The #5101 includes two 15-disk unit enclosures, one 765-watt power supply, backplanes, and cables. One #4748/#4778 PCI RAID Disk Unit Controller is required to support one 15 disk unit enclosure.</p>
#5103	<p>#5103 Dual Line Cords - 830 CEC</p> <p>The #5103 provides dual line cord capability for the Model 830 CEC and attached #9074 Base I/O Tower. Two 14xx line cords must be ordered for the 830 when an #5103 is ordered on an initial order or a model upgrade into an 830 from a non-830 model. When ordering a #5103 as a simple MES, one additional #14xx line cord is required to be ordered (for a total of two line cords for the CEC). The #5103 is supported on racked Model 830 systems (#0550). Minimum OS/400 level: V5R1 Note: If the #9074 has feature #5101 installed, the #5101 must be converted to a #5111 (no parts shipped).</p>
#5104	<p>#5104 Dual Line Cords - 840 CEC</p> <p>The #5104 provides dual line cord capability for the Model 840 CEC and #9079 Base I/O Tower. Two #14xx line cords must be ordered for the 840 CEC and two #14xx line cords must be ordered for the #9079 Base I/O Tower when the #5104 is ordered on an initial order or a model upgrade into an 840 from a non-840 model. When ordering a #5104 as a simple MES, one additional #14xx line cord is required to be ordered for the 840 CEC and one additional #14xx line cord is required to be ordered for the #9079 (for a total of two line cords for both the CEC and the #9079). If the 840 is ordered with the #8079 Optional Base 1.8 M I/O Rack, the #5104 provides dual line cord capability for the Model 840 CEC and the lower unit in the #8079. Two #14xx line cords must be ordered for the 840 CEC and two #14xx line cords must be ordered for the lower unit in the #8079 when a #5104 is ordered on an initial order or a model upgrade into an 840 from a non-840 model. When ordering a #5104 as a simple MES, one additional #14xx line cord is required to be ordered for the CEC, and one additional #14xx line cord is required to be ordered for the lower unit in the #8079 (for a total of two line cords for the CEC and lower unit in the #8079). The #5105 must be ordered for the dual line cord capability for the upper unit in the #8079. Minimum OS/400 level: V5R1 The #5104 has country-specific usage. Note: If any feature #5101s are installed, the #5101s must be converted to a #5111s (no parts shipped).</p>
#5105	<p>#5105 Dual Line Cords - I/O Tower</p> <p>The #5105 provides dual line cord capability for a #5079 and top unit in a #8079 Optional Base 1.8 M I/O Rack or #8093 Optional 1.8 M I/O Rack. Two #14xx line cords must be ordered for each #5074 PCI Expansion Tower with a #5105 when a #5105 is ordered on an initial order of a #5074. When ordering a #5105 as a simple MES, against an existing #5074, one additional #14xx line cord is required to be ordered (for a total of two line cords for a #5074). A #5074 mounted in a #0551 iSeries Rack is supported with the #5105. Minimum OS/400 level: V5R1 Note: If the #5074 has feature #5101 installed, the #5101 must be converted to a #5111 (no parts shipped).</p>
#5106	<p>#5106 Dual Line Cords - #5079 Tower</p> <p>The #5106 provides dual line cord capability for a single unit in a #5079 1.8 M I/O Tower. Two #14xx line cords must be ordered for each #5106 present, when a #5106 is ordered on an initial order of a #5079. When ordering a #5106 as a simple MES, against an existing #5079, one additional #14xx line cord is required to be ordered for each #5106 ordered. Marketing configurator defaults a quantity of two #5106s, for each #5079 ordered, on a system that has dual line cords on the CEC. Minimum OS/400 level: V5R1 Note: If the #5079 has any feature #5101 installed, the #5101s must be converted to a #5111s (no parts shipped).</p>
#5107	<p>#5107 30 Disk Expansion</p> <p>The #5107 is a disk unit expansion enclosure feature for the #9094 or #8093 Optional 1.8 M I/O Rack. In the #8093, the #5107 is installed in the bottom unit and a #5101 is installed in the upper unit. The #5107 includes two 15-disk unit enclosures, one 765-watt power supply, backplanes, and cables. One #4748/#4778 PCI RAID Disk Unit Controller is required to support the 15 disk units in each of the two disk unit enclosures included with #5107.</p>

#5111	<p>#5111 30 Disk Expansion with Dual Line Cord</p> <p>The #5111 is a disk unit expansion enclosure feature for systems and towers that are dual line cord enabled (830 CECs have #5103, 840 CECs have #5104 and #5074 PCI Expansion Towers which have #5105). The #5111 includes two 15-disk unit enclosures, backplanes and cables. One #4748/#4778 PCI RAID Disk Unit Controller is required to support one 15 disk unit enclosure.</p> <p>Prerequisite: A #5103 when ordered for an 830 CEC. A #5104 when ordered for a 840 CEC. A #5105 when ordered for a stand alone #5074 PCI Expansion Tower or top unit in a #8079 Optional Base 1.8 M I/O Rack.</p>
#5114	<p>#5114 Dual Line Cords - Tower</p> <p>The #5114 provides dual line cord capability for the Model 890 CEC and #9094 Base PCI I/O Enclosure. Two #13xx line cords must be ordered for the 890 CEC and two #13xx line cords must be ordered for the #9094 Base PCI I/O Enclosure when a #5114 is ordered on an initial order or a model upgrade into an 890 from a non-890 model. When ordering a #5114 as a simple MES, one additional #13xx line cord is required to be ordered for the 890 CEC and one additional #13x line cord is required to be ordered for the #9094 (for a total of two line cords for both the CEC and the #9094).</p> <p>If the 890 is ordered with the #8093 Optional 1.8 M I/O Rack the #5114 provides dual line cord capability for the Model 890 CEC and the lower unit in the #8093. Two #13xx line cords must be ordered for the 890 CEC, and two #13xx line cords must be ordered for the lower unit in the #8093 when a #5114 is ordered on an initial order or a model upgrade into an 890 from a non-890 model. When ordering a #5114 as a simple MES, one additional #13xx line cord is required to be ordered for the CEC, and one additional #13xx line cord is required to be ordered for the lower unit in the #8093 (for a total of two line cords for the CEC and lower unit in the #8093). The #5105 must be ordered for the dual line cord capability for the upper unit in the #8093.</p> <p>Minimum OS/400 level: V5R2</p> <p>The #5114 has country-specific usage.</p> <p>Note: If any feature #5107s are installed, the #5107s must be converted to a #5117s (no parts shipped).</p>
#5117	<p>#5117 30-Disk Expansion with Dual Line Cord</p> <p>The #5117 is a disk unit expansion enclosure feature for a dual line cord enabled #9094 Base PCI I/O Enclosure. The #5117 includes two 15-disk unit enclosures, back planes, and cables. One #4748/#4778 PCI RAID Disk Unit Controller is required to support the 15 disk units in each of the two disk unit enclosures included with #5117.</p> <p>Prerequisite: A #5114 when ordered for an #9094 or #8093 (lower unit).</p>
#5150	<p>#5150 Battery Backup (external)</p> <p>The #5150 is an external battery backup that when used in conjunction with the internal battery backup is capable of extending the battery backup time.</p> <p>Models 840 only.</p>
#5153	<p>#5153 Redundant Power Supplies</p> <p>The #5153 consists of two power supplies, a 970 watt and a 700 watt. The #5153 provides redundancy for the power supplies in the #5035 Migration Tower I and the #5064/#9364 System Unit Expansion. The #5153 physically resides in the #5064/#9364.</p> <p>Prerequisite: #5035 with #5064/#9364 System Unit Expansion.</p>
#5155	<p>Redundant Power and Cooling</p> <p>The #5155 adds an additional 575-watt power supply for redundancy and additional cooling fans.</p> <p>Prerequisite: #5157 Feature Power Supply</p> <p>The #5155 is a Customer Install Feature (CIF).</p> <p>Model 820 only.</p>
#5156	<p>Redundant Power and Cooling</p> <p>The #5156 adds an additional 575-watt power supply for redundancy and additional cooling fan to the #5075 PCI Expansion Tower.</p> <p>The #5156 is a Customer Install Feature (CIF).</p> <p>Model 820 only.</p>
#5157	<p>#5157 Feature Power Supply</p> <p>The #5157 adds an additional 575-watt power supply to the Model 820. The #5157 is required when a #7127 DASD Expansion Unit is added to a Model 820 and is required when a #5155 Redundant Power and Cooling feature is added to a Model 820. For Model 820 processors #2397, #2398, #2426, and #2427, a #5157 Feature Power Supply must be present or ordered when a feature #2884 Main Storage Expansion Riser Card is added or ordered.</p> <p>The #5157 is a Customer Install Feature (CIF).</p> <p>Model 820 only.</p>
#7127	<p>#7127 DASD Expansion Unit</p> <p>The #7127 is a concurrent maintenance DASD six position expansion feature that can be ordered to support an additional six disk units (for a total of 12) in the Model 820 system unit.</p> <p>Prerequisite: #5157 Feature Power Supply.</p> <p>The #7127 is a Customer Install Feature (CIF).</p>

#8079	<p>#8079 Optional Base 1.8 M I/O Rack</p> <p>The #8079 is an optional base I/O rack shipped on the Model 840 instead of the #9079 Base I/O Tower. The #8079 supports up to 90 disk units, up to 22 PCI IOAs, and up to four removable media units. A #8079 is a #9079 Base I/O Tower with a #5074 (#0574 specify code) tower package in a rack.</p> <p>Select three (if only three are on the order, only copper can be specified) or four of these HSL cables depending on the requirements of optical and copper HSL:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable #1470 - 6m Optical HSL Cable (top enclosure only) #1471 - 30m Optical HSL Cable (top enclosure only) #1472 - 100m Optical HSL Cable (top enclosure only) #1473 - 250m Optical HSL Cable (top enclosure only) <p>The #1462 - 15m Copper HSL Cable can be used on any HSL port of the Model 840. If a #5077 Migration Tower II is included in the configuration, then four Copper HSL cables have to be ordered for the #8079 Optional Base 1.8 M I/O Rack. Select an additional two of these HSL cables, only when the Model 840 is in a clustered loop with the Model 890:</p> <ul style="list-style-type: none"> #1474 - 6m HSL to HSL-2 Cable (cluster with Model 890 only) #1475 - 10m HSL to HSL-2 Cable (cluster with Model 890 only) <p>Select two of these SPCN cables per tower:</p> <ul style="list-style-type: none"> #0369 100m Optical SPCN Cable #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable #1468 - 250m Optical SPCN Cable <p>Specify two line cords for the #8079 Optional Base 1.8 M I/O Rack. Some countries offer fewer choices of line cords and some countries are shipped a default line cord type.</p> <p>The #8079 has two #9943 Base PCI IOPs and a #9778/#9748 Base PCI RAID Disk Unit Controller. It has PCI slots for up to 22 PCI IOAs, space for up to 90 disk units (#5101/#5111 is installed in both the bottom and top unit), space for four removable media devices, two battery backup, and redundant/hot swap power supplies.</p> <p>The #8079 is capable of controlling Ultra2 SCSI disk units.</p> <p>The 22 PCI IOAs are supported (driven) by two #9943 Base PCI IOPs and #2843 PCI IOPs, #2790 PCI Integrated Netfinity Server, or feature #2791/#2799 PCI Integrated xSeries Server.</p> <p>The #8079 also supports up to four removable media devices (internal tape or CD-ROM). These removable media devices are supported by one #9778/#9748 and a feature #4778/#4748 PCI RAID Disk Unit Controller.</p> <p>If the top enclosure is to be attached to a different system than initially ordered, the #0574 specify code has to RPO removed from the initially ordered machine and added to the target machine.</p>
#8093	<p>#8093 Optional 1.8 M I/O Rack</p> <p>The #8093 is an optional base I/O rack shipped on the Model 890 instead of a #9094 Base PCI I/O Enclosure. The #8093 supports up to 90 disk units, up to 22 PCI IOAs, and up to three removable media units. It has two #9943 Base PCI IOPs and a #4778 PCI RAID Disk Unit Controller. The #8093 has PCI slots for up to 22 PCI IOAs, space for up to 90 disk units (#5101/#5111 installed in the top unit and a #5107/#5117 installed in the lower unit), space for four removable media devices, two battery backup units, and redundant/hot swap power supplies. The 22 PCI IOAs are supported (driven) by two #9943 Base PCI IOPs and #2843 PCI IOPs, or the #2799 PCI Integrated xSeries Server.</p> <p>A #8093 is a #9094 Base PCI I/O Enclosure with a #5074 (#0574 specify code) tower package in a rack.</p> <p>The #8093 is capable of controlling Ultra2 SCSI disk units.</p> <p>The #8093 also supports up to three additional removable media devices (internal tape or CD-ROM or DVD-ROM/RAM). These removable media devices are supported by a #4748/#4778 PCI RAID Disk Unit Controller.</p> <p>If the top enclosure is to be attached to a different system than initially ordered, the #0574 specify code has to RPO removed from the initially ordered machine and added to the target machine.</p> <p>Select three or four of these HSL cables depending on the requirements of optical and copper HSL:</p> <ul style="list-style-type: none"> #1482 - 4m Copper HSL-2 Cable #1483 - 10m Optical HSL-2 Cable #1485 - 15m Copper HSL-2 Cable <p>And select two (any combination) of these HSL to HSL-2 cables:</p> <ul style="list-style-type: none"> #1474 - 6m HSL to HSL-2 Cable #1475 - 10m HSL to HSL-2 Cable

#8093 (cont.)	<p>Select two of these SPCN cables per tower:</p> <ul style="list-style-type: none"> #0369 100m Optical SPCN Cable #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable #1468 - 250m Optical SPCN Cable <p>Specify two line cords for the #8093 Optional 1.8 M I/O Rack. Some countries offer fewer choices of line cords and some countries are shipped a default line cord type.</p>
#9074	<p>#9074 Base I/O Tower</p> <p>The #9074 is the "base" I/O tower shipped on Models 830. The #9074 supports up to 45 disk units, 15 are "base", with an additional 30 provided with #5101 or #5111, up to 11 PCI IOAs, up to two removable media units, one battery backup and redundant/hot swap power supplies. The #9074 has a #9943 Base PCI IOP and a #9748 Base PCI RAID Disk Unit Controller. The 11 PCI IOAs are supported (driven) by the #9943 Base PCI IOP and by #2843 PCI IOPs. The #2790 PCI Integrated Netfinity Server or the #2791/#2799 PCI Integrated xSeries Server can also support selected LAN cards.</p> <p>The #1460 - 3m Copper HSL Cable is included automatically on the order.</p> <p>Select an additional two of these HSL cables, only when the Model 830 is in a clustered loop with the Model 890:</p> <ul style="list-style-type: none"> #1474 - 6m HSL to HSL-2 Cable (cluster with Model 890 only) #1475 - 10m HSL to HSL-2 Cable (cluster with Model 890 only) <p>One #14xx power cord must be specified (geography dependent).</p> <p>The #9074 is capable of controlling Ultra2 SCSI disk units.</p> <p>The two removable media devices (internal tape or CD-ROM) are supported by the #9748.</p>
#9079	<p>#9079 Base I/O Tower</p> <p>The #9079 is the "base" I/O tower shipped on Models 840. The #9079 supports up to 45 disk units, 15 are "base", with an additional 30 provided with #5101 or #5111, up to 11 PCI IOAs, up to two removable media units, one battery backup and redundant/hot swap power supplies. The #9079 has a #9943 Base PCI IOP and a #9748 Base PCI RAID Disk Unit Controller. The 11 PCI IOAs are supported (driven) by the #9943 Base PCI IOP and by #2843 PCI IOPs. The #2790 PCI Integrated Netfinity Server or the #2791/#2799 PCI Integrated xSeries Server can also support selected LAN cards.</p> <p>Select two (any combination) of these HSL cables:</p> <ul style="list-style-type: none"> #1460 - 3m Copper HSL Cable #1461 - 6m Copper HSL Cable #1462 - 15m Copper HSL Cable <p>Select an additional two of these HSL cables, only when the Model 830 is in a clustered loop with the Model 890:</p> <ul style="list-style-type: none"> #1474 - 6m HSL to HSL-2 Cable (Cluster with Model 890 only) #1475 - 10m HSL to HSL-2 Cable (Cluster with Model 890 only) <p>Select one of these SPCN cables per tower:</p> <ul style="list-style-type: none"> #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable <p>One #14xx power cord (two when dual line cord feature #5104 has been ordered for the 840 CEC) feature must be specified (geography dependent).</p> <p>The #9079 is capable of controlling Ultra2 SCSI disk units.</p> <p>The two removable media devices (internal tape or CD-ROM) are supported by the #9748.</p>

#9094	<p>#9094 Base PCI I/O Enclosure</p> <p>The #9094 is the "base" I/O tower shipped on 890 Models. The #9094 provides space for up to 45 disk units, 15 are "base", with an additional 30 provided with the #5107/#5117, up to 11 PCI IOAs, up to two removable media units, one battery backup and redundant/hot swap power supplies. The #9074 has a #9943 Base PCI IOP and a #9793 Two-Line WAN IOA with Modem. The 11 PCI IOAs are supported (driven) by the #9943 Base PCI IOP and by #2843 PCI IOPs. The #2799 PCI Integrated xSeries Server can also support selected LAN cards.</p> <p>Select two of these HSL cables:</p> <ul style="list-style-type: none"> #1482 - 4m Copper HSL-2 Cable #1483 - 10m Optical HSL-2 Cable #1485 - 15m Copper HSL-2 Cable <p>Select one of these SPCN cables per tower:</p> <ul style="list-style-type: none"> #1463 - 2m SPCN Cable #1464 - 6m SPCN Cable #1465 - 15m SPCN Cable #1466 - 30m SPCN Cable <p>One #14xx power cord must be specified (geography dependent). The #9094 is capable of controlling Ultra2 SCSI disk units. The two removable media devices (internal tape or CD-ROM) are supported by a #4778.</p>
#9301	<p>Upgraded 30 Disk Expansion</p> <p>The #9301 is equivalent to a #5101 30 Disk Unit Expansion. It is ordered when doing a Model 830 to 840 upgrade, and the Model 830 has a #0550 iSeries Rack installed. A #0550 iSeries Rack to #0551 iSeries Rack conversion is performed and a #0125 (#9079 Lower Unit in Rack) and #9301 are added to the install record.</p>
#9691	<p>#9691 Base Bus Adapter (Copper HSL)</p> <p>The #9691 is a base bus adapter card that installs in the #5074 PCI Expansion Tower and #5079 1.8 M I/O Tower, the #9079 Base I/O Tower or the #8079 Optional Base 1.8 M I/O Rack on a Model 840 system unit, and in the #0578/#5078 PCI Expansion Unit. The #9691 supports HSL Copper. Minimum OS/400 level: V4R5</p>
#9739	<p>#9739 Base Optical Bus Adapter (HSL)</p> <p>The #9739 is used in the #5074 PCI Expansion Tower and #5079 1.8 M I/O Tower and in the #5078/#0578 to allow these towers to connect via optical HSL. The #9739 supports clustering (HSL OptiConnect). Optical HSL is only available on 830, 840 and 890 system units. Minimum OS/400 level: V5R1 or V5R2 when connected to the Model 890</p>
#9887	<p>Base HSL-2 Bus Adapter</p> <p>The #9887 is a base feature that provides HSL-2 connectivity for #9094 Base PCI I/O Enclosure. The #9887 can be ordered with an expansion unit/tower only. Once the expansion unit is installed, a #2887 must be ordered to support this function.</p>

4.6 iSeries Model 8xx tower conversions

The upgrades supported for external towers supported for 8xx models are identified here.

8xx towers				
To	5074	5079	8093	9094
From				
5065	X			
5066		X		
5075	X			
8079		X	X	
9079	X			X

4.7 High-speed link (HSL) tower placement for iSeries servers

4.7.1 HSL loop definition and rules

- ▶ HSL loop is the name of the system bus technology introduced in V4R5
- ▶ HSL cables connect system towers to I/O towers, Integrated xSeries Adapter cards in xSeries towers, and other system towers
 - HSL Copper Cables come in 3, 6, and 15 meter lengths
 - HSL Optical Cables come in 6, 30, 100, and 250 meter lengths
 - HSL-2 cables come in 4, 10, and 15 meter lengths
 - HSL to HSL-2 cables come in 6 and 15 meter lengths
- ▶ HSL loop rules
 - Maximum of nine I/O towers and Integrated xSeries Adapter cards in xSeries towers per HSL loop
 - Maximum number of I/O towers per loop is model dependent (see the table on the following page)
 - Maximum number of Integrated xSeries Adapter cards in xSeries towers per loop is model dependent (see the table on the following page)
 - A single migration tower is supported *only* on the first loop of 820, 830, and 840 models
- ▶ HSL systems and towers
 - System models 270, 820, 830, 840
 - I/O towers #5074, #5075, #5078, #0578, #5079, and #8079
- ▶ HSL-2 systems and towers
 - System model 890
 - I/O towers 9094 or the bottom unit of the #8093
- ▶ Integrated xSeries Adapter card behaviors
 - Maintaining power to the Integrated xSeries Adapter card requires that the xSeries tower is varied off prior to powering down the xSeries tower
 - Powering down the xSeries tower from the Windows menu without varying off the tower results in powering down of the Integrated xSeries Adapter card, splitting the HSL loop

Important: Use the iSeries System Service Tools (SST) concurrent maintenance power options to switch off the power for the xSeries tower *before* servicing the xSeries.

4.7.2 HSL loop considerations

- ▶ **HSL loop reliability**

The HSL loop architecture provides redundant paths between any two nodes on the loop. An optimum path is set up when configured at IPL time and the direction around the loop is used if a failure prevents communication in the preferred direction.
- ▶ **HSL tower configurations**

To minimize the number of cables, the system can be configured by attaching the maximum number of I/O towers to an HSL loop before using another HSL loop.

To maximize performance, the system can be configured by spreading out the I/O towers across the greatest number of HSL loops possible

► **HSL loop performance**

- HSL I/O towers operate at (theoretical) 500 MB per second speed in both directions.
- Migration towers operate at (theoretical) 250 MB per second speed in both directions.
- Optical HSL cables operate at (theoretical) 250 MB per second speed in both directions.
- For best performance system, towers should be limited to four per loop.
- For optimum performance system, towers should be limited to two per loop.

► **HSL port numbering**

There are no technical restrictions regarding which port connects to which port along the HSL loop path.

System maximums	270	820	830	840	890
HSL loops	1	1	4	8	14
Optical HSL loops	0	0	1	2	12
I/O towers	1	5	13	23	47
IXA cards in xSeries towers	2	4	8	16	32
I/O towers and IXA cards	3	9	21	39	47
HSL OptiConnect loops	1	1	2	4	14
HSL Migration tower	0	1	1	1	0
HSL loop maximums	270	820	830	840	890
I/O towers	1	5	6	6	6
IXA cards in xSeries towers	2	4	5	5	5
I/O towers and IXA cards	3	9	9	9	9
HSL OptiConnect loop: Two systems	270	820	830	840	890
I/O towers and IXA cards	4	4	4	4	4
HSL OptiConnect loop: Three systems	270	820	830	840	890
I/O towers and IXA cards	n/a	n/a	0	0	0

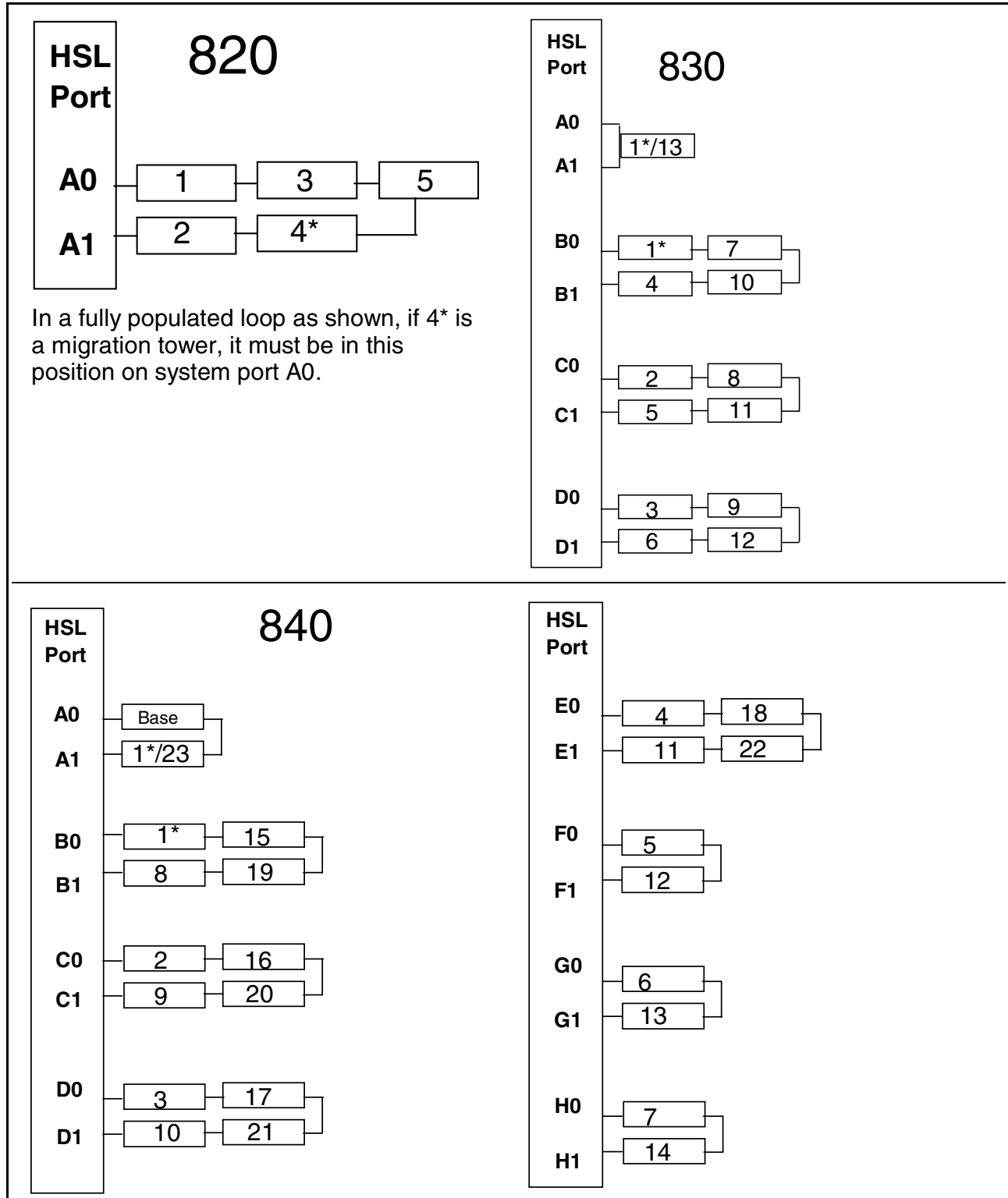
4.7.3 HSL OptiConnect loop definition, rules, and considerations

- HSL OptiConnect Loop designates an HSL loop, which connects multiple systems
 - Provides system to system connectivity and switch disk environment.
- HSL OptiConnect Loop rules
 - Maximum of three system towers per loop.
 - Additional secondary LPAR partitions may participate in any HSL OptiConnect Loop and are not counted in the system maximums.
 - For a two system tower loop, a maximum of four external I/O towers and Integrated xSeries Adapter cards in xSeries towers per loop.
 - Maximum of three external I/O towers or Integrated xSeries Adapter cards in xSeries towers per loop segment.
 - Three system tower loops do not support external towers or Integrated xSeries Adapter cards in xSeries towers.

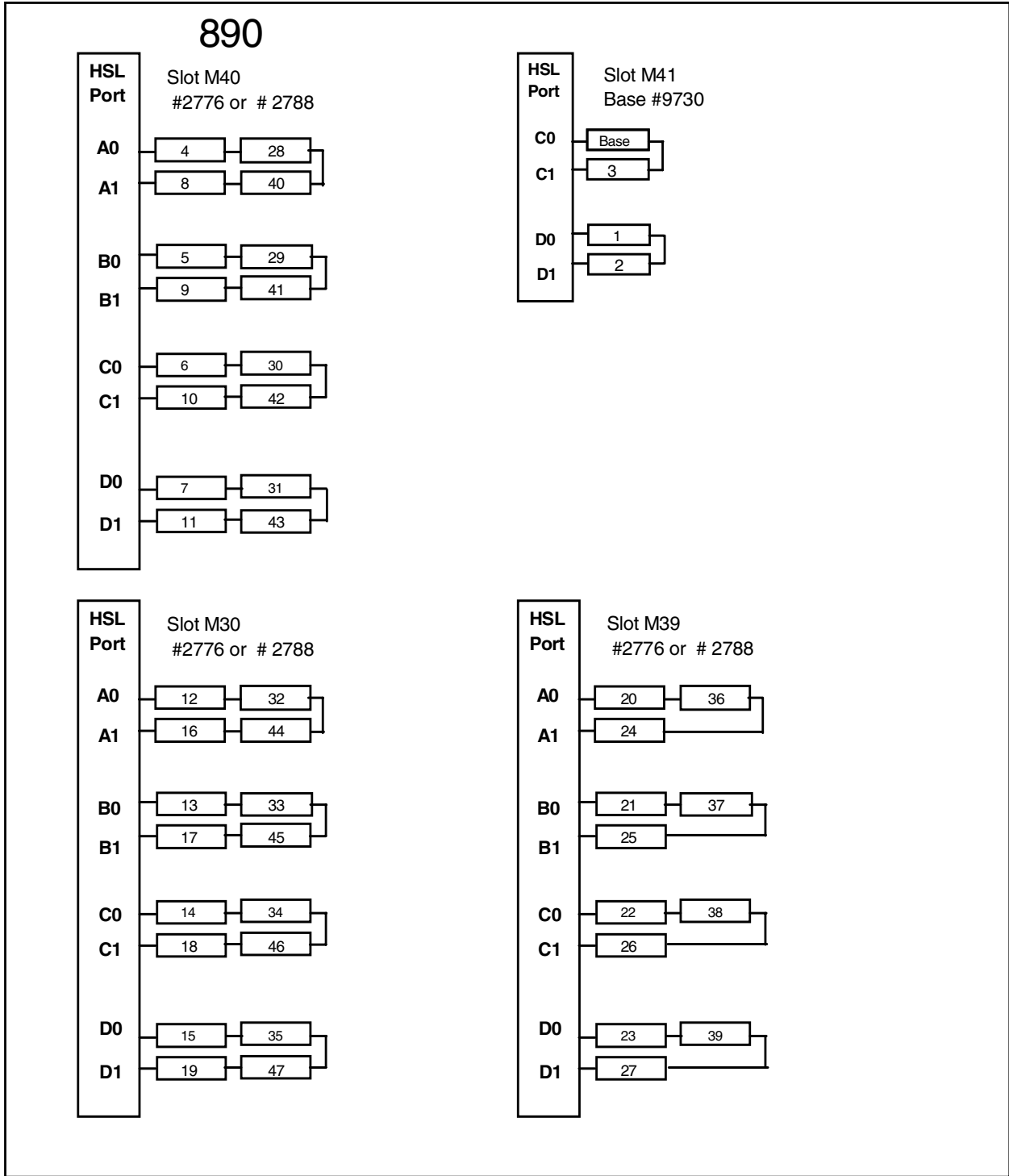
- Three system tower loops are supported by 830, 840, and 890 model systems.
- All systems participating in a three system tower loop must be at V5R2.
- All switchable external towers on one loop segment are in the same device CRG and switch together.
- All switchable external towers in one device CRG are in the same SPCN power domain.
- Migration towers are not supported on HSL OptiConnect Loops.
- All systems (primary and secondary LPAR) that communicate with or share a switchable tower with a model 890 system must be at V5R2.
- ▶ System-to-system communications over an HSL OptiConnect Loop.
 - OptiConnect for OS/400, priced OS/400 Optional Feature 23, is required on each system that communicates over an HSL OptiConnect Loop (including LPAR secondary partitions).
- ▶ Switch Tower Support on an HSL OptiConnect Loop
 - OS/400 HA Switchable Resources, priced OS/400 Optional Feature 41, is required on each system that shares a switchable tower on an HSL OptiConnect Loop (including LPAR secondary partitions).
- ▶ Logical partitions (LPAR)
 - Each logical partition can participate in the functions relating to an HSL OptiConnect Loop.
- ▶ Enabling HSL OptiConnect Loop
 - The DST/SST Communication option called *HSL OptiConnect* must be enabled for each partition (including the primary) that uses the HSL OptiConnect loop functions.
 - The DST/SST Communication option called *Virtual OptiConnect* must be enabled for each partition (including the primary) that uses the internal partition to partition functions.
 - Switch disk environments must enable the DST/SST Communication option HSL OptiConnect.

4.7.4 HSL placement diagrams

The following diagrams illustrate the recommended placement of towers on HSL loops.



Note: On Models 830 or 840, if 1* is a Migration Tower I or II, it must be attached to Loop A. If 1* is an expansion tower, it should be attached to Loop B, leaving Loop A available for a migration tower in the future, or the thirteenth (on Model 830) or the twenty-third (on Model 840) expansion tower.



4.8 Upgrades to iSeries 8xx processors

Upgrades to the iSeries 8xx servers are available within the 8xx product line and from AS/400e 7xx servers. RISC systems prior to 7xx models are no longer supported as upgrade paths to the 8xx servers.

Model 820												
To	2437						2438					
From	1521	1522	1523	1524	1525	1526	1521	1522	1523	1524	1525	1526
720												
2062	1500	M	M	M	M							
	1501	M	M	M	M	M						
	1502		M	M	M	M	M					
	1503			M	M	M	M					
2063	1500	M	M	M	M		M	M	M	M		
	1502		M	M	M	M	M	M	M	M	M	M
	1503			M	M	M	M		M	M	M	M
	1504				M	M	M			M	M	M
2064	1500	M	M	M	M		M	M	M	M		
	1502		M	M	M	M	M	M	M	M	M	M
	1503			M	M	M	M		M	M	M	M
	1504				M	M	M			M	M	M
	1505					M	M				M	M

4.8.2 Model 820 upgrades within the Model 820

Model 820																									
To	0151	0152	2395			2396					2397					2398				2435					
From			1522	1523	1524	1521	1522	1523	1524	1525	1521	1522	1523	1524	1525	1526	1521	1522	1523	1524	1521	1522	1523	1524	
820																									
0150		B	B																						
			B																						
2395	1521			B	B	B	B	B	B		B	B	B	B			B	B	B	B		B	B	B	B
	1522				B	B		B	B	B		B	B	B	B		B	B	B	B			B	B	B
	1523					B			B	B	B		B	B	B	B			B	B	B			B	B
	1524								B	B			B	B	B	B				B	B	B			B
2396	1521							B	B	B		B	B	B	B		B	B	B	B					
	1522								B	B	B		B	B	B	B		B	B	B	B				
	1523									B	B		B	B	B	B			B	B	B	B			
	1524										B			B	B	B				B	B	B	B		
	1525													B	B					B	B	B			
2397	1521											B	B	B			B	B	B	B					
	1522												B	B	B			B	B	B	B				
	1523													B	B	B			B	B	B	B			
	1524														B	B				B	B	B	B		
	1525															B				B	B	B			
	1526																B				B	B			
2398	1521																	B	B	B					
	1522																		B	B	B				
	1523																			B	B	B			
	1524																				B	B	B		
	1525																				B	B			
	1526																					B			
2435	1521																						B	B	B
	1522																							B	B
	1523																								B

Model 820																			
To		2436					2437					2438							
From		1521	1522	1523	1524	1525	1521	1522	1523	1524	1525	1526	1521	1522	1523	1524	1525	1526	1527
820																			
2395	1521	B	B	B	B		B	B	B	B									
	1522		B	B	B	B		B	B	B	B								
	1523			B	B	B			B	B	B	B							
	1524				B	B				B	B	B							
2396	1521						B	B	B	B		B	B	B	B				
	1522							B	B	B	B		B	B	B	B			
	1523								B	B	B	B			B	B	B	B	
	1524									B	B	B				B	B	B	B
	1525										B	B					B	B	B
2397	1521											B	B	B	B				
	1522												B	B	B	B			
	1523													B	B	B	B		
	1524														B	B	B	B	
	1525															B	B	B	
	1526																B	B	
2435	1521	B	B	B	B		B	B	B	B		B	B	B	B				
	1522		B	B	B	B		B	B	B	B		B	B	B	B			
	1523			B	B	B			B	B	B	B			B	B	B	B	
	1524				B	B				B	B	B				B	B	B	B
2436	1521		B	B	B		B	B	B	B		B	B	B	B				
	1522			B	B	B		B	B	B	B		B	B	B	B			
	1523				B	B			B	B	B	B			B	B	B	B	
	1524					B				B	B	B				B	B	B	B
	1525										B	B					B	B	B
2437	1521							B	B	B		B	B	B	B				
	1522								B	B	B		B	B	B	B			
	1523									B	B	B			B	B	B	B	
	1524										B	B				B	B	B	B
	1525											B					B	B	B
	1526																	B	B
2438	1521												B	B	B				
	1522													B	B	B			
	1523														B	B	B		
	1524															B	B	B	
	1525																B	B	
	1526																	B	

4.8.3 Model 820 Dedicated Server for Domino upgrades

Model 820				
To	2426	2427	2457	2458
From				
820				
2425	B	B	B	B
2426		B	B	B
2427				B
2456			B	B
2457				B

4.8.4 Models 820 and 830 upgrades to Model 830

Model 830																		
To	2400					2402					2403							
From	1531	1532	1533	1534	1535	1531	1532	1533	1534	1535	1536	1531	1532	1533	1534	1535	1536	1537
820																		
2395	1521	M	M	M		M	M	M										
	1522	M	M	M	M	M	M	M	M									
	1523		M	M	M	M		M	M	M	M							
	1524			M	M	M			M	M	M	M						
2396	1521	M	M	M		M	M	M				M	M	M				
	1522	M	M	M	M	M	M	M	M			M	M	M	M			
	1523		M	M	M	M		M	M	M	M		M	M	M	M		
	1524			M	M	M			M	M	M	M		M	M	M	M	
	1525				M	M				M	M	M			M	M	M	M
2397	1521					M	M	M				M	M	M				
	1522					M	M	M	M			M	M	M	M			
	1523						M	M	M	M			M	M	M	M		
	1524							M	M	M	M			M	M	M	M	
	1525								M	M	M				M	M	M	M
	1526									M	M					M	M	M
2398	1521											M	M	M				
	1522											M	M	M	M			
	1523												M	M	M	M		
	1524													M	M	M	M	
	1525														M	M	M	M
	1526															M	M	M
	1527																M	M
2435	1521	M	M	M		M	M	M										
	1522	M	M	M	M	M	M	M	M									
	1523		M	M	M	M		M	M	M	M							
	1524			M	M	M			M	M	M	M						
2436	1521	M	M	M		M	M	M				M	M	M				
	1522	M	M	M	M	M	M	M	M			M	M	M	M			
	1523		M	M	M	M		M	M	M	M			M	M	M	M	
	1524			M	M	M			M	M	M	M			M	M	M	M
	1525				M	M				M	M	M			M	M	M	M

Model 830																		
To		2400					2402					2403						
From	1531	1532	1533	1534	1535	1531	1532	1533	1534	1535	1536	1531	1532	1533	1534	1535	1536	1537
830																		
2437	1521					M	M	M				M	M	M				
	1522					M	M	M	M			M	M	M	M			
	1523						M	M	M	M			M	M	M	M		
	1524							M	M	M	M			M	M	M	M	
	1525								M	M	M				M	M	M	M
	1526									M	M					M	M	M
2438	1521											M	M	M				
	1522											M	M	M	M			
	1523												M	M	M	M		
	1524													M	M	M	M	
	1525														M	M	M	M
	1526															M	M	M
	1527																M	M
2400	1531		B	B	B	B	B	B	B			B	B	B	B			
	1532			B	B	B		B	B	B			B	B	B	B		
	1533				B	B		B	B	B	B			B	B	B	B	
	1534					B			B	B	B				B	B	B	B
	1535									B	B					B	B	B
2402	1531					B	B	B				B	B	B	B			
	1532						B	B	B			B	B	B	B			
	1533							B	B	B			B	B	B	B		
	1534								B	B				B	B	B	B	
	1535										B					B	B	B
	1536																B	B
2403	1531												B	B	B			
	1532													B	B	B		
	1533														B	B	B	
	1534															B	B	B
	1535																B	B
	1536																	B

4.8.5 Model 7xx upgrades to Model 830

Model 830																		
To		2400					2402					2403						
From	1531	1532	1533	1534	1535	1531	1532	1533	1534	1535	1536	1531	1532	1533	1534	1535	1536	1537
720																		
2061	1500	M	M	M		M	M	M				M	M	M				
	1501	M	M	M	M	M	M	M	M			M	M	M	M			
	1502	M	M	M	M	M	M	M	M	M		M	M	M	M	M		
2062	1500	M	M	M		M	M	M				M	M	M				
	1501	M	M	M	M	M	M	M	M			M	M	M	M			
	1502	M	M	M	M	M	M	M	M	M		M	M	M	M	M		
2063	1503		M	M	M		M	M	M	M	M		M	M	M	M	M	
	1500	M	M	M		M	M	M				M	M	M				
	1502	M	M	M	M	M	M	M	M	M		M	M	M	M	M		
	1503		M	M	M	M		M	M	M	M		M	M	M	M	M	M
1504			M	M	M			M	M	M	M			M	M	M	M	

Model 830																		
To	2400					2402					2403							
From	1531	1532	1533	1534	1535	1531	1532	1533	1534	1535	1536	1531	1532	1533	1534	1535	1536	1537
720																		
2064	1500					M	M	M				M	M	M				
	1502					M	M	M	M	M		M	M	M	M	M		
	1503						M	M	M	M	M		M	M	M	M	M	
	1504							M	M	M	M			M	M	M	M	M
	1505								M	M	M				M	M	M	M
730																		
2065	1506	M	M	M	M	M	M	M	M			M	M	M	M			
	1507	M	M	M	M	M	M	M	M	M		M	M	M	M	M		
	1508		M	M	M		M	M	M	M	M		M	M	M	M	M	
	1509			M	M			M	M	M	M			M	M	M	M	M
2066	1506	M	M	M	M	M	M	M	M			M	M	M	M			
	1507	M	M	M	M	M	M	M	M	M		M	M	M	M	M		
	1508		M	M	M		M	M	M	M	M		M	M	M	M	M	
	1509			M	M			M	M	M	M			M	M	M	M	M
	1510				M				M	M	M				M	M	M	M
2067	1506					M	M	M	M			M	M	M	M			
	1508						M	M	M	M	M		M	M	M	M	M	
	1509							M	M	M	M			M	M	M	M	M
	1510								M	M	M				M	M	M	M
	1511									M	M					M	M	M
2068	1506					M	M	M	M			M	M	M	M			
	1508						M	M	M	M	M		M	M	M	M	M	
	1509							M	M	M	M			M	M	M	M	M
	1510								M	M	M				M	M	M	M
	1511									M	M					M	M	M
740																		
2069	1510								M	M	M				M	M	M	M
	1511									M	M					M	M	M
	1512										M	M	M	M			M	M
	1514					M	M	M	M	M		M	M	M	M	M		
2070	1510														M	M	M	M
	1511															M	M	M
	1512																M	M
	1513																M	M
1514											M	M	M	M	M			

4.8.7 Model 740, 830, and 840 upgrades to Model 890

		Model 890																						
		To	0197	0198	2487						2488													
From					1576	1577	1578	1579	1581	1583	1585	1587	1588	1576	1577	1578	1579	1581	1583	1585	1587	1588	1591	
740																								
2069	1510						M	M	M	M														
	1511							M	M	M	M	M												
	1512								M	M	M	M	M											
	1514				M	M	M	M																
2070	1510						M	M	M	M														
	1511							M	M	M	M	M												
	1512								M	M	M	M	M											
	1513								M	M	M	M	M											
	1514				M	M	M	M																
830																								
0153		M																						
2349	1531				M	M	M																	
	1532				M	M	M	M																
	1533				M	M	M	M	M															
	1534					M	M	M	M	M														
	1535						M	M	M	M														
	1536								M	M	M	M												
	1537								M	M	M	M	M											
2402	1531				M	M	M																	
	1532				M	M	M	M																
	1533				M	M	M	M	M															
	1534					M	M	M	M	M														
	1535						M	M	M	M														
	1536								M	M	M	M												
2403	1531				M	M	M																	
	1532				M	M	M	M																
	1533				M	M	M	M	M															
	1534					M	M	M	M	M														
	1535						M	M	M	M														
	1536								M	M	M	M												
	1537								M	M	M	M	M											
840																								
0158		M																						
0159		M																						

Model 890																					
To	0197	0198	2487						2488												
From			1576	1577	1578	1579	1581	1583	1585	1587	1588	1576	1577	1578	1579	1581	1583	1585	1587	1588	1591
840																					
2352	1540		M	M	M	M															
	1541		M	M	M	M	M														
	1542			M	M	M	M	M													
	1543				M	M	M	M													
	1544					M	M	M	M	M											
	1545						M	M	M	M	M										
	1546							M	M	M	M										
2353	1540		M	M	M	M															
	1541		M	M	M	M	M														
	1542			M	M	M	M	M													
	1543				M	M	M	M													
	1544					M	M	M	M	M											
	1545						M	M	M	M	M										
	1546							M	M	M	M										
	1547								M	M	M										
2354	1540		M	M	M	M						M	M	M	M						
	1541		M	M	M	M	M					M	M	M	M	M					
	1542			M	M	M	M	M					M	M	M	M	M				
	1543				M	M	M	M						M	M	M	M				
	1544					M	M	M	M	M					M	M	M	M	M		
	1545						M	M	M	M	M					M	M	M	M	M	M
	1546							M	M	M	M					M	M	M	M	M	M
	1547								M	M	M						M	M	M	M	M
	1548									M	M							M	M	M	M
2416	1540		M	M	M	M															
	1541		M	M	M	M	M														
	1542			M	M	M	M	M													
	1543				M	M	M	M													
	1544					M	M	M	M	M											
	1545						M	M	M	M	M										
	1546							M	M	M	M										
2417	1540		M	M	M	M															
	1541		M	M	M	M	M														
	1542			M	M	M	M	M													
	1543				M	M	M	M													
	1544					M	M	M	M	M											
	1545						M	M	M	M	M										
	1546							M	M	M	M										

Model 890																						
To	0197	0198	2487						2488													
From			1576	1577	1578	1579	1581	1583	1585	1587	1588	1576	1577	1578	1579	1581	1583	1585	1587	1588	1591	
840																						
2418	1540		M	M	M	M																
	1541		M	M	M	M	M															
	1542			M	M	M	M	M														
	1543				M	M	M	M														
	1544					M	M	M	M	M												
	1545						M	M	M	M	M											
	1546							M	M	M	M											
2419	1540		M	M	M	M																
	1541		M	M	M	M	M															
	1542			M	M	M	M	M														
	1543				M	M	M	M														
	1544					M	M	M	M	M												
	1545						M	M	M	M	M											
	1546							M	M	M	M											
	1547								M	M	M											
2420	1540		M	M	M	M																
	1541		M	M	M	M	M															
	1542			M	M	M	M	M														
	1543				M	M	M	M														
	1544					M	M	M	M	M												
	1545						M	M	M	M	M											
	1546							M	M	M	M											
	1547								M	M	M											
2461	1540											M	M	M	M							
	1541											M	M	M	M	M						
	1542												M	M	M	M	M					
	1543													M	M	M	M					
	1544														M	M	M	M	M			
	1545															M	M	M	M	M	M	
	1546																M	M	M	M	M	
	1547																	M	M	M	M	
	1548																		M	M	M	
890																						
0197		B																				

Model 890																							
To	0197	0198	2487								2488												
From			1576	1577	1578	1579	1581	1583	1585	1587	1588	1576	1577	1578	1579	1581	1583	1585	1587	1588	1591		
890																							
2487	1576			B	B	B						B	B	B	B								
	1577				B	B	B						B	B	B	B							
	1578					B	B	B						B	B	B	B						
	1579						B	B							B	B	B						
	1581							B	B							B	B	B					
	1583								B	B	B						B	B	B	B			
	1585									B	B							B	B	B			
	1587										B									B	B	B	
	1588																				B	B	
2488	1576												B	B	B								
	1577													B	B	B							
	1578														B	B	B						
	1579															B	B						
	1581																B	B					
	1583																	B	B	B			
	1585																		B	B			
	1587																				B	B	
	1588																					B	

RISC to RISC Data Migration (#0205): The #0205 specify code is used when a customer orders a new (RISC) AS/400e server to replace an existing (RISC) AS/400e. The #0205 is orderable for initial orders of the AS/400e server Model 170 or 7xx. Preloading Licensed Programs, by manufacturing, is not allowed with #0205. Manufacturing only loads SLIC up through QSYS of OS/400 when #0205 is ordered.

The #0205 and #5000 are mutually exclusive.

4.8.8 Interactive performance reduction option for AS/400e 7xx servers

In some cases, a supported upgrade path involves a reduction in Interactive CPW ratings. 7xx customers who do not want to keep their current interactive card may reduce their interactive capacity by one level when upgrading to a new 8xx server. This can lower the price paid for the upgrade.

For example, a customer with 1050 Interactive CPW (Interactive feature #1510) upgrading to an 8xx server can choose a model with a lower Interactive CPW level (for example, 560). Customers choosing this reduction option are required to repurchase (at full price) any additional Interactive CPW in the future.

Customers are encouraged to review current Interactive CPW utilization with Performance Management/400 (PM/400), Management Central, and other AS/400 Performance Tools reports prior to exercising this interactive performance reduction option.

