Finding parts, locations, and addresses

ESCALA

Finding parts, locations, and addresses

Hardware

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Contents

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- **DANGER** notices call attention to a situation that is potentially lethal or extremely hazardous to people.
- **CAUTION** notices call attention to a situation that is potentially hazardous to people because of some existing condition.
- **Attention** notices call attention to the possibility of damage to a program, device, system, or data.

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Several countries require the safety information contained in product publications to be presented in their national languages. If this requirement applies to your country, a safety information booklet is included in the publications package shipped with the product. The booklet contains the safety information in your national language with references to the U.S. English source. Before using a U.S. English publication to install, operate, or service this product, you must first become familiar with the related safety information in the booklet. You should also refer to the booklet any time you do not clearly understand any safety information in the U.S. English publications.

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Das Produkt ist nicht für den Einsatz an Bildschirmarbeitsplätzen im Sinne § 2 der Bildschirmarbeitsverordnung geeignet.

Laser safety information

IBM® servers can use I/O cards or features that are fiber-optic based and that utilize lasers or LEDs.

Laser compliance

All lasers are certified in the U.S. to conform to the requirements of DHHS 21 CFR Subchapter J for class 1 laser products. Outside the U.S., they are certified to be in compliance with IEC 60825 as a class 1 laser product. Consult the label on each part for laser certification numbers and approval information.

CAUTION:
This product might contain one or more of the following devices: CD-ROM drive, DVD-ROM drive, DVD-RAM drive, or laser module, which are Class 1 laser products. Note the following information:

- **Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.**
- **Use of the controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.**

(C026)

CAUTION:
Data processing environments can contain equipment transmitting on system links with laser modules that operate at greater than Class 1 power levels. For this reason, never look into the end of an optical fiber cable or open receptacle. (C027)

CAUTION:
This product contains a Class 1M laser. Do not view directly with optical instruments. (C028)

CAUTION:
Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following information: laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam. (C030)

Power and cabling information for NEBS (Network Equipment-Building System) GR-1089-CORE

The following comments apply to the IBM servers that have been designated as conforming to NEBS (Network Equipment-Building System) GR-1089-CORE:

The equipment is suitable for installation in the following:
- Network telecommunications facilities
- Locations where the NEC (National Electrical Code) applies

The intrabuilding ports of this equipment are suitable for connection to intrabuilding or unexposed wiring or cabling only. The intrabuilding ports of this equipment *must not* be metallically connected to the interfaces that connect to the OSP (outside plant) or its wiring. These interfaces are designed for use as intrabuilding interfaces only (Type 2 or Type 4 ports as described in GR-1089-CORE) and require isolation from the exposed OSP cabling. The addition of primary protectors is not sufficient protection to connect these interfaces metallically to OSP wiring.

Note: All Ethernet cables must be shielded and grounded at both ends.

The ac-powered system does not require the use of an external surge protection device (SPD).

The dc-powered system employs an isolated DC return (DC-I) design. The DC battery return terminal *shall not* be connected to the chassis or frame ground.

Finding parts, locations, and addresses

Locate physical part locations and identify parts with system diagrams.

You can identify the enclosure in which a field replaceable unit (FRU) is plugged by its location code. The first character of the location code is always U followed by a 4–character feature code or enclosure type as shown in the following example: `U789C.001.10ABCDE-P3-C31` In this example, the enclosure type is **789C**.

The next 3 characters of the location code indicate the model of the enclosure (**001** in the example). The next string of characters provides the enclosure serial number (**10ABCDE** in the example).

Using this information, locate the enclosure with the FRU you want to replace. Find the enclosure type in the following table and go to the service guide for that enclosure.

Feature code (Utttt)	System
U789D.001	9117-MMA
U9406.MMA	9406-MMA
U8234.EMA	8234-EMA
U789C.001	8203-E4A
U9407.M15	9407-M15
U9408.M25	9408-M25
U78A0.001	8204-E8A
U9409.M50	9409-M50
U9125.F2A	9125-F2A
U9119.FHA	9119-FHA
U7311.D11	7311-D11
U5790.001	5790
U7314.G30	7314-G30
U5796.001	5796
U7311.D20	7311-D20
U0595.001	0595
U5095.001	5095
U5094.001	5094
U5294.001	5294
U5096.001	5096
U5296.001	5296
U7031.T24	7031-T24
U5786.001	5786
U5787.001	5787
U7031.D24	7031-D24
U7311.D10	7311-D10
U5796.001	5796

Feature code (Utttt)	System
U5886.001	5886
U5791.001	5791
U5802.001	5802
U5877.001	5877
U5803.001	5803
U5873.001	5873

Locate the FRU

The string of characters following the enclosure serial number identifies the FRU location within the enclosure: U7879.001.10ABCDE-P3-C31 In this example, **P3-C31** is the location of the FRU to be replaced. Use the graphics and tables to locate the FRU and link to its removal and replacement procedure.

Part locations and location codes

You can find part locations by using location codes. Illustrations are provided to help you map a location code to a position on the server or expansion unit.

8203-E4A, 9407-M15, 9408-M25

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

Use the following table to link to a specific topic that you need additional information on when reading your location code.

Location code topics that might be of interest	Description
"Location code overview" on page 3	Contains background information on the use of location codes.
"Physical location codes" on page 3	Provides a definition for physical location code.
"Logical location codes" on page 3	Provides a definition of what a logical location code is.
"Location code format" on page 3	Provides descriptive information of the Un value in the location code string. For example U789C.001.
"Location code labels" on page 4	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U789C.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 5	Provides a definition for the world unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the unit type and model immediately follow the first character (Utttt.mmm). Match the unit type and model to a link, as shown in the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table and follow the link to determine the service information.

Note: Locations for units that are not in the preceding list are either not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

`U789C.001.10ABCDE-P3-C31-T2-L23`

The first part of the location code (through the `T2` label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (`L23`) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is `Un-A1`.

The first position, represented by Un (where n is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes the U is a constant digit; however, the numbered positions that follow the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
`Utttt.mmm.sssssss-A1`	`Uffff.ccc.sssssss-A1`
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • `Utttt.sssssss-A1` • `Uffff.sssssss-A1`	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX® format.

Table 1. Unit type and locations

Unit type (Utttt.mmm)	Link to location information
U789C.001	8203.E4A Locations
U9407.M15	9407.M15 Locations
U9408.M25	9408.M25 Locations

Location code labels

The following table describes the location code label prefixes.

Note: These labels apply to system units only.

Table 2. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel

Table 2. Location code label prefixes for system units (continued)

Prefix	Description	Example
E	Electrical	Battery, power supply, ac charger
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port, external cable	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Use this information to help you map a location code to a position on the unit.

The following diagrams show field replaceable unit (FRU) layouts in the system. Use these diagrams with the following tables.

Rack views

Figure 1. Rack front view with 3.5 inch DASD
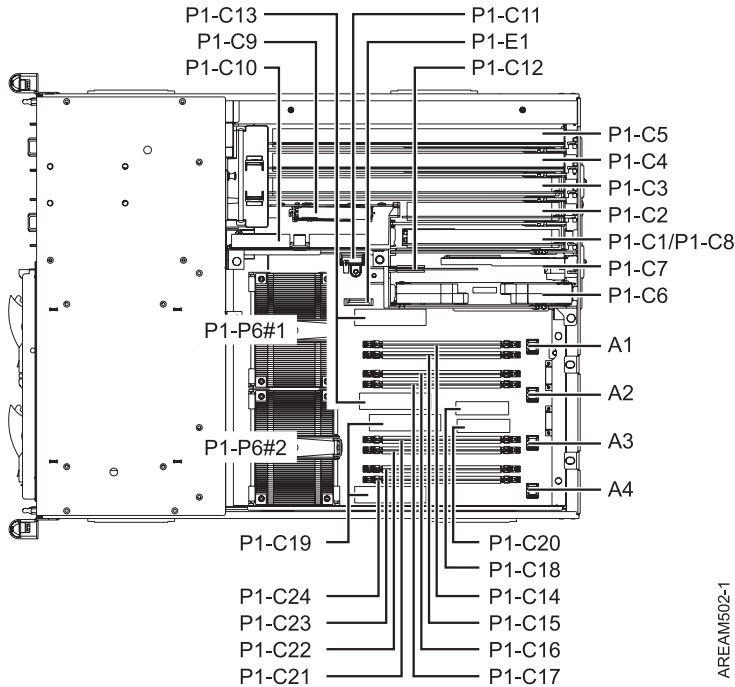
Figure 2. Rack top view, without fans
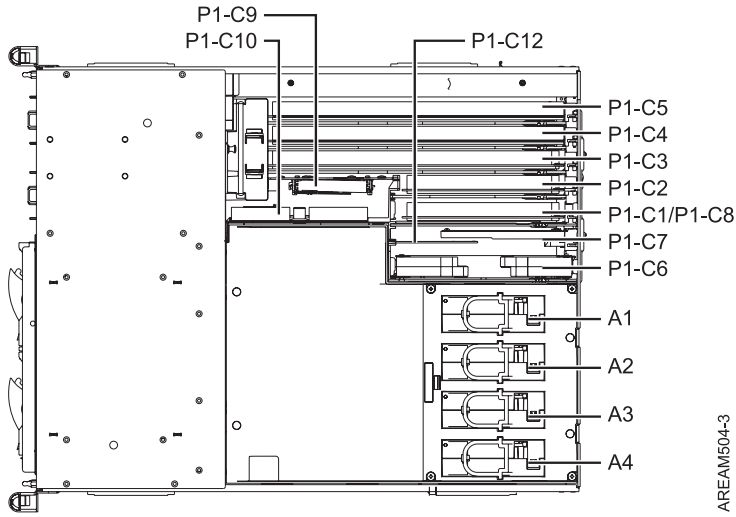
Figure 3. Rack top view, with fans
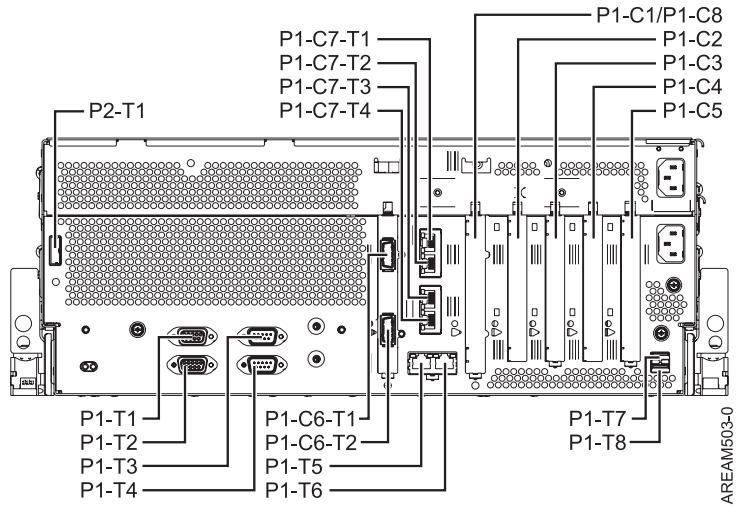
Figure 4. Rack rear view

Stand-alone views
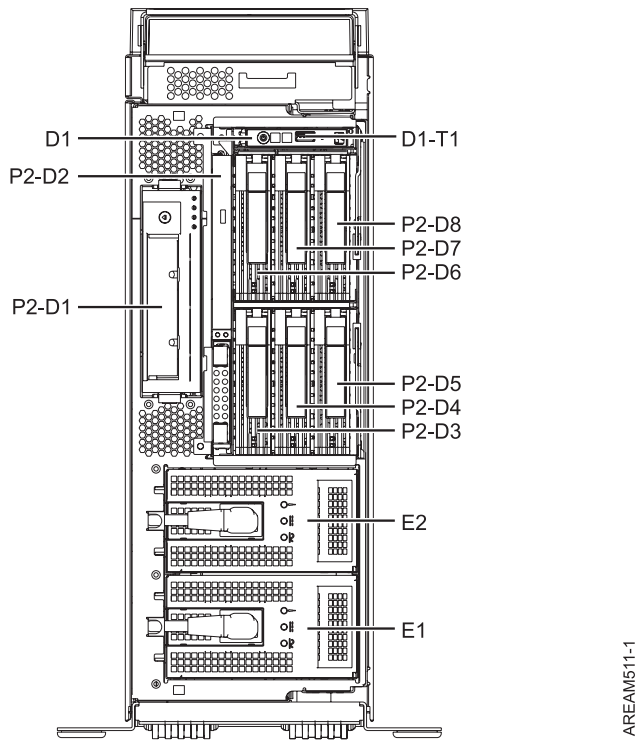
Figure 5. Stand-alone front view with 3.5 inch DASD
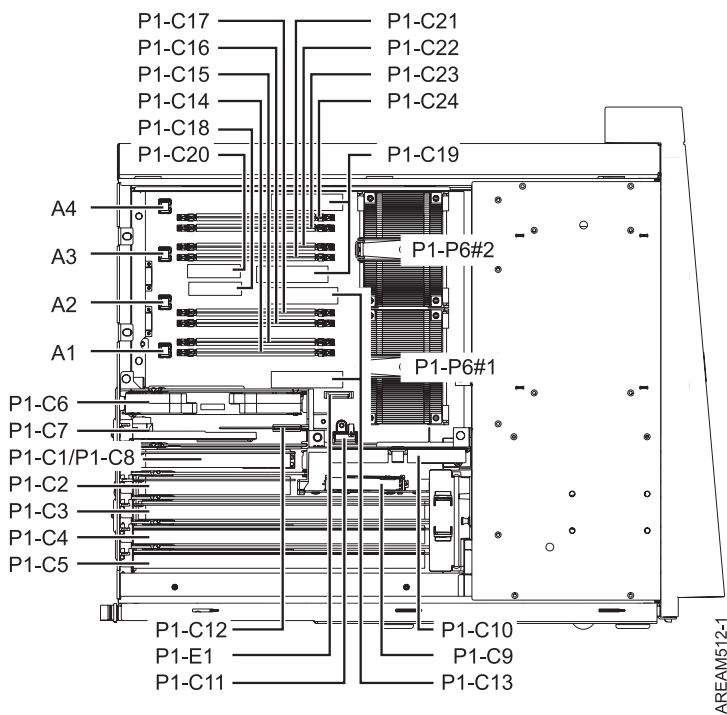
Figure 6. Stand-alone side view without fans

AREAM514-0
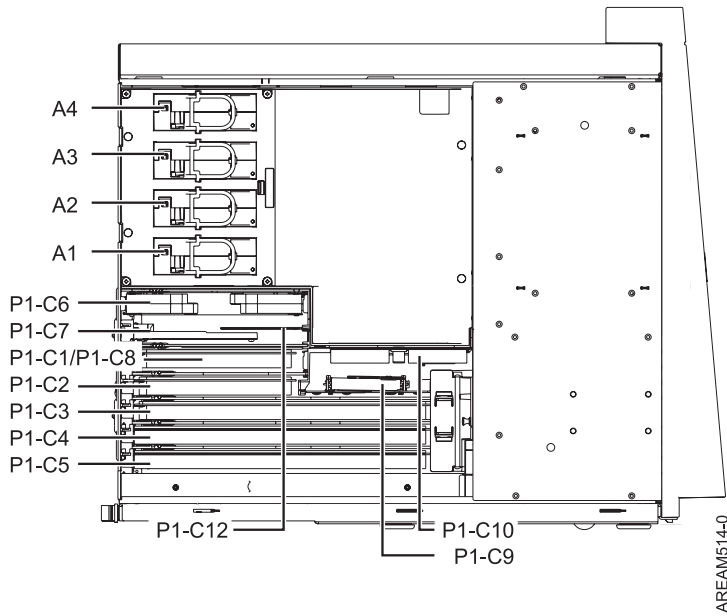
Figure 7. Stand-alone side view with fans

AREAM513-0
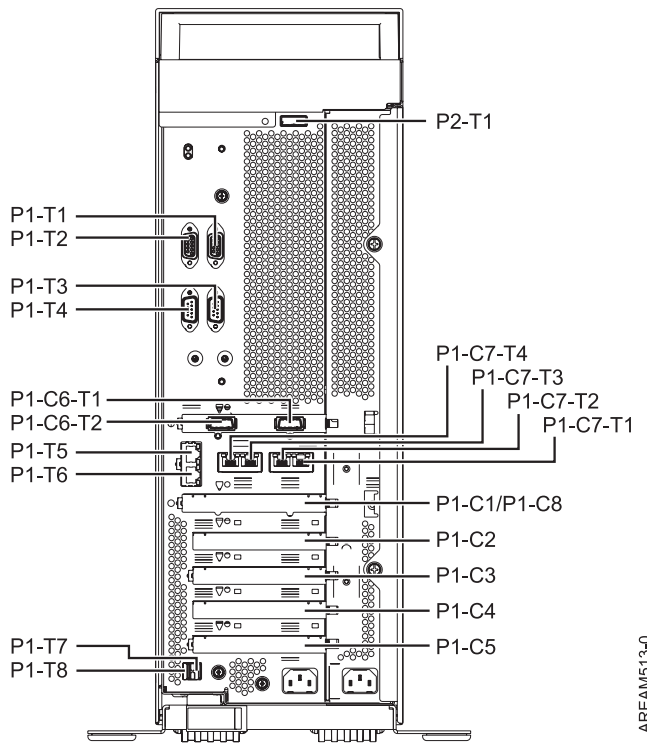
Figure 8. Stand-alone rear view

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The following table provides location codes for parts that comprise the server.

Table 3. FRU location table.

Failing item name	Physical location code	Identify LED
System unit	U*n*	
Fans		
Fan 1	U*n*-A1	Yes
Fan 2	U*n*-A2	Yes
Fan 3	U*n*-A3	Yes
Fan 4	U*n*-A4	Yes
Power supplies		
Power supply 1	U*n*-E1	Yes
Power supply 2	U*n*-E2	Yes
Backplanes		
Input/output backplane with embedded: • RIO Hub/HSL NIC • RIO/HSL link • Ethernet controller • USB controller (AIX or Linux® environment only) • SAS controllers • Logic oscillator • Service processor • Processor 1 • Processor 2 • SPCN • Time-of-day	U*n*-P1	Yes
Time-of-day battery	U*n*-P1-E1	
DASD and media backplane	U*n*-P2	Yes
DVD	U*n*-P2-D2	
System backplane cables		
System serial cable 1 (top connector)	U*n*-P1-T3	
System serial cable 2 (bottom connector)	U*n*-P1-T4	
Embedded USB front cable	U*n*-D1-T1	
Embedded USB rear cable 1	U*n*-P1-T7	
Embedded USB rear cable 2	U*n*-P1-T8	
SPCN cable 1 (top connector)	U*n*-P1-T1	
SPCN cable 2 (bottom connector)	U*n*-P1-T2	
HMC 1 (left connector)	U*n*-P1-T5	
HMC 2 (right connector)	U*n*-P1-T6	
Dual 1 GB Ethernet cable 1	U*n*-P1-C7-T1	
Dual 1 GB Ethernet cable 2	U*n*-P1-C7-T2	
Quad 1 GB Ethernet port 1	U*n*-P1-C7-T1	
Quad 1 GB Ethernet cable 2	U*n*-P1-C7-T2	

Table 3. FRU location table (continued).

Failing item name	Physical location code	Identify LED
Quad 1 GB Ethernet cable 3	U*n*-P1-C7-T3	
Quad 1 GB Ethernet cable 4	U*n*-P1-C7-T4	
External SAS cable	U*n*-P2-T1	
Internal SAS cable	U*n*-P1-T9	
Processor and processor regulator		
Voltage regulator 1A for processor 1	U*n*-P1-C13	Yes
Voltage regulator 1B for processor 1	U*n*-P1-C13	Yes
Voltage regulator 2 for processor 1	U*n*-P1-C18	Yes
Voltage regulator 1A for processor 2	U*n*-P1-C19	Yes
Voltage regulator 1B for processor 2	U*n*-P1-C19	Yes
Voltage regulator 2 for processor 2	U*n*-P1-C20	Yes
VPD card	U*n*-P1-C11	Yes
Adapters		
PCI-E adapter in slot 1	U*n*-P1-C1	Yes
PCI-E adapter in slot 2	U*n*-P1-C2	Yes
PCI-E adapter in slot 3	U*n*-P1-C3	Yes
PCI-X adapter in slot 4	U*n*-P1-C4	Yes
PCI-X adapter in slot 5	U*n*-P1-C5	Yes
Ethernet card	U*n*-P1-C7	Yes
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 1	U*n*-P1-C8	Yes
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 2	U*n*-P1-C6	Yes
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 1 port 1	U*n*-P1-C8-T1	Yes, for RIO adapter controller No, for 12X Channel Attach adapter
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 1 port 2	U*n*-P1-C8-T2	Yes, for RIO adapter controller No, for 12X Channel Attach adapter
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 2 port 1	U*n*-P1-C6-T1	Yes, for RIO adapter controller No, for 12X Channel Attach adapter
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 2 port 2	U*n*-P1-C6-T2	Yes, for RIO adapter controller No, for 12X Channel Attach adapter
Auxiliary cache card for system backplane	U*n*-P1-C9	Yes
Auxiliary cache card battery	U*n*-P1-C9-E1	No
RAID enablement card for system backplane	U*n*-P1-C10	Yes

Table 3. FRU location table (continued).

Failing item name	Physical location code	Identify LED
Thermal management card	U*n*-P1-C12	Yes
Memory modules		
Memory module 1	U*n*-P1-C14	Yes
Memory module 2	U*n*-P1-C15	Yes
Memory module 3	U*n*-P1-C16	Yes
Memory module 4	U*n*-P1-C17	Yes
Memory module 5	U*n*-P1-C21	Yes
Memory module 6	U*n*-P1-C22	Yes
Memory module 7	U*n*-P1-C23	Yes
Memory module 8	U*n*-P1-C24	Yes
Device physical locations		
Removable media	U*n*-P2-D1	No
Removable media	U*n*-P2-D2	No
Disk drive 1	U*n*-P2-D3	Yes
Disk drive 2	U*n*-P2-D4	Yes
Disk drive 3	U*n*-P2-D5	Yes
Disk drive 4	U*n*-P2-D6	Yes
Disk drive 5	U*n*-P2-D7	Yes
Disk drive 6	U*n*-P2-D8	Yes
Control panel		
Control panel	Un -D1	
Temperature sensor	Un -D1	
Server firmware		
Server firmware	U*n*-Y1	

8204-E8A and 9409-M50

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

Use the following table to link to a specific topic that you need additional information on when reading your location code.

Location code topics that might be of interest	Description
"Location code overview" on page 13	Contains background information on the use of location codes.
"Physical location codes" on page 13	Provides a definition for physical location code.
"Logical location codes" on page 13	Provides a definition of what a logical location code is.
"Location code format" on page 14	Provides descriptive information of the U*n* value in the location code string. For example U78A0.001.

Location code topics that might be of interest	Description
"Location code labels" on page 15	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U78A0.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 15	Provides a definition for the world unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the unit type and model immediately follow the first character (Utttt.mmm). Match the unit type and model to a link, as shown in the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table and follow the link to determine the service information.

Note: Locations for units that are not in the preceding list are either not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:
U7879.001.10ABCDE-P3-C31-T2-L23

The first part of the location code (through the T2 label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (L23) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is U*n*-A1.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes the U is a constant digit; however, the numbered positions that follow the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • U*tttt.sssssss*-A1 • U*ffff.sssssss*-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 4. Unit type and locations

Unit type (U*tttt*)	Link to location information
U78A0.001	8204.E8A Locations
U9409.M50	9409.M50 Locations

Location code labels

The following table describes the location code label prefixes.

Note: These labels apply to system units only.

Table 5. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port, external cables	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations
Use this information to help you map a location code to a position on the unit.

The following diagrams show field replaceable unit (FRU) layouts in the system. Use these diagrams with the following tables.

Rack views

Figure 9. Rack front view with 3.5 inch DASD
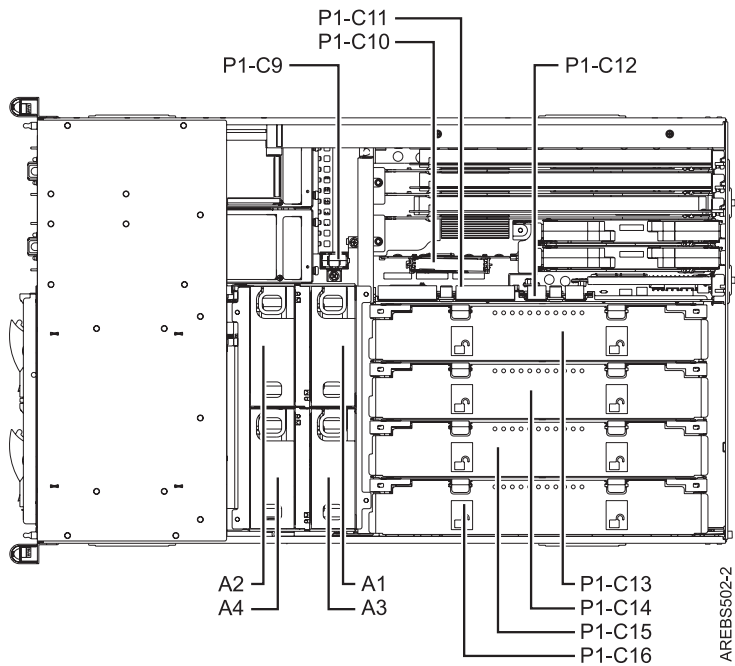
Figure 10. Rack top view
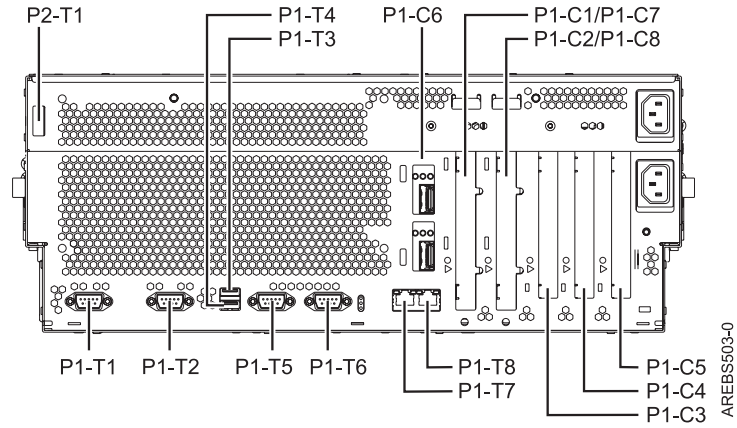
Figure 11. Rack rear view

Stand-alone views
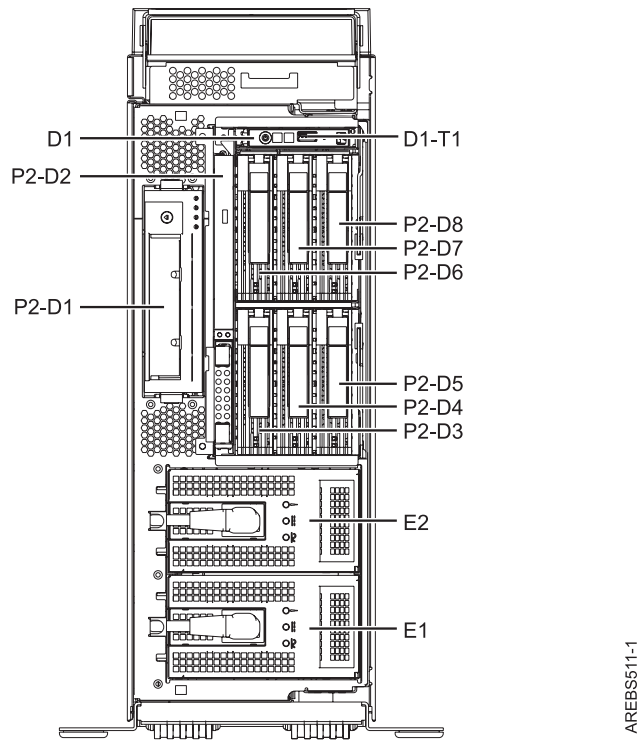
Figure 12. Stand-alone front view with 3.5 inch DASD
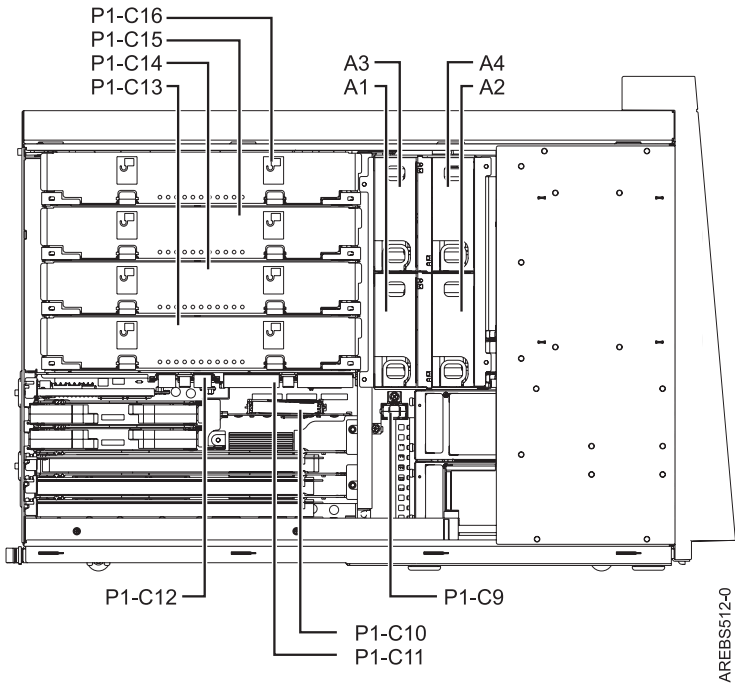
Figure 13. Stand-alone side view
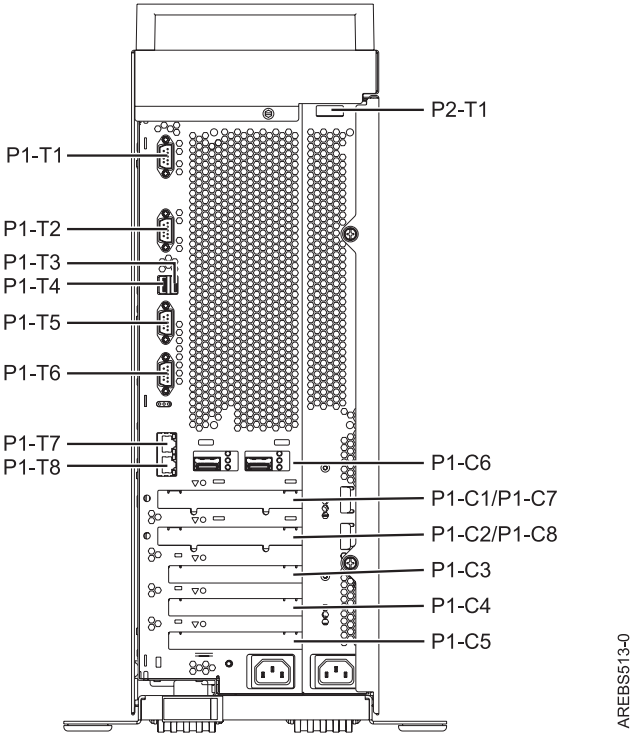
Figure 14. Stand-alone rear view

Processor book
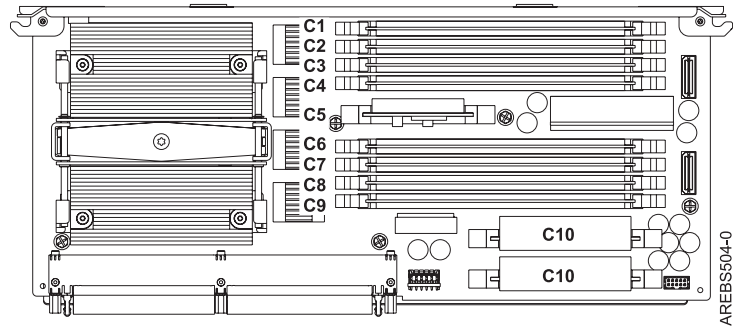
Figure 15. Rack and stand-alone processor book

Location codes

The following table provides location codes for parts that comprise the server.

Table 6. FRU location table.

Failing item name	Physical location code	Identify LED
System unit	U*n*	
Fans		
Fan 1	U*n*-A1	Yes
Fan 2	U*n*-A2	Yes
Fan 3	U*n*-A3	Yes
Fan 4	U*n*-A4	Yes
Power supplies		
Power supply 1	U*n*-E1	Yes
Power supply 2	U*n*-E2	Yes
Backplanes		

Table 6. FRU location table (continued).

Failing item name	Physical location code	Identify LED
Input/output backplane with embedded: • RIO Hub/HSL NIC • RIO/HSL link • Ethernet controller • USB controller (AIX or Linux only) • SAS controllers • Logic oscillator • Service processor • SPCN • Time-of-day	U*n*-P1	Yes
Battery	U*n*-P1-E1	
DASD and media backplane	U*n*-P2	Yes
DVD	U*n*-P2-D2	
System backplane ports		
System serial port 1 (rear view - left connector)	U*n*-P1-T1	
System serial port 2 (rear view - right connector)	U*n*-P1-T2	
Embedded USB front port	U*n*-D1-T1	
Embedded USB rear port 1	U*n*-P1-T3	
Embedded USB rear port 2	U*n*-P1-T4	
SPCN port 1 (rear view - left connector)	U*n*-P1-T5	
SPCN port 2 (rear view - right connector)	U*n*-P1-T6	
HMC 1 (rear view - left connector)	U*n*-P1-T7	
HMC 2 (rear view - right connector)	U*n*-P1-T8	
Dual 1 GB Ethernet port 1 (top RJ45 connector)	U*n*-P1-C6-T1	
Dual 1 GB Ethernet port 2 (bottom RJ45 connector)	U*n*-P1-C6-T2	
Quad 1 GB Ethernet port 1 (top RJ45 connector)	U*n*-P1-C6-T1	
Quad 1 GB Ethernet port 2 (middle top RJ45 connector)	U*n*-P1-C6-T2	
Quad 1 GB Ethernet port 3 (middle bottom RJ45 connector)	U*n*-P1-C6-T3	
Quad 1 GB Ethernet port 4 (bottom RJ45 connector)	U*n*-P1-C6-T4	
External SAS port	U*n*-P2-T1	
Processor and processor regulator		
Processor card 1	U*n*-P1-C13	Yes
Processor card 2	U*n*-P1-C14	Yes
Processor card 3	U*n*-P1-C15	Yes
Processor card 4	U*n*-P1-C16	Yes
Voltage regulator 1A on processor card 1 (both must be replaced as a pair)	U*n*-P1-C13-C10	Yes
Voltage regulator 1B on processor card 1 (both must be replaced as a pair)	U*n*-P1-C13-C10	Yes

Table 6. FRU location table (continued).

Failing item name	Physical location code	Identify LED
Voltage regulator 2 on processor card 1	U*n*-P1-C13-C5	Yes
Voltage regulator 1A on processor card 2 (both must be replaced as a pair)	U*n*-P1-C14-C10	Yes
Voltage regulator 1B on processor card 2 (both must be replaced as a pair)	U*n*-P1-C14-C10	Yes
Voltage regulator 2 on processor card 2	U*n*-P1-C14-C5	Yes
Voltage regulator 1A on processor card 3 (both must be replaced as a pair)	U*n*-P1-C15-C10	Yes
Voltage regulator 1B on processor card 3 (both must be replaced as a pair)	U*n*-P1-C15-C10	Yes
Voltage regulator 2 on processor card 3	U*n*-P1-C15-C5	Yes
Voltage regulator 1A on processor card 4 (both must be replaced as a pair)	U*n*-P1-C16-C10	Yes
Voltage regulator 1B on processor card 4 (both must be replaced as a pair)	U*n*-P1-C16-C10	Yes
Voltage regulator 2 on processor card 4	U*n*-P1-C16-C5	Yes
VPD card	U*n*-P1-C9	Yes
Adapters		
PCI-E adapter in slot 1	U*n*-P1-C1	Yes
PCI-E adapter in slot 2	U*n*-P1-C2	Yes
PCI-E adapter in slot 3	U*n*-P1-C3	Yes
PCI-X adapter in slot 4	U*n*-P1-C4	Yes
PCI-X adapter in slot 5	U*n*-P1-C5	Yes
Ethernet card	U*n*-P1-C6	Yes
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 1 (rear view - second slot from center)	U*n*-P1-C8	Yes
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 2 (rear view - first slot from center)	U*n*-P1-C7	Yes
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 1 port 1 (top connector)	U*n*-P1-C8-T1	Yes, for RIO adapter controller No, for 12X Channel Attach adapter
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 1 port 2 (bottom connector)	U*n*-P1-C8-T2	Yes, for RIO adapter controller No, for 12X Channel Attach adapter
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 2 port 1 (top connector)	U*n*-P1-C7-T1	Yes, for RIO adapter controller No, for 12X Channel Attach adapter

Table 6. FRU location table (continued).

Failing item name	Physical location code	Identify LED
RIO/HSL/GX Dual-Port 12X Channel Attach adapter controller slot 2 port 2 (bottom connector)	U*n*-P1-C7-T2	Yes, for RIO adapter controller No, for 12X Channel Attach adapter
Auxiliary cache card for system backplane	U*n*-P1-C10	Yes
Auxiliary cache card battery	U*n*-P1-C10-E1	No
RAID enablement card for system backplane	U*n*-P1-C11	Yes
Thermal management card	U*n*-P1-C12	Yes
Memory modules		
Memory module 1 on processor 1	U*n*-P1-C13-C1	Yes
Memory module 2 on processor 1	U*n*-P1-C13-C2	Yes
Memory module 3 on processor 1	U*n*-P1-C13-C3	Yes
Memory module 4 on processor 1	U*n*-P1-C13-C4	Yes
Memory module 5 on processor 1	U*n*-P1-C13-C6	Yes
Memory module 6 on processor 1	U*n*-P1-C13-C7	Yes
Memory module 7 on processor 1	U*n*-P1-C13-C8	Yes
Memory module 8 on processor 1	U*n*-P1-C13-C9	Yes
Memory module 1 on processor 2	U*n*-P1-C14-C1	Yes
Memory module 2 on processor 2	U*n*-P1-C14-C2	Yes
Memory module 3 on processor 2	U*n*-P1-C14-C3	Yes
Memory module 4 on processor 2	U*n*-P1-C14-C4	Yes
Memory module 5 on processor 2	U*n*-P1-C14-C6	Yes
Memory module 6 on processor 2	U*n*-P1-C14-C7	Yes
Memory module 7 on processor 2	U*n*-P1-C14-C8	Yes
Memory module 8 on processor 2	U*n*-P1-C14-C9	Yes
Memory module 1 on processor 3	U*n*-P1-C15-C1	Yes
Memory module 2 on processor 3	U*n*-P1-C15-C2	Yes
Memory module 3 on processor 3	U*n*-P1-C15-C3	Yes
Memory module 4 on processor 3	U*n*-P1-C15-C4	Yes
Memory module 5 on processor 3	U*n*-P1-C15-C6	Yes
Memory module 6 on processor 3	U*n*-P1-C15-C7	Yes
Memory module 7 on processor 3	U*n*-P1-C15-C8	Yes
Memory module 8 on processor 3	U*n*-P1-C15-C9	Yes
Memory module 1 on processor 4	U*n*-P1-C16-C1	Yes
Memory module 2 on processor 4	U*n*-P1-C16-C2	Yes
Memory module 3 on processor 4	U*n*-P1-C16-C3	Yes
Memory module 4 on processor 4	U*n*-P1-C16-C4	Yes
Memory module 5 on processor 4	U*n*-P1-C16-C6	Yes
Memory module 6 on processor 4	U*n*-P1-C16-C7	Yes
Memory module 7 on processor 4	U*n*-P1-C16-C8	Yes

Table 6. FRU location table (continued).

Failing item name	Physical location code	Identify LED
Memory module 8 on processor 4	U*n*-P1-C16-C9	Yes
Device physical locations		
Removable media	U*n*-P2-D1	No
Removable media	U*n*-P2-D2	No
Disk drive 1	U*n*-P2-D3	Yes
Disk drive 2	U*n*-P2-D4	Yes
Disk drive 3	U*n*-P2-D5	Yes
Disk drive 4	U*n*-P2-D6	Yes
Disk drive 5	U*n*-P2-D7	Yes
Disk drive 6	U*n*-P2-D8	Yes
Control panel		
Control panel	Un -D1	
Temperature sensor	Un -D1	
Server firmware		
Server firmware	U*n*-Y1	

8234-EMA, 9117-MMA, and 9406-MMA

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

For additional information about reading your location code, use the following table to link to a specific topic.

Location code topics that might be of interest	Description
"Location code overview" on page 24	Contains background information on the use of location codes.
"Physical location codes" on page 24	Provides a definition for physical location code.
"Logical location codes" on page 24	Provides a definition for a logical location code.
"Location code format" on page 24	Provides descriptive information of the U*n* value in the location code string. For example U5886.001.
"Location code labels" on page 25	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 26	Provides a definition for the worldwide unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the feature immediately follows the first character (U5886). Refer to the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table, and follow the link to determine the service information.

Note: If locations for units are not in the preceding format, either they are not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

`U7879.001.10ABCDE-P3-C31-T2-L23`

The first part of the location code (through the `T2` label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (`L23`) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is `Un-A1`.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit; however, the numbered positions following the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the

beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • U*tttt.sssssss*-A1 • U*ffff.sssssss*-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 7. Unit type and locations

Unit type (U*tttt.mmm*)	Link to location information
U9406.MMA	9406.MMA Locations
U789D.001	9117.MMA Locations
U8234.EMA	8234.EMA Locations

Location code labels

The following table identifies the location code label prefixes.

Note: These labels apply to system units only.

Table 8. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger

Table 8. Location code label prefixes for system units (continued)

Prefix	Description	Example
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

The following table contains location codes for the parts that make up the server.

The following diagrams show field replaceable unit (FRU) layouts in the system. Use these diagrams with the following tables.
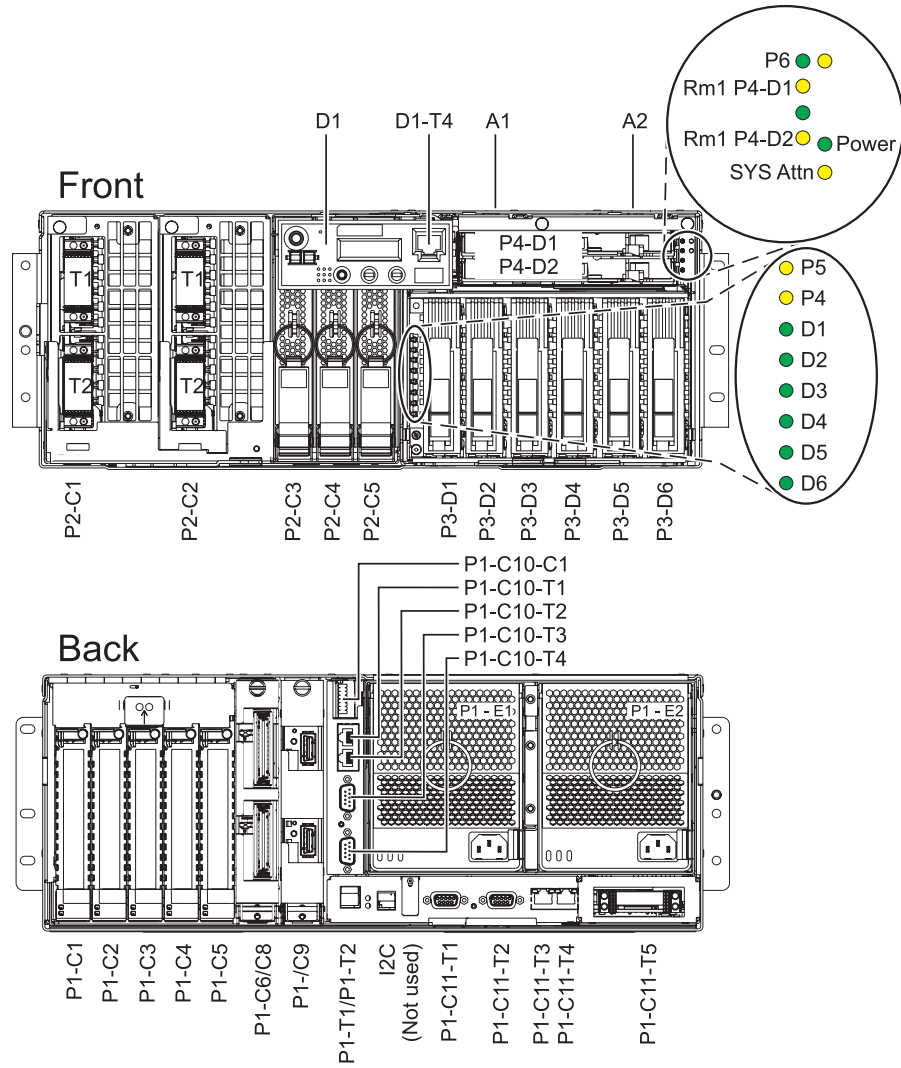
Figure 16. Front and rear views of the system unit
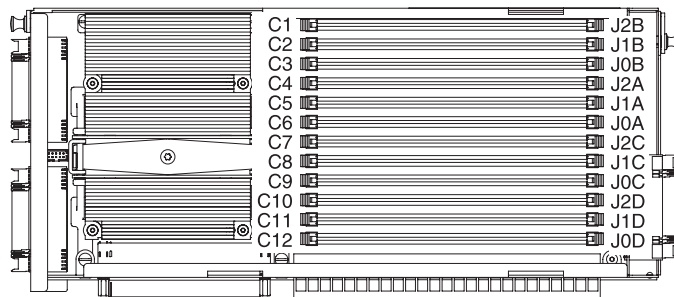
Figure 17. Memory module locations on the processor card (Un-P2-Cx)

Use the following illustration to map a node location when you are working with a multiple node installation. All of the nodes have the same location codes inside the system unit; only the serial number is different (Utttt.mmm.sssssss-).
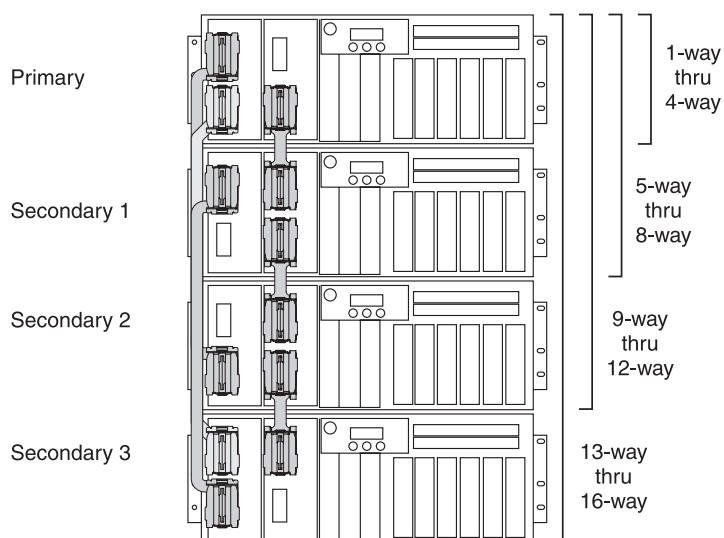
Figure 18. Multiple node locations with SMP processor cable shown

Note: Information regarding parts can be found in "8234-EMA, 9117-MMA, and 9406-MMA" on page 147.

Table 9. FRU location table.

Failing item name	Physical location code	Identify LED
System unit	U*n*	
Fans		
Fan 1	U*n*-A1	Yes
Fan 2	U*n*-A2	Yes
Power supplies		
Power supply 1	U*n*-E1	Yes
Power supply 2	U*n*-E2	Yes
Backplanes		
Input/output backplane with embedded: • RIO Hub/HSL NIC • RIO/HSL link • Ethernet controller • USB controller (AIX or Linux only) • SAS controllers • Logic oscillator	U*n*-P1	Yes
Regulator distribution connection backplane	U*n*-P2	Yes
Disk drive backplane	U*n*-P3	Yes
Media drive backplane	U*n*-P4	Yes

Table 9. FRU location table (continued).

Failing item name	Physical location code	Identify LED
Ports		
system port 2 (back of system unit)	U*n*-P1-C10-T3	
system port 1 (back of system unit)	U*n*-P1-C10-T4	
Integrated 2-port USB port 1 (AIX or Linux only)	U*n*-P1-T1	
Integrated 2-port USB port 2 (AIX or Linux only)	U*n*-P1-T2	
Integrated dual 1 GB Ethernet controller-port 1	U*n*-P1-C10-T2	
Integrated dual 1 GB Ethernet controller-port 2	U*n*-P1-C10-T1	
System cable connector	U*n*-P1-C11-T5	
Processor and processor regulator		
Processor card 1	U*n*-P2-C1	Yes
Processor card 2	U*n*-P2-C2	Yes
SMP processor cable	U*n*-P2-C1-T1 U*n*-P2-C1-T2 U*n*-P2-C2-T1 U*n*-P2-C2-T2	
Temperature sensor	U*n* -P2-C1 U*n* -P2-C2	
Voltage regulator 1	U*n*-P2-C3	Yes
Voltage regulator 2	U*n*-P2-C4	Yes
Voltage regulator 3	U*n*-P2-C5	Yes
VPD pass-through card	U*n*-P1-C10 Feature 5639: serial port 1 at bottom is T4 and serial port 2 top is T3, Ethernet port 1 is T2 and port 2 is T1 Feature 5637: serial port 2 is T3, Ethernet port 1 is T2 and port 2 is T1 Feature 5639: port 2 is T5, Ethernet Port 1 is T4 (top), port 2 is T3, port 3 is T2 and port 4 is T1	
VPD card	U*n*-P1-C10-C1	
Service processor		
Service processor card	U*n*-P1-C11	Yes
Service processor cable	U*n*-P1-C11-T5	
Time-of-day (TOD)	U*n*-P1-C11	
Time-of-day Battery	U*n*-P1-C11-E1	
HMC 1 connector	U*n*-P1-C11-T3	
HMC 2 connector	U*n*-P1-C11-T4	
SPCN 0 connector	U*n*-P1-C11-T1	
SPCN 1 connector	U*n*-P1-C11-T2	
Adapters		
PCI adapter in slot 1	U*n*-P1-C1	Yes

Table 9. FRU location table (continued).

Failing item name	Physical location code	Identify LED
PCI adapter in slot 2	U*n*-P1-C2	Yes
PCI adapter in slot 3	U*n*-P1-C3	Yes
PCI adapter in slot 4	U*n*-P1-C4	Yes
PCI adapter in slot 5	U*n*-P1-C5	Yes
PCI adapter in slot 6	U*n*-P1-C6	Yes
RIO/HSL adapter or 12x host channel adapter	U*n*-P1-C8	Yes
RIO/HSL adapter or 12x host channel adapter	U*n*-P1-C9	Yes
RIO/HSL adapter/ 12x host channel adapter connector	U*n*-P1-C8-T1	Yes
RIO/HSL adapter/ 12x host channel adapter connector	U*n*-P1-C8-T2	Yes
RIO/HSL adapter/ 12x host channel adapter connector	U*n*-P1-C9-T1	Yes
RIO/HSL adapter/ 12x host channel adapter connector	U*n*-P1-C9-T2	Yes
Memory modules		
Memory module 1	U*n*-P2-C1-C1	Yes
Memory module 2	U*n*-P2-C1-C2	Yes
Memory module 3	U*n*-P2-C1-C3	Yes
Memory module 4	U*n*-P2-C1-C4	Yes
Memory module 5	U*n*-P2-C1-C5	Yes
Memory module 6	U*n*-P2-C1-C6	Yes
Memory module 7	U*n*-P2-C1-C7	Yes
Memory module 8	U*n*-P2-C1-C8	Yes
Memory module 9	U*n*-P2-C1-C9	Yes
Memory module 10	U*n*-P2-C1-C10	Yes
Memory module 11	U*n*-P2-C1-C11	Yes
Memory module 12	U*n*-P2-C1-C12	Yes
Memory module 1	U*n*-P2-C2-C1	Yes
Memory module 2	U*n*-P2-C2-C2	Yes
Memory module 3	U*n*-P2-C2-C3	Yes
Memory module 4	U*n*-P2-C2-C4	Yes
Memory module 5	U*n*-P2-C2-C5	Yes
Memory module 6	U*n*-P2-C2-C6	Yes
Memory module 7	U*n*-P2-C2-C7	Yes
Memory module 8	U*n*-P2-C2-C8	Yes
Memory module 9	U*n*-P2-C2-C9	Yes
Memory module 10	U*n*-P2-C2-C10	Yes

Table 9. FRU location table (continued).

Failing item name	Physical location code	Identify LED
Memory module 11	U*n*-P2-C2-C11	Yes
Memory module 12	U*n*-P2-C2-C12	Yes
Note: First quad of memory modules is plugged into memory module slots P2-Cx-C3, P2-Cx-C6, P2-Cx-C9, and P2-Cx-C12. Second quad of memory modules is plugged into memory module slots P2-Cx-C2, P2-Cx-C5, P2-Cx-C8, and P2-Cx-C11. Third quad of memory modules is plugged into memory module slots P2-Cx-C1, P2-Cx-C4, P2-Cx-C7, and P2-Cx-C10.		
Device physical locations		
Disk drive 1	U*n*-P3-D1 (logical location with RAID card U*n*-P1-T13-L5-L0, logical location without RAID card U*n*-P1-T14-L5-L0)	Yes
Disk drive 2	U*n*-P3-D2 (logical location with RAID card U*n*-P1-T13-L4-L0, logical location without RAID card U*n*-P1-T14-L4-L0)	Yes
Disk drive 3	U*n*-P3-D3 (logical location with RAID card U*n*-P1-T13-L3-L0, logical location without RAID card U*n*-P1-T14-L3-L0)	Yes
Disk drive 4	U*n*-P3-D4 (logical location with RAID card U*n*-P1-T12-L5-L0, logical location without RAID card U*n*-P1-T12-L5-L0)	Yes
Disk drive 5	U*n*-P3-D5 (logical location with RAID card U*n*-P1-T12-L4-L0, logical location without RAID card U*n*-P1-T12-L4-L0)	Yes
Disk drive 6	U*n*-P3-D6 (logical location with RAID card U*n*-P1-T12-L3-L0, logical location without RAID card U*n*-P1-T12-L3-L0)	Yes
IDE drive 1	U*n*-P4-D1	Yes
Control panel		
Control panel (bottom media bay)	Un -D1	
Control panel system port 1	Un -D1-T4	
Server firmware		
Server firmware	U*n*-Y1	

9119-FHA

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

For additional information about reading your location code, use the following table to link to a specific topic.

Location code topics that might be of interest	Description
"Location code overview"	Contains background information on the use of location codes.
"Physical location codes"	Provides a definition for physical location code.
"Logical location codes" on page 33	Provides a definition for a logical location code.
"Location code format" on page 33	Provides descriptive information of the Un value in the location code string. For example U5886.001.
"Location code labels" on page 34	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 34	Provides a definition for the worldwide unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the feature immediately follows the first character (U5886). Refer to the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table, and follow the link to determine the service information.

Note: If locations for units are not in the preceding format, either they are not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

U7879.001.10ABCDE-P3-C31-T2-L23

The first part of the location code (through the T2 label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (L23) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is U*n*-A1.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit; however, the numbered positions following the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • U*tttt.sssssss*-A1 • U*ffff.sssssss*-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 10. Unit type and locations

Unit type (Utttt.mmm)	Link to location information
U9119.FHA	Locations

Location code labels

The following table identifies the location code label prefixes.

Note: These labels apply to system units only.

Table 11. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Use this information to help you map a location code to a position on the unit.

Note: The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.

The following diagrams show the field replaceable unit (FRU) layout in the system. Use these diagrams with the following tables.

Front   **Back**

Figure 19. Front and rear views
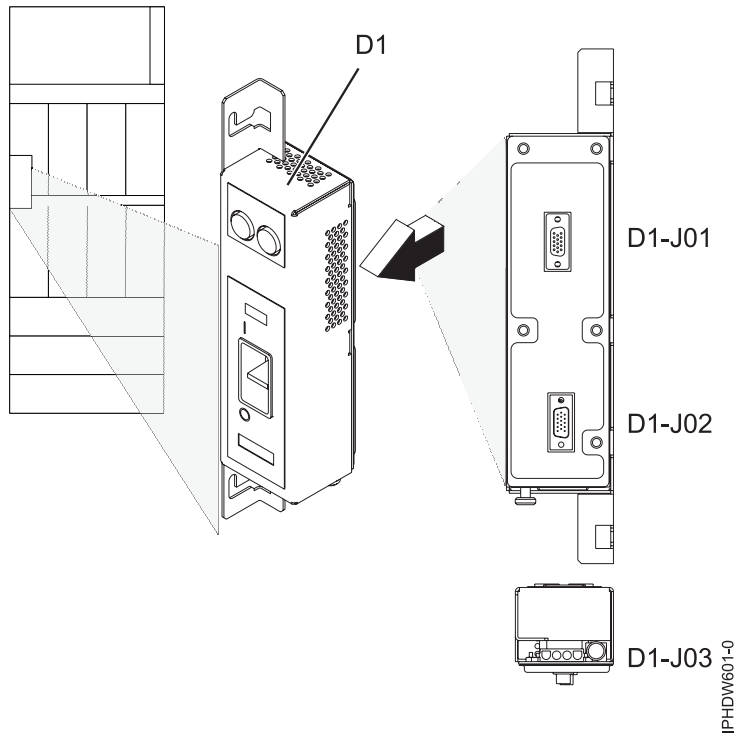
Figure 20. Emergency power off (EPO)
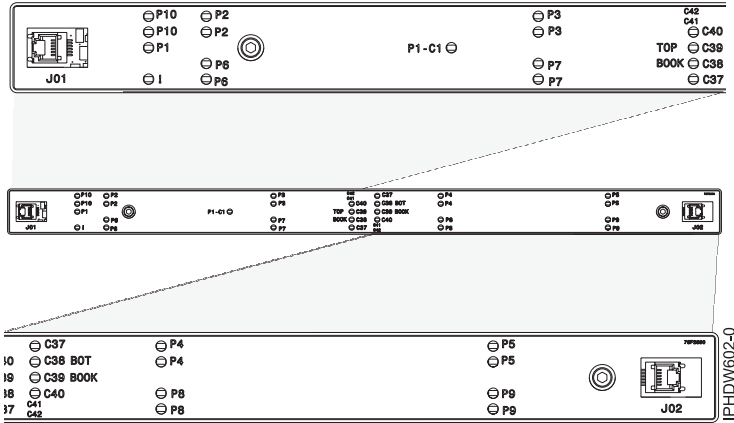
Figure 21. Light strip views
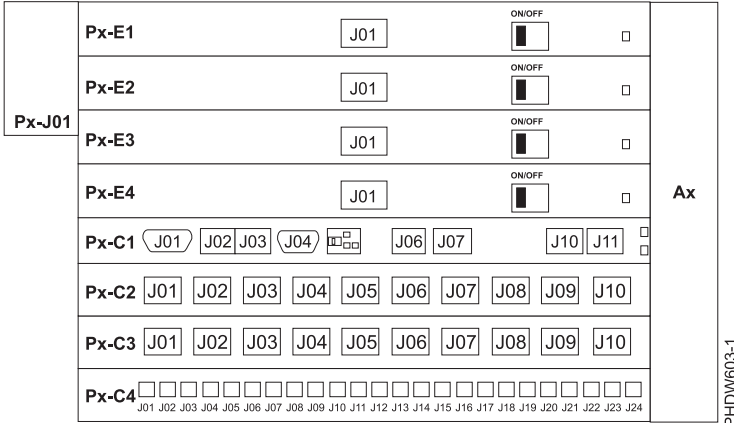
Figure 22. Bulk power assembly (BPA). Front is Un-A1 and back is Un-A2.
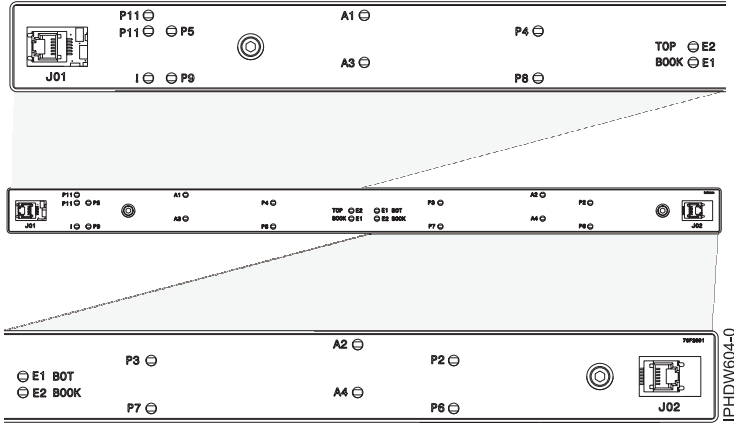
Figure 23. Light strip views
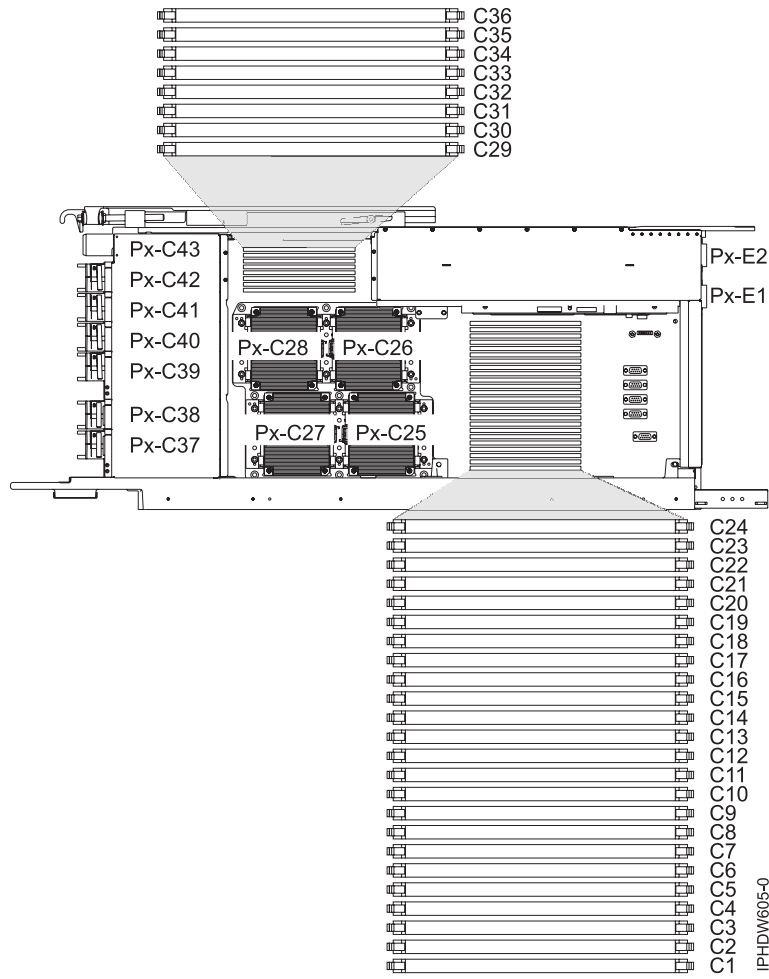
Figure 24. Node locations

The following table provides location codes for parts that make up the server.

Table 12. Bulk power assembly (BPA) locations, and failing components

Failing item name	Identify LED	Physical location code
System unit bulk power assembly (BPA)		U*n*
Bulk power distribution (BPD)		
Bulk power regulator (BPR) 2A	No	U*n*-P1–E1
Bulk power regulator (BPR) 1A	No	U*n*-P1–E4
Bulk power controller (BPC) A	No	U*n*-P1–C1
Bulk power distribution (BPD) 1A	No	U*n*-P1–C2
Bulk power distribution (BPD) 2A	No	U*n*-P1–C3
Bulk power hub (BPH) A	No	U*n*-P1–C4
Bulk power fan (BPF) A	No	U*n*-A1
Bulk power assembly (BPA) B. Rear of frame, B side power boundary		U*n*-P2
Bulk power regulator (BPR) 4B, top	No	U*n*-P2–E1
Bulk power regulator (BPR) 3B	No	U*n*-P2–E2
Bulk power regulator (BPR) 2B	No	U*n*-P2–E3

Table 12. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Identify LED	Physical location code
Bulk power regulator (BPR) 1B	No	U*n*-P2–E4
Bulk power controller (BPC) B	No	U*n*-P2–C1
Bulk power distribution (BPD) 1B	No	U*n*-P2–C2
Bulk power distribution (BPD) 2B	No	U*n*-P2–C3
Bulk power hub (BPH) B	No	U*n*-P2–C4
Bulk power fan (BPF) B	No	U*n*-A2
UEPO panel		U*n*-D1
Bulk power assembly (BPA)		
BPR 4		U*n*-P*x*-E1
Connector J01		U*n*-P*x*-E1–J01
BPR 3		U*n*-P*x*-E2
Connector J01		U*n*-P*x*-E2–J01
BPR 2		U*n*-P*x*-E3
Connector J01, IBF		U*n*-P*x*-E3–J01
BPR 1		U*n*-P*x*-E4
Connector J01, IBF		U*n*-P*x*-E4–J01
Bulk power controller (BPC)		U*n*-P*x*-C1
Connector J01, BPC cross communication	No	U*n*-P*x*-C1–J01
Connector J02, ethernet to BPH	No	U*n*-P*x*-C1–J02
Connector J03, ethernet to BPH	No	U*n*-P*x*-C1–J03
Connector J04, UEPO panel	No	U*n*-P*x*-C1–J04
Connector J06, BPF	No	U*n*-P*x*-C1–J06
Connector J07, BPC cross power	No	U*n*-P*x*-C1–J07
Connector J10, MDA 1 & 3, Y cable powers 2 MDAs	No	U*n*-P*x*-C1–J10
Connector J11, MDA 2 & 4, Y cable powers 2 MDAs	No	U*n*-P*x*-C1–J11
Bulk power distribution (BPD) connectors		
BPD1	No	U*n*-P*x*-C2
Connector J01, I/O drawer 1, DCA 2	No	U*n*-P*x*-C2–J01
Connector J02, I/O drawer 1, DCA 1	No	U*n*-P*x*-C2–J02
Connector J03, I/O drawer 2, DCA 2	No	U*n*-P*x*-C2–J03
Connector J04, I/O drawer 2, DCA 1	No	U*n*-P*x*-C2–J04
Connector J05, I/O drawer 3, DCA 2	No	U*n*-P*x*-C2–J05
Connector J06, I/O drawer 3, DCA 1	No	U*n*-P*x*-C2–J06
Connector J07, node P5	No	U*n*-P*x*-C2–J07
Connector J08, node P9	No	U*n*-P*x*-C2–J08
Connector J09, node P2	No	U*n*-P*x*-C2–J09
Connector J10, node P6	No	U*n*-P*x*-C2–J10
BPD2	No	U*n*-P*x*-C3

Table 12. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Identify LED	Physical location code
Connector J01, I/O drawer 4, DCA 2	No	U*n*-P*x*-C3–J01
Connector J02, I/O drawer 4, DCA 1	No	U*n*-P*x*-C3–J02
Connector J03, I/O drawer 5, DCA 2	No	U*n*-P*x*-C3–J03
Connector J04, I/O drawer 5, DCA 1	No	U*n*-P*x*-C3–J04
Connector J05, I/O drawer 6, DCA 2	No	U*n*-P*x*-C3–J05
Connector J06, I/O drawer 6, DCA 1	No	U*n*-P*x*-C3–J06
Connector J07, node P4 or I/O drawer 7	No	U*n*-P*x*-C3–J07
Connector J08, node P3 or I/O drawer 8	No	U*n*-P*x*-C3–J08
Connector J09, node P8 or I/O drawer 9	No	U*n*-P*x*-C3–J09
Connector J10, node P7 or I/O drawer 10	No	U*n*-P*x*-C3–J10
Bulk power hub (BPH)	No	U*n*-P*x*-C4
Connector J01–J24	No	U*n*-P*x*-C4–J*xx*
UEPO panel		U*n*-P*x*-D1
Connector J01, to BPC-A		U*n*-P*x*-D1–J01
Connector J02, to BPC-B		U*n*-P*x*-D1–J02
Central electronics complex (CEC)		
Midplane		U*n*-P1
Anchor card	Yes	U*n*-P1–C1
FSP card 0	Yes	U*n*-P1–C2
Clock card 0	Yes	U*n*-P1–C3
Clock card 1	Yes	U*n*-P1–C4
FSP card 1	Yes	U*n*-P1–C5
Processor book 0, plugs into midplane	Yes	U*n*-P2
Processor book 1	Yes	U*n*-P6
Processor book 2	Yes	U*n*-P3
Processor book 3	Yes	U*n*-P7
Processor book 4	Yes	U*n*-P4
Processor book 5	Yes	U*n*-P8
Processor book 6	Yes	U*n*-P5
Processor book 7	Yes	U*n*-P9
Air moving device AMD 1	Yes	U*n*-A1
Motor drive assembly (MDA) MDA 1	Yes	U*n*-A1–E1
Air moving device AMD 2	Yes	U*n*-A2
MDA 2	Yes	U*n*-A2–E1
Air moving device AMD 3	Yes	U*n*-A3
MDA 3	Yes	U*n*-A3–E1
Air moving device AMD 4	Yes	U*n*-A4
MAD 4	Yes	U*n*-A4–E1
Processor book Where *m* varies from 2–9		
DCA 1	Yes	U*n*-P*m*-E2

Table 12. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Identify LED	Physical location code
DCA 2	Yes	U*n*-P*m*-E1
I/O hub cards Where *m* varies from 2–9		
Slot T	Yes	U*n*-P*m*-C40
Slot S	Yes	U*n*-P*m*-C39
Slot U	Yes	U*n*-P*m*-C38
Slot V	Yes	U*n*-P*m*-C37
I/O hub card connectors Where *m* varies from 2–9		
Slot T	Yes	U*n*-P*m*-C40–T01 and U*n*-P*m*-C40–T02
Slot S	Yes	U*n*-P*m*-C39–T01 and U*n*-P*m*-C39–T02
Slot U	Yes	U*n*-P*m*-C38–T01 and U*n*-P*m*-C38–T02
Slot V	Yes	U*n*-P*m*-C37–T01 and U*n*-P*m*-C37–T02
Book FSP card 1		U*n*-P*m*-C42
Book FSP card 0		U*n*-P*m*-C41
FSP card connector J01		U*n*-P*m*-C*x*-T01
FSP card connector J02		U*n*-P*m*-C*x*-T02
Memory Where *m* varies from 2–9		
DIMM S1	Yes	U*n*-P*m*-C36
DIMM S2	Yes	U*n*-P*m*-C35
DIMM S3	Yes	U*n*-P*m*-C34
DIMM S4	Yes	U*n*-P*m*-C33
DIMM S5	Yes	U*n*-P*m*-C32
DIMM S6	Yes	U*n*-P*m*-C31
DIMM S7	Yes	U*n*-P*m*-C30
DIMM S8	Yes	U*n*-P*m*-C29
DIMM T1	Yes	U*n*-P*m*-C24
DIMM T2	Yes	U*n*-P*m*-C23
DIMM T3	Yes	U*n*-P*m*-C22
DIMM T4	Yes	U*n*-P*m*-C21
DIMM T5	Yes	U*n*-P*m*-C20
DIMM T6	Yes	U*n*-P*m*-C19
DIMM T7	Yes	U*n*-P*m*-C18
DIMM T8	Yes	U*n*-P*m*-C17
DIMM V1	Yes	U*n*-P*m*-C16
DIMM V2	Yes	U*n*-P*m*-C15
DIMM V3	Yes	U*n*-P*m*-C14
DIMM V4	Yes	U*n*-P*m*-C13
DIMM V5	Yes	U*n*-P*m*-C12
DIMM V6	Yes	U*n*-P*m*-C11
DIMM V7	Yes	U*n*-P*m*-C10
DIMM V8	Yes	U*n*-P*m*-C9

Table 12. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Identify LED	Physical location code
DIMM U1	Yes	U*n*-P*m*-C8
DIMM U2	Yes	U*n*-P*m*-C7
DIMM U3	Yes	U*n*-P*m*-C6
DIMM U4	Yes	U*n*-P*m*-C5
DIMM U5	Yes	U*n*-P*m*-C4
DIMM U6	Yes	U*n*-P*m*-C3
DIMM U7	Yes	U*n*-P*m*-C2
DIMM U8	Yes	U*n*-P*m*-C1
MCM-S		U*n*-P*m*-C28
MCM-T		U*n*-P*m*-C26
MCM-U		U*n*-P*m*-C25
MCM-V		U*n*-P*m*-C27
Front light strip	Yes	U*n*-P10
Back light strip	Yes	U*n*-P11
Central electronics complex (CEC) cage connectors Where *m* varies from 2–5		
Connector J1, front light strip	No	U*n*-P1–C*m*-T1
Connector J2, back light strip	No	U*n*-P1–C*m*-T2
Connector J3, ethernet connects to BHP A	Yes	U*n*-P1–C*m*-T3
Connector J4Ethernet connects to BHP B	Yes	U*n*-P1–C*m*-T4
Connector J5, SPCN connector	No	U*n*-P1–C*m*-T5
Book connectors		
Super UPIC power connector J01	No	U*n*-P*x*-J01
Super UPIC power connector J02	No	U*n*-P*x*-J02
Motor drive assembly (MDA) MDA 1	Yes	U*n*-A2–E1
MDA 2	Yes	U*n*-A4–E1
MDA 3	Yes	U*n*-A3–E1
MDA 4	Yes	U*n*-A1–E1
Device physical locations		
Disk drive 1		U*n*-P3-D01 (logical location P2-T6-L8-L0)
Disk drive 2		U*n*-P3-D02 (logical location P2-T6-L9-L0)
Disk drive 3		U*n*-P3-D03 (logical location P2-T6-L10-L0)
Disk drive 4		U*n*-P3-D04 (logical location P2-T6-L11-L0)
Disk drive 5		U*n*-P4-D05 (logical location P2-T5-L8-L0)
Disk drive 6		U*n*-P4-D06 (logical location P2-T5-L9-L0)
Disk drive 7		U*n*-P4-D07 (logical location P2-T5-L10-L0)

Table 12. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Identify LED	Physical location code
Disk drive 8		Un-P4-D08 (logical location P2-T5-L11-L0)
Disk drive 9		Un-P5-D09 (logical location P1-T6-L8-L0)
Disk drive 10		Un-P5-D10 (logical location P1-T6-L9-L0)
Disk drive 11		Un-P5-D11 (logical location P1-T6-L10-L0)
Disk drive 12		Un-P5-D12 (logical location P1-T6-L11-L0)
Disk drive 13		Un-P6-D13 (logical location P1-T5-L8-L0)
Disk drive 14		Un-P6-D14 (logical location P1-T5-L9-L0)
Disk drive 15		Un-P6-D15 (logical location P1-T5-L10-L0)
Disk drive 16		Un-P6-D16 (logical location P1-T5-L11-L0)

Note:

1. The following table provides information necessary to identify the IOP to which an IOA is assigned.
   - The left column indicates the domain in which IOA assignment is allowed.
   - The right column is used to determine the IOP to which an IOA is assigned.
   - The first position in the list must be an IOP. The remaining positions may be IOPs or IOAs. IOAs are assigned to the first IOP located to their left in the list. Although IOAs can be manually reassigned using SST/DST, the IOA assignments return to the default order after each IPL.

Table 13. Identify the IOP to which IOAs are assigned

Multi-adapter bridge domain / PCI bridge set	IOA assignment rules
P1-C01 through P1-C04	P1-C02, P1-C03, P1-C04
P1-C05 through P1-C07	P1-C06, P1-C07
P2-C01 through P2-C04	P2-C02, P2-C03, P2-C04
P2-C05 through P2-C07	P2-C06, P2-C07

9125-F2A

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

For additional information about reading your location code, use the following table to link to a specific topic.

Location code topics that might be of interest	Description
"Location code overview" on page 43	Contains background information on the use of location codes.

Location code topics that might be of interest	Description
"Physical location codes"	Provides a definition for physical location code.
"Logical location codes"	Provides a definition for a logical location code.
"Location code format" on page 44	Provides descriptive information of the U*n* value in the location code string. For example U5886.001.
"Location code labels" on page 45	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 45	Provides a definition for the worldwide unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the feature immediately follows the first character (U5886). Refer to the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table, and follow the link to determine the service information.

Note: If locations for units are not in the preceding format, either they are not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

`U7879.001.10ABCDE-P3-C31-T2-L23`

The first part of the location code (through the `T2` label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (`L23`) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is `Un-A1`.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit; however, the numbered positions following the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
`Utttt.mmm.sssssss-A1`	`Uffff.ccc.sssssss-A1`
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • `Utttt.sssssss-A1` • `Uffff.sssssss-A1`	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 14. Unit type and locations

Unit type (Utttt.mmm)	Link to location information
U9125.F2A	Locations
U9A00.100	VPD designation for the BPC, see Locations
U78A1.001	VPD designation for the node, see Locations

Location code labels

The following table identifies the location code label prefixes.

Note: These labels apply to system units only.

Table 15. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Use this information to help you map a location code to a position on the unit.

Note: The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.

The following diagrams show the field replaceable unit (FRU) layout in the system. Use these diagrams with the following tables.

Figure 25. Front and rear views
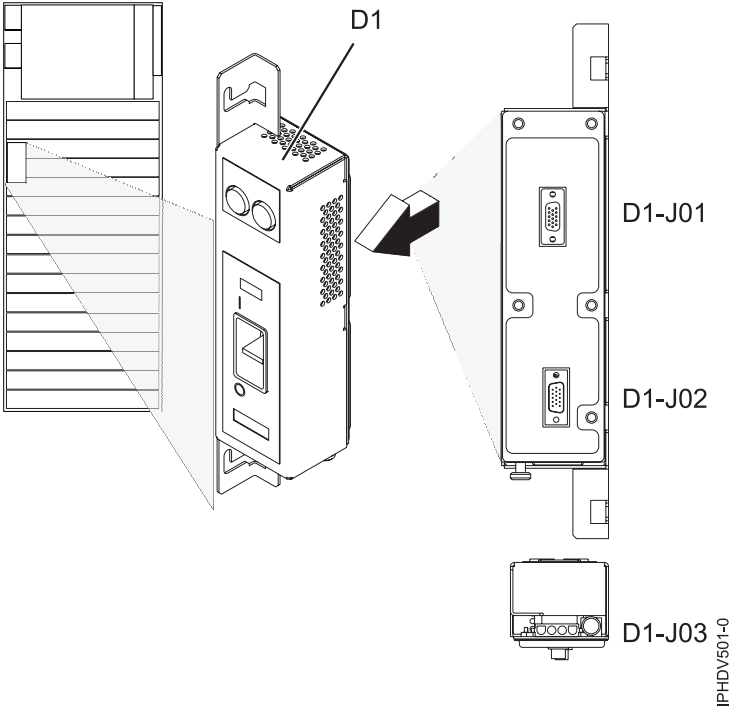
Figure 26. Emergency power off (EPO)
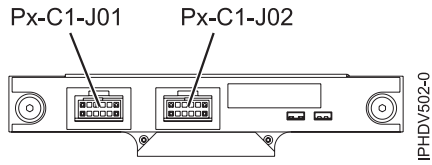
Figure 27. Modular water unit (MWU)
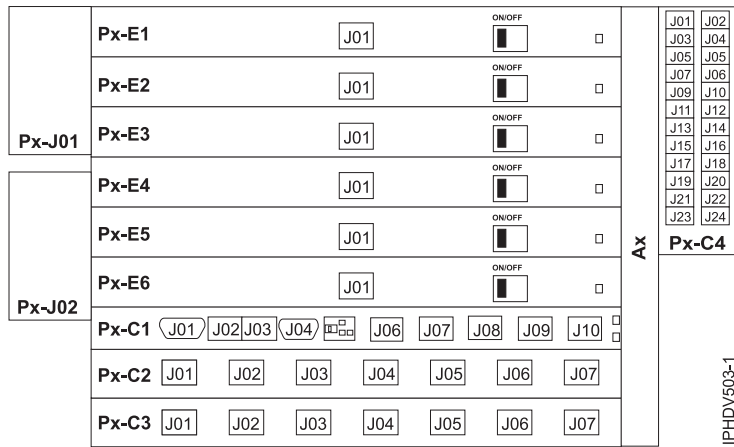
Figure 28. Bulk power assembly (BPA). Front is Un-A1 and back is Un-A2
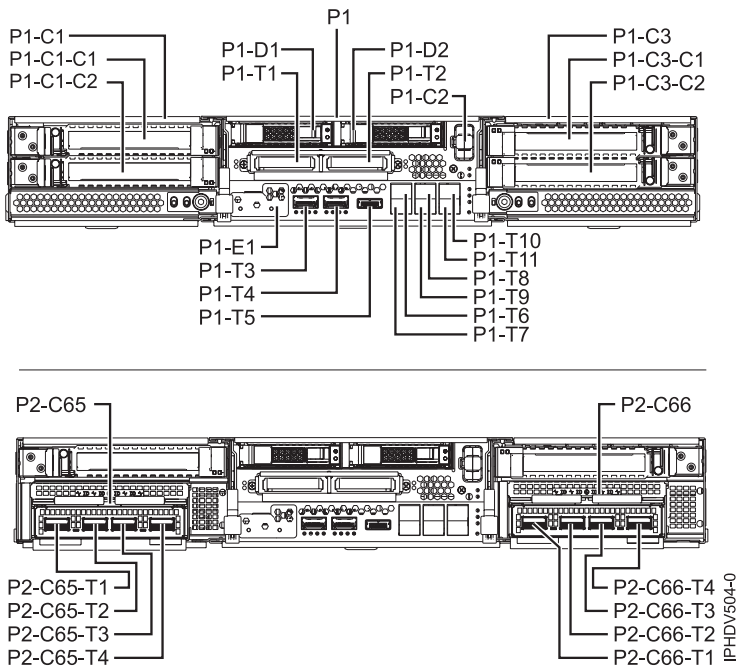
Figure 29. I/O full assembly and I/O full assembly with two GX adapters
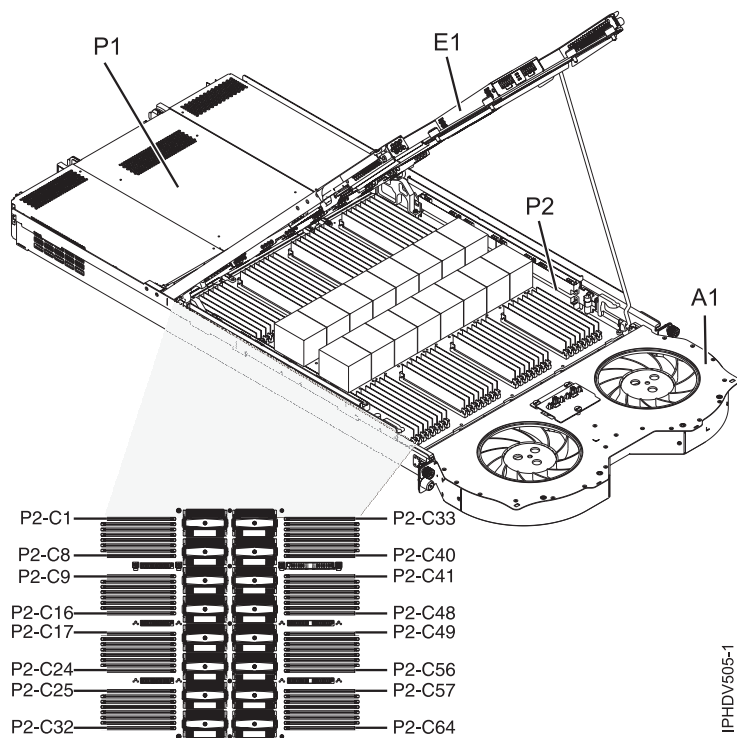
Figure 30. System view

The following table provides location codes for parts that make up the server.

Table 16. Bulk power assembly (BPA) locations, and failing components

Failing item name	Symbolic FRU name	Physical location code
System unit bulk power assembly (BPA)		U*n*
Bulk power hub (BPH) Where: • Cage A is U*n*-P1-C1 • Cage B is U*n*-P2-C1		
Bulk power hub (BPH)		U*n*-P*x*-C1
Connector J01		U*n*-P*x*-C1-T1
Connector J02		U*n*-P*x*-C1-T2
Connector J03		U*n*-P*x*-C1-T3
Connector J04		U*n*-P*x*-C1-T4
Connector J05		U*n*-P*x*-C1-T5
Connector J06		U*n*-P*x*-C1-T6
Connector J07		U*n*-P*x*-C1-T7
Connector J08		U*n*-P*x*-C1-T8
Connector J09		U*n*-P*x*-C1-T9
Connector J10		U*n*-P*x*-C1-T10
Connector J11		U*n*-P*x*-C1-T11
Connector J12		U*n*-P*x*-C1-T12
Connector J13		U*n*-P*x*-C1-T13

Table 16. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Symbolic FRU name	Physical location code
Connector J14		Un-Px-C1-T14
Connector J15		Un-Px-C1-T15
Connector J16		Un-Px-C1-T16
Bulk power distribution (BPD) Where: • Side A, top most is Un-P1-C3 • Side A, bottom most is Un-P1-C4 • Side B, top most is Un-P2-C2 • Side B, bottom most is Un-P2-C4		
Bulk power distribution (BPD) x		Un-Px-Cx
Bulk power distribution (BPD) x connector J01		Un-Px-Cx-T1
Bulk power distribution (BPD) x connector J02		Un-Px-Cx-T2
Bulk power distribution (BPD) x connector J03		Un-Px-Cx-T3
Bulk power distribution (BPD) x connector J04		Un-Px-Cx-T4
Bulk power distribution (BPD) x connector J05		Un-Px-Cx-T5
Bulk power distribution (BPD) n connector J06		Un-Px-Cx-T6
Bulk power distribution (BPD) x connector J07		Un-Px-Cx-T7
Bulk power regulator (BPR) Where: • Cage A is Un-P1 • Cage B is Un-P2		
Bulk power controller (BPC)		Un-Px
BPR 11		Un-Px-E6
Connector J00		Un-Px-E6–T1
BPR 9		Un-Px-E5
Connector J00		Un-Px-E5–T1
BPR 7		Un-Px-E4
Connector J00		Un-Px-E4–T1
BPR 5		Un-Px-E3
Connector J00		Un-Px-E3–T1
BPR 3		Un-Px-E2
Connector J00		Un-Px-E2–T1
BPR 1		Un-Px-E1
Connector J00		Un-Px-E1–T1
Bulk power controller (BPC)		
Bulk power controller (BPC)		Un-P1–C2
Connector J01		Un-P1–C2–T1
Connector J02		Un-P1–C2–T2

Table 16. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Symbolic FRU name	Physical location code
Connector J03		U*n*-P1–C2–T3
Connector J04		U*n*-P1–C2–T4
Connector J05		U*n*-P1–C2–T5
Connector J06		U*n*-P1–C2–T6
Connector J07		U*n*-P1–C2–T7
Connector J08		U*n*-P1–C2–T8
Connector J09		U*n*-P1–C2–T9
Bulk power fan (BPF)		
Bulk power fan (BPF) A (front)		U*n*-A1
Bulk power fan (BPF) B (back)		U*n*-A2
Emergency power off (EPO)		
Emergency power off (EPO)		U*n*-D1
Emergency power off (EPO) connector J01, BPA connection		U*n*-D1-J01
Emergency power off (EPO) J02, BPA connection		U*n*-D1-J02
Emergency power off (EPO) J03, room connection		U*n*-D1-J03
Integrated battery feature (IBF)		
IBF11		U*n*-E1
IBF11, connector J01		U*n*-E1-J01
IBF9		U*n*-E2
IBF9, connector J01		U*n*-E2-J01
IBF7		U*n*-E3
IBF7, connector J01		U*n*-E3-J01
IBF5		U*n*-E4
IBF5, connector J01		U*n*-E4-J01
IBF3		U*n*-E5
IBF3, connector J01		U*n*-E5-J01
IBF1		U*n*-E6
IBF1, connector J01		U*n*-E6-J01
IBF12		U*n*-E7
IBF12, connector J01		U*n*-E7-J01
IBF10		U*n*-E8
IBF10, connector J01		U*n*-E8-J01
IBF8		U*n*-E9
IBF8, connector J01		U*n*-E9-J01
IBF6		U*n*-E10
IBF6, connector J01		U*n*-E10-J01
IBF4		U*n*-E11
IBF4, connector J01		U*n*-E11-J01

Table 16. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Symbolic FRU name	Physical location code
IBF2		U*n*-E12
IBF2, connector J01		U*n*-E12-J01
Bulk power assembly BPA Where: • Bulk power assembly (BPA) A (front) is U*n*-P1 • Bulk power assembly (BPA) B (back) is U*n*-P2		
BPA		U*n*-P*x*
Line cord 1 powers BPRs 1,2,3		U*n*-P*x*-J02
Line cord 2 powers BPRs 4,5,6		U*n*-P*x*-J01
BPR 6		U*n*-P*x*-E1
Connector J01		U*n*-P*x*-E1-J01
BPR 5		U*n*-P*x*-E2
Connector J01		U*n*-P*x*-E2-J01
BPR 4		U*n*-P*x*-E3
Connector J01		U*n*-P*x*-E3-J01
BPR 3		U*n*-P*x*-E4
Connector J01		U*n*-P*x*-E4-J01
BPR 2		U*n*-P*x*-E5
Connector J01		U*n*-P*x*-E5-J01
BPR 1		U*n*-P*x*-E6
Connector J01		U*n*-P*x*-E6-J01
Bulk power distribution (BPD) Top		
BPD		U*n*-P*x*-C2
Connector J01		U*n*-P*x*-C2-J01
Connector J02		U*n*-P*x*-C2-J02
Connector J03		U*n*-P*x*-C2-J03
Connector J04		U*n*-P*x*-C2-J04
Connector J05		U*n*-P*x*-C2-J05
Connector J06		U*n*-P*x*-C2-J06
Connector J07		U*n*-P*x*-C2-J07
Bulk power distribution (BPD) Bottom		
BPD		U*n*-P*x*-C3
Connector J01		U*n*-P*x*-C3-J01
Connector J02		U*n*-P*x*-C3-J02
Connector J03		U*n*-P*x*-C3-J03
Connector J04		U*n*-P*x*-C3-J04
Connector J05		U*n*-P*x*-C3-J05
Connector J06		U*n*-P*x*-C3-J06
Connector J07		U*n*-P*x*-C3-J07

Table 16. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Symbolic FRU name	Physical location code
Modular water units (MWU) Where: • Modular Water Units A is U*n*-P3 • Modular Water Unit B is U*n*-P4		
MWU		U*n*-P*x*-C1
Connector J01		U*n*-P*x*-C1-J01
Connector J02		U*n*-P*x*-C1-J02
Fill and drain tool (FDT)		
Front frame connector		U*n*-J01
Rear frame connector		U*n*-J02
FDT front		U*n*-P5
Control card		U*n*-P5-C1
FDT back		U*n*-P6
Control card		U*n*-P6-C1

Table 17. Processor subsystem assembly locations, and failing components

Failing item name	Symbolic failing item name	Physical location code	Identify LED
System unit		U*n*	
Fan			
Fan		U*n*-A1	Yes
Power supply (DCA)			
Power supply		U*n*-E1	Yes
Power supply connector 1		U*n*-E1-J01	
Power supply connector 2		U*n*-E1-J02	
Backplane			
System backplane		U*n*-P1	Yes
Time-of-day battery	TOD_BAT	U*n*-P1-E1	
Processor backplane • System processor	ANYPROC MEMBRD MEMCTLR	U*n*-P2	Yes
System backplane ports			
IB 12x left communication port, rear		U*n*-P1-T1	
IB 12x right communication port, rear		U*n*-P1-T2	
10 GB optical, rear left		U*n*-P1-T3	
10 GB optical, rear right		U*n*-P1-T4	
SAS connector		U*n*-P1-T5	Yes
1 GB ethernet port 1, rear		U*n*-P1-T6	Yes
1 GB ethernet port 2, rear		U*n*-P1-T7	Yes
1 GB ethernet port 3, rear		U*n*-P1-T8	Yes
1 GB ethernet port 4, rear		U*n*-P1-T9	Yes

Table 17. Processor subsystem assembly locations, and failing components (continued)

Failing item name	Symbolic failing item name	Physical location code	Identify LED
HMC 1 (FSP)		U*n*-P1-T10	Yes
HMC 2 (FSP)		U*n*-P1-T11	Yes
Adapters			
GX adapter 0		U*n*-P2-C65	Yes
GX adapter 0, port 0		U*n*-P2-C65-T1	Yes
GX adapter 0, port 1		U*n*-P2-C65-T2	Yes
GX adapter 0, port 2		U*n*-P2-C65-T3	Yes
GX adapter 0, port 3		U*n*-P2-C65-T4	Yes
GX adapter 1		U*n*-P2-C66	Yes
GX adapter 1, port 0		U*n*-P2-C66-T1	Yes
GX adapter 1, port 1		U*n*-P2-C66-T2	Yes
GX adapter 1, port 2		U*n*-P2-C66-T3	Yes
GX adapter 1, port 3		U*n*-P2-C66-T4	Yes
Memory modules			
Memory module 1	MEMDIMM	U*n*-P2-C1	Yes
Memory module 2	MEMDIMM	U*n*-P2-C2	Yes
Memory module 3	MEMDIMM	U*n*-P2-C3	Yes
Memory module 4	MEMDIMM	U*n*-P2-C4	Yes
Memory module 5	MEMDIMM	U*n*-P2-C5	Yes
Memory module 6	MEMDIMM	U*n*-P2-C6	Yes
Memory module 7	MEMDIMM	U*n*-P2-C7	Yes
Memory module 8	MEMDIMM	U*n*-P2-C8	Yes
Memory module 9	MEMDIMM	U*n*-P2-C9	Yes
Memory module 10	MEMDIMM	U*n*-P2-C10	Yes
Memory module 11	MEMDIMM	U*n*-P2-C11	Yes
Memory module 12	MEMDIMM	U*n*-P2-C12	Yes
Memory module 13	MEMDIMM	U*n*-P2-C13	Yes
Memory module 14	MEMDIMM	U*n*-P2-C14	Yes
Memory module 15	MEMDIMM	U*n*-P2-C15	Yes
Memory module 16	MEMDIMM	U*n*-P2-C16	Yes
Memory module 17	MEMDIMM	U*n*-P2-C17	Yes
Memory module 18	MEMDIMM	U*n*-P2-C18	Yes
Memory module 19	MEMDIMM	U*n*-P2-C19	Yes
Memory module 20	MEMDIMM	U*n*-P2-C20	Yes
Memory module 21	MEMDIMM	U*n*-P2-C21	Yes
Memory module 22	MEMDIMM	U*n*-P2-C22	Yes
Memory module 23	MEMDIMM	U*n*-P2-C23	Yes
Memory module 24	MEMDIMM	U*n*-P2-C24	Yes
Memory module 25	MEMDIMM	U*n*-P2-C25	Yes

Table 17. Processor subsystem assembly locations, and failing components (continued)

Failing item name	Symbolic failing item name	Physical location code	Identify LED
Memory module 26	MEMDIMM	U*n*-P2-C26	Yes
Memory module 27	MEMDIMM	U*n*-P2-C27	Yes
Memory module 28	MEMDIMM	U*n*-P2-C28	Yes
Memory module 29	MEMDIMM	U*n*-P2-C29	Yes
Memory module 30	MEMDIMM	U*n*-P2-C30	Yes
Memory module 31	MEMDIMM	U*n*-P2-C31	Yes
Memory module 32	MEMDIMM	U*n*-P2-C32	Yes
Memory module 33	MEMDIMM	U*n*-P2-C33	Yes
Memory module 34	MEMDIMM	U*n*-P2-C34	Yes
Memory module 35	MEMDIMM	U*n*-P2-C35	Yes
Memory module 36	MEMDIMM	U*n*-P2-C36	Yes
Memory module 37	MEMDIMM	U*n*-P2-C37	Yes
Memory module 38	MEMDIMM	U*n*-P2-C38	Yes
Memory module 39	MEMDIMM	U*n*-P2-C39	Yes
Memory module 40	MEMDIMM	U*n*-P2-C40	Yes
Memory module 41	MEMDIMM	U*n*-P2-C41	Yes
Memory module 42	MEMDIMM	U*n*-P2-C42	Yes
Memory module 43	MEMDIMM	U*n*-P2-C43	Yes
Memory module 44	MEMDIMM	U*n*-P2-C44	Yes
Memory module 45	MEMDIMM	U*n*-P2-C45	Yes
Memory module 46	MEMDIMM	U*n*-P2-C46	Yes
Memory module 47	MEMDIMM	U*n*-P2-C47	Yes
Memory module 48	MEMDIMM	U*n*-P2-C48	Yes
Memory module 49	MEMDIMM	U*n*-P2-C49	Yes
Memory module 50	MEMDIMM	U*n*-P2-C50	Yes
Memory module 51	MEMDIMM	U*n*-P2-C51	Yes
Memory module 52	MEMDIMM	U*n*-P2-C52	Yes
Memory module 53	MEMDIMM	U*n*-P2-C53	Yes
Memory module 54	MEMDIMM	U*n*-P2-C54	Yes
Memory module 55	MEMDIMM	U*n*-P2-C55	Yes
Memory module 56	MEMDIMM	U*n*-P2-C56	Yes
Memory module 57	MEMDIMM	U*n*-P2-C57	Yes
Memory module 58	MEMDIMM	U*n*-P2-C58	Yes
Memory module 59	MEMDIMM	U*n*-P2-C59	Yes
Memory module 60	MEMDIMM	U*n*-P2-C60	Yes
Memory module 61	MEMDIMM	U*n*-P2-C61	Yes
Memory module 62	MEMDIMM	U*n*-P2-C62	Yes
Memory module 63	MEMDIMM	U*n*-P2-C63	Yes
Memory module 64	MEMDIMM	U*n*-P2-C64	Yes

Table 17. Processor subsystem assembly locations, and failing components (continued)

Failing item name	Symbolic failing item name	Physical location code	Identify LED
Device locations			
Disk drive 1		U*n*-P1-D1	
Disk drive 2		U*n*-P1-D2	
Feature 5798 Where: • Front right DCA is U*n*-E1 • Front left DCA is U*n*-E2 • Font left backplane is U*n*-P1 • Front back backplane is U*n*-P2			
DCA		U*n*-E*x*	Yes
DCA Super UPIC connector, left front		U*n*-E*x*-T1	Yes
DCA Super UPIC connector, right front		U*n*-E*x*-T2	Yes
Fan 1		U*n*-A1	Yes
Fan 2		U*n*-A2	Yes
Fan 3		U*n*-A3	Yes
Fan 4		U*n*-A4	Yes
Backplane	MA_BRDG MABRCFG PPCITWR PRI_PCI SI_PHB SIIOADP PIOCARD MASBUS SLOTERR SIADPCD HSL_I4 HSL_LNK TWRPLNR	U*n*-P*x*	Yes
Slot 1	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C1	Yes
Slot 2	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C2	Yes
Slot 3	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C3	Yes
Slot 4	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C4	Yes
Slot 5	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C5	Yes
Slot 6	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C6	Yes
Slot 7	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C7	Yes
Slot 8	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C8	Yes
Slot 9	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C9	Yes
Slot 10	PIOCARD MASBUS SLOTERR	U*n*-P*x*-C10	Yes
IB riser port, right front		U*n*-P*x*-T1	Yes

Table 17. Processor subsystem assembly locations, and failing components (continued)

Failing item name	Symbolic failing item name	Physical location code	Identify LED
IB riser port, left front		U*n*-P*x*-T2	Yes
DASD backplane 1		U*n*-P3	Yes
DASD backplane 2		U*n*-P4	Yes
DASD backplane 3		U*n*-P5	Yes
DASD backplane 4		U*n*-P6	Yes
Media bay power connector		U*n*-P*x*–T3	
Integrated SCSI controller port		U*n*-P*x*–T4	
Integrated SCSI controller port		U*n*-P*x*–T5	
DASD 1		U*n*-P3–D01	Yes
DASD 2		U*n*-P3–D02	Yes
DASD 3		U*n*-P3–D03	Yes
DASD 4		U*n*-P3–D04	Yes
DASD 5		U*n*-P4–D05	Yes
DASD 6		U*n*-P4–D06	Yes
DASD 7		U*n*-P4–D07	Yes
DASD 8		U*n*-P4–D08	Yes
DASD 9		U*n*-P5–D09	Yes
DASD 10		U*n*-P5–D10	Yes
DASD 11		U*n*-P5–D11	Yes
DASD 12		U*n*-P5–D12	Yes
DASD 13		U*n*-P6–D13	Yes
DASD 14		U*n*-P6–D14	Yes
DASD 15		U*n*-P6–D15	Yes
DASD 16		U*n*-P6–D16	Yes

0595, 5095, and 7311-D20

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

Use the following table to link to a specific topic for additional information when reading and understanding your location code.

Table 18. Location code topics

Location code topics	Description
"Location code overview" on page 57	Contains background information about using location codes.
"Physical location codes" on page 57	Provides definitions for physical location codes.
"Logical location codes" on page 57	Provides definitions for logical location codes.

Table 18. Location code topics (continued)

Location code topics	Description
"Location code format" on page 58	Provides format information of the U*n* value in the location code string. For example U7031.001.
"Location code labels" on page 59	Provides definitions for location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7031.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 59	Provides definitions for the worldwide unique identifiers. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the unit type and model immediately follow the first character (Utttt.mmm).

- If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.
- If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model number and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, do the following:
  1. Examine the display panels on all of the I/O enclosures that are connected to the server until you find one with the same characters in the first 5 digits of the top line in the enclosure's display.
  2. Record the I/O enclosure's real machine type and model from the I/O enclosure label.
  3. Match the I/O enclosure's machine type and model in the unit type and locations table and then follow the link to determine the service information.

  Note: If you have a location code that does not follow the location code format as described in "Location code format" on page 58 it is either not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

U7031.001.10ABCDE-P3-C31-T2-L23

The first part of the location code (through the T2 label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (L23) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is U*n*-A1.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit. However, the numbered positions following the U are variables and are dependent on your server. Each row in the following table defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • U*tttt.sssssss*-A1 • U*ffff.sssssss*-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

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Table 19. Unit type and locations

Unit type (Utttt.mmm)	Link to location information
U0595.001	Locations
U5095.001	Locations
U7311.D20	Locations

Location code labels

The following table describes the location code label prefixes. These labels apply to system units only.

Table 20. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SCSI target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware field replaceable unit (FRU)	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Learn how to locate field replaceable units (FRUs) by using logical and physical location codes.

Note: The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.

The following diagrams show field replaceable unit (FRU) layout in the expansion unit. Use these diagrams with the following tables.

Note: Some units may have labels that designate location codes other than those shown in the following illustrations and tables. If that is the case, use the location codes shown in the following illustrations and tables.

IPHAU800-1

Figure 31. Front view of the expansion unit

IPHAU801-5
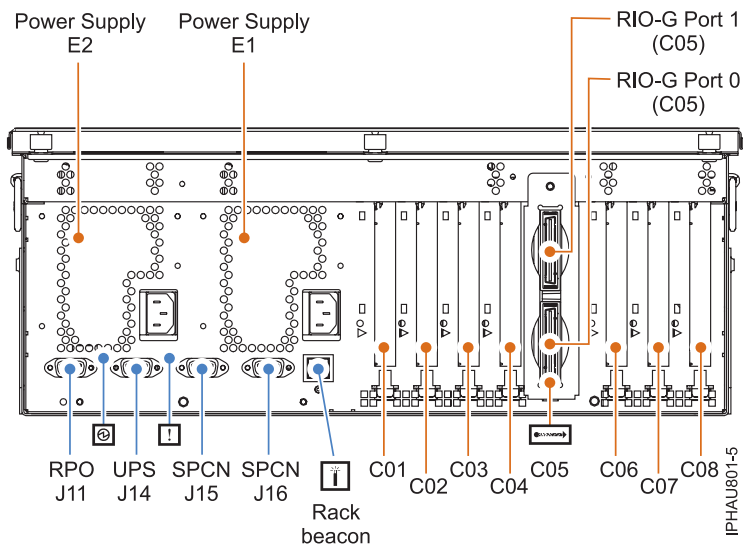
Figure 32. Back view of the expansion unit
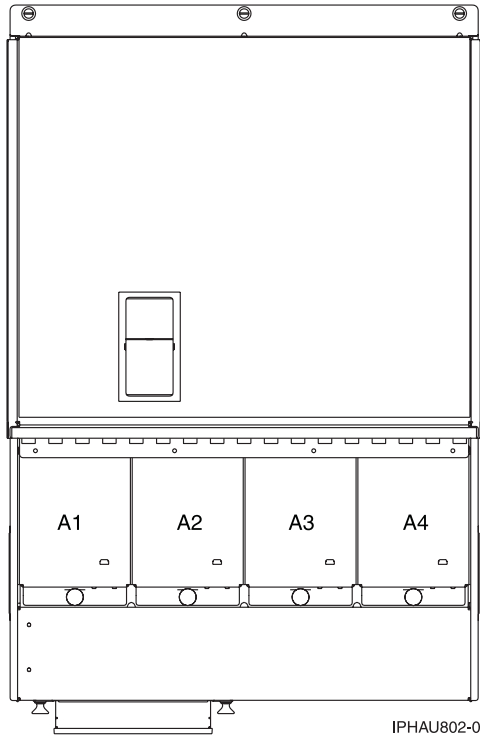
Figure 33. Top view of the expansion unit

The following table gives the components available for callout on the expansion units, and matches those components with the FRU containing the component. For part numbers associated with failing components, see "0595, 5095, and 7311-D20 system parts" on page 180.

Table 21. FRU locations and failing components for the expansion unit

Failing item name	Physical location code	Identify LED
Backplane • SPCN • Card enclosure or backplane • Multi-adapter bridge (all)	U*n*-P1	Yes
PCI adapter in slot 1	U*n*-P1-C01	Yes
PCI adapter in slot 2	U*n*-P1-C02	Yes
PCI adapter in slot 3	U*n*-P1-C03	Yes
PCI adapter in slot 4	U*n*-P1-C04	Yes
RIO/HSL adapter	U*n*-P1-C05	Yes
RIO/HSL adapter connector (bottom connector	U*n*-P1-C05-00	Yes
RIO/HSL adapter connector (top connector)	U*n*-P1-C05-01	Yes
PCI adapter in slot 6	U*n*-P1-C06	Yes
PCI adapter in slot 7	U*n*-P1-C07	Yes
PCI adapter in slot 8	U*n*-P1-C08	Yes

Table 21. FRU locations and failing components for the expansion unit (continued)

Failing item name	Physical location code	Identify LED
PCI bridge set 1	U*n*-P1 U*n*-P1-C01 U*n*-P1-C02 U*n*-P1-C03 U*n*-P1-C04	
PCI bridge set 2	U*n*-P1 U*n*-P1-C06 U*n*-P1-C07 U*n*-P1-C08	
EPO connector (J11)	U*n*-P1-T1	
UPS connector (J14)	U*n*-P1-T2	
SPCN connector (J15)	U*n*-P1-T3	
SPCN connector (J16)	U*n*-P1-T4	
Rack beacon connector	U*n*-P1-T5	
Fan 1	U*n*-A1	Yes
Fan 2	U*n*-A2	Yes
Fan 3	U*n*-A3	Yes
Fan 4	U*n*-A4	Yes
Device physical locations		
Disk drive 1	U*n*-DB1-D01	
Disk drive 2	U*n*-DB1-D02	
Disk drive 3	U*n*-DB1-D03	
Disk drive 4	U*n*-DB1-D04	
Disk drive 5	U*n*-DB1-D05	
Disk drive 6	U*n*-DB1-D06	
Disk drive 7	U*n*-DB2-D07	
Disk drive 8	U*n*-DB2-D08	
Disk drive 9	U*n*-DB2-D09	
Disk drive 10	U*n*-DB2-D10	
Disk drive 11	U*n*-DB2-D11	
Disk drive 12	U*n*-DB2-D12	
Power supply 1	U*n*-E1	
Power supply 2	U*n*-E2	
Disk drive backplane	U*n*-DB1	
Disk drive backplane	U*n*-DB2	

Notes:

1. J11 is an RPO connection, J14 is an uninterruptible power supply connector, J15 is an SPCN 1 connector, and J16 is an SPCN 2 connector.

2. Multi-adapter bridge domains are labeled **PCI Bridge Set** inside the expansion unit.

3. The following table provides information necessary to identify the IOP to which an IOA is assigned.

    - The left column indicates the domain in which IOA assignment is allowed.

    - The right column is used to determine the IOP to which an IOA is assigned.

- The first position in the list must be an IOP. The remaining positions may be IOPs or IOAs. IOAs are assigned to the first IOP located to their left in the list. Although IOAs can be manually reassigned using SST/DST, the IOA assignments return to the default order after each IPL.

Table 22. IOA domains and assignments

Multi-adapter bridge domain / PCI bridge set	IOA assignments rules
C01 - C04	C01, C02, C03, C04
C06 - C08	C06, C07, C08

5094, 5294, 5096, and 5296

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

Location codes are produced by system firmware to identify replaceable parts. Learn how to read and understand the sections of a location code string and the comprehensive list of location codes that are used by the I/O enclosure.

Use the following table to link to a specific topic that you need additional information on when reading your location code.

Location code topics that might be of interest	Description
"Location code overview"	Contains background information on the use of location codes.
"Physical location codes" on page 64	Provides a definition for physical location code.
"Logical location codes" on page 64	Provides a definition of what a logical location code is.
"Location code format" on page 64	Provides descriptive information of the Un value in the location code string. For example U7879.001.
"Location code labels" on page 65	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 66	Provides a definition for the world unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use "Physical location codes" on page 64 to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The "Location code format" on page 64 is the same for all servers.

If you are working with a specific location code, the unit type and model immediately follow the first character (Utttt.mmm). Match the unit type and model to a link, as shown in the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a "Logical location codes" is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table and follow the link to determine the service information.

Note: Locations for units that are not in the preceding list are either not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

U7879.001.10ABCDE-P3-C31-T2-L23

The first part of the location code (through the T2 label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (L23) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is U*n*-A1.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes the U is a constant digit; however the numbered positions that follow the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • U*tttt.sssssss*-A1 • U*ffff.sssssss*-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to "Location code labels."

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 23. Unit type and locations

Unit type (U*tttt.mmm*)	Link to location information
U5094.001	"Locations" on page 66
U5096.001	"Locations" on page 66
U5294.001	"Locations" on page 66
U5296.001	"Locations" on page 66

Location code labels

The following table explains what the location code label prefixes mean.

Note: These labels apply to system units only.

Table 24. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SCSI target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane

Table 24. Location code label prefixes for system units (continued)

Prefix	Description	Example
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Note:
* The known logical location codes for this unit are listed next to the corresponding physical location in the following information.
* If you are working with a logical location code for your expansion unit and it is not listed in the following information, contact your next level of support.

The following diagram shows the FRU layout in the 5094 expansion unit but can be used in conjunction with the following tables for the 5294, 5096, 5296, expansion units.

Remember: References to disk units, media (optical and tape), and device boards in either the following diagram or table do not apply to the 5096, or 5296.
If you need address information, refer to "5094, 5294, 5096, and 5296 addresses" on page 120.

Front   Back
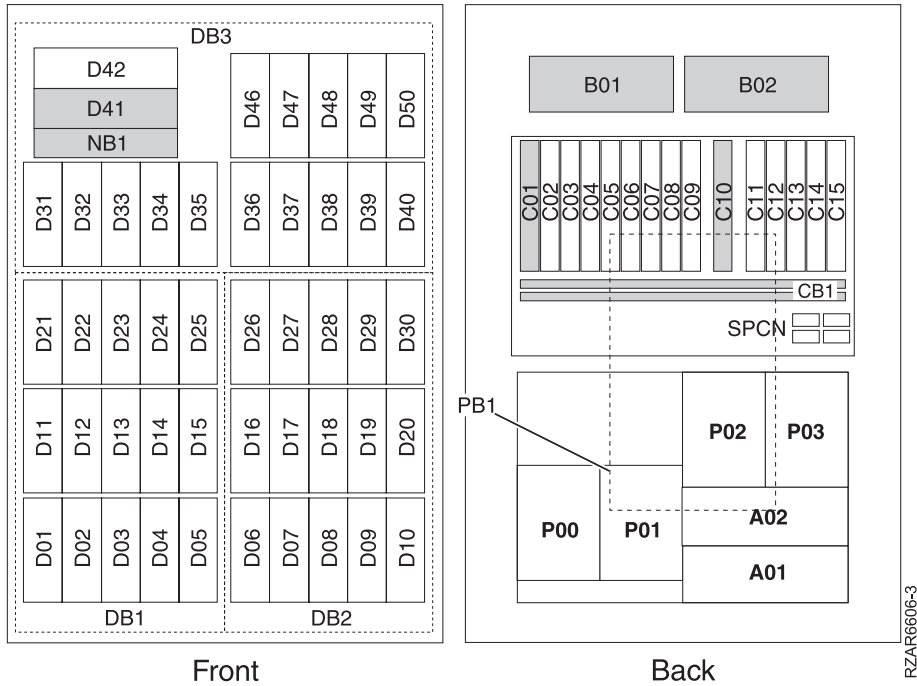
Note: Do not install power supplies P00 and P01 ac jumper cables on the same ac module.

The following table gives the components available for callout on the expansion units. It matches those components with the FRU containing the component. The other columns give location information, a link to a removal and replacement procedure, and additional comments.

Table 25. FRU locations and failing components for expansion units

Failing item name	Symbolic FRU name	Physical location code
Expansion unit backplane • SPCN • Card enclosure or backplane • Multi-adapter bridge (all)	TWRCARD MA_BRDG MABRCFG PPCITWR PRI_PCI HSL_LNK PIOCARD MASBUS TWRBKPL TWRPLNR	Un-CB1
PCI adapter in slot 1	PIOCARD MASBUS SLOTERR	Un-CB1-C01
PCI adapter in slot 2	PIOCARD MASBUS SLOTERR	Un-CB1-C02
PCI adapter in slot 3	PIOCARD MASBUS SLOTERR	Un-CB1-C03
PCI adapter in slot 4	PIOCARD MASBUS SLOTERR	Un-CB1-C04

Table 25. FRU locations and failing components for expansion units (continued)

Failing item name	Symbolic FRU name	Physical location code
PCI adapter in slot 5	PIOCARD MASBUS SLOTERR	Un-CB1-C05
PCI adapter in slot 6	PIOCARD MASBUS SLOTERR	Un-CB1-C06
PCI adapter in slot 7	PIOCARD MASBUS SLOTERR	Un-CB1-C07
PCI adapter in slot 8	PIOCARD MASBUS SLOTERR	Un-CB1-C08
PCI adapter in slot 9	PIOCARD MASBUS SLOTERR	Un-CB1-C09
RIO/HSL adapter card • HSL I/O adapter • PCI host bridge adapter	SIIOADP SIADPCD SI_PHB	Un-CB1-C10
PCI adapter in slot 11	PIOCARD MASBUS SLOTERR	Un-CB1-C11
PCI adapter in slot 12	PIOCARD MASBUS SLOTERR	Un-CB1-C12
PCI adapter in slot 13	PIOCARD MASBUS SLOTERR	Un-CB1-C13
PCI adapter in slot 14	PIOCARD MASBUS SLOTERR	Un-CB1-C14
PCI adapter in slot 15	PIOCARD MASBUS SLOTERR	Un-CB1-C15
PCI bridge set 1	BRDGSET BRDGST1	Un-CB1-C01 Un-CB1-C02 Un-CB1-C03 Un-CB1-C04
PCI bridge set 2	BRDGSET BRDGST2	Un-CB1-C05 Un-CB1-C06 Un-CB1-C07 Un-CB1-C08 Un-CB1-C09
PCI bridge set 3	BRDGSET BRDGST3	Un-CB1-C11 Un-CB1-C12 Un-CB1-C13 Un-CB1-C14 Un-CB1-C15
Fan 1		Un-B01
Fan 2		Un-B02
Power board		Un-PB1

Table 25. FRU locations and failing components for expansion units (continued)

Failing item name	Symbolic FRU name	Physical location code
AC module 1		U*n*-A01
AC module 2		U*n*-A02
Power supply 0 (dual line cord only)		U*n*-P00
Power supply 1 (single or dual line cord)		U*n*-P01
Power supply 2 (single or dual line cord)		U*n*-P02
Power supply 3 (single or dual line cord)		U*n*-P03
Remember: If you are servicing a 5096, or a 5296 that references to disk units, media (optical and tape), and device boards in the location tables do not apply to either of these models.		
Device board 1		U*n*-DB1
Device board 2		U*n*-DB2
Device board 3		U*n*-DB3
Display panel		U*n*-NB1
Disk units 1–5		U*n*-DB1-D01 U*n*-DB1-D02 U*n*-DB1-D03 U*n*-DB1-D04 U*n*-DB1-D05
Disk units 6–10		U*n*-DB2-D06 U*n*-DB2-D07 U*n*-DB2-D08 U*n*-DB2-D09 U*n*-DB2-D10
Disk units 11–15		U*n*-DB1-D11 U*n*-DB1-D12 U*n*-DB1-D13 U*n*-DB1-D14 U*n*-DB1-D15
Disk units 16–20		U*n*-DB2-D16 U*n*-DB2-D17 U*n*-DB2-D18 U*n*-DB2-D19 U*n*-DB2-D20
Disk units 21–25		U*n*-DB1-D21 U*n*-DB1-D22 U*n*-DB1-D23 U*n*-DB1-D24 U*n*-DB1-D25
Disk units 26–30		U*n*-DB2-D26 U*n*-DB2-D27 U*n*-DB2-D28 U*n*-DB2-D29 U*n*-DB2-D30

Table 25. FRU locations and failing components for expansion units (continued)

Failing item name	Symbolic FRU name	Physical location code
Disk units 31–40		U*n*-DB3-D31 U*n*-DB3-D32 U*n*-DB3-D33 U*n*-DB3-D34 U*n*-DB3-D35 U*n*-DB3-D36 U*n*-DB3-D37 U*n*-DB3-D38 U*n*-DB3-D39 U*n*-DB3-D40
Media (optical)		U*n*-DB3-D41
Media (tape)		U*n*-DB3-D42
Disk units 46–50		U*n*-DB3-D46 U*n*-DB3-D47 U*n*-DB3-D48 U*n*-DB3-D49 U*n*-DB3-D50
RIO/HSL adapter card connector	HSL_LNK HSL2 HSL2_xx HSLH HSLH_xx	U*n*-CB1-C10-00
RIO/HSL adapter card connector	HSL_LNK HSL2 HSL2_xx HSLH HSLH_xx	U*n*-CB1-C10-01

Notes:

1. Card positions C01, C05, and C11 are required to be either I/O processors or Integrated xSeries® servers (IXS).

2. J11 is a RPO connection, J14 is an uninterruptible power supply connector, J15 is a SPCN 1 connector, and J16 is a SPCN 2 connector.

3. Multi-adapter bridge domains are labeled **PCI Bridge Set** inside the I/O unit.

4. The following table provides information necessary to identify the IOP to which IOAs are assigned.
   - The left column indicates the domain in which IOA assignment is allowed.
   - The right column is used to determine the IOP to which an IOA is assigned.
   - The first position in the list must be an IOP. The remaining positions may be IOPs or IOAs. IOAs are assigned to the first IOP located to their left in the list. Although IOAs can be manually reassigned using SST/DST, the IOA assignments return to the default order after each IPL.

Table 26. Identify the IOP to which IOAs are assigned

Multi-adapter bridge domain / PCI bridge set	IOA assignment rules
C01 - C04	C01, C02, C03, C04
C05 - C09	C05, C06, C07, C08, C09
C11 - C15	C11, C12, C13, C14, C15

5786, 5787, 7031-D24, and 7031-T24

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

This chapter also provides information about how to read and understand the specific sections of a location code string. A comprehensive list of location codes used by your I/O enclosure is also provided.

Use the following table to link to a specific topic for additional information when reading and understanding your location code.

Table 27. Location code topics

Location code topics	Description
"Location code overview"	Contains background information about using location codes.
"Physical location codes" on page 72	Provides definitions for physical location codes.
"Logical location codes" on page 72	Provides definitions for logical location codes.
"Location code format" on page 72	Provides format information of the U*n* value in the location code string. For example U7031.001.
"Location code labels" on page 73	Provides definitions for location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7031.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 74	Provides definitions for the worldwide unique identifiers. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and enclosures) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the unit type and model immediately follow the first character (Utttt.mmm). Match the unit type and model to a link, as shown in the Unit type and locations table.

- If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.
- If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model number and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, do the following:
  1. Examine the display panels on all of the I/O enclosures that are connected to the server until you find one with the same characters in the first 5 digits of the top line in the enclosure's display.
  2. Record the I/O enclosure's real machine type and model from the I/O enclosure label.
  3. Match the I/O enclosure's machine type and model in the unit type and locations table and then follow the link to determine the service information.

Note: If you have a location code that does not follow the location code format as described in "Location code format" it is either not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

`U7031.001.10ABCDE-P3-C31-T2-L23`

The first part of the location code (through the T2 label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (L23) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is U*n*-A1.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit. However, the numbered positions following the U are variables and are dependent on your server. Each row in the following table defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • U*tttt.sssssss*-A1 • U*ffff.sssssss*-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels. To review a list of location codes for your I/O enclosure, refer to "5786, 5787, 7031-D24, and 7031-T24" on page 71.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 28. Unit type and locations

Unit type (Utttt.mmm)	Link to location information
U5786.001	Locations
U5787.001	Locations
U7031.D24	Locations
U7031.T24	Locations

Location code labels

The following table describes the location code label prefixes.

Table 29. Location code label prefixes for I/O enclosure and system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	input/output port (IOP), input/output adapter (IOA), dual inline memory module (DIMM), processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SCSI target	IDE address, fibre channel logical unit number (LUN)
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	System unit or enclosure integrated connector
U	Unit	Usually consists of the machine type
V	Virtual planar	
W	Worldwide unique ID	This group of digits follows the resource code labels and always begins with the letter *W*
X	Electronic industries alliance (EIA) spacing value for an empty rack location	Standardized unit of measure used to identify the height of a rack drawer or the usable height space within a rack.

Table 29. Location code label prefixes for I/O enclosure and system units (continued)

Prefix	Description	Example
Y	Firmware field replaceable unit (FRU)	microprogram or instruction set stored in read only memory (ROM) of your system

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Use the table and illustrations to help you identify the major field replaceable units (FRUs) installed in your I/O enclosure. The table also will cross reference to the symbolic FRU that might be associated with each FRU.

Note:

- The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.
- If you need SCSI repeater card address information, refer to "5786, 5787, 7031-D24, and 7031-T24 addresses" on page 126.

The following illustrations show the FRU layout and its associated location code.
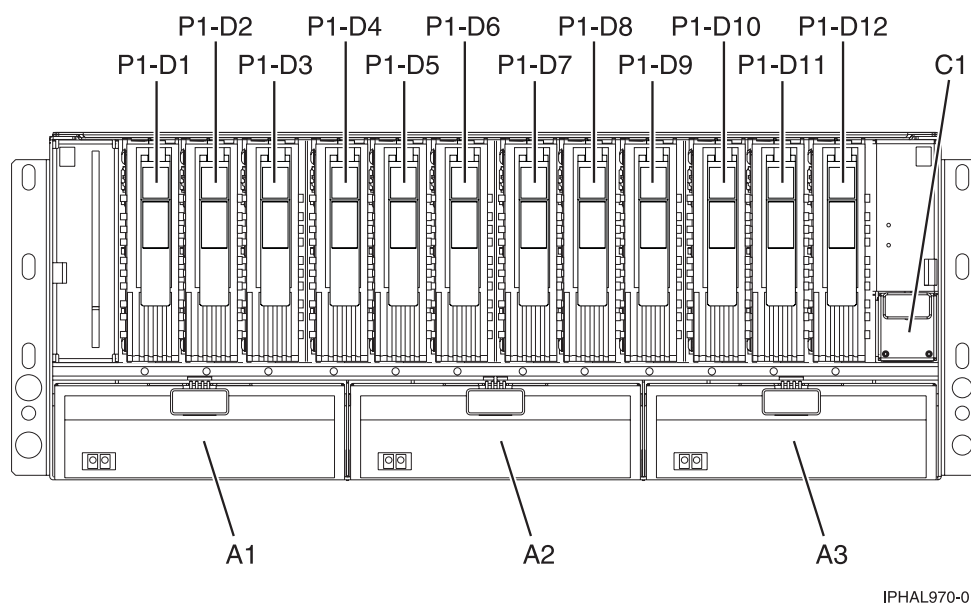
IPHAL970-0

Figure 34. I/O enclosure (drawer model, front) or (stand-alone model on its side, front)
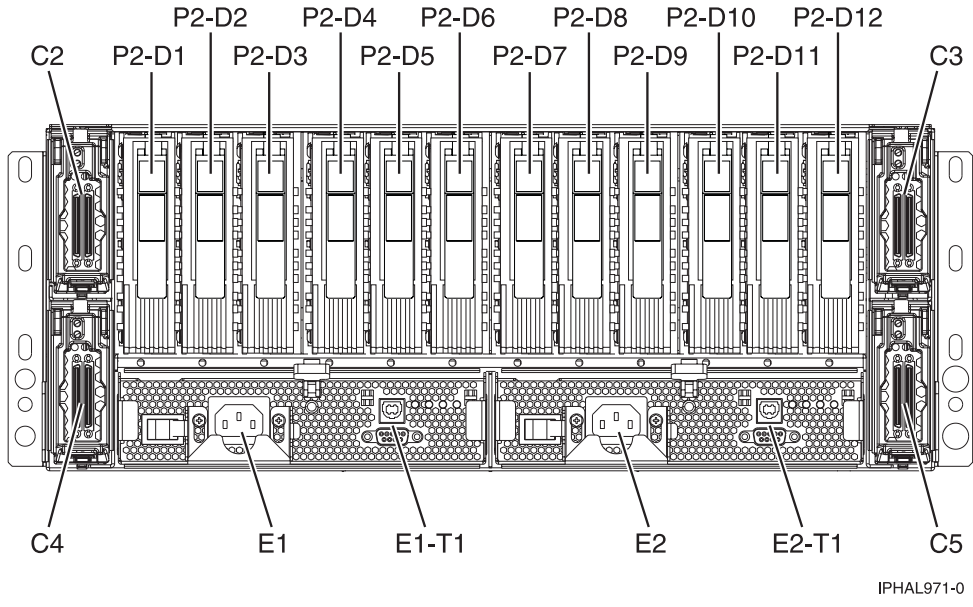
Figure 35. I/O enclosure (drawer model, back)
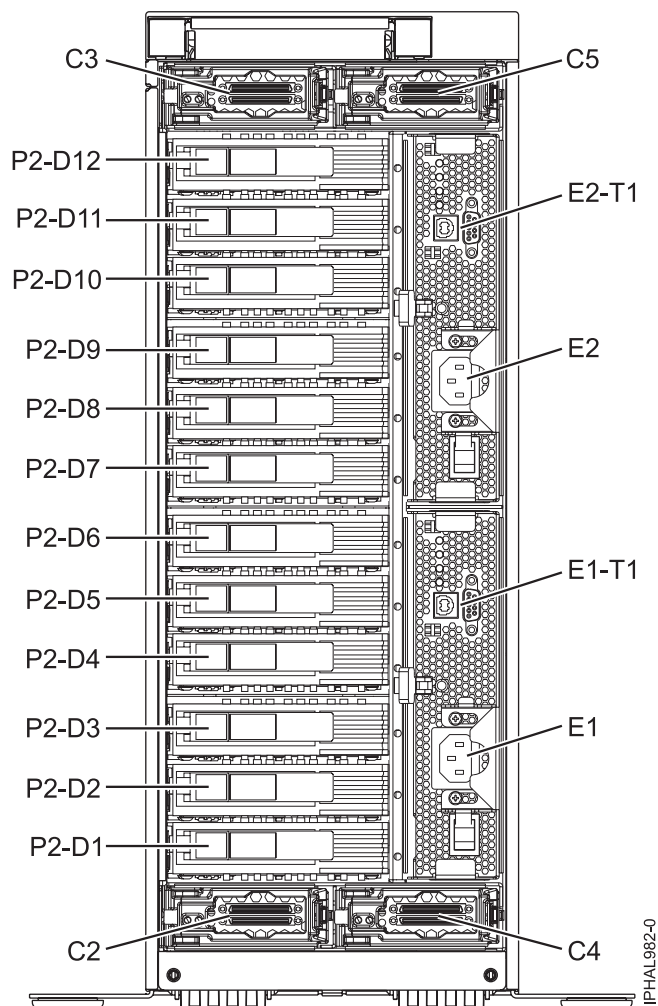
Figure 36. I/O enclosure (stand-alone model, back) 7031-T24

Table 30. FRU locations and failing components

Failing item name	Physical location code	Identify LED
Disk drive backplane 1	U*n*-P1	No
Disk drive backplane 2	U*n*-P2	No
Power distribution backplane	U*n*-P3	No
Fan 1 (left)	U*n*-A1	Yes
Fan 2	U*n*-A2	Yes
Fan 3 (right)	U*n*-A3	Yes
VPD card	U*n*-C1	No
SCSI repeater card 1 (top left)	U*n*-C2	Yes
SCSI repeater card 2 (top right)	U*n*-C3	Yes
SCSI repeater card 3 (bottom left)	U*n*-C4	No
SCSI repeater card 4 (bottom right)	U*n*-C5	Yes
Crossover card 1 (left)	U*n*-C6	No
Crossover card 2 (right)	U*n*-C7	No
Power supply 1 (left)	U*n*-E1	Yes

Table 30. FRU locations and failing components (continued)

Failing item name	Physical location code	Identify LED
Rack indicator connector	U*n*-E1-T1	No
Power supply 2 (right)	U*n*-E2	Yes
Rack indicator connector	U*n*-E2-T1	No
Device physical locations		
Disk drive 1 (front)	U*n*-P1-D01 (logical location U*n*-P*x*- T*y*-L5-L0 - single or U*n*-P*x*-T*y*-L13-L0 - dual [1])	Yes
Disk drive 2 (front)	U*n*-P1-D02 (logical location U*n*-P*x*- T*y*-L4-L0 - single or U*n*-P*x*-T*y*-L12-L0 - dual [1])	Yes
Disk drive 3 (front)	U*n*-P1-D03 (logical location U*n*-P*x*- T*y*-L3-L0 - single or U*n*-P*x*-T*y*-L11-L0 - dual [1])	Yes
Disk drive 4 (front)	U*n*-P1-D04 (logical location U*n*-P*x*- T*y*-L2-L0 - single or U*n*-P*x*-T*y*-L10-L0 - dual [1])	Yes
Disk drive 5 (front)	U*n*-P1-D05 (logical location U*n*-P*x*- T*y*-L1-L0 - single or U*n*-P*x*-T*y*-L9-L0 - dual [1])	Yes
Disk drive 6 (front)	U*n*-P1-D06 (logical location U*n*-P*x*- T*y*-L0-L0 - single or U*n*-P*x*-T*y*-L8-L0 - dual [1])	Yes
Disk drive 7 (front)	U*n*-P1-D07 (logical location U*n*-P*x*- T*y*-L5-L0 [1])	Yes
Disk drive 8 (front)	U*n*-P1-D08 (logical location U*n*-P*x*- T*y*-L4-L0 [1])	Yes
Disk drive 9 (front)	U*n*-P1-D09 (logical location U*n*-P*x*- T*y*-L3-L0 [1])	Yes
Disk drive 10 (front)	U*n*-P1-D10 (logical location U*n*-P*x*- T*y*-L2-L0 [1])	Yes
Disk drive 11 (front)	U*n*-P1-D11 (logical location U*n*-P*x*- T*y*-L1-L0 [1])	Yes
Disk drive 12 (front)	U*n*-P1-D12 (logical location U*n*-P*x*- T*y*-L0-L0 [1])	Yes
Disk drive 1 (back)	U*n*-P2-D01 (logical location U*n*-P*x*- T*y*-L5-L0 - single or U*n*-P*x*-T*y*-L13-L0 - dual [1])	Yes
Disk drive 2 (back)	U*n*-P2-D02 (logical location U*n*-P*x*- T*y*-L4-L0 - single or U*n*-P*x*-T*y*-L12-L0 - dual [1])	Yes
Disk drive 3 (back)	U*n*-P2-D03 (logical location U*n*-P*x*- T*y*-L3-L0 - single or U*n*-P*x*-T*y*-L11-L0 - dual [1])	Yes
Disk drive 4 (back)	U*n*-P2-D04 (logical location U*n*-P*x*- T*y*-L2-L0 - single or U*n*-P*x*-T*y*-L10-L0 - dual [1])	Yes
Disk drive 5 (back)	U*n*-P2-D05 (logical location U*n*-P*x*- T*y*-L1-L0 - single or U*n*-P*x*-T*y*-L9-L0 - dual [1])	Yes
Disk drive 6 (back)	U*n*-P2-D06 (logical location U*n*-P*x*- T*y*-L0-L0 - single or U*n*-P*x*-T*y*-L8-L0 - dual [1])	Yes
Disk drive 7 (back)	U*n*-P2-D07 (logical location U*n*-P*x*- T*y*-L5-L0 [1])	Yes
Disk drive 8 (back)	U*n*-P2-D08 (logical location U*n*-P*x*- T*y*-L4-L0 [1])	Yes
Disk drive 9 (back)	U*n*-P2-D09 (logical location U*n*-P*x*- T*y*-L3-L0 [1])	Yes
Disk drive 10 (back)	U*n*-P2-D10 (logical location U*n*-P*x*- T*y*-L2-L0 [1])	Yes
Disk drive 11 (back)	U*n*-P2-D11 (logical location U*n*-P*x*- T*y*-L1-L0 [1])	Yes
Disk drive 12 (back)	U*n*-P2-D12 (logical location U*n*-P*x*- T*y*-L0-L0 [1])	Yes

Table 30. FRU locations and failing components (continued)

Failing item name	Physical location code	Identify LED
[1] Where: • U*n*-P*x* is the backplane of the unit where the SCSI PCI adapter is installed. • T*y* is the connector on the SCSI PCI adapter. • single is a single SCSI interface card. • dual is a dual SCSI interface card.		

5790 and 7311-D11

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

Use the following table to link to a specific topic for additional information when reading and understanding your location code.

Table 31. Location code topics

Location code topics	Description
"Location code overview"	Contains background information about using location codes.
"Physical location codes" on page 79	Provides definitions for physical location codes.
"Logical location codes" on page 79	Provides definitions for logical location codes.
"Location code format" on page 79	Provides format information of the U*n* value in the location code string. For example U7031.001.
"Location code labels" on page 80	Provides definitions for location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7031.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 81	Provides definitions for the worldwide unique identifiers. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the unit type and model immediately follow the first character (Utttt.mmm).go

- If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

- If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model number and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, do the following:

1. Examine the display panels on all of the I/O enclosures that are connected to the server until you find one with the same characters in the first 5 digits of the top line in the enclosure's display.
2. Record the I/O enclosure's real machine type and model from the I/O enclosure label.
3. Match the I/O enclosure's machine type and model in the unit type and locations table and then follow the link to determine the service information.

Note: If you have a location code that does not follow the location code format as described in "Location code format" it is either not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

`U7031.001.10ABCDE-P3-C31-T2-L23`

The first part of the location code (through the `T2` label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (`L23`) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is `Un-A1`.

The first position, represented by Un (where n is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit. However, the numbered positions following the U are variables and are dependent on your server. Each row in the following table defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
`Utttt.mmm.sssssss-A1`	`Uffff.ccc.sssssss-A1`
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
`Utttt.mmm.sssssss-A1`	`Uffff.ccc.sssssss-A1`
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • `Utttt.sssssss-A1` • `Uffff.sssssss-A1`	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 32. Unit type and locations

Unit type (Utttt.mmm)	Link to location information
U5790.001	Locations
U7311.D11	Locations

Location code labels

The following table describes the location code label prefixes. These labels apply to system units only.

Table 33. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SCSI target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	

Table 33. Location code label prefixes for system units (continued)

Prefix	Description	Example
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware field replaceable unit (FRU)	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Learn how to locate field replaceable units (FRUs) by using logical and physical location codes.

Note: The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.

The following diagrams show field replaceable unit (FRU) layout in the expansion unit. Use these diagrams with the following tables.

Note: Some units may have labels that designate location codes other than those shown in the following illustrations and tables. If that is the case, use the location codes shown in the following illustrations and tables.

Figure 37. Front view of the expansion unit
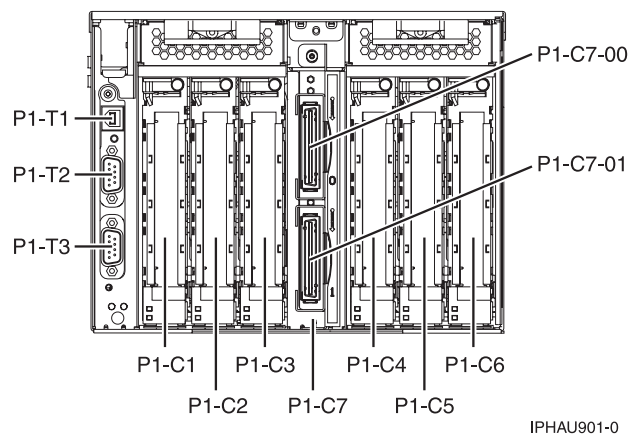
Figure 38. Back view of the expansion unit

The following table gives the components available for callout on the expansion units. It matches those components with the FRU containing the component. The other columns give location information, a link to a removal and replacement procedure, and additional information.

Table 34. FRU locations and failing components

Failing item name	Physical location code	Identify LED
Expansion unit	U*n*	
Fan		
Fan	U*n*-A1	Yes
Power supplies		
Power supply 1	U*n*-E1	Yes
Power supply 2	U*n*-E2	Yes
Backplane		
I/O backplane	U*n*-P1	Yes
I/O backplane ports		
Rack beacon connector	U*n*-P1-T1	
Adapters		
PCI adapter in slot 1	U*n*-P1-C1	Yes
PCI adapter in slot 2	U*n*-P1-C2	Yes
PCI adapter in slot 3	U*n*-P1-C3	Yes
PCI adapter in slot 4	U*n*-P1-C4	Yes
PCI adapter in slot 5	U*n*-P1-C5	Yes
PCI adapter in slot 6	U*n*-P1-C6	Yes
PCI bridge set 1	U*n*-P1 U*n*-P1-C1 U*n*-P1-C2 U*n*-P1-C3	
PCI bridge set 2	U*n*-P1 U*n*-P1-C4 U*n*-P1-C5 U*n*-P1-C6	
RIO/HSL adapter	U*n*-P1-C7	Yes

Table 34. FRU locations and failing components (continued)

Failing item name	Physical location code	Identify LED
RIO/HSL adapter connector (top connector), port 0	U*n*-P1-C7-00 or U*n*-P1-C7-T1	Yes
RIO/HSL adapter connector (bottom connector), port 1	U*n*-P1-C7-01 or U*n*-P1-C7-T2	Yes

5791, 5794, 5797, and 5798

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

For additional information about reading your location code, use the following table to link to a specific topic.

Location code topics that might be of interest	Description
"Location code overview"	Contains background information on the use of location codes.
"Physical location codes" on page 84	Provides a definition for physical location code.
"Logical location codes" on page 84	Provides a definition for a logical location code.
"Location code format" on page 84	Provides descriptive information of the U*n* value in the location code string. For example U5886.001.
"Location code labels" on page 85	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 86	Provides a definition for the worldwide unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the feature immediately follows the first character (U5886). Refer to the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table, and follow the link to determine the service information.

Note: If locations for units are not in the preceding format, either they are not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

`U7879.001.10ABCDE-P3-C31-T2-L23`

The first part of the location code (through the T2 label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (L23) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is U*n*-A1.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit; however, the numbered positions following the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.ssssss*-A1	U*ffff.ccc.ssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
ssssss represents the serial number for the enclosure.	*ssssss* represents the serial number of the enclosure.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • U*tttt.sssssss*-A1 • U*ffff.sssssss*-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 35. Unit type and locations

Unit type (U*tttt.mmm*)	Link to location information
U5791	Refer to Locations in order to differentiate between the 5791, 5794, 5797, and 5798.

Location code labels

The following table identifies the location code label prefixes.

Note: These labels apply to system units only.

Table 36. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	

Table 36. Location code label prefixes for system units (continued)

Prefix	Description	Example
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations
Use this information to help you map a location code to a position on the unit.

Note: The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.

The following diagrams show the field replaceable unit (FRU) layout in the system. Use these diagrams with the following tables.

Figure 39. 5791 and 5794 front view
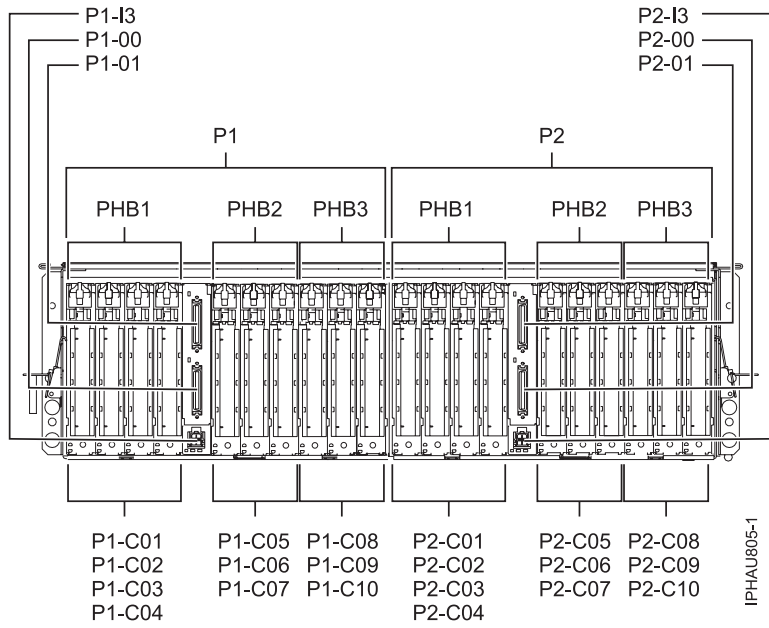
Figure 40. 5791 and 5794 back view
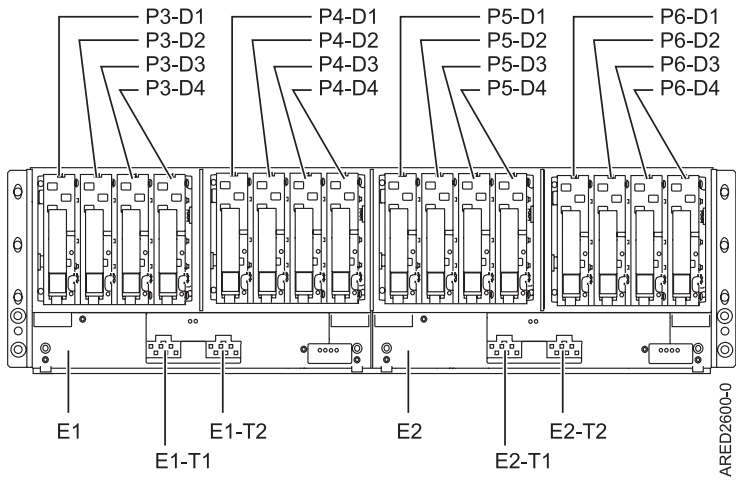
Figure 41. 5797 and 5798 front view
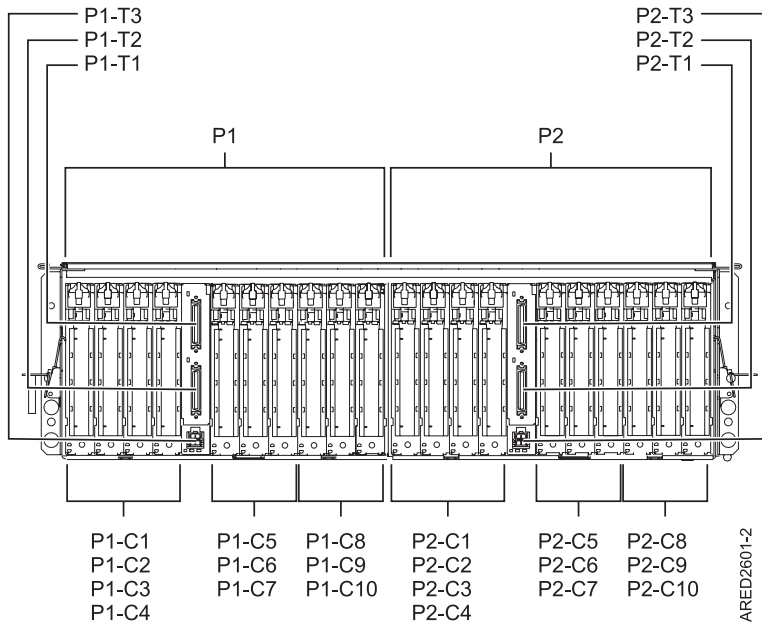
Figure 42. 5797 and 5798 back view
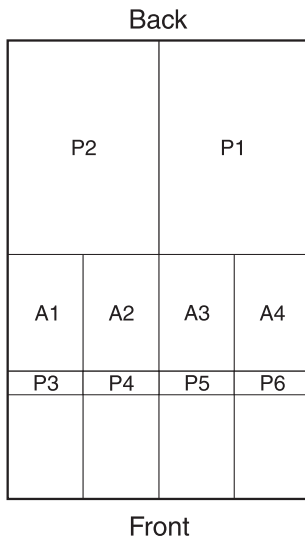
Figure 43. Top view

The following table provides location codes for parts that make up the server.

The 5791 RIO cable has black connectors and does not have the letters RSR or RLR on the label. The 5797 has the letters RLR on the label, and the 12X cable has green connectors. The 5798 has the letters RSR on the label, and the 12X cable has green connectors.

Table 37. 5791 and 5794 location codes

Failing item name	Physical location code
I/O planar book, plugs into I/O backplane	Un-P1
I/O planar book, plugs into I/O backplane	Un-P2

Table 37. 5791 and 5794 location codes (continued)

Disk drive backplane	U*n*-P3
Disk drive backplane	U*n*-P4
Disk drive backplane	U*n*-P5
Disk drive backplane	U*n*-P6
PCI adapter in slot 1	U*n*-P1-C01
PCI adapter in slot 2	U*n*-P1-C02
PCI adapter in slot 3	U*n*-P1-C03
PCI adapter in slot 4	U*n*-P1-C04
PCI adapter in slot 5	U*n*-P1-C05
PCI adapter in slot 6	U*n*-P1-C06
PCI adapter in slot 7	U*n*-P1-C07
PCI adapter in slot 8	U*n*-P1-C08
PCI adapter in slot 9	U*n*-P1-C09
PCI adapter in slot 10	U*n*-P1-C10
IB riser card	U*n*-P1-C11
IB riser card	U*n*-P1-C11-T1
IB riser card	U*n*-P1-C11-T2
PHB (PCI bridge set) 1	U*n*-P1-C01 U*n*-P1-C02 U*n*-P1-C03 U*n*-P1-C04
PHB (PCI bridge set) 2	U*n*-P1-C05 U*n*-P1-C06 U*n*-P1-C07
PHB (PCI bridge set) 3	U*n*-P1-C08 U*n*-P1-C09 U*n*-P1-C10
PCI adapter in slot 1	U*n*-P2-C01
PCI adapter in slot 2	U*n*-P2-C02
PCI adapter in slot 3	U*n*-P2-C03
PCI adapter in slot 4	U*n*-P2-C04
PCI adapter in slot 5	U*n*-P2-C05
PCI adapter in slot 6	U*n*-P2-C06
PCI adapter in slot 7	U*n*-P2-C07
PCI adapter in slot 8	U*n*-P2-C08
PCI adapter in slot 9	U*n*-P2-C09
PCI adapter in slot 10	U*n*-P2-C10
PHB (PCI bridge set) 1	U*n*-P2-C01 U*n*-P2-C02 U*n*-P2-C03 U*n*-P2-C04
PHB (PCI bridge set) 2	U*n*-P2-C05 U*n*-P2-C06 U*n*-P2-C07

Table 37. 5791 and 5794 location codes (continued)

PHB (PCI bridge set) 3	U*n*-P2-C08 U*n*-P2-C09 U*n*-P2-C10
Fan 1 (left)	U*n*-A1
Fan 2	U*n*-A2
Fan 3	U*n*-A3
Fan 4 (right)	U*n*-A4
Power supply 1 (left)	U*n*-E1
Super UPIC connector (left)	U*n*-E1-T1
Super UPIC connector (right)	U*n*-E1-T2
Power supply 2 (right)	U*n*-E2
Super UPIC connector (left)	U*n*-E2-T1
Super UPIC connector (right)	U*n*-E2-T2
12X adapter connector port 0 (bottom connector - P0)	U*n*-P1-00
12X adapter connector port 1 (top conector - P1)	U*n*-P1-01
12X adapter connector port 0 (bottom connector - P0)	U*n*-P2-00
12X adapter connector port 1 (top conector - P1)	U*n*-P2-01
Media subsystem power connector	U*n*-P1-T3
Media subsystem power connector	U*n*-P2-T3
Integrated SCSI controller port	U*n*-P1-T5
Integrated SCSI controller port	U*n*-P1-T6
Integrated SCSI controller port	U*n*-P2-T5
Integrated SCSI controller port	U*n*-P2-T6

The following table provides location codes for parts that make up the server.

Table 38. 5797 and 5798 location codes

Failing item name	Physical location code
I/O planar book, plugs into I/O backplane	U*n*-P1
I/O planar book, plugs into I/O backplane	U*n*-P2
Disk drive backplane	U*n*-P3
Disk drive backplane	U*n*-P4
Disk drive backplane	U*n*-P5
Disk drive backplane	U*n*-P6
PCI adapter in slot 1	U*n*-P1-C1
PCI adapter in slot 2	U*n*-P1-C2
PCI adapter in slot 3	U*n*-P1-C3
PCI adapter in slot 4	U*n*-P1-C4
PCI adapter in slot 5	U*n*-P1-C5
PCI adapter in slot 6	U*n*-P1-C6
PCI adapter in slot 7	U*n*-P1-C7
PCI adapter in slot 8	U*n*-P1-C8

Table 38. 5797 and 5798 location codes (continued)

PCI adapter in slot 9	U*n*-P1-C9
PCI adapter in slot 10	U*n*-P1-C10
PHB (PCI bridge set) 1	U*n*-P1-C1 U*n*-P1-C2 U*n*-P1-C3 U*n*-P1-C4
PHB (PCI bridge set) 2	U*n*-P1-C5 U*n*-P1-C6 U*n*-P1-C7
PHB (PCI bridge set) 3	U*n*-P1-C8 U*n*-P1-C9 U*n*-P1-C10
PCI adapter in slot 1	U*n*-P2-C1
PCI adapter in slot 2	U*n*-P2-C2
PCI adapter in slot 3	U*n*-P2-C3
PCI adapter in slot 4	U*n*-P2-C4
PCI adapter in slot 5	U*n*-P2-C5
PCI adapter in slot 6	U*n*-P2-C6
PCI adapter in slot 7	U*n*-P2-C7
PCI adapter in slot 8	U*n*-P2-C8
PCI adapter in slot 9	U*n*-P2-C9
PCI adapter in slot 10	U*n*-P2-C10
IB riser port	U*n*-P*x*-T2
IB riser port	U*n*-P*x*-T1
PHB (PCI bridge set) 1	U*n*-P2-C1 U*n*-P2-C2 U*n*-P2-C3 U*n*-P2-C4
PHB (PCI bridge set) 2	U*n*-P2-C5 U*n*-P2-C6 U*n*-P2-C7
PHB (PCI bridge set) 3	U*n*-P2-C8 U*n*-P2-C9 U*n*-P2-C10
Fan 1 (left)	U*n*-A1
Fan 2	U*n*-A2
Fan 3	U*n*-A3
Fan 4 (right)	U*n*-A4
Power supply 1 (left)	U*n*-E1
Super UPIC connector (left)	U*n*-E1-T1
Super UPIC connector (right)	U*n*-E1-T2
Power supply 2 (right)	U*n*-E2
Super UPIC connector (left)	U*n*-E2-T1
Super UPIC connector (right)	U*n*-E2-T2
12X attachment top port	U*n*-P1-T1

Table 38. 5797 and 5798 location codes (continued)

12X attachment bottom port	U*n*-P1-T2
Media bay power connector	U*n*-P1-T3
Media bay power connector	U*n*-P2-T3
Integrated SCSI controller port	U*n*-P1-T4
Integrated SCSI controller port	U*n*-P1-T5
Integrated SCSI controller port	U*n*-P2-T4
Integrated SCSI controller port	U*n*-P2-T5

5796 and 7314-G30

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

Use the following table to link to a specific topic that you need additional information on when reading your location code.

Table 39. Location code topics

Location code topics	Description
"Location code overview"	Contains background information on the use of location codes.
"Physical location codes" on page 93	Provides a definition for physical location code.
"Logical location codes" on page 93	Provides a definition of what a logical location code is.
"Location code format" on page 93	Provides descriptive information of the U*n* value in the location code string. For example, U7879.001.
"Location code labels" on page 94	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 95	Provides a definition of a worldwide unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the unit type and model immediately follow the first character (Utttt.mmm). Match the unit type and model to a link, as shown in the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location

codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. If the expansion unit does not have a display, use the display of the attached system unit, or use the process of elimination by tracing the cables from the system unit to the expansion unit. Record the unit's machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table and follow the link to determine the service information.

Note: Locations for units that are not in the preceding list are either not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

`U7879.001.10ABCDE-P3-C31-T2-L23`

The first part of the location code (through the `T2` label) represents the physical location code of the resource that communicates with the target resource. The remainder of the logical location code (`L23`) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is `U`*n*`-A1`.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit; however, the numbered positions following the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
Utttt.mmm.sssssss-A1	Uffff.ccc.sssssss-A1
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • Utttt.sssssss-A1 • Uffff.sssssss-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a dual in-line memory module (DIMM), with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 40. Unit type and locations

Unit type (Utttt.mmm)	Link to location information
U5796.001	"Locations" on page 95
U7314.G30	"Locations" on page 95

Location code labels

The following table describes the location code label prefixes.

Note: These location code labels apply to system units only.

Table 41. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SCSI target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	

Table 41. Location code label prefixes for system units (continued)

Prefix	Description	Example
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not include a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

The known logical location codes for this unit are listed next to the corresponding physical location.

Note: Any known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.
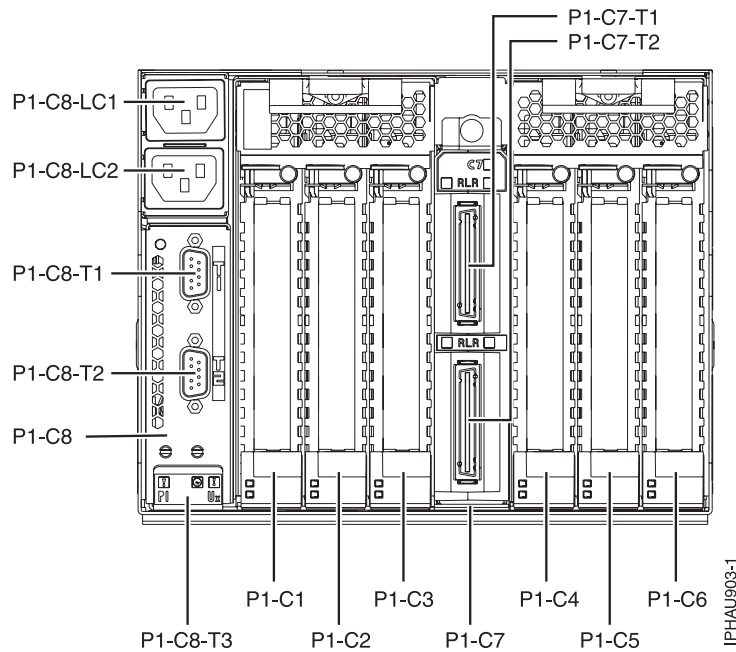
Figure 44. Rear view of unit.
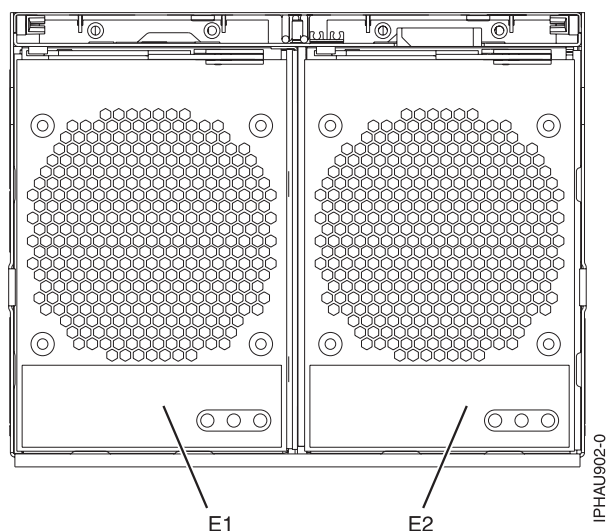
Figure 45. Front view of unit.

The following table provides location codes for parts that comprise the server.

Table 42. FRU locations and failing components

Failing item name	Symbolic failing item name	Physical location code	Identify LED
System unit		Un	
Power supplies			
Power supply 1, from front view it is left		Un-E1	Yes
Power supply 2, from front view it is right		Un-E2	Yes
Backplane			
I/O planar		Un-P1	Yes
Adapters			
PCI adapter in slot 1		Un-P1-C1	Yes
PCI adapter in slot 2		Un-P1-C2	Yes
PCI adapter in slot 3		Un-P1-C3	Yes
PCI adapter in slot 4		Un-P1-C4	Yes
PCI adapter in slot 5		Un-P1-C5	Yes
PCI adapter in slot 6		Un-P1-C6	Yes
GX Dual-Port 12X Channel Attach adapter		Un-P1-C7	Yes
GX Dual-Port 12X Channel Attach adapter top port		Un-P1-C7-T1	Yes
GX Dual-Port 12X Channel Attach adapter bottom port		Un-P1-C7-T2	Yes
SPCN		Un-P1-C8	
SPCN top port		Un-P1-C8-T1	
SPCN bottom port		Un-P1-C8-T2	

5802 and 5877

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

For additional information about reading your location code, use the following table to link to a specific topic.

Location code topics that might be of interest	Description
"Location code overview"	Contains background information on the use of location codes.
"Physical location codes" on page 98	Provides a definition for physical location code.
"Logical location codes" on page 98	Provides a definition for a logical location code.
"Location code format" on page 98	Provides descriptive information of the U*n* value in the location code string. For example U5886.001.
"Location code labels" on page 99	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 99	Provides a definition for the worldwide unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the feature immediately follows the first character (U5886). Refer to the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table, and follow the link to determine the service information.

Note: If locations for units are not in the preceding format, either they are not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

`U7879.001.10ABCDE-P3-C31-T2-L23`

The first part of the location code (through the `T2` label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (`L23`) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is `U`*n*`-A1`.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit; however, the numbered positions following the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • U*tttt.sssssss*-A1 • U*ffff.sssssss*-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the

base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 43. Unit type and locations

Unit type (U*tttt.mmm*)	Link to location information
U5802.001	Locations
U5877.001	Locations

Location code labels

The following table identifies the location code label prefixes.

Note: These labels apply to system units only.

Table 44. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations
Use this information to help you map a location code to a position on the unit.

Note: The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.

The following diagrams show the field replaceable unit (FRU) layout in the system. Use these diagrams with the following tables.

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Figure 46. 5802 front view
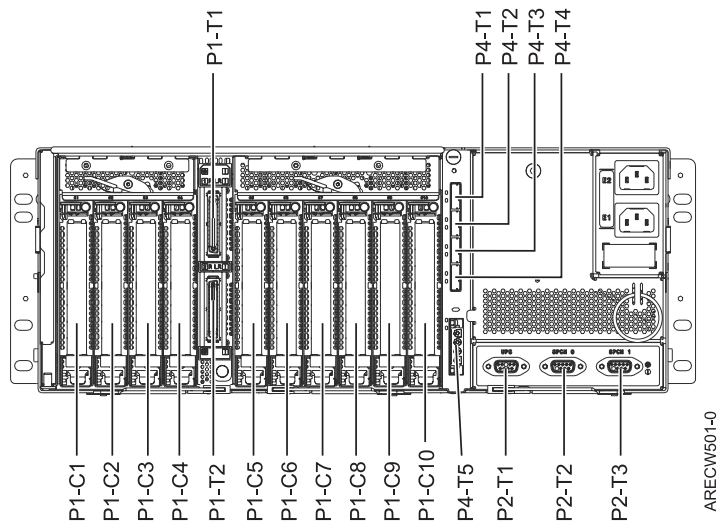
Figure 47. 5802 rear view
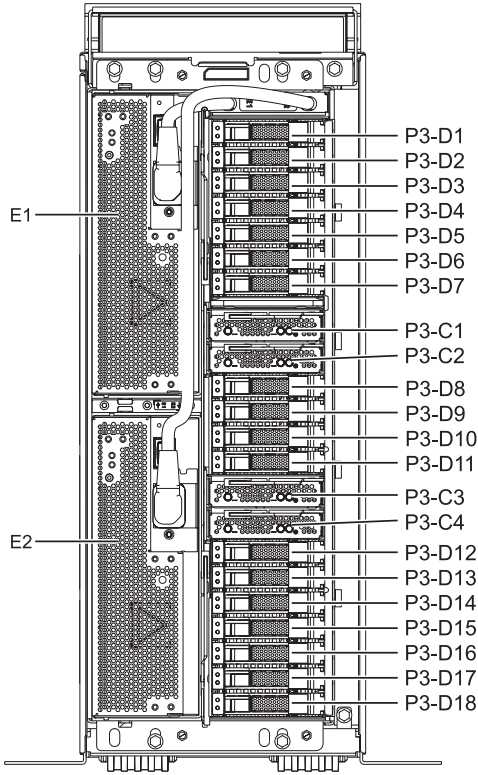
Figure 48. 5877 front view
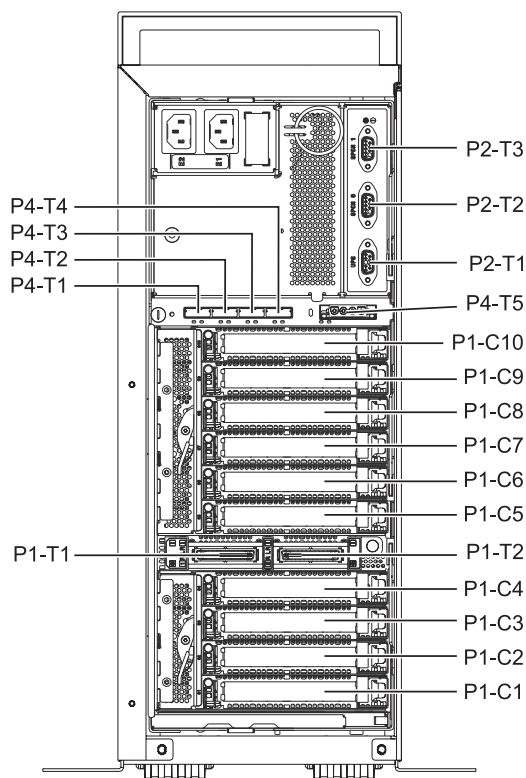
Figure 49. 5877 rear view

The following table provides location codes for parts that make up the server.

Table 45. Bulk power assembly (BPA) locations, and failing components

Failing item name	Symbolic FRU name	CCIN
OCA	Ux-E1	2C43
OCA UPIC connector	Ux-E1-T1	
OCA UPIC connector	Ux-E1-T2	
OCA	Ux-E2	2C43
OCA UPIC connector	Ux-E2-T1	
OCA UPIC connector	Ux-E2-T2	
Fans		
Fan	Ux-E1-A1	
Fan	Ux-E1-A2	
Fan	Ux-E2-A1	
Fan	Ux-E2-A2	
Backplane		
Planar	Ux-P1	50A2
IOA slot	Ux-P1-C1	
IOA slot	Ux-P1-C2	
IOA slot	Ux-P1-C3	
IOA slot	Ux-P1-C4	
IOA slot	Ux-P1-C5	

Table 45. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Symbolic FRU name	CCIN
IOA slot	Ux-P1-C6	
IOA slot	Ux-P1-C7	
IOA slot	Ux-P1-C8	
IOA slot	Ux-P1-C9	
IOA slot	Ux-P1-C10	
IB riser port	Ux-P1-T1	
IB riser port	Ux-P1-T2	
EMC card		
EMC card	Ux-P2	50A6
UPS	Ux-P2-T1	
SPCN 9 pin D-shell	Ux-P2-T2	
SPCN 9 pin D-shell	Ux-P2-T3	
DASD		
DASD backplane	Ux-P3	50A9
PORT card 1	Ux-P3-C1	50A4
PORT card 2	Ux-P3-C2	50A4
PORT card 3	Ux-P3-C3	50A4
PORT card 4	Ux-P3-C4	50A4
DASD drive bay	Ux-P3-D1	
DASD drive bay	Ux-P3-D2	
DASD drive bay	Ux-P3-D3	
DASD drive bay	Ux-P3-D4	
DASD drive bay	Ux-P3-D5	
DASD drive bay	Ux-P3-D6	
DASD drive bay	Ux-P3-D7	
DASD drive bay	Ux-P3-D8	
DASD drive bay	Ux-P3-D9	
DASD drive bay	Ux-P3-D10	
DASD drive bay	Ux-P3-D11	
DASD drive bay	Ux-P3-D12	
DASD drive bay	Ux-P3-D13	
DASD drive bay	Ux-P3-D14	
DASD drive bay	Ux-P3-D15	
DASD drive bay	Ux-P3-D16	
DASD drive bay	Ux-P3-D17	
DASD drive bay	Ux-P3-D18	
SAS conduit		
SAS conduit	Ux-P4	50A5
SAS connector	Ux-P4-T1	
SAS connector	Ux-P4-T2	

Table 45. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Symbolic FRU name	CCIN
SAS connector	Ux-P4-T3	
SAS connector	Ux-P4-T4	
Media bay connector	Ux-P4-T5	
Midplane		
Midplane	Ux-P5	50AA

5803 and 5873

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

For additional information about reading your location code, use the following table to link to a specific topic.

Location code topics that might be of interest	Description
"Location code overview"	Contains background information on the use of location codes.
"Physical location codes" on page 105	Provides a definition for physical location code.
"Logical location codes" on page 105	Provides a definition for a logical location code.
"Location code format" on page 105	Provides descriptive information of the U*n* value in the location code string. For example U5886.001.
"Location code labels" on page 106	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 107	Provides a definition for the worldwide unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the feature immediately follows the first character (U5886). Refer to the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table, and follow the link to determine the service information.

Note: If locations for units are not in the preceding format, either they are not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

U7879.001.10ABCDE-P3-C31-T2-L23

The first part of the location code (through the T2 label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (L23) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is U*n*-A1.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit; however, the numbered positions following the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt.mmm.sssssss*-A1	U*ffff.ccc.sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
Utttt.mmm.sssssss-A1	Uffff.ccc.sssssss-A1
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • Utttt.sssssss-A1 • Uffff.sssssss-A1	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes will always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 46. Unit type and locations

Unit type (Utttt.mmm)	Link to location information
U5803.001	Locations
U5873.001	Locations

Location code labels

The following table identifies the location code label prefixes.

Note: These labels apply to system units only.

Table 47. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	

Table 47. Location code label prefixes for system units (continued)

Prefix	Description	Example
X	EIA value for an empty rack location	
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Use this information to help you map a location code to a position on the unit.

Note: The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.

The following diagrams show the field replaceable unit (FRU) layout in the system. Use these diagrams with the following tables.

Figure 50. Front view
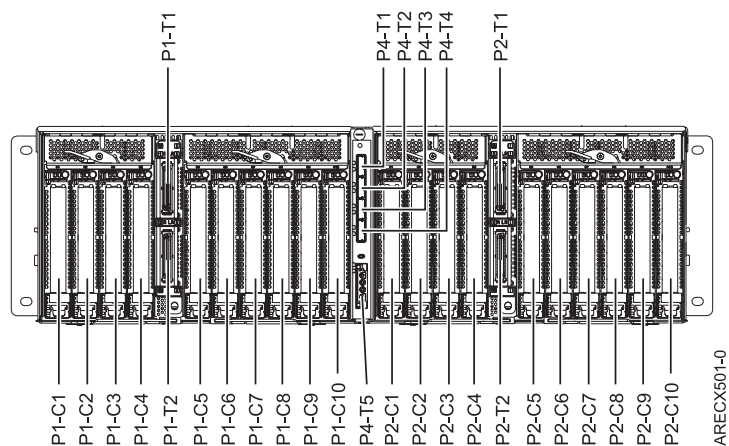
Figure 51. Rear view

The following table provides location codes for parts that make up the server.

Table 48. Bulk power assembly (BPA) locations, and failing components

Failing item name	Symbolic FRU name	CCIN
DCA	U*n*-E1	2C44
DCA UPIC connector	U*n*-E1-T1	
DCA UPIC connector	U*n*-E1-T2	
DCA	U*n*-E2	2C44
DCA UPIC connector	U*n*-E2-T1	
DCA UPIC connector	U*n*-E2-T2	
Fans		
Fan	U*n*-E1-A1	
Fan	U*n*-E1-A2	
Fan	U*n*-E1-A3	
Fan	U*n*-E2-A1	
Fan	U*n*-E2-A2	
Fan	U*n*-E2-A3	
Backplane • U*n*-P1-C1 • U*n*-P2-C1		
Planar	U*n*-P*x*	50A2
IOA slot	U*n*-P*x*-C1	
IOA slot	U*n*-P*x*-C2	
IOA slot	U*n*-P*x*-C3	
IOA slot	U*n*-P*x*-C4	
IOA slot	U*n*-P*x*-C5	
IOA slot	U*n*-P*x*-C6	
IOA slot	U*n*-P*x*-C7	
IOA slot	U*n*-P*x*-C8	
IOA slot	U*n*-P*x*-C9	

Table 48. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Symbolic FRU name	CCIN
IOA slot	U*n*-P*x*-C10	
IB Riser Port	U*n*-P*x*-T1	
IB Riser Port	U*n*-P*x*-T2	
DASD		
DASD backplane	U*n*-P3	50A7
PORT card 1	U*n*-P3-C1	50A4
PORT card 2	U*n*-P3-C2	50A4
PORT card 3	U*n*-P3-C3	50A4
PORT card 4	U*n*-P3-C4	50A4
DASD drive bay	U*n*-P3-D1	
DASD drive bay	U*n*-P3-D2	
DASD drive bay	U*n*-P3-D3	
DASD drive bay	U*n*-P3-D4	
DASD drive bay	U*n*-P3-D5	
DASD drive bay	U*n*-P3-D6	
DASD drive bay	U*n*-P3-D7	
DASD drive bay	U*n*-P3-D8	
DASD drive bay	U*n*-P3-D9	
DASD drive bay	U*n*-P3-D10	
DASD drive bay	U*n*-P3-D11	
DASD drive bay	U*n*-P3-D12	
DASD drive bay	U*n*-P3-D13	
DASD drive bay	U*n*-P3-D14	
DASD drive bay	U*n*-P3-D15	
DASD drive bay	U*n*-P3-D16	
DASD drive bay	U*n*-P3-D17	
DASD drive bay	U*n*-P3-D18	
DASD drive bay	U*n*-P3-D19	
DASD drive bay	U*n*-P3-D20	
DASD drive bay	U*n*-P3-D21	
DASD drive bay	U*n*-P3-D22	
DASD drive bay	U*n*-P3-D23	
DASD drive bay	U*n*-P3-D24	
DASD drive bay	U*n*-P3-D25	
DASD drive bay	U*n*-P3-D26	
SAS conduit		
SAS conduit	U*n*-P4	50A5
SAS connector	U*n*-P4-T1	
SAS connector	U*n*-P4-T2	
SAS connector	U*n*-P4-T3	

Table 48. Bulk power assembly (BPA) locations, and failing components (continued)

Failing item name	Symbolic FRU name	CCIN
SAS connector	U*n*-P4-T4	
Media bay connector	U*n*-P4-T5	
Media bay connector	U*n*-P4-T6	
Midplane		
Midplane	U*n*-P5	50A8

5886

The information provided in this topic defines specific sections of a location code string. Use this information to understand the meaning of a location code.

Using location codes

For additional information about reading your location code, use the following table to link to a specific topic.

Location code topics that might be of interest	Description
"Location code overview"	Contains background information on the use of location codes.
"Physical location codes" on page 111	Provides a definition for physical location code.
"Logical location codes" on page 111	Provides a definition for a logical location code.
"Location code format" on page 111	Provides descriptive information of the U*n* value in the location code string. For example U5886.001.
"Location code labels" on page 112	Provides a table that identifies and defines the location code labels. The location code labels begin with an alphabetic character and follow the system serial number. For example, U7879.001.10ABCDE-P3-C31-T2-L23. (The system serial number is the 10ABCDE in the previous example.) The P3, C31, T2, and L23 all contain an alphabetic character that is identified in the Location code labels table.
"Worldwide unique identifier" on page 113	Provides a definition for the worldwide unique identifier. This group of digits follows the resource code labels and always begins with the letter *W*.

Location code overview

Servers (system unit and expansion units) use physical location codes to provide mapping of replaceable units. Location codes are produced by the server's firmware, which structures them so that they can be used to identify specific parts in a system. The location code format is the same for all servers.

If you are working with a specific location code, the feature immediately follows the first character (U5886). Refer to the Unit type and locations table.

If the location code ends with **-Txx-Lxx**, the server's firmware could not identify the physical location. When a physical location cannot be identified, a logical location code is provided. Where logical location codes occur in enclosures, the locations topic for the enclosure has the known conversions listed. For logical location codes with no conversion, contact your next level of support.

If the location code begins with **UTMPx**, the expansion I/O unit's machine type, model and serial number have not been set yet and this is a temporary unit identifier. To identify the unit, examine the display panels on all of the expansion I/O units connected to the server until you find one with the same characters in the first 5 digits of the top line in the unit's display. Record the unit's real machine type and model from the unit label. Match the unit's machine type and model in the Unit type and locations table, and follow the link to determine the service information.

Note: If locations for units are not in the preceding format, either they are not supported or there is a problem in the firmware. Contact your next level of support.

Physical location codes

Physical location codes provide a mapping of logical functions and components (such as backplanes, removable modules, connectors, ports, cables, and devices) to their specific locations within the physical structure of the server.

Logical location codes

If the physical location cannot be mapped to a physical location code, the server's firmware generates a logical location code. A logical location code is a sequence of location labels that identifies the path that the system uses to communicate with a given resource.

Note: A resource has as many logical location codes as it has logical connections to the system. For example, an external tape device connected to two I/O adapters will have two logical location codes.

An example of a logical location code is:

U7879.001.10ABCDE-P3-C31-T2-L23

The first part of the location code (through the T2 label) represents the physical location code for the resource that communicates with the target resource. The remainder of the logical location code (L23) represents exactly which resource is indicated.

Location code format

The location code is an alphanumeric string of variable length, consisting of a series of location identifiers, separated by a dash. An example of a physical location for a fan is U*n*-A1.

The first position, represented by U*n* (where *n* is equal to any string contained between the U and the hyphen) in the preceding example, is displayed in one of the forms in the following table.

Note: In location codes, the U is a constant digit; however, the numbered positions following the U are variables and are dependent on your server. Each column defines the numbers that follow the U in the beginning of the location code.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
U*tttt*.*mmm*.*sssssss*-A1	U*ffff*.*ccc*.*sssssss*-A1
The leftmost code is always U.	The leftmost code is always U.
tttt represents the unit type of the enclosure (drawer or node).	*ffff* represents the feature code of the enclosure (drawer or node).
mmm represents the model of the enclosure.	*ccc* represents the sequence number of the enclosure .
sssssss represents the serial number for the enclosure.	*sssssss* represents the serial number of the enclosure.

Machine type and model number in its location codes	Feature codes and sequence numbers in its location code
`Utttt.mmm.sssssss-A1`	`Uffff.ccc.sssssss-A1`
Note: The *mmm* or *ccc* number might not be displayed on all location codes for all servers. If the *mmm* value is not displayed, the location code is displayed in one of the following forms: • `Utttt.sssssss-A1` • `Uffff.sssssss-A1`	

The location code is hierarchical; that is, each location identifier in the string represents a physical part. The order (from left to right), in which each identifier is shown, allows you to determine which parts contain other parts in the string.

The dash (-) separator character represents a relationship between two components in the unit. In the example of the fan, whose location code is U*n*-A1, the dash shows that the fan (A1) is contained in the base unit (or U*n*). Modules, adapters, cables, and devices are all parts that are plugged into another part. Their location codes always show that they are plugged into another part as components of the server. Another example follows:, U*n*-P1-C9 is a memory DIMM, with memory DIMM (C9) plugged into a backplane (P1), which is inside the unit (U*n*).

For more information about the various location code label prefixes, refer to Location code labels.

Note: For devices, certain error conditions might cause an IBM i device to display the device location in an AIX format.

Table 49. Unit type and locations

Unit type (Utttt)	Link to location information
U5886.001	Locations

Location code labels

The following table identifies the location code label prefixes.

Note: These labels apply to system units only.

Table 50. Location code label prefixes for system units

Prefix	Description	Example
A	Air-moving device	Fan, blower
C	Card connector	IOP, IOA, DIMM, processor card
D	Device	Diskette, control panel
E	Electrical	Battery, power supply, ac charger
L	Logical path SAS target	IDE address, fibre channel LUN
N	Horizontal placement for an empty rack location	
P	Planar	System backplane
T	Port	
U	Unit	
V	Virtual planar	
W	Worldwide unique ID	
X	EIA value for an empty rack location	

Table 50. Location code label prefixes for system units (continued)

Prefix	Description	Example
Y	Firmware FRU	

Worldwide unique identifier

A worldwide unique identifier location label consists of the prefix W followed by a maximum of 16 uppercase hexadecimal digits with no leading zeros. A location code might not consist of a worldwide unique identifier. When present, the worldwide unique identifier location label follows the location label of the resource that interfaces with the resource that has the worldwide unique identifier, usually a port.

Locations

Use this information to help you map a location code to a position on the unit.

Note: The known logical location codes for this unit are listed next to the corresponding physical location in the following information. If you are working with a logical location code for this unit and it is not listed in the following information, contact your next level of support.

The following diagrams show the field replaceable unit (FRU) layout in the system. Use these diagrams with the following tables.

Figure 52. Front and rear views

The following table provides location codes for parts that make up the server.

Table 51. FRU locations and failing components

Failing item name	Symbolic failing item name	Physical location code	Identify LED
System unit		Un	

Table 51. FRU locations and failing components (continued)

Failing item name	Symbolic failing item name	Physical location code	Identify LED
ESM			
ESM A		Un-C1	Yes
ESM B		Un-C2	Yes
Power supplies			
Power supply	PWRSPLY	Un-E1	Yes
Power supply	PWRSPLY	Un-E2	Yes
Midplane			
Midplane		Un-P1	Yes
Device physical locations			
Disk drive 1		Un-P1-D1	Yes
Disk drive 2		Un-P1-D2	Yes
Disk drive 3		Un-P1-D3	Yes
Disk drive 4		Un-P1-D4	Yes
Disk drive 5		Un-P1-D5	Yes
Disk drive 6		Un-P1-D6	Yes
Disk drive 7		Un-P1-D7	Yes
Disk drive 8		Un-P1-D8	Yes
Disk drive 9		Un-P1-D9	Yes
Disk drive 10		Un-P1-D10	Yes
Disk drive 11		Un-P1-D11	Yes
Disk drive 12		Un-P1-D12	Yes

Addresses

Use this information to locate system addresses.

Use the address to find the location and then go to locations to "Part locations and location codes" on page 2 to find the physical location.

8203-E4A, 9407-M15, and 9408-M25 addresses

You can cross-reference a disk drive physical location code to the address.

Use the address to find the location for the system, then go to "8203-E4A, 9407-M15, 9408-M25" on page 2 to find additional location information.

Table 52. IOA, and device address information, running IBM i

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
Un -P1	Embedded SAS controller	02001000 (primary)	7FFFFFFF
Un -P1-C1	PCI-E adapter	02040000	Not applicable
Un -P1-C2	PCI-E adapter	02050000	Not applicable
Un -P1-C3	PCI-E adapter	02070000	Not applicable

Table 52. IOA, and device address information, running IBM i (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
U*n* -P1-C4	PCI-X adapter	02021000	Not applicable
U*n* -P1-C5	PCI-X adapter	02031000	Not applicable
U*n* -P1-C9	PCI auxiliary cache card	02060000	7FFFFFFF
U*n* -P1-C10	RAID card	02001000	7FFFFFFF
U*n* -P2-D1	Removable media	02001000	020000FF
U*n* -P2-D2	Removable media	02001000	030000FF
U*n* -P2-D3	Disk drive 1	02001000	040200FF
U*n* -P2-D4	Disk drive 2	02001000	040300FF
U*n* -P2-D5	Disk drive 3	02001000	040400FF
U*n* -P2-D6	Disk drive 4	02001000	040500FF
U*n* -P2-D7	Disk drive 5	02001000	040600FF
U*n* -P2-D8	Disk drive 6	02001000	040700FF

8204-E8A and 9409-M50 addresses

You can cross-reference a disk drive physical location code to the address.

Use the address to find the location for the system, then go to "8204-E8A and 9409-M50" on page 12 to find additional location information.

Table 53. IOA, and device address information, running IBM i

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
U*n* -P1	Embedded SAS controller	02001000	7FFFFFFF
U*n* -P1-C1	PCI-E adapter	02040000	Not applicable
U*n* -P1-C2	PCI-E adapter	02050000	Not applicable
U*n* -P1-C3	PCI-E adapter	02070000	Not applicable
U*n* -P1-C4	PCI-X adapter	02021000	Not applicable
U*n* -P1-C5	PCI-X adapter	02031000	Not applicable
U*n* -P1-C10	PCI auxiliary cache card	02060000	7FFFFFFF
U*n* -P1-C11	RAID card	02001000	7FFFFFFF
U*n* -P2-D1	Removable media	02001000	020000FF
U*n* -P2-D2	Removable media	02001000	030000FF
U*n* -P2-D3	Disk drive 1	02001000	040200FF
U*n* -P2-D4	Disk drive 2	02001000	040300FF
U*n* -P2-D5	Disk drive 3	02001000	040400FF
U*n* -P2-D6	Disk drive 4	02001000	040500FF
U*n* -P2-D7	Disk drive 5	02001000	040600FF
U*n* -P2-D8	Disk drive 6	02001000	040700FF

8234-EMA, 9117-MMA, and 9406-MMA addresses

You can cross-reference a disk drive physical location code to the address.

Use the address to find the location for the system, then go to "8234-EMA, 9117-MMA, and 9406-MMA" on page 23 to find additional location information.

Table 54. IOA, and device address information for running IBM i

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
Un -P1	Embedded SAS controller	0200-20-00 (primary) 0220-20-00 (secondary 1) 0240-20-00 (secondary 2) 0260-20-00 (secondary 3)	Not applicable
Un -P1-C1	PCI adapter	0204-00-00 (primary) 0224-00-00 (secondary 1) 0244-00-00 (secondary 2) 0264-00-00 (secondary 3)	Not applicable
Un -P1-C2	PCI adapter	0205-00-00 (primary) 0225-00-00 (secondary 1) 0245-00-00 (secondary 2) 0265-00-00 (secondary 3)	Not applicable
Un -P1-C3	PCI adapter	0206-00-00 (primary) 0226-00-00 (secondary 1) 0246-00-00 (secondary 2) 0266-00-00 (secondary 3)	Not applicable
Un -P1-C4	PCI adapter	0201-10-00 (primary) 0221-10-00 (secondary 1) 0241-10-00 (secondary 2) 0261-10-00 (secondary 3)	Not applicable
Un -P1-C5	PCI adapter	0202-10-00 (primary) 0222-10-00 (secondary 1) 0242-10-00 (secondary 2) 0262-10-00 (secondary 3)	Not applicable
Un -P1-C6	PCI adapter	0207-00-00 (primary) 0227-00-00 (secondary 1) 0247-00-00 (secondary 2) 0267-00-00 (secondary 3)	Not applicable

Table 54. IOA, and device address information for running IBM i (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
U*n* -P3-D1	Disk drive 1	0200-20-00 (primary) 0220-20-00 (secondary 1) 0240-20-00 (secondary 2) 0260-20-00 (secondary 3)	000200FF
U*n* -P3-D2	Disk drive 2	0200-20-00 (primary) 0220-20-00 (secondary 1) 0240-20-00 (secondary 2) 0260-20-00 (secondary 3)	000300FF
U*n* -P3-D3	Disk drive 3	0200-20-00 (primary) 0220-20-00 (secondary 1) 0240-20-00 (secondary 2) 0260-20-00 (secondary 3)	000400FF
U*n* -P3-D4	Disk drive 4	0200-20-00 (primary) 0220-20-00 (secondary 1) 0240-20-00 (secondary 2) 0260-20-00 (secondary 3)	000500FF
U*n* -P3-D5	Disk drive 5	0200-20-00 (primary) 0220-20-00 (secondary 1) 0240-20-00 (secondary 2) 0260-20-00 (secondary 3)	000600FF
U*n* -P3-D6	Disk drive 6	0200-20-00 (primary) 0220-20-00 (secondary 1) 0240-20-00 (secondary 2) 0260-20-00 (secondary 3)	000700FF
U*n* -P4-D1	IDE drive 1	0200-20-00 (primary) 0220-20-00 (secondary 1) 0240-20-00 (secondary 2) 0260-20-00 (secondary 3)	040000FF

0595, 5095, and 7311-D20 addresses

You can cross-reference a disk drive physical location code to the address.

Use the address to find the location for the system, then go to "0595, 5095, and 7311-D20" on page 56 to find additional location information.

Table 55. IOP, IOA, and device address information

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
		IOA and device DSAs do not conform to the following rules if the IOA is manually reassigned after IPL.	
C01 (IXS capable position)	IOP	xxxx-20-00	FFFFFFFF
C02 (empty if IXS in C01)	Storage IOA	xxxx-20-00	2FFFFFFF
C02 (empty if IXS in C01)	Communication or workstation IOA	xxxx-20-00	E2FFFFFF
C03	IOP	xxxx-24-00	FFFFFFFF
C03	Storage IOA	xxxx-20-00	4FFFFFFF
C03	Communication or workstation IOA	xxxx-20-00	E4FFFFFF
C03	IXS attached IOA	xxxx-20-00	E004FFFF
C04	Storage IOA	The IOA has the same DSA as the first IOP found in the following list: C03, C01.	6FFFFFFF
C04	Communication or workstation IOA	The IOA has the same DSA as the first IOP found in the following list: C03, C01.	E6FFFFFF
C04	IXS attached IOA	The IOA has the same DSA as the first IOP found in the following list: C03, C01.	E006FFFF
C06	IOP	yyyy-20-00	FFFFFFFF
C07	Storage IOA	yyyy-20-00	2FFFFFFF
C07	Communication or workstation IOA	yyyy-20-00	E2FFFFFF
C08	Storage IOA	yyyy-20-00	6FFFFFFF
C08	Communication or workstation IOA	yyyy-20-00	E6FFFFFF
C08	IXS attached IOA	yyyy-20-00	E006FFFF
D01, D07	Disk unit	The disk unit has the same DSA as the IOP controlling the storage IOA.	xy0100FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address and y is I/O bus 0, 1, 2, or 3. Storage IOA buses begin with 0 and are numbered from the tailstock toward the middle of the card. Find the storage IOA with the same DSA and xFFFFFFF address, then trace the I/O bus cable to determine if the position is D01 or D07.)

Table 55. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
D02, D08	Disk unit		xy0200FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address and y is I/O bus 0, 1, 2, or 3. Storage IOA buses begin with 0 and are numbered from the tailstock toward the middle of the card. Find the storage IOA with the same DSA and xFFFFFFF address, then trace the I/O bus cable to determine if the position is D02 or D08.)
D03, D09	Disk unit		xy0300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address and y is I/O bus 0, 1, 2, or 3. Storage IOA buses begin with 0 and are numbered from the tailstock toward the middle of the card. Find the storage IOA with the same DSA and xFFFFFFF address, then trace the I/O bus cable to determine if the position is D03 or D09.)
D04, D10	Disk unit		xy0400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address and y is I/O bus 0, 1, 2, or 3. Storage IOA buses begin with 0 and are numbered from the tailstock toward the middle of the card. Find the storage IOA with the same DSA and xFFFFFFF address, then trace the I/O bus cable to determine if the position is D04 or D10.)
D05, D11	Disk unit		xy0E00FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address and y is I/O bus 0, 1, 2, or 3. Storage IOA buses begin with 0 and are numbered from the tailstock toward the middle of the card. Find the storage IOA with the same DSA and xFFFFFFF address, then trace the I/O bus cable to determine if the position is D05 or D11.)

Table 55. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
D06, D12	Disk unit		xy0F00FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address and y is I/O bus 0, 1, 2, or 3. Storage IOA buses begin with 0 and are numbered from the tailstock toward the middle of the card. Find the storage IOA with the same DSA and xFFFFFFF address, then trace the I/O bus cable to determine if the position is D06 or D12.)

5094, 5294, 5096, and 5296 addresses

You can cross-reference a disk drive physical location code to the address.

Use the address to find the location for the system, then go to "5094, 5294, 5096, and 5296" on page 63 to find additional location information.

Remember: References to disk units, media (optical and tape), and device boards in either the following table does not apply to the 5096, or 5296.

Table 56. IOP, IOA, and device address information

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
		IOA and device DSAs do not conform to the following rules if the IOA is manually reassigned after IPL.	
C01 (IXS capable position)	IOP	xxxx-20-00	FFFFFFFF
C02 (empty if IXS in C01)	Storage IOA	xxxx-20-00	2FFFFFFF
C02 (empty if IXS in C01)	Communications or Workstation IOA	xxxx-20-00	E2FFFFFF
C03	IOP	xxxx-24-00	FFFFFFFF
C03	Storage IOA	xxxx-20-00	4FFFFFFF
C03	Communications or Workstation IOA	xxxx-20-00	E4FFFFFF
C03	IXS attached IOA	xxxx-20-00	E004FFFF
C04	Storage IOA	The IOA has the same DSA as the first IOP found in the following list: C03, C01.	6FFFFFFF
C04	Communications or Workstation IOA	The IOA has the same DSA as the first IOP found in the following list: C03, C01.	E6FFFFFF
C04	IXS attached IOA	The IOA has the same DSA as the first IOP found in the following list: C03, C01.	E006FFFF
C05 (IXS capable position)	IOP	yyyy-20-00	FFFFFFFF

Table 56. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
C06 (empty if IXS in C05)	Storage IOA	yyyy-20-00	2FFFFFFFF
C06 (empty if IXS in C05)	Communications or Workstation IOA	yyyy-20-00	E2FFFFFF
C07	IOP	yyyy-23-00	FFFFFFFF
C07	Storage IOA	yyyy-20-00	3FFFFFFF
C07	Communications or Workstation IOA	yyyy-20-00	E3FFFFFF
C07	IXS attached IOA	yyyy-20-00	E003FFFF
C08	IOP	yyyy-24-00	FFFFFFFF
C08	Storage IOA	The IOA has the same DSA as the first IOP found in the following list: C07, C05.	4FFFFFFF
C08	Communications or Workstation IOA	The IOA has the same DSA as the first IOP found in the following list: C07, C05.	E4FFFFFF
C08	IXS attached IOA	The IOA has the same DSA as the first IOP found in the following list: C07, C05.	E004FFFF
C09	Storage IOA	The IOA has the same DSA as the first IOP found in the following list: C08, C07, C05.	6FFFFFFF
C09	Communications or Workstation IOA	The IOA has the same DSA as the first IOP found in the following list: C08, C07, C05.	E6FFFFFF
C09	IXS attached IOA	The IOA has the same DSA as the first IOP found in the following list: C08, C07, C05.	E006FFFF
C11 (IXS capable position)	IOP	zzzz-20-00	FFFFFFFF
C12 (empty if IXS in C11)	Storage IOA	zzzz-20-00	2FFFFFFFF
C12 (empty if IXS in C11)	Communications or Workstation IOA	zzzz-20-00	E2FFFFFF
C13	IOP	zzzz-23-00	FFFFFFFF
C13	Storage IOA	zzzz-20-00	3FFFFFFF
C13	Communications or Workstation IOA	zzzz-20-00	E3FFFFFF
C13	IXS attached IOA	zzzz-20-00	E003FFFF
C14	IOP	zzzz-24-00	FFFFFFFF
C14	Storage IOA	The IOA has the same DSA as the first IOP found in the following list: C13, C11.	4FFFFFFF
C14	Communications or Workstation IOA	The IOA has the same DSA as the first IOP found in the following list: C13, C11.	E4FFFFFF
C14	IXS attached IOA	The IOA has the same DSA as the first IOP found in the following list: C13, C11.	E004FFFF
C15	Storage IOA	The IOA has the same DSA as the first IOP found in the following list: C14, C13, C11.	6FFFFFFF
C15	Communications or Workstation IOA	The IOA has the same DSA as the first IOP found in the following list: C14, C13, C11.	E6FFFFFF
C15	IXS attached IOA	The IOA has the same DSA as the first IOP found in the following list: C14, C13, C11.	E006FFFF

Table 56. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBBCcbb)	Unit address
D01	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x00300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D02	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x00400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D03	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x00500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D04	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x00600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D05	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x00700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D06	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x00300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D07	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x00400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D08	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x00500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D09	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x00600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D10	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x00700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)

Table 56. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
D11	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x10300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D12	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x10400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D13	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x10500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D14	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x10600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D15	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x10700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D16	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x10300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D17	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x10400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D18	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x10500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D19	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x10600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D20	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x10700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)

Table 56. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
D21	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x20300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D22	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x20400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D23	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x20500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D24	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x20600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D25	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "L-1".	x20700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D26	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x20300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D27	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x20400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D28	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x20500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D29	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x20600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D30	Disk unit	The disk unit has the same DSA as the IOA attached to the internal cable labeled "R-2".	x20700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)

Table 56. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
D31	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x00100FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D32	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x00200FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D33	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x00300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D34	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x00400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D35	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x00500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D36	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x10300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D37	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x10400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D38	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x10500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D39	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x10600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D40	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x10700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)

Table 56. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
D41	Optical	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x00600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D42	Tape	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x00700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D46	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x20300FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D47	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x20400FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D48	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x20500FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D49	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x20600FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)
D50	Disk unit	The disk unit has the same DSA as the IOA attached to the internal flat ribbon cable.	x20700FF (where x is the same as the first character of the xFFFFFFF IOA Unit Address)

5786, 5787, 7031-D24, and 7031-T24 addresses

Use the table to cross reference a disk drive physical location code to that of the SCSI cable address.

Use the address to find the location for the system, then go to "5786, 5787, 7031-D24, and 7031-T24" on page 71 to find additional location information.

Note: The *x* in the following table represents the I/O adapter number of the attached I/O card and the *y* represents the SCSI bus number.

Table 57. Device cable address information

Physical location code	Unit address (SCSI cable from I/O adapter to SCSI interface card)	Unit address (SCSI cable from SCSI interface card to SCSI interface card)
Un-P1-D1	xy0200FF	xy0A00FF
Un-P1-D2	xy0300FF	xy0B00FF
Un-P1-D3	xy0400FF	xy0C00FF

Table 57. Device cable address information (continued)

Physical location code	Unit address (SCSI cable from I/O adapter to SCSI interface card)	Unit address (SCSI cable from SCSI interface card to SCSI interface card)
Un-P1-D4	xy0500FF	xy0D00FF
Un-P1-D5	xy0600FF	xy0E00FF
Un-P1-D6	xy0700FF	xy0F00FF
Un-P1-D7	xy0200FF	xy0A00FF
Un-P1-D8	xy0300FF	xy0B00FF
Un-P1-D9	xy0400FF	xy0C00FF
Un-P1-D10	xy0500FF	xy0D00FF
Un-P1-D11	xy0600FF	xy0E00FF
Un-P1-D12	xy0700FF	xy0F00FF
Un-P2-D1	xy0200FF	xy0A00FF
Un-P2-D2	xy0300FF	xy0B00FF
Un-P2-D3	xy0400FF	xy0C00FF
Un-P2-D4	xy0500FF	xy0D00FF
Un-P2-D5	xy0600FF	xy0E00FF
Un-P2-D6	xy0700FF	xy0F00FF
Un-P2-D7	xy0200FF	xy0A00FF
Un-P2-D8	xy0300FF	xy0B00FF
Un-P2-D9	xy0400FF	xy0C00FF
Un-P2-D10	xy0500FF	xy0D00FF
Un-P2-D11	xy0600FF	xy0E00FF
Un-P2-D12	xy0700FF	xy0F00FF

5790 and 7311-D11 addresses

You can cross-reference a disk drive physical location code to the address.

Use the address to find the location for the system, then go to "5790 and 7311-D11" on page 78 to find additional location information.

Table 58. IOP, IOA, and device address information

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
Un-P1-C1	IOP or IOA	xxxx-20-00	
Un-P1-C2	IOP or IOA	xxxx-22-00 If the IOA is controlled by a physical IOP, then it has the DSA of the controlling IOP instead)	
Un-P1-C3	IOP or IOA	xxxx-26-00 If the IOA is controlled by a physical IOP, then it has the DSA of the controlling IOP instead)	s
Un-P1-C4	IOP or IOA	yyyy-20-00	

Table 58. IOP, IOA, and device address information (continued)

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
Un-P1-C5	IOP or IOA	yyyy-22-00 If the IOA is controlled by a physical IOP, then it has the DSA of the controlling IOP instead)	
Un-P1-C6	IOP or IOA	yyyy-26-00 If the IOA is controlled by a physical IOP, then it has the DSA of the controlling IOP instead)	

5796 and 7314-G30 addresses

You can cross-reference a disk drive physical location code to the address.

Use the address to find the location for the system, then go to "5796 and 7314-G30" on page 92 to find additional location information.

Table 59. IOP, IOA, and device address information

Position	Possible failing item	DSA (BBBBCcbb)	Unit address
Un-P1-C1	PCI adapter	aaaa-00-00	N/A
Un-P1-C2	PCI adapter	bbbb-00-00	N/A
Un-P1-C3	PCI adapter	cccc-00-00	N/A
Un-P1-C4	PCI adapter	dddd-00-00	N/A
Un-P1-C5	PCI adapter	eeee-00-00	N/A
Un-P1-C6	PCI adapter	ffff-00-00	N/A

5886 addresses

You can cross-reference a disk drive physical location code to the address.

Use the address to find the location for the system, then go to "5886" on page 110 to find additional location information.

Table 60. Device address information

Physical location code	Unit address
U*n*-P1-D1	044000FF
U*n*-P1-D2	044100FF
U*n*-P1-D3	044200FF
U*n*-P1-D4	044300FF
U*n*-P1-D5	044400FF
U*n*-P1-D6	044500FF
U*n*-P1-D7	044600FF
U*n*-P1-D8	044700FF
U*n*-P1-D9	044800FF
U*n*-P1-D10	044900FF
U*n*-P1-D11	044A00FF

Table 60. Device address information (continued)

Physical location code	Unit address
U*n*-P1-D12	044B00FF

System parts

Use this information to locate and identify common hardware parts.

System parts contains only the part numbers likely to be needed during hardware servicing, and is not a complete part number listing. Indexed assembly diagrams help you map the part to its position on the unit. Use "Part locations and location codes" on page 2 to help you identify location codes.

8203-E4A, 9407-M15, and 9408-M25 system parts

Indexed drawings show parts system part numbers.

Rack assembly
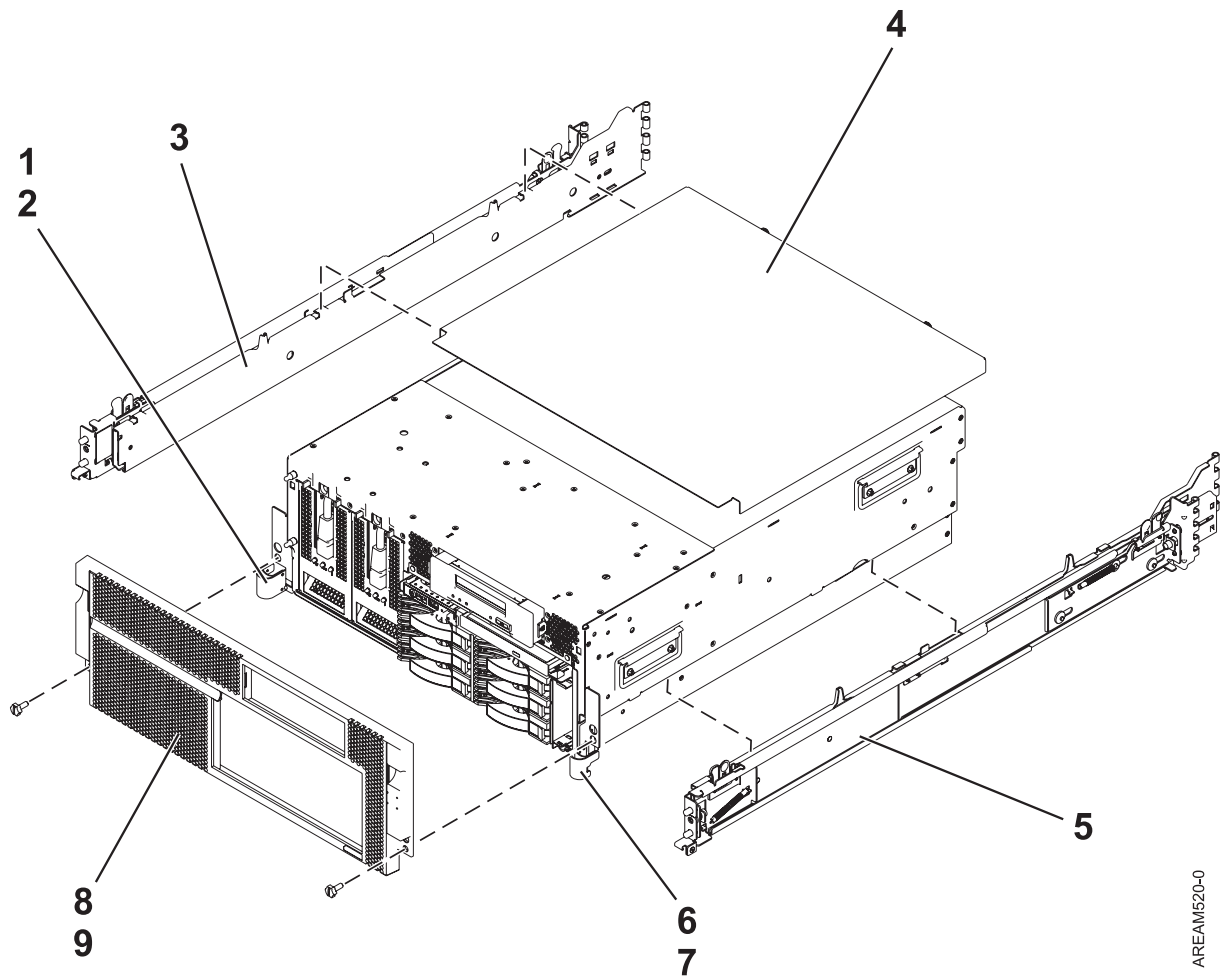
AREAM520-0

Table 61. Rack assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
1		32P1865 44V4345	1	Left EIA bracket
2		09P3744	1	Screw, left EIA bracket
3		43W4518	1	Left slide assembly
4		39J4515	1	Drawer top cover 8203-E4A
4		53P0308	1	Drawer top cover 9408-M25
4		39J4515	1	Drawer top cover 9407-M15
5		43W4519	1	Right slide assembly
6		32P1864 44V4342	1	Right EIA bracket
7		09P3744	1	Screw, right EIA bracket
8		39J4530	1	Drawer front bezel
9		04N6587	2	Drawer shipping screws

Stand-alone assembly
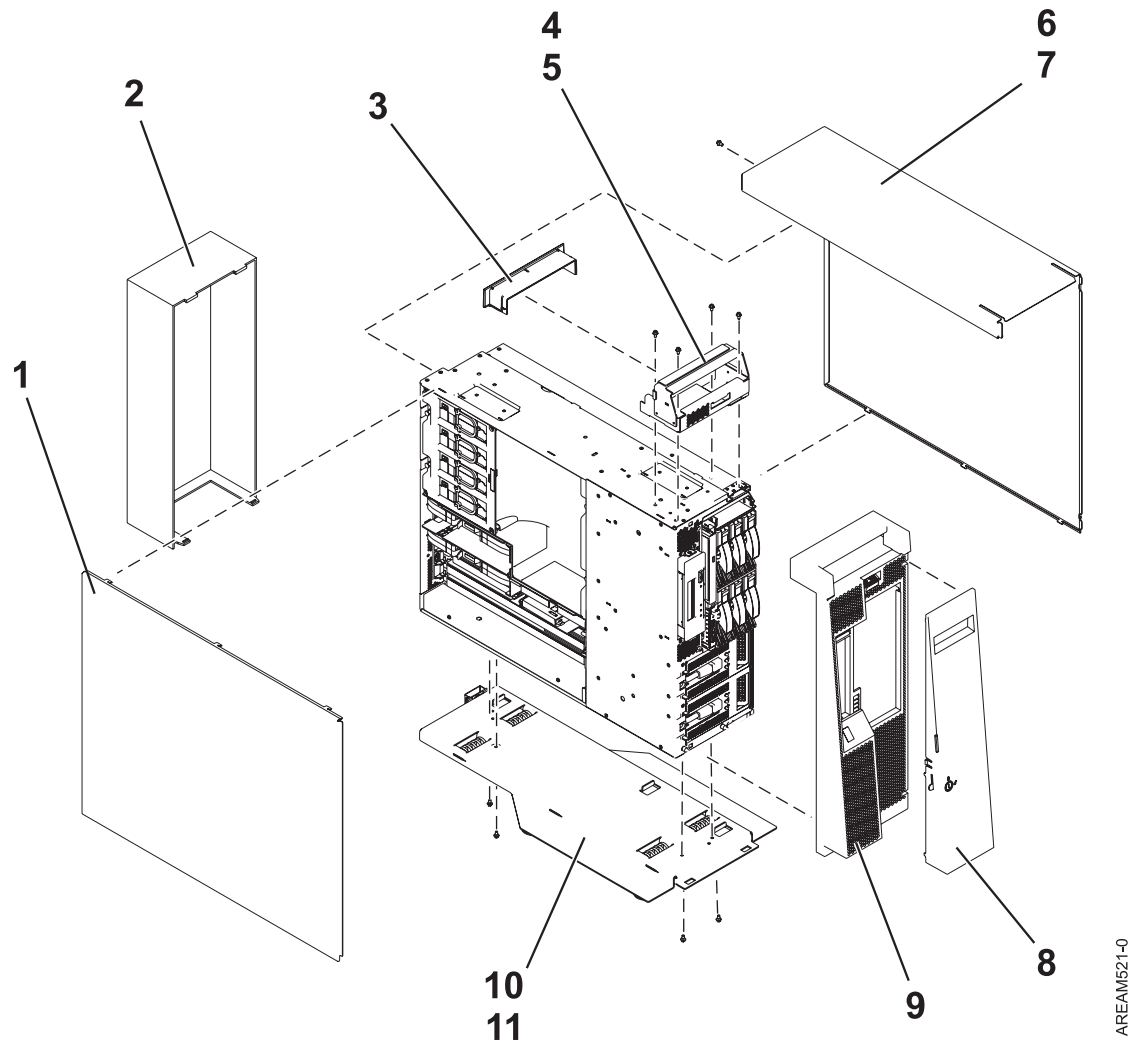
Table 62. Stand-alone assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
1		44V3121	1	Left stand-alone cover 8203-E4A
1		53P0285	1	Left stand-alone cover 9408-M25
1		44V3121	1	Left stand-alone cover 9407-M15
2			0	Not applicable
3		42R8604	1	Handle cap
4		44V3127	1	Handle bracket
5		09P3744	4	Screw, handle bracket
6		44V3125	1	Right stand-alone cover 8203-E4A
6		39J1179	1	Right stand-alone cover 9408-M25
6		44V3125	1	Right stand-alone cover 9407-M15
7		09P3744	1	Screw, right stand-alone cover
8 and 9		42R6911	1	One piece front stand-alone bezel

Table 62. Stand-alone assembly part numbers (continued)

Index number	CCIN	Part number	Units per assembly	Description
10		44V3120	1	Tip foot
11		09P3744	4	Screw, tip foot

Rack assembly continued
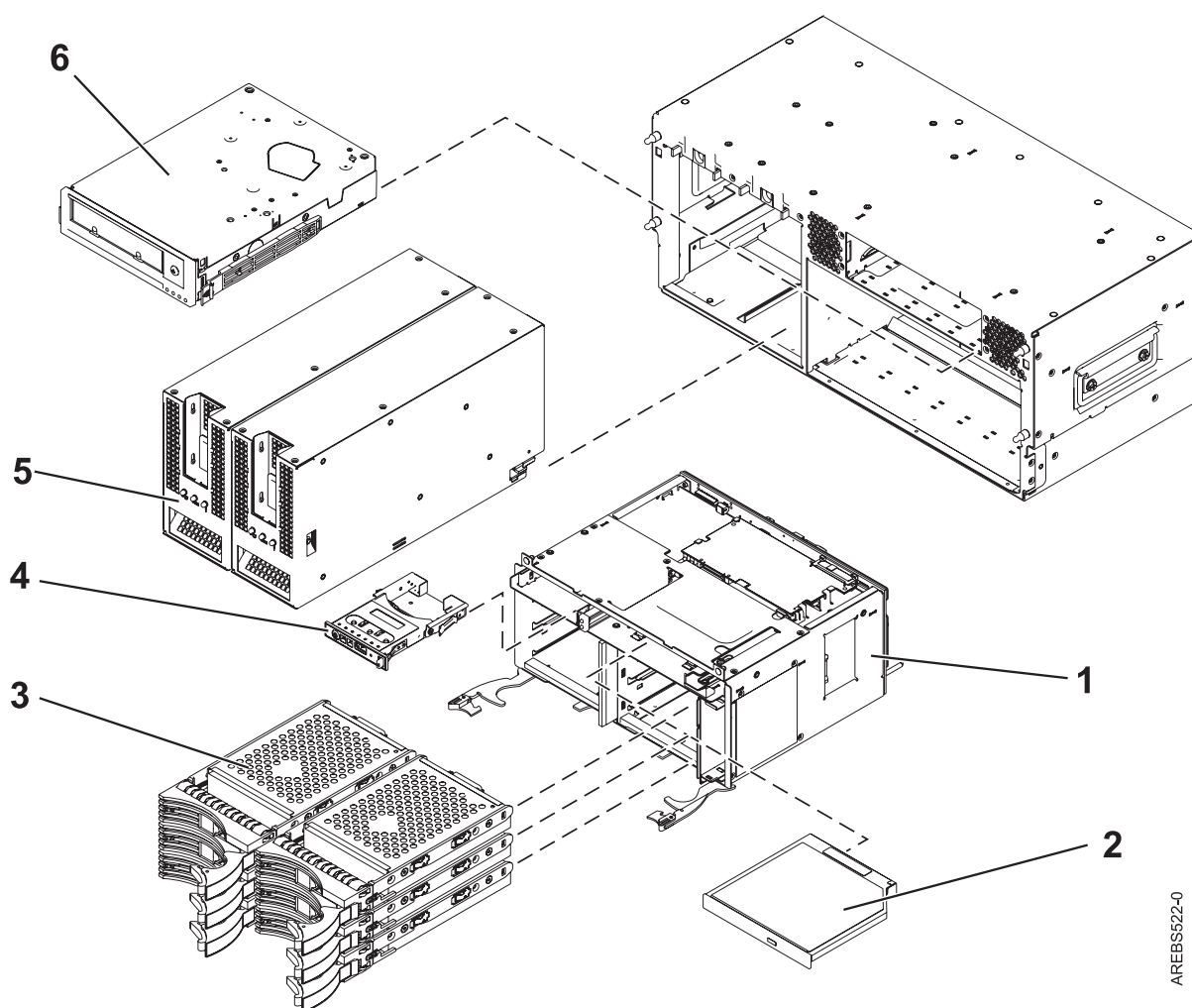
AREBS522-0

Table 63. Rack assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
1	2875	44V4270 (high function) 07P6910 (low function)	1	Disk drive cage assembly
2			1	Removable media. See Managing devices.
3	433B	42R6690	1–6	70 GB SAS disk drive, System i® model
3	3646	10N7230	1-6	73 GB SAS disk drive, AIX and Linux
3		10N7230	1-6	73 GB SAS disk drive

Table 63. Rack assembly part numbers (continued)

Index number	CCIN	Part number	Units per assembly	Description
3	433C	42R6691	1–6	140 GB SAS disk drive v
3		10N7204	1-6	146 GB SAS disk drive
3	3647	10N7232	1-6	146 GB SAS disk drive, AIX and Linux
3	433D	42R6692	1–6	283.7 GB SAS disk drive, System i model
3	3608	10N7234	1-6	300 GB SAS disk drive, AIX and Linux
3		10N7234	1-6	300 GB SAS disk drive
4		44V4749	1	Control panel
5		44V4195	2	Power supply
6			1	Tape drive. See Managing devices.

Rack assembly continued
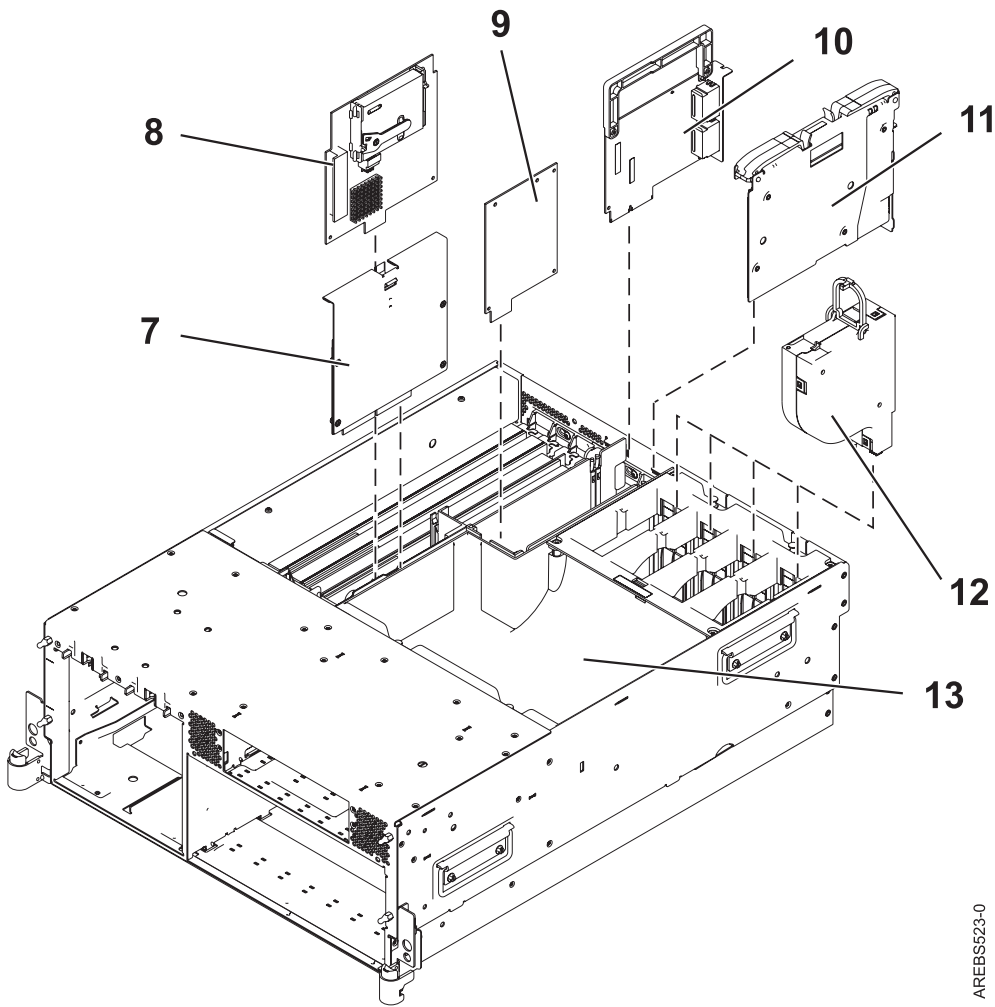
AREBS523-0

Table 64. Rack assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
7	57B8	44V3298	1	SAS RAID enablement card
8	57B7	44V4192	1	RAID auxiliary cache card
9	2A0D	10N9718	1	Thermal management card
10	1819	10N9622	1	Quad 1 GB ethernet card
10	1830	10N9669		Dual 10 GB ethernet card
10	1818	10N9627	1	Dual 1 GB ethernet card
11	1814	07P6778	2	GXRIOG adapter
11	1817	46K6564	2	GX 12xInfiniBand adapter
12		39J4517	4	Blower assembly
13			1	Air plenum

Rack assembly continued
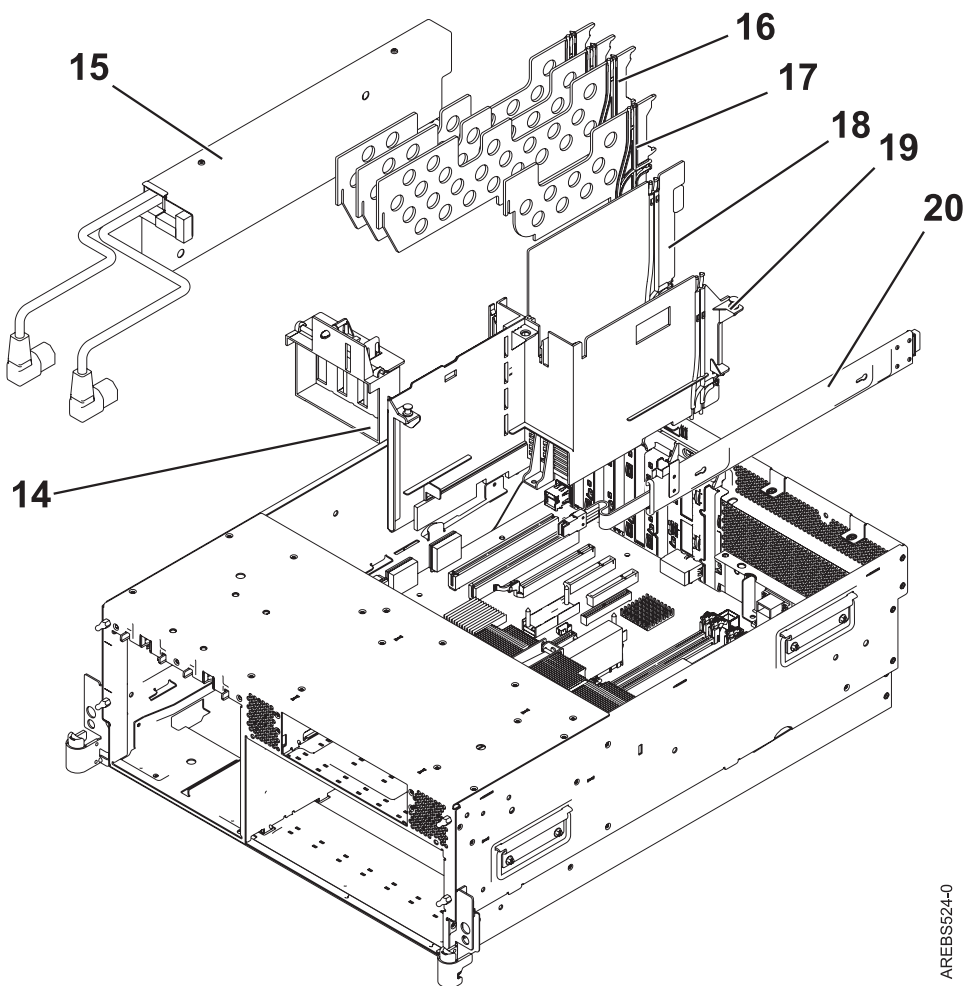
AREBS524-0

Table 65. Rack assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
14		39J4503	1	PCI guide
15		39J4522	1	Line cord bracket
16		39J4502	3	Long PCI divider
17		53P2733	1	Short PCI divider
18		42R5078	1	GX divider
19		39J4500	1	Chassis
20		44V3382	1	SAS cable, DASD backplane to bulkhead (external) connector 8203-E4A, 9408-M25
20		44V5253	1	SAS cable, DASD backplane to bulkhead connector 8203-E4A

Rack assembly continued
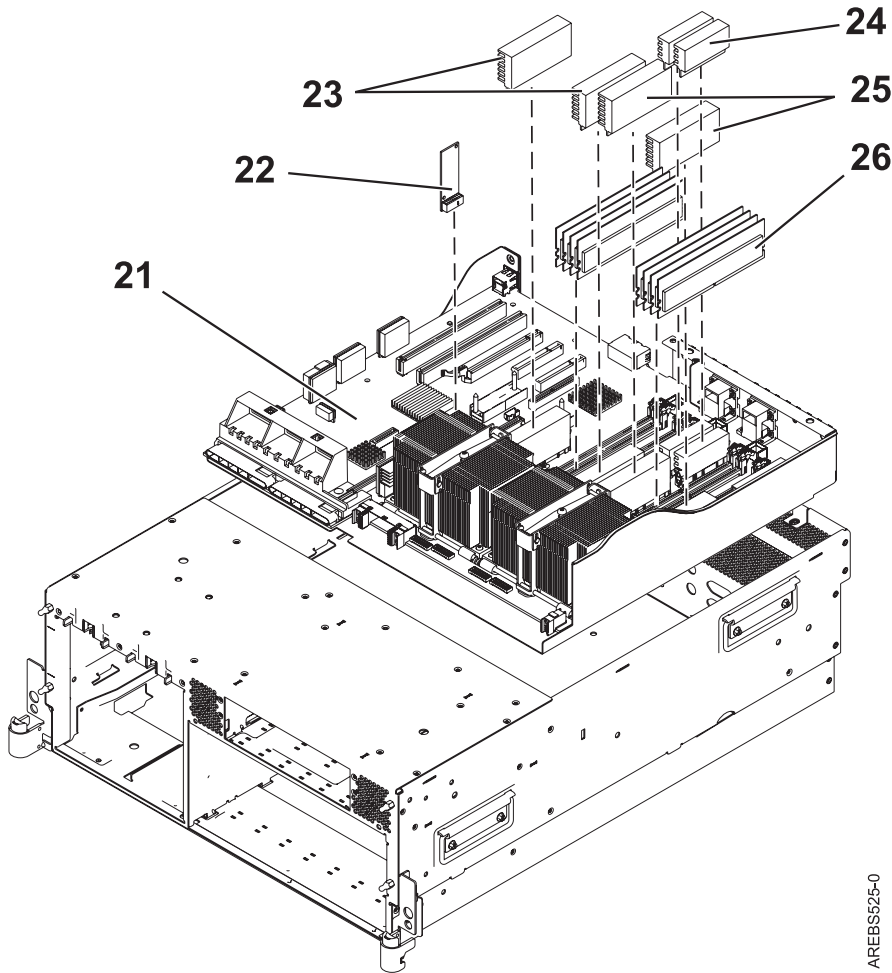
AREBS525-0

Table 66. Rack assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
21	53DE	10N9996	1	1-core 4.2 GHz backplane 8203-E4A, 9407-M15
21	53DC	10N9995	1	2-core 4.2 GHz backplane 8203-E4A, 9408-M25
21	53DC	10N9997	1	4-core 4.2 GHz backplane 8203-E4A
22	52A9	10N6802	1	VPD card
23		44V3845	2	Processor VRM
24		44V3841	2	30 A VRM
26		87H3621	8	8 MG DIMM
26	31A9	77P6497	8	512 MG DIMM
26	31AA	77P6498	8	1 GB DIMM
26	31AB	77P6499	8	2 GB DIMM
26	31A6	77P6500	8	4 GB DIMM
26	31A8	77P7504	8	8 GB DIMM

Table 67. Cables

CCIN	Description	Part number
	1.5 meter InfiniBand cable	15R8139
	3 meter InfiniBand cable	15R8140
	10 meter InfiniBand cable	15R8141
	Operator panel cable, drawer	42R6066
	Operator panel cable, stand-alone	42R6064
	USB short cable for operator panel	42R6069
	SCSI cable	52G4233
	SCSI2 cable	52G4291
	3.7 meter cable	10N7158
	8 meter cable	10N7159
	10 meter HSL cable	39J2561
	1 meter SAS cable	44V4147
	3 meter SAS cable	44V4148
	6 meter SAS cable	44V4149
	4.5 meter SAS cable	42R5814
	3 meter SAS cable	44V4154
	6 meter SAS cable	44V4155
	15 meter SAS cable	44V4156
	1 meter SAS cable	44V4041
	3 meter SAS cable	44V4163
	6 meter SAS cable	44V4164
	1.5 meter SAS cable	44V4161
	3 meter SAS cable	44V4162
	1.5 meter SAS cable	44V4157

Table 67. Cables (continued)

CCIN	Description	Part number
	3 meter SAS cable	44V4158
	6 meter SAS cable	44V4159
	15 meter SAS cable	44V4160
	2 meter SPCN cable	22R5217
	3 meter SPCN cable	22R5239
	15 meter SPCN cable	22R5221
	6 meter SPCN cable	22R5219
	30 meter SPCN cable	22R5222

Table 68. Miscellaneous parts

CCIN	Description	Part number
	External cables and cords	See Site and hardware planning.
	Removable media	See Managing devices.
	PCI adapters	See Managing PCI adapters.
	Cable configuration	See Enclosures and expansion units.
	Battery pack	44V4145
	Time-of-day battery	44V4359
	Power supply filler	42R6935
	4 MM cleaning tape	23R5638

8204-E8A and 9409-M50 system parts

Indexed drawings show parts system part numbers.

Rack final assembly
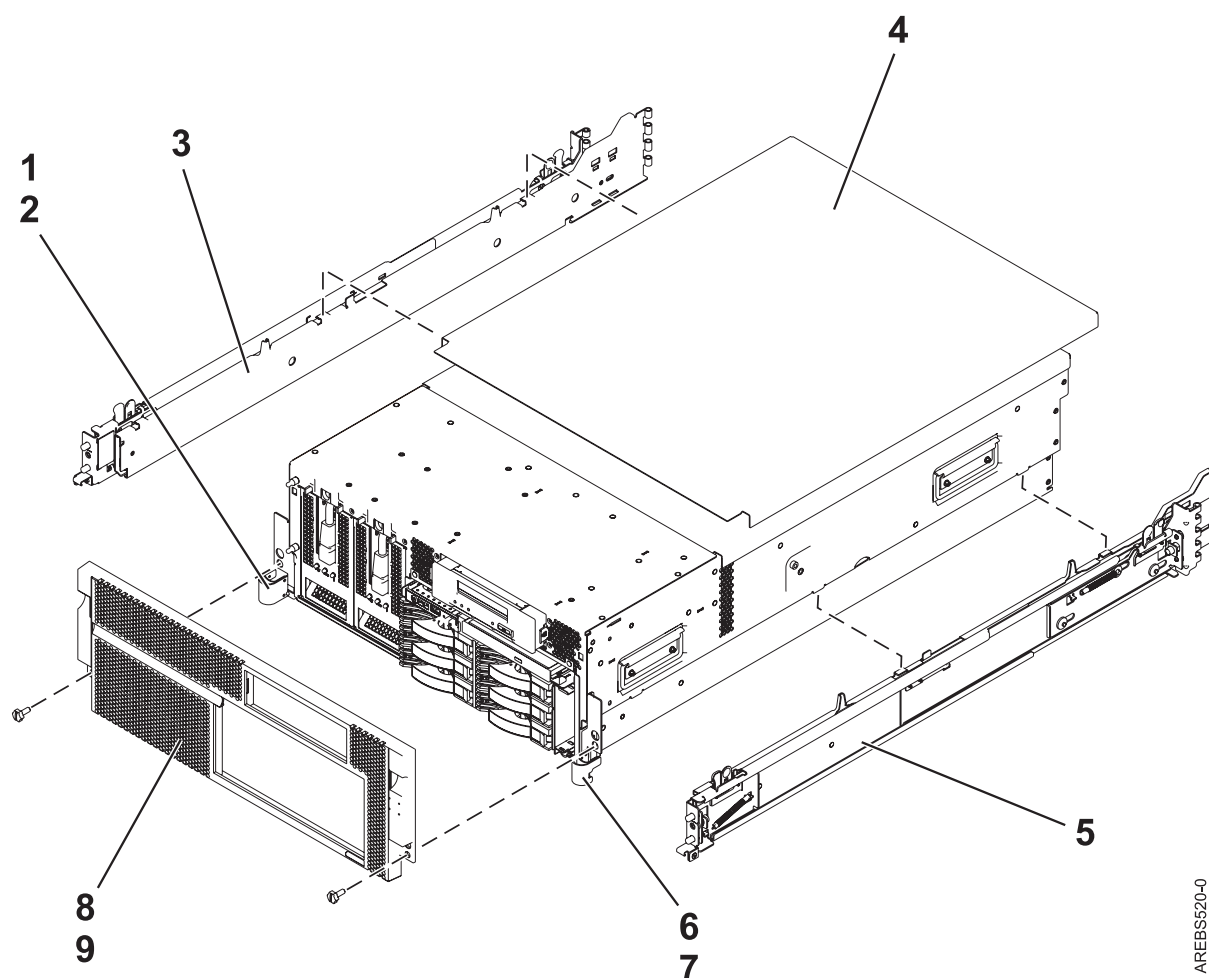
Table 69. Rack final assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
1		39R6550	1	Rack mounting bracket kit 8204-E8A
1		42R8279	1	Left rack mounting bracket
2		39J3953	2	Screw
2		39R6550	1	Rack mounting bracket kit 8204-E8A
3		39J4471	1	Left rail 9409-M50
4		42R7686	1	Rack top cover 8204-E8A
4		21P4986	1	Rack top cover 9409-M50
5		39J4472	1	Right rail 9409-M50
6		42R8278	1	Right rack mounting bracket
7		39J3953	2	Screw
8		44V5078	1	Front bezel 8204-E8A
8		44V4987	1	Front bezel 9409-M50
9		12J5289	2	Screw

Stand-alone final assembly
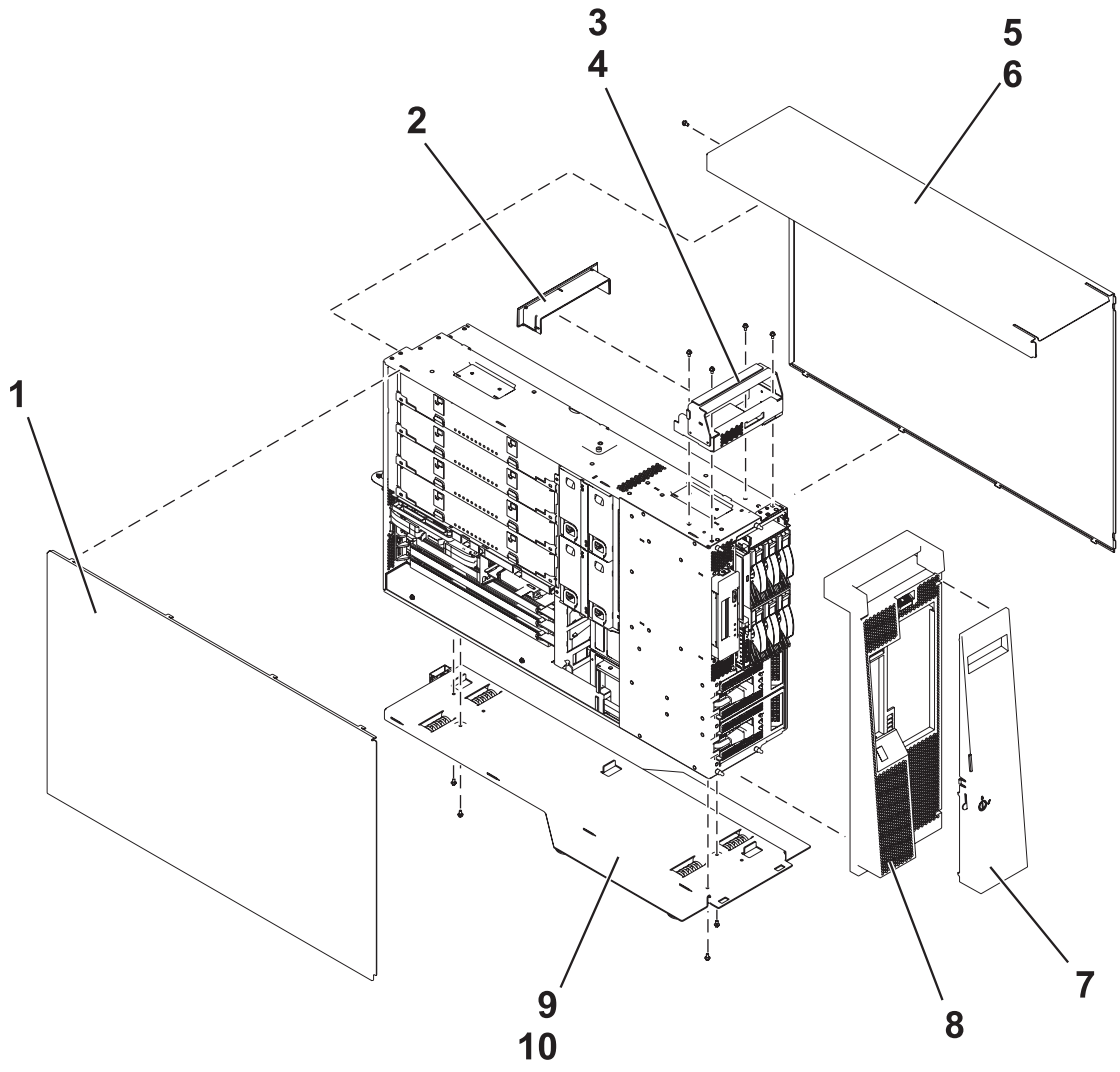
Table 70. Stand-alone final assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
1		44V2839	1	Left side cover 8204-E8A
1		39J1223	1	Left side cover 9409-M50
2		42R8604	1	Top handle cap
3		42R8601	1	Top handle assembly
4		09P3744	4	Screw
5		42R8598	1	Right side cover 8204-E8A
5		39J1224	1	Right side cover 9409-M50
6		09P3744	1	Screw
7 & 8		44V4989	1	Stand-alone bezel 8204-E8A
7 & 8		12R8505	1	Stand-alone bezel 9409-M50
9		42R5432	1	Tip foot assembly 8204-E8A
9		39J1235	1	Tip foot assembly 9409-M50

Table 70. Stand-alone final assembly part numbers (continued)

Index number	CCIN	Part number	Units per assembly	Description
10		09P3744	4	Screw

Rack assembly detail
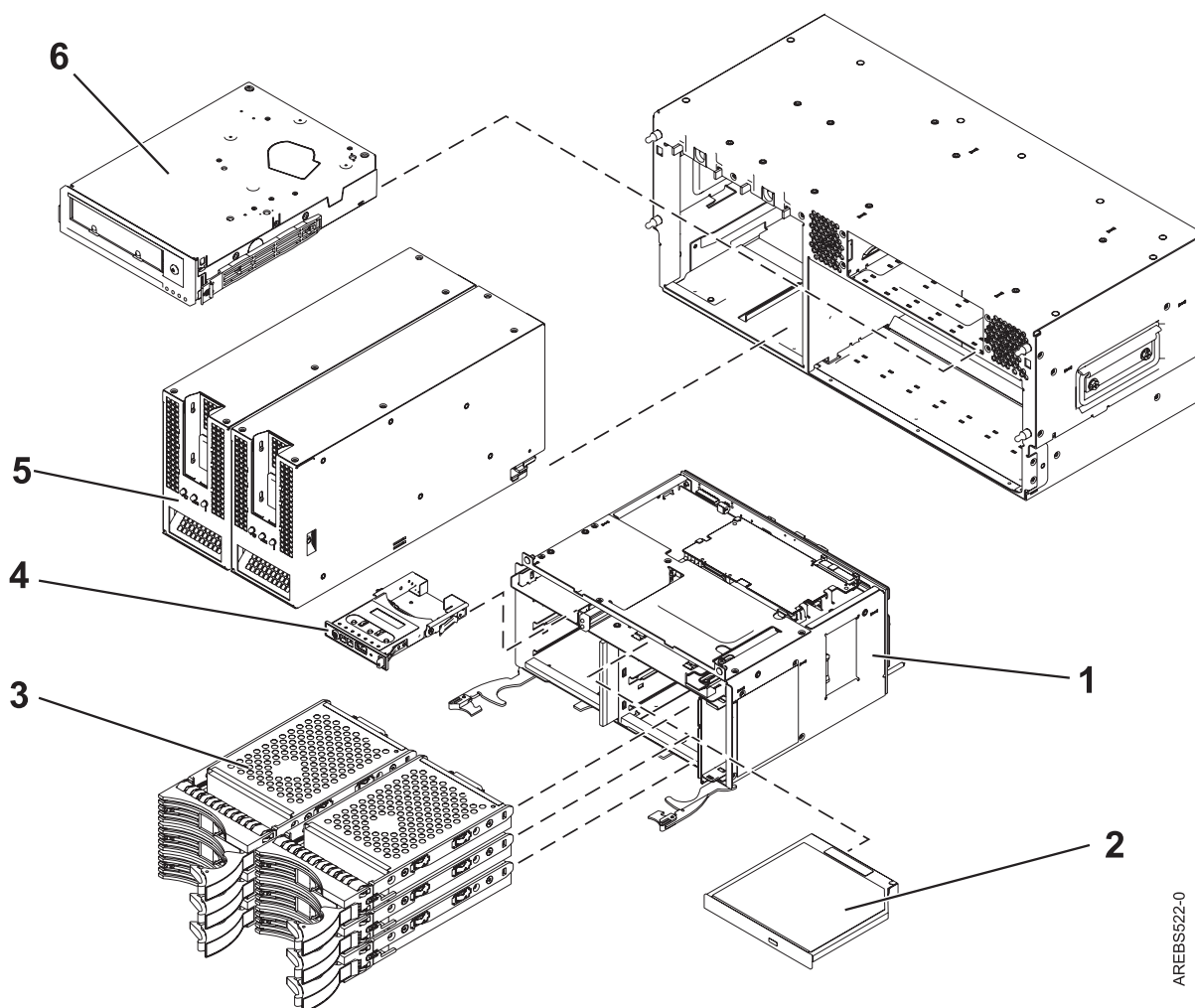
AREBS522-0

Table 71. Rack assembly detail part numbers

Index number	CCIN	Part number	Units per assembly	Description
1	2893	10N9532 (low function)	1	3.5 DASD cage with board
1	2875	10N9664 (high function)	1	3.5 DASD cage with board
2		39J5774	1	DVD. See Managing devices.
3		39J3695 39J3698	1–6	3.5 inch 35 GB SCSI DASD 9409-M50, 15 K
3	433B	42R6690	1–6	70 GB SAS disk drive

Table 71. Rack assembly detail part numbers (continued)

Index number	CCIN	Part number	Units per assembly	Description
3		39J3696 39J3699	1–6	3.5 inch 70 GB SCSI DASD 9409-M50, 15 K
3		10N7230	1-6	3.5 inch 73 GB SAS DASD
3		10N7200 42R8391	1–6	3.5 inch 73 GB SAS DASD 8204-E8A, 15 K
3		03N5260	1–6	3.5 inch 73 GB SAS DASD 9409-M50, 10 K
3	433C	42R6691	1–6	140 GB SAS disk drive
3		39J3697 39J3700	1–6	3.5 inch 140 GB SCSI DASD 9409-M50, 15 K
3		10N7232	1-6	3.5 inch 146 GB SAS DASD, 15 K
3		10N7204 42R8392	1–6	3.5 inch 146 GB SAS DASD 8204-E8A
3		03N5265 03N6330	1–6	3.5 inch 146 GB SAS DASD 9409-M50, 10 K
3		03N5285	1-6	3.5 inch 146 GB SCSI DASD 9409-M50, 15 K
3		42R6676 42R6677	1–6	3.5 inch 282 GB SAS DASD 9409-M50, 15 K
3	433D	42R6692	1–6	283.7 GB SAS disk drive
3		10N7208	1-6	3.5 inch 300 GB SAS DASD, 15 K
3		10N7234	1-6	3.5 inch 300 GB SAS DASD, 15 K 8204-E8A
3		10N7211 10N8578	1-6	3.5 inch 300 GB SAS DASD, 15 K9409-M50
3		03N5270 03N6335	1-6	3.5 inch 300 GB SAS DASD, 10K9409-M50
4	296C	44V4749	1	Control panel
5		42R6607	2	1700 W dc power supply 8204-E8A
5	51C3	44V4951	2	1700 W ac power supply 8204-E8A
6			1	Tape drive. See Managing devices.

Rack assembly detail, continued
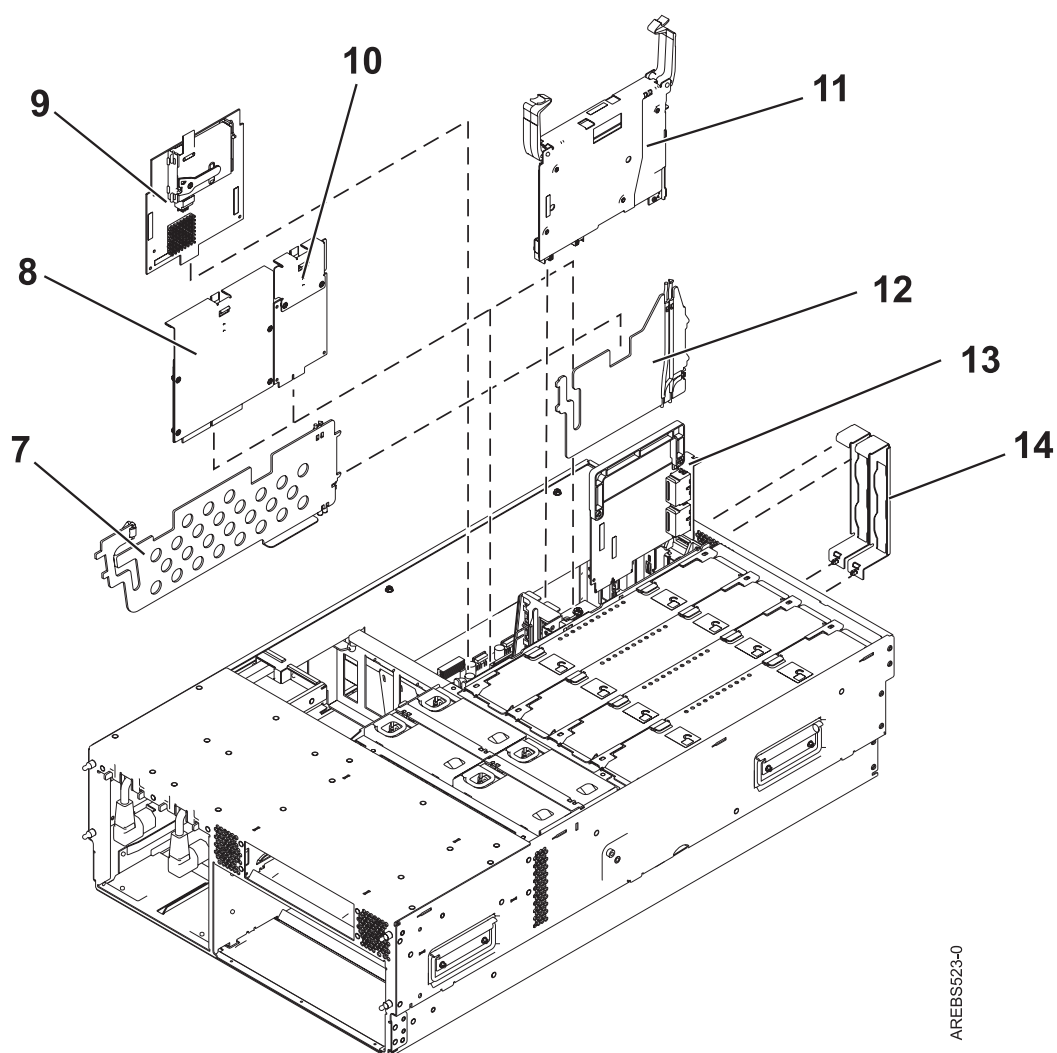
Table 72. Rack assembly detail, continued part numbers

Index number	CCIN	Part number	Units per assembly	Description
7		44V3776	1	PCI divider
8	57B8	44V3298	1	RAID base card
9	57B7	44V3139	1	RAID cache card
10	2A0E	10N9588	1	TPMD card
11	1814	07P6778	1	GX RIOG adapter
11	1817	46K6564	2	GX IB 12x adapter
11	52B4	45D3912	1	GX IB 12x adapter
12		44V3949	1	GX card divider
13	1818	10N9627	1	Dual 1 GB ethernet card
13	1819	10N9622	1	Quad 1 GB ethernet card
13	1830	10N9669	1	Dual 10 GB ethernet card
14		42R5805	2	GX support bracket

Table 72. Rack assembly detail, continued part numbers (continued)

Index number	CCIN	Part number	Units per assembly	Description
14		42R5807	2	GX Dual-Port 12X Channel Attach adapter support bracket
14		42R5809	2	GX support bracket

Rack assembly detail, continued
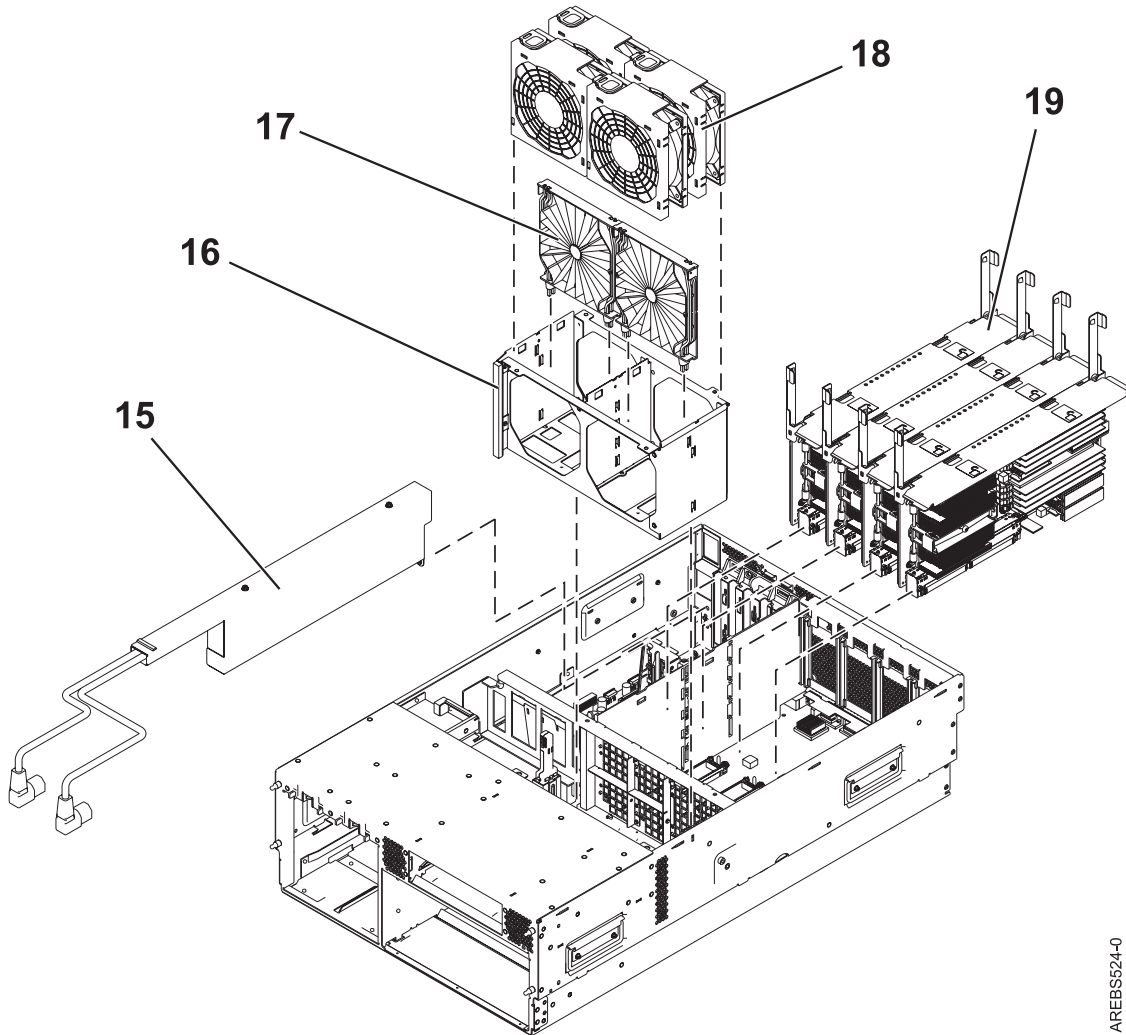
AREBS524-0

Table 73. Rack assembly detail part numbers

Index number	CCIN	Part number	Units per assembly	Description
15		44V3458	1	ac line cord box
16		NONUM	1	Fan cage
17		44V3455	1	Fan lattice
18		44V3454	4	Fan
19		10N9725	4	4.2 GHZ processor 8204-E8A
19		7P6793	4	3.5 GHZ processor 8204-E8A

Table 73. Rack assembly detail part numbers (continued)

Index number	CCIN	Part number	Units per assembly	Description
19		10N6466	4	1.9 GHZ processor 9409-M50
19		07P6829	4	1.65 GHZ processor 9409-M50

Rack assembly detail, continued
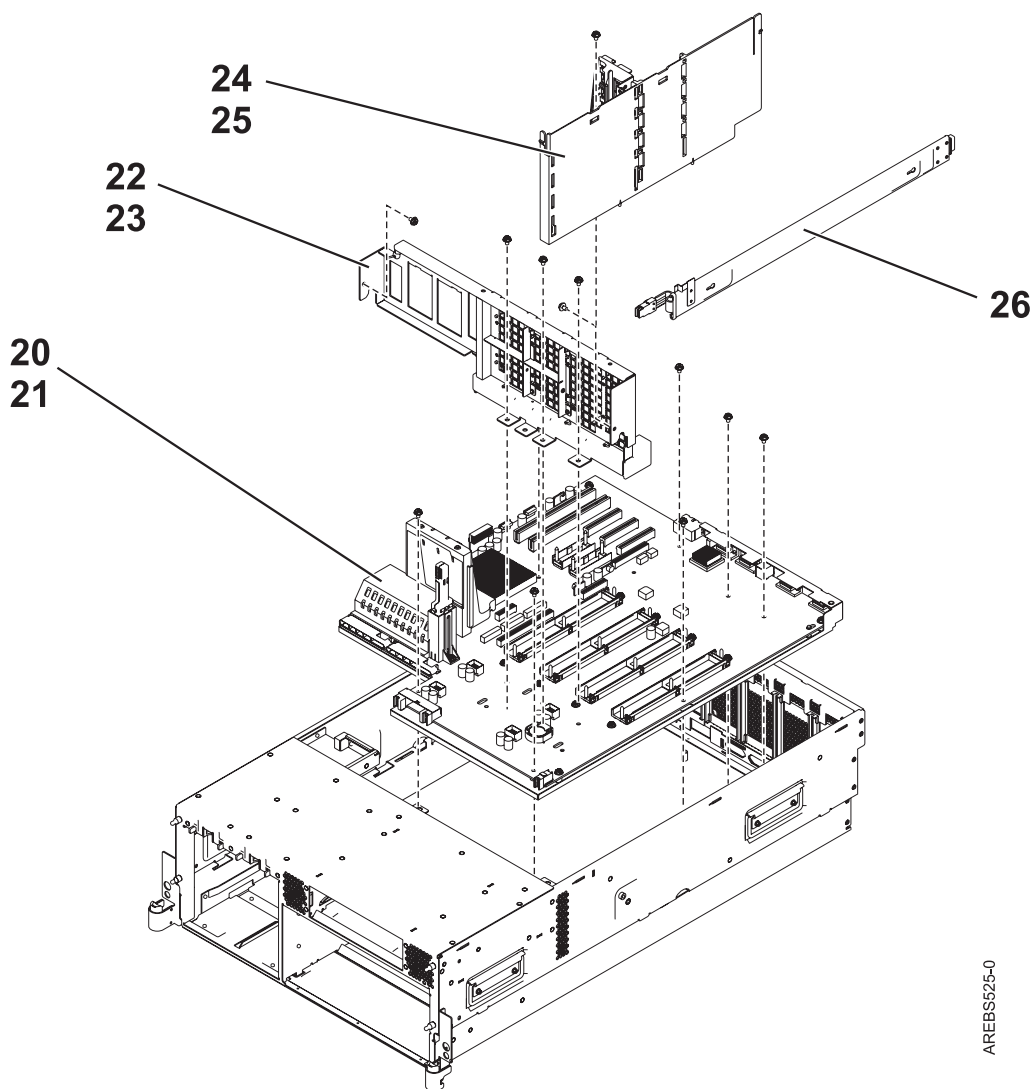
AREBS525-0

Table 74. Rack assembly detail part numbers

Index number	CCIN	Part number	Units per assembly	Description
20	28A3	46K6726	1	Backplane
21		NONUM	9	Backplane screw
22		NONUM	1	Front processor support
23		NONUM	5	Screw
24		NONUM	1	Card support divider

Table 74. Rack assembly detail part numbers (continued)

Index number	CCIN	Part number	Units per assembly	Description
25		NONUM	1	Screw
26		42R5751,	1	SAS cable, DASD backplane to bulkhead connector (external)
26		44V5252	1	SAS cable, DASD backplane to bulkhead connector, split DASD backplane functionality8204-E8A

Rack assembly detail, continued
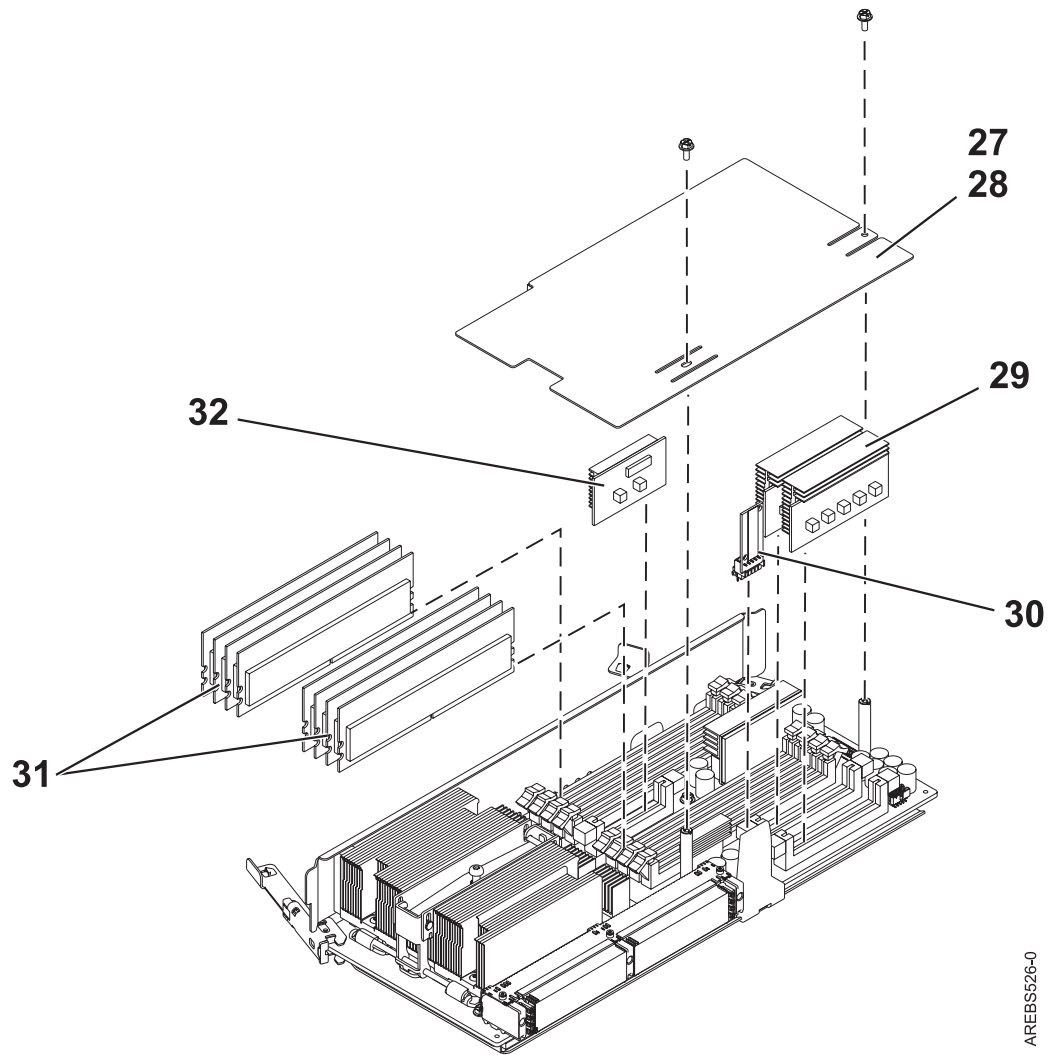
AREBS526-0

Table 75. Rack assembly detail part numbers, continued.

Index number	CCIN	Part number	Units per assembly	Description
27		44V4619	1	DIMM duct plate
28		39J2038		Screw

Table 75. Rack assembly detail part numbers, continued. (continued)

Index number	CCIN	Part number	Units per assembly	Description
29	2A29	44V5183	2	Voltage regulator 95 A (both must be replaced as a pair)
30			1	Smart card
31		77P6497	2–8	512 MB, 667 MHz RDIMM
31		77P6498	2–8	1 GB, 667 MHz RDIMM
31		77P6499	2–8	2 GB, 667 MHz RDIMM
31		77P6500	2–8	4 GB, 667 MHz RDIMM
31		77P7504	2–8	8 GB, 400 MHz RDIMM
31		77P5883	2–8	512 MB DIMM for integrated xSeries server
31		77P5880	2–8	1 GB DIMM for integrated xSeries server
32	2A2C	44V3841	1	Voltage regulator 30 A

Table 76. Cables

CCIN/CIN	Description	Part number
	.6 meter InfiniBand cable	42V2129
	1 meter SAS cable 8204-E8A	44V4147
	1.5 meter GX Dual-Port 12X Channel Attach adapter to GX cable	15R8139
	1.5 meter InfiniBand cable	42V2130
	2 meter SPCN cable	22R5217
6006	3 meter SPCN cable	22R5239
	3 meter SAS cable 8204-E8A	44V4148
1482	3.5 meter RIO-2 cable	39J2554
	3 meter InfiniBand cable	42V2132
	3 meter InfiniBand cable, DDR	15R8140
System p5® model: 1464, System i5® and System p5 models: 6008	6 meter SPCN cable	22R5219
	8 meter InfiniBand cable	42R6160
	10 meter InfiniBand cable	15R8141 8204-E8A
1483	10 meter RIO	39J2561
	10.5 inch SAS power cable	42R5815
System i5 model: 1465, System p5 model: 6007	15 meter SPCN cable	22R5221
System i5 model: 1466, System i5 and System p5 models: 6029	30 meter SPCN cable	22R5222
	SCSI2 cable	52G4291
	SCSI cable	52G4233

Table 76. Cables (continued)

CCIN/CIN	Description	Part number
	SCSI cable	42R4756
	Serial cable	10N6535
	Operator panel round cable	42R6069
	Operator panel flat ribbon cable	42R6064

Table 77. Miscellaneous parts

CCIN	Description	Part number
	Removable media	See Managing devices.
	External cables and cords	See Site and hardware planning.
	Cable configuration	See Enclosures and expansion units.
	VPD card, CCIN 52AE	10N8696
	Wrap plug	12R9314
	Wrap plug	03N6070 8204-E8A
	Wrap plug	87H3439
	Wrap plug	87H3442
	Wrap plug	93H5270
	Wrap plug	87H3588
	Wrap plug	12R9315
	Wrap plug	42R4761
	Wrap plug	87H3311
	Wrap plug	33F8985
	Wrap plug	73H2508
282A	Backplane, feature 5790	80P6626
	845 W power supply	15R7998
	840 W power supply	39J5273
	595 W power supply	97P5253
	530 W power supply	42C2140
	435 W power supply	39J2781
	Power supply filler	44V4069
	Battery	16G8095

8234-EMA, 9117-MMA, and 9406-MMA

Indexed drawings show parts system part numbers.

Cover assemblies

Note: When upgrading, make sure DIMM is compatible with the system's Firmware level.
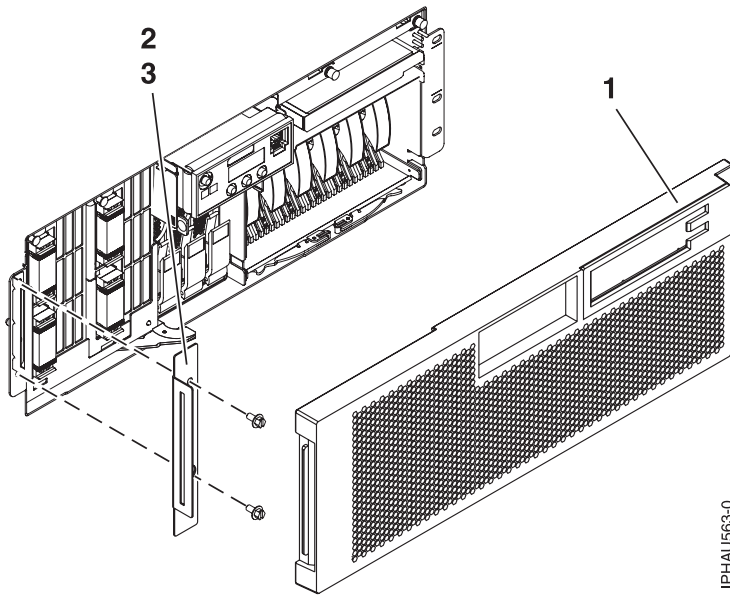
Table 78. Cover assembly part numbers

Index number	CCIN		Units per assembly	Description
1		44V4751		Front cover assembly
2		44V2831	1	Front cover mounting bracket
3		44V2831	1	Front cover mounting bracket screw

Final assembly (back)
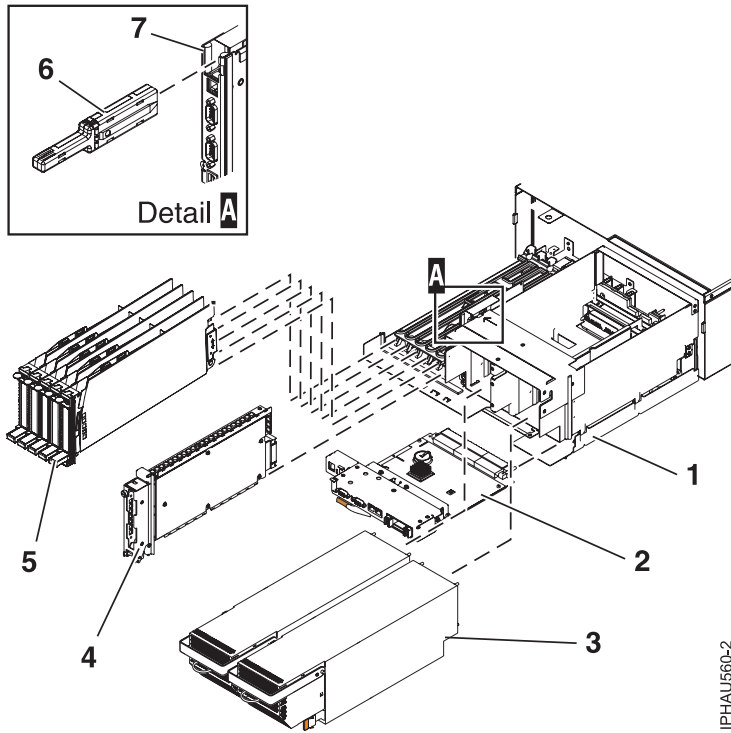
Table 79. Assembly

Index number	CCIN	Part number	Units per assembly	Description
1	282A	44V4584	1	I/O backplane
2		1. 10N9907 10N8752 10N9353 2. 16G8095 42R3965 39J5555	1	1. Service processor assembly 2. Battery
3		44V3086	2	Power regulator 1600 W
3		39J2779	2	Power regulator 1500 W
3		15R7998	2	Power regulator 845 W
3		39J5273	2	Power regulator 840 W
3		97P5253	2	Power regulator 595 W
3		42C2140	2	Power regulator 530 W
3		39J2781	2	Power regulator 435 W
3		44V4294	2	Power regulator 300 W
3		22R3958	2	Power regulator 228 W
4	1800	10N9921	2	RIO/HSL card assembly
4	1802	42R6849	2	12X Channel Interface card assembly
5		42R4190	1	PCI adapter cassette, Gen 3 single wide (handle at bottom), short

Table 79. Assembly (continued)

Index number	CCIN	Part number	Units per assembly	Description
5		42R4007	1	PCI adapter cassette, Gen 3 single wide (handle at bottom), long
5		16R0091	1	PCI adapter cassette, Gen 2.x (handle at top), all
5		42R4008	1	PCI adapter cassette, Gen 3 double wide (handle at bottom), long
6		10N6883	1	VPD card
7		42R6775	Feature 5636	VPD pass-through card. This card provides connection for the system VPD card, system ports, and SPCN cable.1 GB ethernet
7		42R7000	Feature 5639	VPD pass-through card. This card provides connection for the system VPD card, system ports, and SPCN cable. 1 GB ethernet quad
7		07P6931	Feature 5637	VPD pass-through card. This card provides connection for the system VPD card, system ports, and SPCN cable. 10 GB ethernet long range

Final assembly (front)
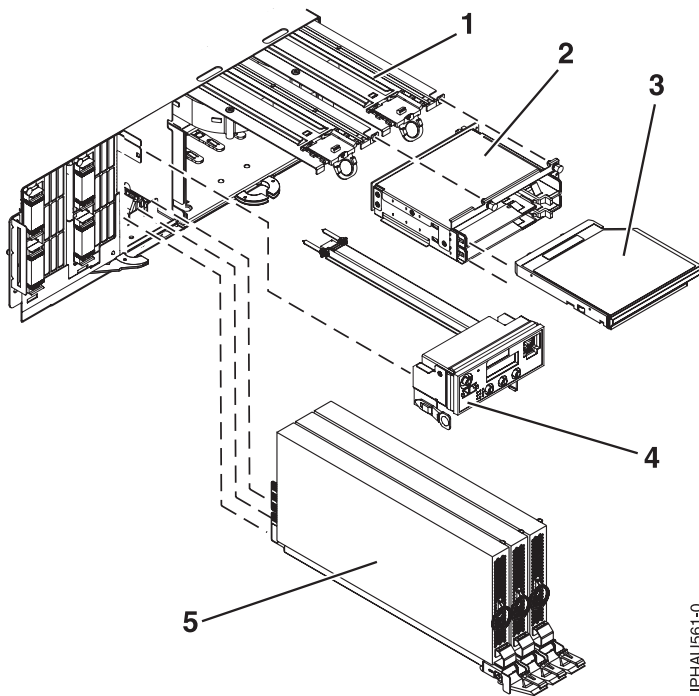
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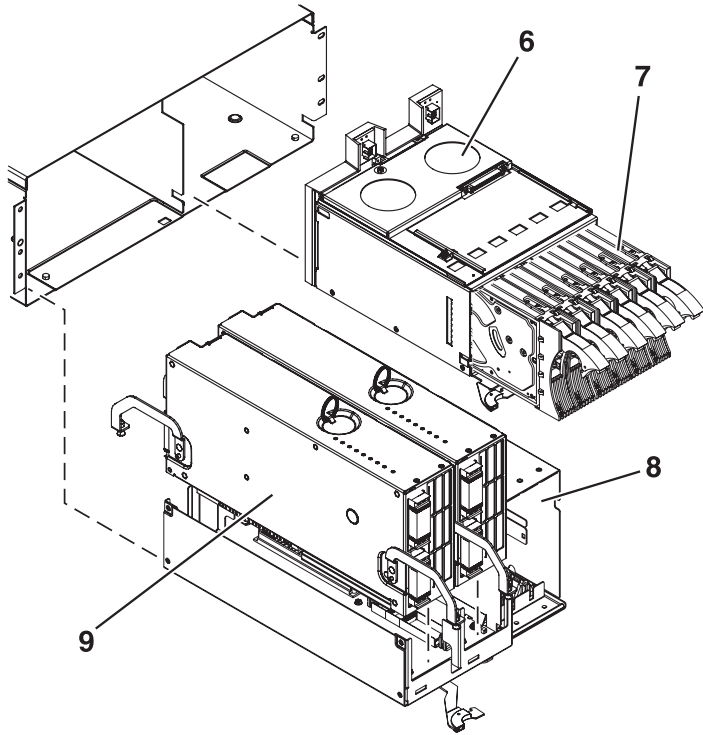
IPHAU562-1

Table 80. Final assembly (front)

Index number	CCIN	Part number	Units per assembly	Description
1		39J0859 39J1176	1	Fan assembly
2	293D	10N8968	1	Removable media enclosure assembly (includes the media backplane)
3			1	Removable media. See Managing devices.
4		39J1301 10N9964 39J3084	1	Control panel assembly
5		44V2965	3	Voltage regulator assembly

Table 81. Final assembly part numbers (continued)

Index number	CCIN	Part number	Units per assembly	Description
6		10N9617	1	Disk drive backplane
7		39J3695 39J3698		35 GB DASD, 15 K RPM
7	433B	42R6690 39J3699 39J3696		70 GB DASD, 15 K RPM
7		10N7200 10N7230		74 GB DASD, 15 K RPM
7		39J3700 39J3697		140 GB DASD, 15 K RPM
7	433C	42R6691		140 GB DASD, 15 K RPM

Table 81. Final assembly part numbers (continued) (continued)

Index number	CCIN	Part number	Units per assembly	Description
7		10N7232 10N7204 10N7232		146 GB DASD, 15 K RPM
7		42R6676 42R6677		282 GB DASD, 15 K RPM
7	433D	42R6692		283.7 GB DASD, 15 K RPM, 3.5″
7		10N7208 10N7208 10N7234		300 GB DASD with tray, 15 K RPM
8		03N6902	1	System processor backplane
9		10N8029		CPU book assembly, 3.5 GHz
9		10N8339		CPU book assembly, 4.2 GHz, POWER5™ slots
9		10N8023		CPU book assembly, 4.2 GHz, POWER6™ slots
9		03N4468		CPU book assembly, 4.7 GHz
9		10N8325		4.2 GHz, four core processor, 64 bit
9		10N8013		4.4 GHz, dual core processor, 64 bit
9		0N8013		5.0 GHz, dual core processor, 64 bit
9	319B	15R7433		512 MG , DDR2, 667 MHz
9		77P5883		512 MG , DDR
9	319C	15R7436		1 GB , DDR2, 667 MHz
9	30F2	12R8544		1 GB DDR2
9		77P5880		1 GB , 2.5 V DDR
9	31B6	45D1670		1 GB , DDR2, 553 MHz, replaces 319C
9	31B7	45D1672		2 GB , DDR2, 667 MHz, replaces 319E
9	319E	15R7439		2 GB , DDR2, 667 MHz
9	30F3	16R1530		2 GB , DDR2
9	31B9	45D1199		4 GB , DDR2, 553 MHz, replaces 319D
9	31BA	45D1205		8 GB , DDR2, 400 MHz, low current, replaces 319F
9	319F	15R9379		8 GB, DDR2, 400 MHz, low current
9	31BC	45D1208 15R8505		8 GB, DDR2 400 MHz, high current, replaces 31BD
9	31BD	15R9379		8 GB, DDR2 400 MHz, high current
9	31B4	45D1426		16 GB MIMM, DDR2, 400 MHz

Table 82. Cables

CCIN	Description	Part number
	SMP 2 drawer cable	42R8112
	SMP 3 drawer cable	42R8113
	SMP 4 drawer cable	42R8114
	FSP 2 drawer cable	42R6043

Table 82. Cables (continued)

CCIN	Description	Part number
	FSP 3 drawer cable	42R6044
	FSP 4 drawer cable	42R6045
	Blower cable	03N6196
	SPCN cable assembly, base	41L5650
	SPCN 2 meter cable	22R5217
	SPCN 3 meter cable	22R5239
	SPCN 6 meter cable	22R5219
	SPCN 15 meter cable	22R5221
	SPCN 30 meter cable	22R5222
	SPCN power to blower cable	42R4035
	Control panel cable	41L5649
	Control panel cable	42R4032
	SCSI cable, bus base	42R4034
	1 meter SCSI cable	41Y0596
	3 meter SCSI cable	41Y0597
	5 meter SCSI cable	41Y0598
	10 meter SCSI cable	41Y0599
	20 meter SCSI cable	41Y0600
	SCSI expansion cable	42R4049 42R4050
	1 meter GX Dual-Port 12X Channel Attach adapter cable	44V3422
	2 meter GX Dual-Port 12X Channel Attach adapter cable	44V3424
	3 meter GX Dual-Port 12X Channel Attach adapter cable	44V3426
	3 meter GX Dual-Port 12X Channel Attach adapter to InfiniBand 4X cable	15R8140
	10 meter GX Dual-Port 12X Channel Attach adapter to InfiniBand 4X cable	15R8141
	SAS cable	44V3435
	1 meter SAS cable	44V4041 44V4147
	3 meter SAS cable	44V4148 44V4154 44V4158 44V4163
	6 meter SAS cable	44V4149 44V4155 44V4159 44V4164
	15 meter SAS cable	44V4156 44V4160
	6 meter RIO G cable	39J2559
	10 meter RIO G cable	39J2561
	15 meter RIO G cable	21P5457

Table 83. Keyboard parts

CCIN	Description	Part number
2890-002	Keyboard, US English	89P9240
	101 key keyboard	82G3278 1392090 1394609
	102 key keyboard problem keyboard, Arabic	8131596
	Keyboard, Arabic (ID 238)	93H8125
	Keyboard, Belgium-French (ID 120)	93H8127
	Keyboard, Belgium-Dutch	1391414
	Keyboard, Belgium-French	1391526
	Keyboard, Belgium-French (ID 120)	93H8126
	Keyboard, Brazilian Portuguese	64F7707
	Keyboard, Brazilian Portuguese (ID 275)	93H8124
	Keyboard, Bulgarian	1399583
	Keyboard, Bulgarian (ID 442)	93H8128
	Keyboard, Chinese/US (ID 467)	93H8155
	Keyboard, Czechoslovakian	1399570
	Keyboard, Czechoslovakian (ID 243)	93H8129
	Keyboard, Danish	1391407
	Keyboard, Danish (ID 159)	93H8130
	Keyboard, Dutch (ID 143)	93H8131
	Keyboard, Dutch/Netherlands	1391511
	Keyboard, Finnish/Swedish	1391411
	Keyboard, French	1391402
	Keyboard, French(ID 189)	93H8132
	Keyboard, French-Canadian	82G3279
	Keyboard, French-Canadian (ID 058) Keyboard, French-Canadian (ID 445)	93H8121 93H8122
	Keyboard, German (ID 129)	93H8133
	Keyboard, German/Austrian	1391403
	Keyboard, Greek	1399046
	Keyboard, Greek (ID 129)	93H8134
	Keyboard, Hebrew	1391408
	Keyboard, Hebrew (ID 212)	93H8135
	Keyboard, Hungarian	1399581
	Keyboard, Hungarian (ID 208)	93H8136
	102 key keyboard problem Keyboard, Icelandic	1391407
	Keyboard, Icelandic (ID 197)	93H8137
	Keyboard, Italian	1393395
	Keyboard, Italian (ID 142)	93H8138

Table 83. Keyboard parts (continued)

CCIN	Description	Part number
	Keyboard, Korea (ID 413)	93H8156
	Keyboard, Latin American (Spanish)	82G3292
	Keyboard, Latvia (ID 234)	93H8152
	Keyboard, Norwegian	1391409
	Keyboard, Norwegian (ID 155)	93H8139
	Keyboard, Portuguese	1391410
	Keyboard, Polish	1399580
	Keyboard, Polish (ID 214)	93H8140
	Keyboard, Portuguese (ID 163)	93H8141
	Keyboard, Romania	1399582
	Keyboard, Romania (ID 446)	93H8142
	Keyboard, Russian	1399579
	Keyboard, Russian (ID 443)	93H8143
	Keyboard, Serbian (ID 118)	93H8144
	Keyboard, Slovak	1399571
	Keyboard, Slovak (ID 245)	93H8145
	Keyboard, Spanish	1391405
	Keyboard, Spanish (ID 171) Keyboard, Spanish (ID 172)	93H8123 93H8146
	Keyboard, Sweden/Finland (ID 153)	93H8147
	Keyboard, Swiss-French	1395881
	Keyboard, Swiss French/German (ID 150)	93H8148
	Keyboard, Swiss-German	1395882
	Keyboard, Thailand (ID 191)	93H8157
	Keyboard, Turkish (ID 179)	1393286
	Keyboard, Turkish (ID 179)	93H8149
	Keyboard, Turkish (ID 440)	8125409
	Keyboard, Turkish (ID 440)	93H8150
	Keyboard, U.K. English	1391406
	Keyboard, Turkish (ID 166)	93H8151
	Keyboard, US English ISO9995 (ID 103P)	93H8153
	Keyboard, 106 Japan (ID 194)	93H8154
	106 keys International keyboard problem keyboard, Chinese keyboard, Japanese-Kanji Japanese, Enhanced keyboard, Korean keyboard, Taiwanese	1392090 79F0167 66G0507 06H5286 02G7353

Table 83. Keyboard parts (continued)

CCIN	Description	Part number
	Lighted program function keyboard (LPFK), 6094 model 20 cable, serial attachment, power	39F8226 39F8302
	Keyboard, English	10N6956
	Keyboard, French (id 189)	10N6957
	Keyboard, French (id 142)	10N6958
	Keyboard, German	10N6959
	Keyboard, UK English (id 166)	10N6960
	Keyboard, Spanish (id 172)	10N6961
	Keyboard, Japanese (id 184)	10N6962
	Keyboard, Brazilian Portuguese (id 275)	10N6963
	Keyboard, Canadian French (id 58)	10N6968
	Keyboard, Belgium Dutch (id 120)	10N6969
	Keyboard, Swedish Finnish (id 153)	10N6970
	Keyboard, Danish (id 159)	10N6971
	Keyboard, Bulgarian (id 442)	10N6972
	Keyboard, Swiss French German (id 150)	10N6973
	Keyboard, Norwegian (id 155)	10N6974
	Keyboard, Portuguese (id 163)	10N6976
	Keyboard, Greek (id 319)	10N6977
	Keyboard, Hebrew (id 312)	10N6978
	Keyboard, Hungarian (id 208)	10N6964
	Keyboard, Polish (id 214)	10N6979
	Keyboard, Slovakian (id 245)	10N6980
	Keyboard, Czechoslovakian (id 245)	10N6981
	Keyboard, Turkish (id 179)	10N6982
	Keyboard, Spanish (id 171)	10N6983
	Keyboard, Arabic (id 238)	10N6984
	Keyboard, Korean (id 413)	10N6965
	Keyboard, Chinese (id 467)	10N6966
	Keyboard, French Canadian (id 445)	10N6967
	Keyboard, Thailand (id 191)	10N6985
	Keyboard, Russian (id 443)	10N6986
	Keyboard, Yugoslavian Latin (id 105)	10N6987
	Keyboard, English (EMEA) (id 103P)	10N6988
	Keyboard, Dutch	10N6975
	Keyboard	40K9430
	Keyboard	40K9430
	Keyboard	32N1205

Table 83. Keyboard parts (continued)

CCIN	Description	Part number
	Keyboard, French	32N1206
	Keyboard, Italy	32N1207
	Keyboard, Germany and Austria	32N1208
	Keyboard, UK English	32N1209
	Keyboard, Spanish	32N1210
	Keyboard, Japan	32N1211
	Keyboard, Brazil	32N1212
	Keyboard, Hungry	32N1213
	Keyboard, Korea	32N1214
	Keyboard, China	32N1215
	Keyboard, French Canadian	32N1216
	Keyboard, French Canadian	32N1217
	Keyboard, Belgium and UK	32N1218
	Keyboard, Sweden and Finland	32N1219
	Keyboard, Danish	32N1220
	Keyboard, Bulgaria	32N1221
	Keyboard, Swiss, French, and German	32N1222
	Keyboard, Norwegian	32N1223
	Keyboard, Hebrew	32N1227
	Keyboard, Poland	32N1228
	Keyboard, Slovakian	32N1229
	Keyboard, Czechoslovakia	32N1230
	Keyboard, Turkey	32N1231
	Keyboard, Latin Spanish	32N1232
	Keyboard, Arabic	32N1233
	Keyboard, Thailand	32N1234
	Keyboard, Russia	32N1235
	Keyboard, Slovakian	32N1236
	Keyboard, English Europe	32N1237

Table 84. Miscellaneous parts

CCIN	Description	Part number
	Removable media	See Managing devices.
	External cables and cords	See Site and hardware planning.
	Cable configuration	See Enclosures and expansion units.
	Black mouse	03N6669

Table 84. Miscellaneous parts (continued)

CCIN	Description	Part number
	Wrap plug	12R9314 12R9315 42R4761 6165899 73H2508 87H3311 87H3439 87H3442 93H5270 03N6070
	PCI cassette assembly	42R4190
	Battery kit	09J8199
	FSP card	10N9907
	Fan control card	11K1107
	Board stiffener	04N6602
	Voltage regulator	17G1209
	Voltage regulator	44V5648

9119-FHA system parts

Indexed drawings show parts system part numbers.
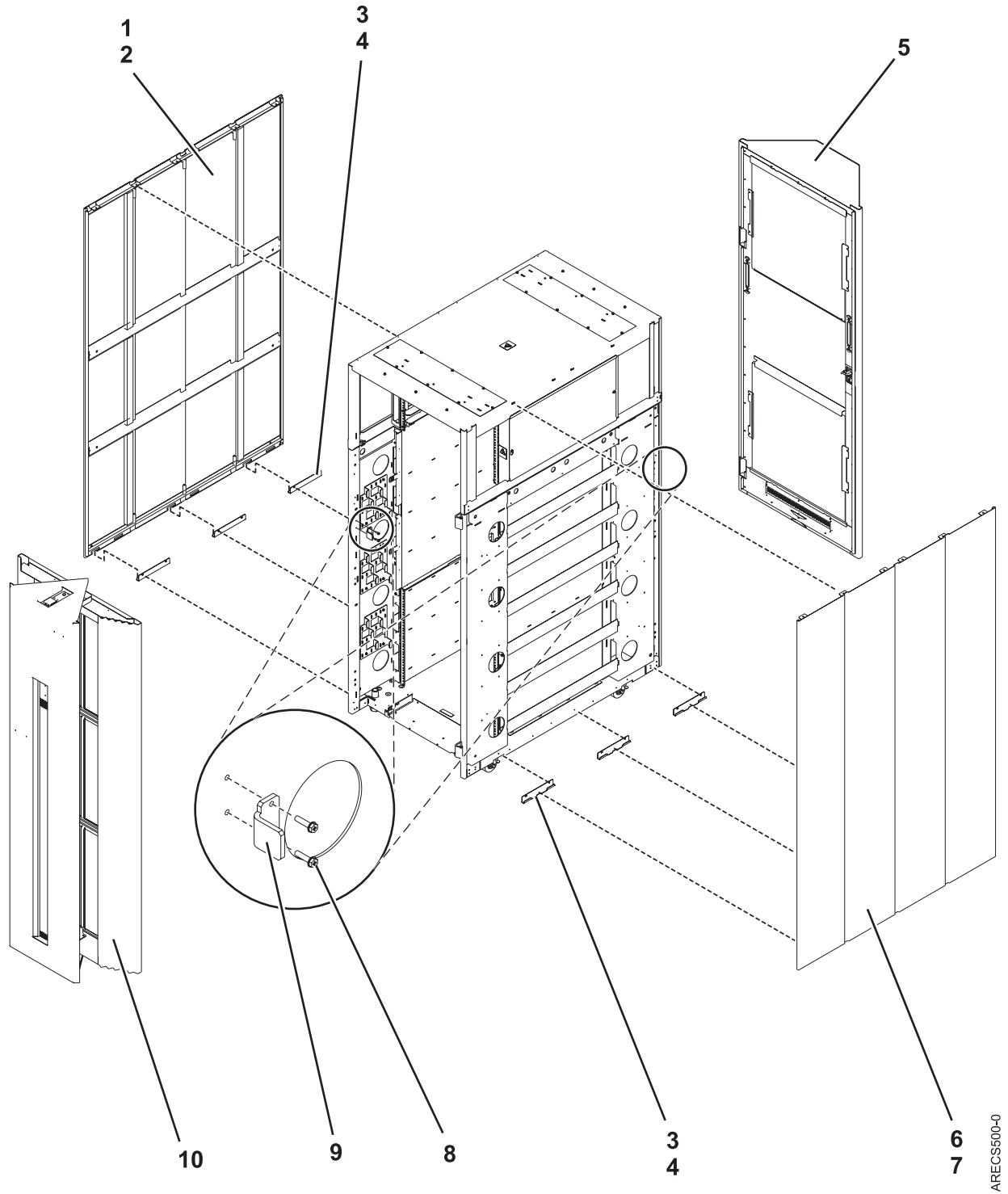
Table 85. Final assembly (assembly 1)

Index number	CCIN	Part number	Units	Description
1		45D0629	1	Cover assembly, left side

Table 85. Final assembly (assembly 1) (continued)

Index number	CCIN	Part number	Units	Description
2		2665528	6	Screw
3		42V2119	6	J-bracket assembly, side cover
4		2665528	12	Screw
5		41U0400	1	Acoustic rear cover
6		45D0628	1	Cover assembly, right side
7		2665528	6	Screw
8		2665525	4	Screw
9		41V2376	2	Latch bracket
10			1	Acoustic front cover
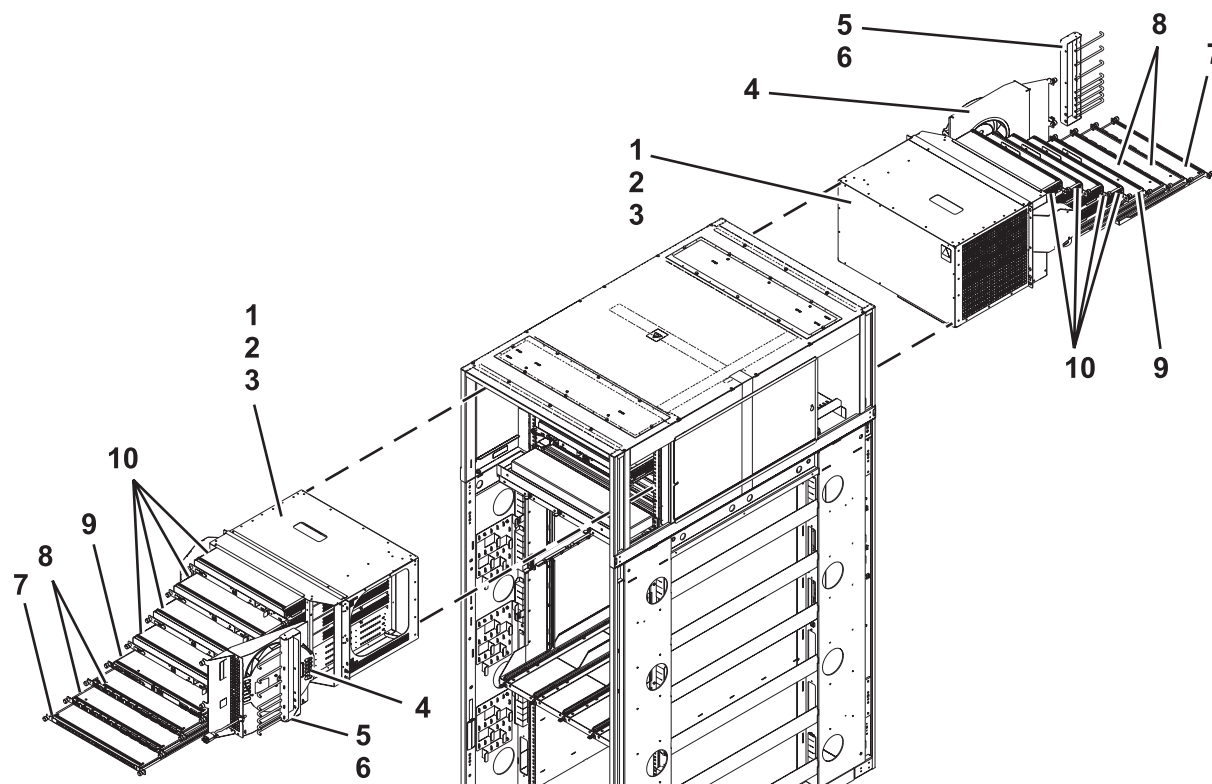
Table 86. Final assembly (assembly 2)

Index number	CCIN	Part number	Units	Description
1		45D2463	2	BPE assembly
2		77G0599	10	Screw
3		74F1823	10	Nut clip
4		41V2374	AR	BPF assembly
4		41V2453	AR	BPF filler plate, front only
5		15R9306	2	Cable bracket assembly
6		77G0599	6	Screw
7		45D1471	2	Bulk power hub (BPH)

Table 86. Final assembly (assembly 2) (continued)

Index number	CCIN	Part number	Units	Description
8		45D1601	AR	BPD assembly
8		31L8609	AR	BPD filler assembly
9		45D1600	2	BPC assembly
10		45D0639	AR	BPR assembly
10		15R7647	AR	BPR filler assembly
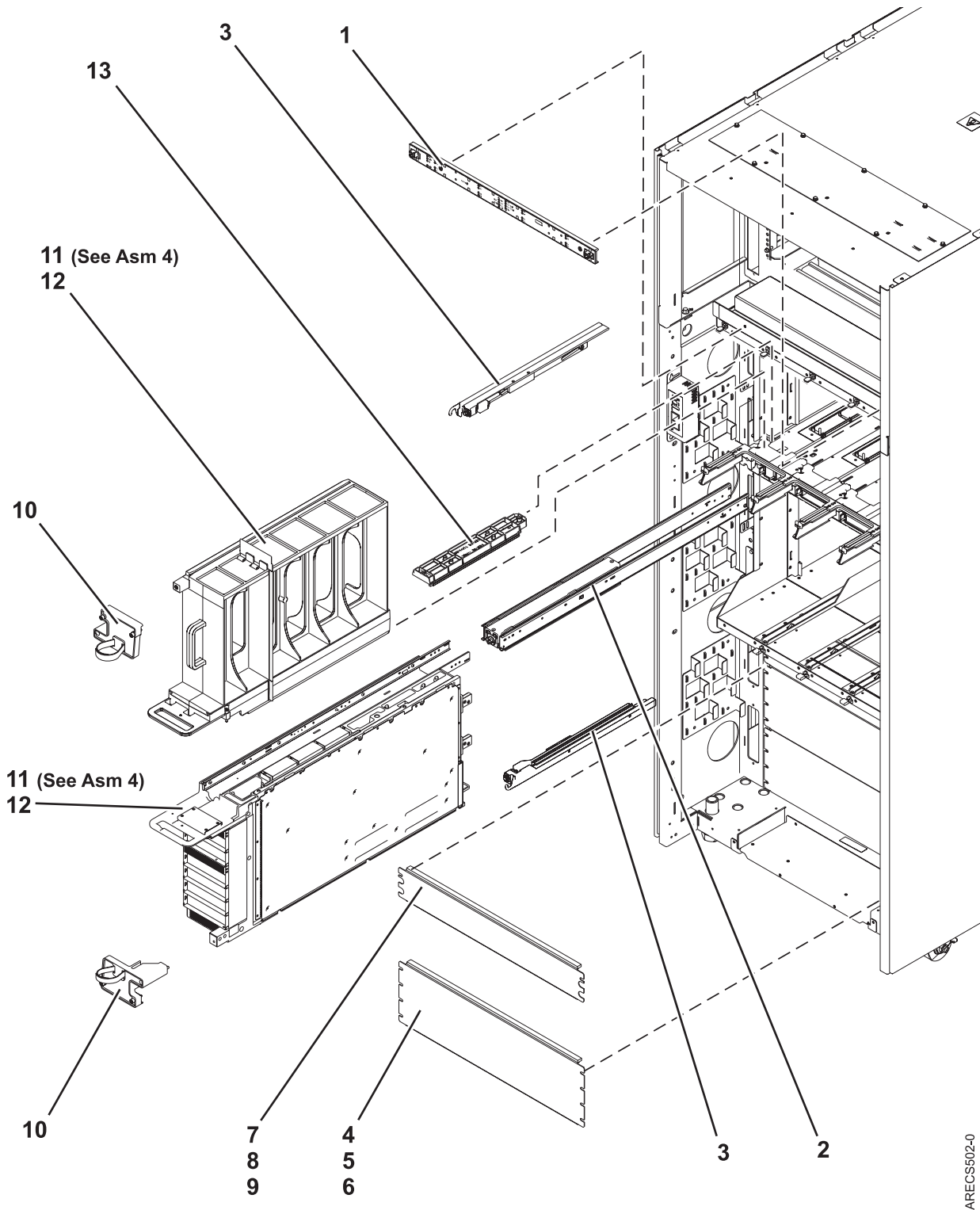
ARECS502-0

Table 87. Final assembly (assembly 3)

Index number	CCIN	Part number	Units	Description
1		15R7120	1	Light strip, front
2		45D0276	4	Actuator assembly, top
2		45D2806	4	Acutuator assembly, bottom

Table 87. Final assembly (assembly 3) (continued)

Index number	CCIN	Part number	Units	Description
3		45D1706	8	Node lock assembly
4		44P2994	AR	Filler plate
5		77G0599	4	Screw
6		74F1823	4	Nut clip
7		44P2462	AR	Filler plate
8		77G0599	2	Screw
9		74F1823	2	Nut clip
10		45D1981	8	Node locking bracket assembly, front
11		60H3940	AR	Node assembly, unpopulated
11		60H4167	AR	Node assembly, populated, 4.2 GHz
11		60H4168	AR	Node assembly, populated, 5 GHz
12		15R7505	AR	Node filler assembly
13		45D0534	AR	EMI cover
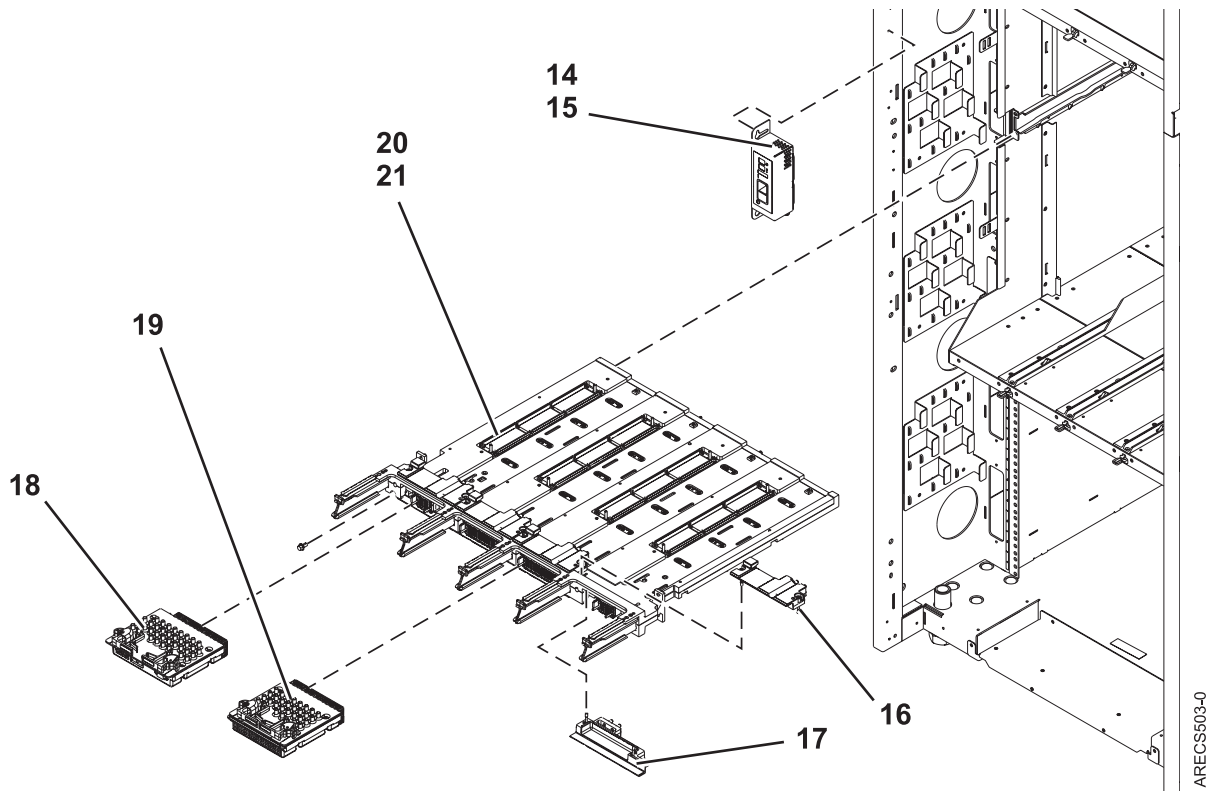
Table 88. Final assembly (assembly 4)

Index number	CCIN	Part number	Units	Description
14		45D0802	1	UEPO assembly
15		2665528	2	Screw
16		15R9219	4	Actuator assembly, top
17		45D1044	4	Actuator assembly, bottom

Table 88. Final assembly (assembly 4) (continued)

Index number	CCIN	Part number	Units	Description
18		60H4138	2	FSP card
19		60H3792	2	Clock card
20		60H4148	1	System midplane
21		1624790	2	Screw, backplane mounting
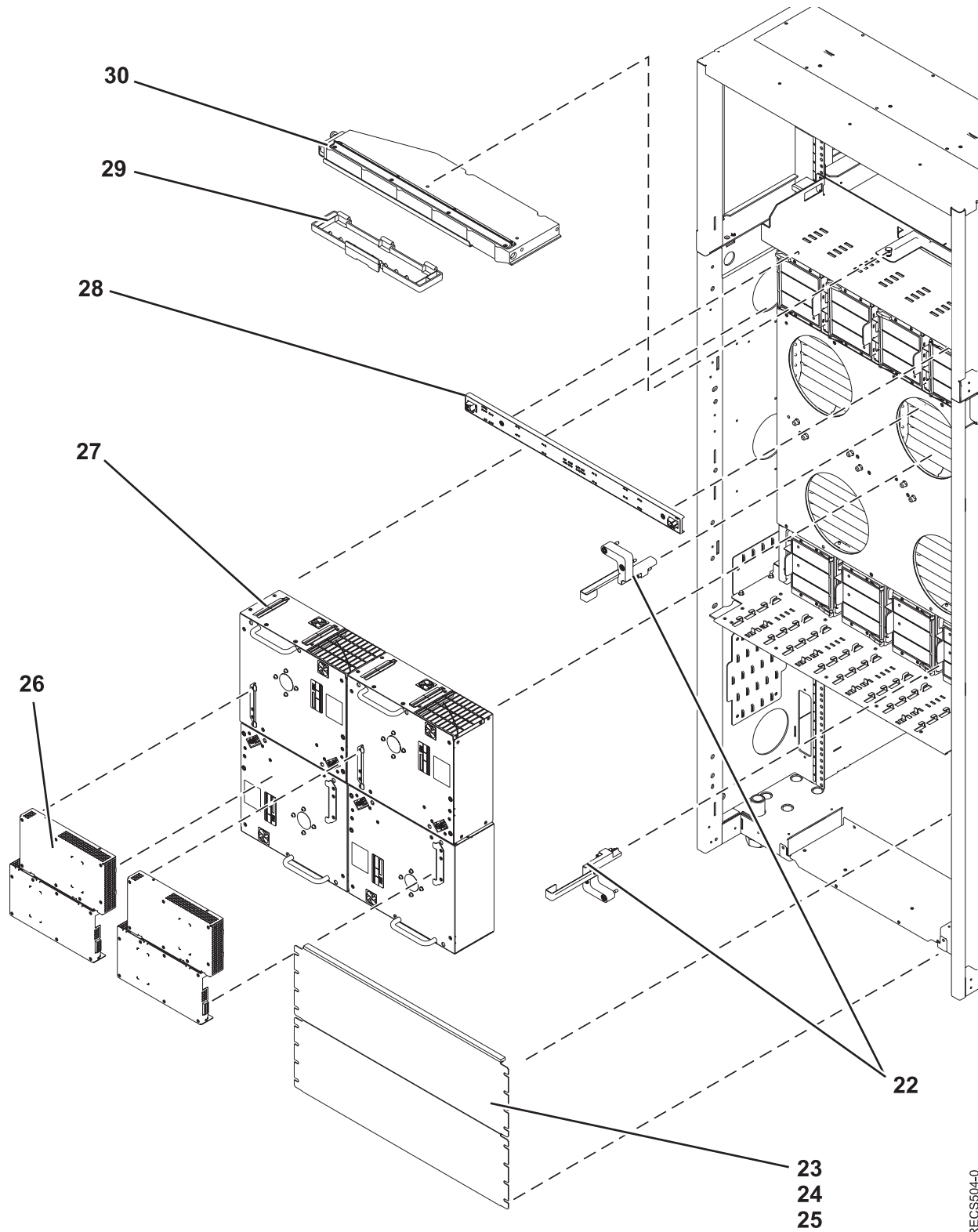
ARECS504-0

Table 89. Final assembly (assembly 5)

Index number	CCIN	Part number	Units	Description
22		15R9224	8	Node locking bracket assembly, back

Table 89. Final assembly (assembly 5) (continued)

Index number	CCIN	Part number	Units	Description
23		44P2994	AR	Filler plate
23		44P2462	AR	Filler plate
24		77G0599	4	Screw
25		74F1823	4	Nut clip
26		45D1140	AR	MDA-EZ assembly
27		15R8873	AR	Blower assembly
28		15R7121	1	Light strip, rear
29		15R8837	1	Node service cover
30		45D2720	1	Node service cover
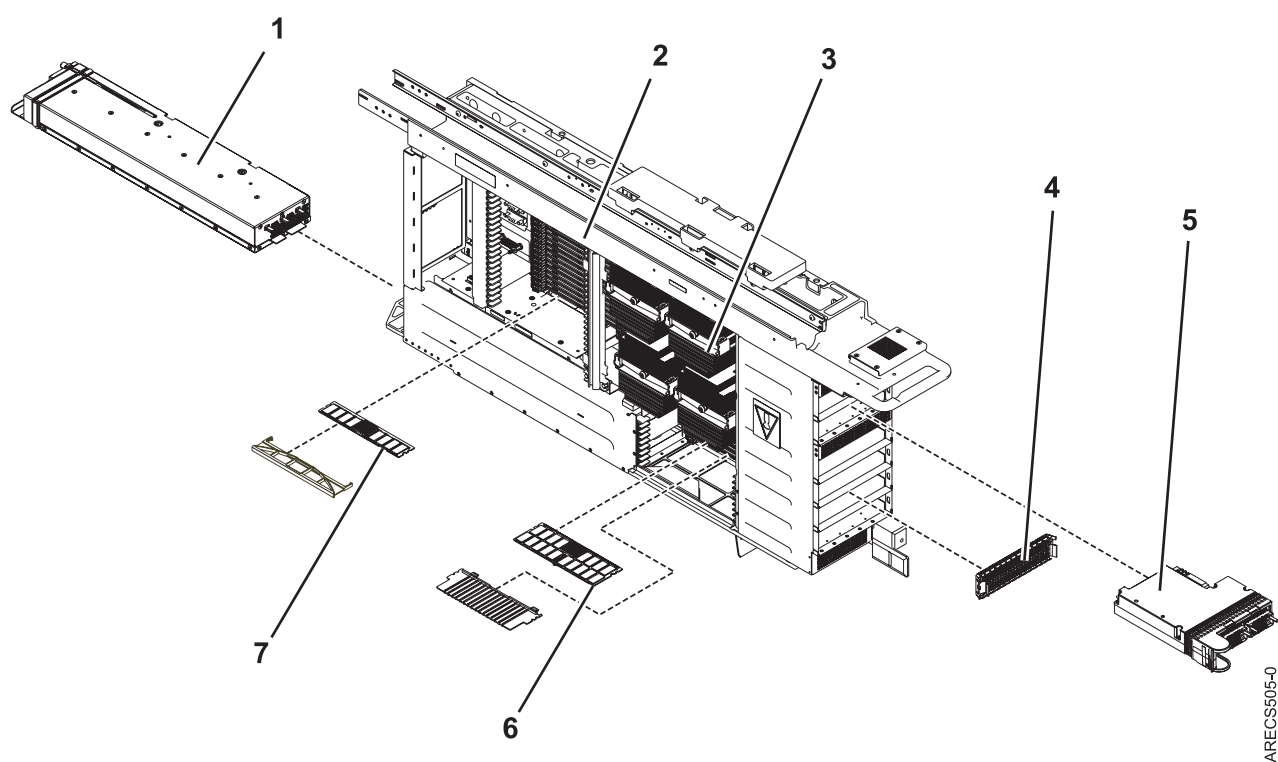
Table 90. Final assembly (assembly 6)

Index number	CCIN	Part number	Units	Description
1		45D2491	AR	DCA assembly
2		No num	1	Node assembly
3		60H4203	AR	Processor assembly, 4.2 GHz
3		60H4202	AR	Processor assembly, 5 GHz
4		41V0922	AR	Book filler assembly
5		45D1902	AR	I/O hub card
6		15R7445	AR	Memory DIMM, 4 GB double high
6		15R937	AR	Memory DIMM, 8 GB double high
7		45D1666	AR	Memory DIMM, 1 GB single high

Table 90. Final assembly (assembly 6) (continued)

Index number	CCIN	Part number	Units	Description
7		45D1668	AR	Memory DIMM, 2 GB single high

Table 91. Cables

CCIN	Part number	Description
	95P4084	SAS cable
	44V4041	1 meter SAS cable
	44V4147	1 meter SAS cable
	44V4817	2 meter SAS cable
	44V4148	3 meter SAS cable
	44V4154	3 meter SAS cable
	44V4158	3 meter SAS cable
	44V4163	3 meter SAS cable
	44V4149	6 meter SAS cable
	44V4155	6 meter SAS cable
	44V4159	6 meter SAS cable
	44V4164	6 meter SAS cable
	44V4156	15 meter SAS cable
	44V4160	15 meter SAS cable
	52G4233	SCSI cable
	41Y0596	1 meter SCSI cable
	41Y0597	3 meter SCSI cable
	41Y0598	5 meter SCSI cable
	41Y0599	10 meter SCSI cable
	41Y0600	20 meter SCSI cable
	22R5217	2 meter SPCN cable
	22R5239	3 meter SPCN cable
036A	39J5820	3 meter SPCN cable
	22R5219	6 meter SPCN cable
	22R5221	15 meter SPCN cable
	22R5222	30 meter SPCN cable
	39J2561	10 meter HSL2 cable
	42V2129	.6 meter 12X IB cable
	42V2131	2.5 meter 12X IB cable
	42R6160	8 meter 12X IB cable
	32N1311	2 meter external cable
	31P6132	8 meter cable
	41V0810	BPCA TO BPCB cable
	15R6779	Bulk power distribution cable
	15R6780	Bulk power distribution cable
	41V2172	Bulk power regulator cable

Table 91. Cables (continued)

CCIN	Part number	Description
	41V0570	IBF cable
	39J5836	UPS adapter cable
	95P4049	DVD cable
	11P4606	Cable clamp
	0524519	Cable tie
	15R8270	Cable tool
	095P4048	VPD cable

Table 92. Keyboards

CCIN	Part number	Description
	10N6984	Keyboard, Arabic
	32N1233	Keyboard, Arabic
	32N1212	Keyboard, Brazilian
	10N6963	Keyboard, Brazilian/Portuguese
	10N6972	Keyboard, Bulgarian
	32N1221	Keyboard, Bulgarian
	32N1217	Keyboard, CANFRC
	32N1215	Keyboard, Chinese
	10N6966	Keyboard, Chinese/US
	10N6981	Keyboard, Czechoslovakian
	32N1230	Keyboard, Czechoslovakian
	10N6971	Keyboard, Danish
	32N1220	Keyboard, Danish
	32N1206	Keyboard, French
	10N6957	Keyboard, French
	10N6967	Keyboard, French Canadian
	10N6968	Keyboard, French Canadian
	32N1216	Keyboard, French Canadian
	10N6973	Keyboard, French/German
	10N6959	Keyboard, German
	32N1208	Keyboard, German
	10N6977	Keyboard, Greek
	32N1226	Keyboard, Greek
	10N6978	Keyboard, Hebrew
	32N1227	Keyboard, Hebrew
	10N6964	Keyboard, Hungarian
	32N1213	Keyboard, Hungarian
	10N6958	Keyboard, Italian
	32N1207	Keyboard, Italian
	32N1211	Keyboard, Japanese

Table 92. Keyboards (continued)

CCIN	Part number	Description
	10N6962	Keyboard, Japanese
	32N1214	Keyboard, Korean
	10N6965	Keyboard, Korean
	10N6983	Keyboard, LA Spanish
	32N1232	Keyboard, LA Spanish
	10N6974	Keyboard, Norwegian
	32N1223	Keyboard, Norwegian
	10N6979	Keyboard, Polish
	32N1228	Keyboard, Polish
	10N6975	Keyboard, Portuguese
	10N6976	Keyboard, Portuguese
	32N1224	Keyboard, Portuguese
	32N1225	Keyboard, Portuguese
	10N6986	Keyboard, Russian
	32N1235	Keyboard, Russian
	10N6980	Keyboard, Slovakia
	32N1229	Keyboard, Slovakia
	32N1236	Keyboard, Slovakia
	10N6961	Keyboard, Spanish
	32N1210	Keyboard, Spanish
	10N6970	Keyboard, Sweden/Finland
	32N1219	Keyboard, Sweden/Finland
	32N1234	Keyboard, Thailand
	10N6985	Keyboard, Thailand
	10N6982	Keyboard, Turkey
	32N1231	Keyboard, Turkey
	10N6960	Keyboard, United Kingdom
	32N1209	Keyboard, United Kingdom
	10N6956	Keyboard, United Kingdom
	10N6988	Keyboard, US EMEA
	32N1205	Keyboard, US
	10N6987	Keyboard, Yugoslavian/Latin

Table 93. Miscellaneous parts

CCIN	Part number	Description
	External cables and cords	See Site and hardware planning.
	Cable configuration	See Enclosures and expansion units.
	PCI adapters	See Managing PCI adapters.

Table 93. Miscellaneous parts (continued)

CCIN	Part number	Description
	Removable media	See Managing devices.
	45D2299	1/4 inch (8 MM) drive socket
	45D0424	3/8 inch drive extension
31BA	45D1205	8 GB DIMM, 400 MHz DDR2
	87H3621	8 MB DIMM
31B4	45D1426	16 GB DIMM, DDR2, 400 MHz
316C	41V2097	0-16 GB CUoD DIMM
316B	41V2095	0-8 GB CUoD DIMM, DDR2
319D	15R7445	4 GB DIMM, DDR2, 533 MHz
319F	15R9379	8 GB DIMM, DDR2, 400 MHz
	45D2504	4 MM socket driver
	03N5265	146 GB DASD, 10 K RPM
	03N6330	146 GB DASD, 10 K RPM
	03N5285	3.5 inch 146 GB SCSI DASD, 15 K RPM
	10N7232	146 GB SAS DASD, 15 K RPM
	10N7204	146 GB SAS DASD, 15 K RPM, 3.5 inch
	15R7322	19 inch acoustic cover kit
	39R6550	2U rail kit
	10N7211	300 GB DASD, 15 K RPM
	10N8578	300 GB DASD, 15 K RPM
	03N5270	300 GB DASD, DASD, 10 K RPM
	03N6335	300 GB DASD, DASD, 10 K RPM
	10N7208	300 GB DASD, SAS, 15 K RPM, 3.5 inch
	10N7234	300 GB SAS DASD, 15 K RPM
	23R5638	4 MM cleaning cartridge
	44P2809	42U frame
	15R7659	61R UEPO switch
	03N5260	73 GB DASD, 10 K RPM
	10N7200	73 GB SAS DASD, 15 K RPM
	10N7230	73 GB SAS DASD, 15 K RPM
	45D0417	8 MM socket
	23R5635	80 GB cartridge
	95P4436	800 GB cartridge
	41U0389	Acoustic cover
	41U0388	Acoustic door
	45D2505	Actuator tool
	45D2300	Adapter, 3/8 inch adapter to 1/4 inch
	41V0606	Adapter bracket
	10N8625	Adapter bracket

Table 93. Miscellaneous parts (continued)

CCIN	Part number	Description
	31L8613	Air baffle
	12R9301	Air feeder
	12R8263	Applicator
	42R4037	Assembly filler
	95P4075	Base unit
	39J5555	Battery
	41U0012	Battery
	11P3745	Battery retainer bracket, inner
	11P3746	Battery retainer bracket, outer
	23R5633	Bezel
	39R6583	Bezel left
	39R6584	Bezel right
	03N6669	Black mouse
	07H6826	Blank tailgate plate
	07H6827	Blank tailgate plate
	10N8994	Blind swap adapter bracket kit
	80P6749	Blind swap cassette filler
	41V1610	Blower assembly
	60H3740	Book planar with VPD
	60H3842	Book planar with VPD
	60H3852	Book with VPD
	15R6976	Bottom filler kit
	45D1756	Bridge assembly
	04N6923	Brush pad
	41V0355	Bulk power controller
	11P2344	Cable bracket
	41V0453	Chassis
	41V1887	Clamp kit
	35L0844	Clean cart
	46G6844	Cleaning kit
	08J5798	Clutch
	45D1517	Clutch torque wrench
	41V1820	Complete frame tie down kit
	41V0943	dc converter
	42C2140	Cooling unit power supply
	44P2633	Core kit for HMC
	44P2450	Corner Bracket
	45D0721	Cover
	41U0397	Cover, slim
	41U0387	Cover kit

Table 93. Miscellaneous parts (continued)

CCIN	Part number	Description
	41V1676	Cover kit
	41V1678	Cover kit
	41V1680	Cover kit
	41U0386	cover kit, non acoustic
	45D1990	Cross member assembly
	41V0608	DASD cage
	22R2809	DASD filler
	42R7992	DASD filler
	21P8267	DDR2 DIMM filler
	42R4695	DIMM filler
	42R4696	DIMM filler
	45D1831	DIMM tool
	7336677	DIMM tray
	31P7513	Display stand
	11P3990	Door key
	97P6859	Door trim kit
	12K0564	Dummy plate
	95P4044	DVD assembly
	42R7291	DVD filler
	95P4093	DVD filler
	95P4096	DVD filler
	95P4106	DVD latch assembly
	46G0334	EMC spring
	53P0522	Empty tray
	44V3937	ESM assembly
	95P4066	Fan assembly
	44P0550	Fan cover
	44P2670	Filter, door
	16R1152	Foam bracket
	11P4104	Foam PAD
	11P4105	Foam PAD
	11P3827	Foam PLATE
	12K0566	Frame rail racket
	12K0032	Front bezel
	45D2202	Front cover
	45D2204	Front cover
	45D1165	Front cover
	41V0593	Front door
	41V2355	Front latch
	60H3873	FSP controller

Table 93. Miscellaneous parts (continued)

CCIN	Part number	Description
	45D1708	Gear box
	42R5435	GX filler bracket
	12R8531	Heat sink
	12R8532	Heat sink
	99F1718	Heat sink
	11P3535	Hinge
	11P4106	Hinge
	41V0080	Hinge assembly
	09N9686	Hinge bracket
	46G5947	Ladder
	12R9892	Latch
	41V1065	Latch bracket
	41V1067	Latch bracket
	44P2459	Latch bracket
	44P0515	Left bracket
	39J4471	Left rail
	2108930	Lint free cloth
	12R8201	Lubricant
	11P4747	Magnifier lens
	53P0322	Media tray
	41V0808	Memory baffle filler
	42R7898	Midplane
	60H3492	Midplane
	40K5342	Monitor T117 enhanced stand
	44P4826	Mounting bracket
	44V3429	Mounting slide tape
	15R9300	Node bar assembly
	15R7507	Node filler
	41V0809	Node kit
	44P1277	Plate cage filler
	39J0854	Processor filler
	42R8498	Rack mounting fasteners kit
	44V4203	RAID controller
	45D1859	Rail bottom left
	45D1860	Rail bottom right
	45D1861	Rail top left
	45D1862	Rail top right
	45D1121	Rear cover
	12R9501	Retainer bracket
	41V1799	Retainer bracket

Table 93. Miscellaneous parts (continued)

CCIN	Part number	Description
	41V1800	Retainer bracket
	44V3005	Reusable M3NIF
	44P0514	Right bracket
	44P0513	Right external bracket
	39J4472	Right rail
	60G7623	Rivet
	5442867	Safety cap
	44V4404	SAS controller
	44V4413	SAS controller
	66F1283	Screw M3
	39J3368	Screw M3X6 Torx flat
	98F2977	Screw, Torx
	39J3889	SCSI differential terminator
	12R9042	SCSI repeater card
	6422725	Shaft assembly
	11P2923	Shipping bar
	80P3422	Short BSM kit
	16R1508	Side cover
	42V2120	Side cover
	44H8167	SIMM filler
	16R0091	Snap together cassette
	31L7174	Soft tie puck
	93G1147	Step stool
	07H5247	Support rail bracket
2D08	60H4213	System VPD
	60H4212	System VPD
	40K5341	T115 stand base
	45D1715	Table assembly
	44P4026	Tailgate bracket
	11P1262	Tailgate bracket assembly
	35L0967	Test cart
	18P8166	Test DISK
	53P2519	Test DVD
	45E1129	Test tape
	41V1913	Tie down
	41V1914	Tie down
	45D0415	Torque tool
	97P2376	Tray assembly
	95P4036	Tray assembly
	95P4107	Tray latch

Table 93. Miscellaneous parts (continued)

CCIN	Part number	Description
	07H6655	Velcro tape
	51H9502	Velcro tie
	45D1677	Weight distribution plate kit
	12R8219	Weight distribution plate kit
	08J5557	Wheel chock
	03N6070	Wrap plug
	12R9314	Wrap plug
	12R9315	Wrap plug
	42R4761	Wrap plug
	42R5143	Wrap plug
	87H3311	Wrap plug
	87H3439	Wrap plug
	87H3442	Wrap plug

9125-F2A system parts

Indexed drawings show parts system part numbers.
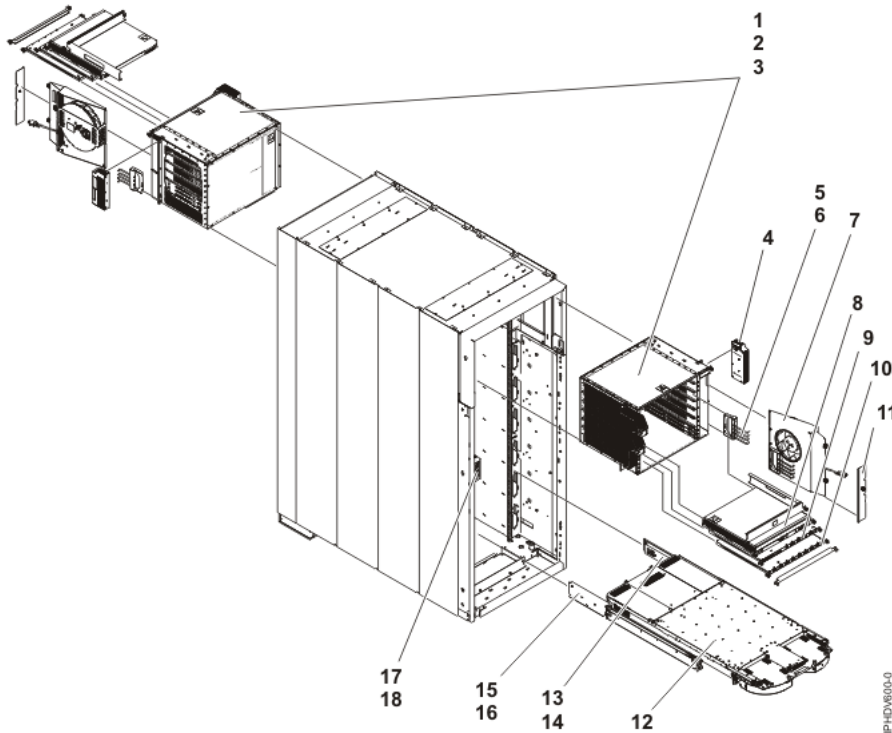
Table 94. Final assembly

Index number	CCIN	Part number	Units	Description
1		45D1608	2	Bulk power enclosure
2		77G0599	12	Screws

Table 94. Final assembly (continued)

Index number	CCIN	Part number	Units	Description
3		74F1823	12	Nut clip
4		45D1139	1	Bulk power supply
5		45D0059	2	Cable bracket
6		77G0599	4	Screw
7		15R7647	AR	Bulk power fan
8		45D1133	AR	Bulk power regulator
9		45D1595	AR	Bulk power controller
10		31L8609	AR	Bulk power distribution air flow baffle
11		45D0318		Bulk power fan cover, front only
12				See Node assembly
13		45D1419	1	Right slide rail
14		54G2882	4	Screw
15		45D0802	1	Left slide rail
16		54G2882	4	Screw
17				ESD bracket
18		77G0599		Screw
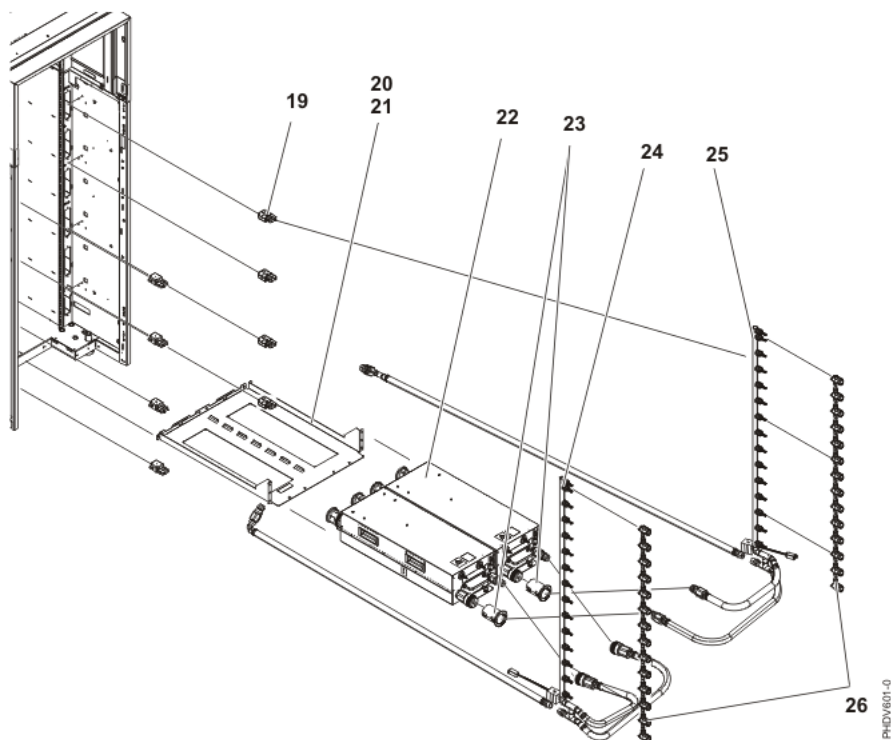
Table 95. Modular water units (WMU) assembly

Index number	CCIN	Part number	Units	Description
19		45D1094	8	Manifold mount assembly
20		45D1971	1	Shelf

Table 95. Modular water units (WMU) assembly (continued)

Index number	CCIN	Part number	Units	Description
21		77G0599	6	Screw
22		45D2731	2	Modular water unit assembly
23		45D1765	4	Shield
24		45D2732	1	Manifold assembly, left
25		45D2733	1	Manifold assembly, right
26		45D0928	2	Drip cup assembly
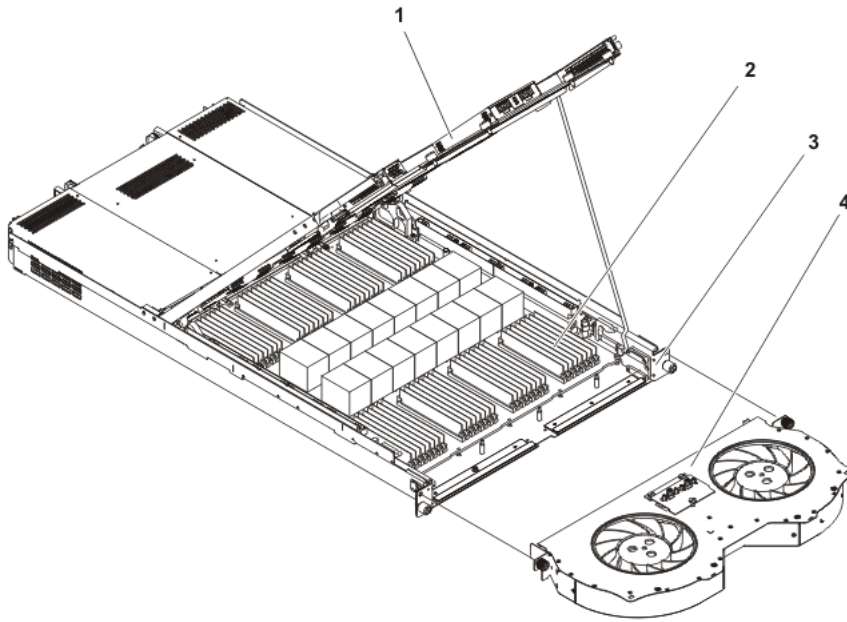
Table 96. Node assembly

Index number	CCIN	Part number	Units	Description
1		45D1593	1	Power supply
2		87H3621		8 MG DIMM
3		45D4074	1–16	Node assembly cold air
3		45D3659	1–14	Node assembly water cooled
4		44V4371	1	Fan assembly, air
4		44V4370	1	Fan assembly, water
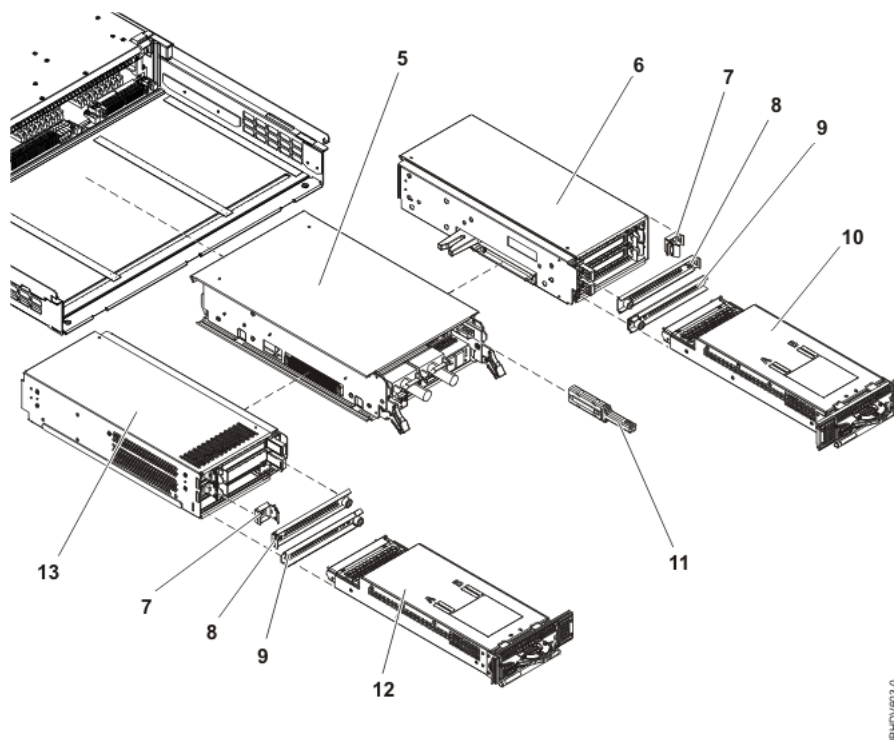
IPHDV603-0

Table 97. Bulk power assembly

Index number	CCIN	Part number	Units	Description
5		45D3667	1	I/O assembly
6		45D0965	1	PCI riser, L
7		45D0667	1–4	PCI filler, short
8		45D0668	1–4	PCI filler, long
9		45D0666	1–2	GX filler
10		45D3396		Adapter
11		10N9779	1	VPD
12		45D0971	1	PCI riser,, R
13		45D3396		Adapter

Table 98. Cables

CCIN	Part number	Description
CCIN	Part number	Description
	44V4147	1 meter SAS cable
	44V4148	3 meter SAS cable
	44V4149	6 meter SAS cable
	44V4158	3 meter SAS cable
	44V4159	6 meter SAS cable
	44V4160	15 meter SAS cable
	15R8392	2 meter hub to node cable
	15R8393	3 meter hub to node cable
	15R8394	4 meter hub to node cable

Table 98. Cables (continued)

CCIN	Part number	Description
	15R8385	BPC cable
	45D2408	Super UPIC cable

Table 99. Miscellaneous parts

CCIN	Part number	Description
	External cables and cords	See Site and hardware planning.
	Cable configuration	See Enclosures and expansion units.
	PCI adapters	See Managing PCI adapters.
	Removable media	See Managing devices.
	0524519	Cable tie
	08J5557	Wheel chock
	11P3662	DASD filler (feature 5798)
	44P4573	Front cover (feature 5798)
	45D1398	IB planer (feature 5798)
	41V2069	DCA (feature 5798)
	42V2129	.6 meter 12X IB cable (feature 5798)
	42V2131	2.5 meter 12X IB cable (feature 5798)
	11P3990	Door key
	11P4606	Cable CLP
	16R0091	Cassette
	42R5435	GX FIL BKT
	44P2630	Frame tool
	44V4203	RAID controller
	44V4404	SAS controller
	45D1603	Weight distribution kit
	45D1831	DIMM tool
	52G4233	SCSI cable
	73H2508	Wrap plug
	87H3311	Wrap plug
	87H3439	Wrap plug
	87H3442	Wrap plug
	93H5270	Wrap plug
	15R7536	Wrap plug
	12R9314	Wrap plug
	12R9315	Wrap plug
	03N6070	Wrap plug
	42R4761	Wrap plug
	42R5143	Wrap plug

Table 99. Miscellaneous parts (continued)

CCIN	Part number	Description
	33F8985	Wrap 25 pin connection
	93G1147	Step stool
	45D2044	Node tool
	45D2045	DCA lift tool
	45D2046	Power lift tool
	45D2052	Hose assembly
	45D2053	Hose assembly
	45D2054	Hose assembly
	45D2055	Hose assembly
	45D2056	Hose assembly
	45D2057	Hose assembly
	45D2058	Hose assembly
	45D2059	Hose assembly
	45D2060	Hose assembly
	45D2104	Tool shelf
	45D2124	Outside EU kit
	45D2129	Within EU kit
	45D2204	Front cover
	45D2218	Hose assembly
	45D2278	Right rail assembly
	45D2279	Left rail assembly
	45D2288	Tailgate clamp
	45D2725	DCA tool
	45D2436	DCA tool
	45D2727	MWU support bracket
	45D2785	MWU air blocker
	45D2964	Fill and drain tool power supply
	45D1113	Fill and drain tool

0595, 5095, and 7311-D20 system parts

Indexed drawings show parts system part numbers.

0595 and 7311-D20 I/O backplane and cabling assembly
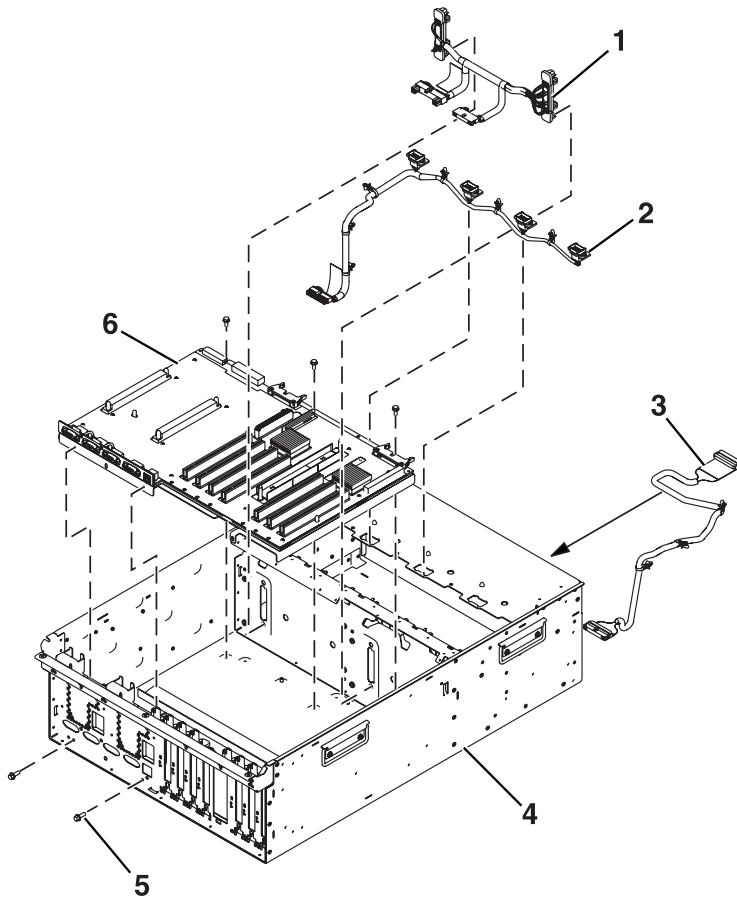
Table 100. 0595 and 7311-D20 I/O backplane and cabling assembly part numbers

Index number	CCIN	Part number	Units	Description
1		53P0416*	1	DASD cable
2		53P4065*	1	Blower cable
3		53P0414*	1	Control panel cable
4		39J1173* 53P0220**	1	Chassis assembly
5		44H7366*	5	Mounting screw, stiffener
6		39J0515* 53P3472**	1	I/O backplane

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

PCI adapters assembly
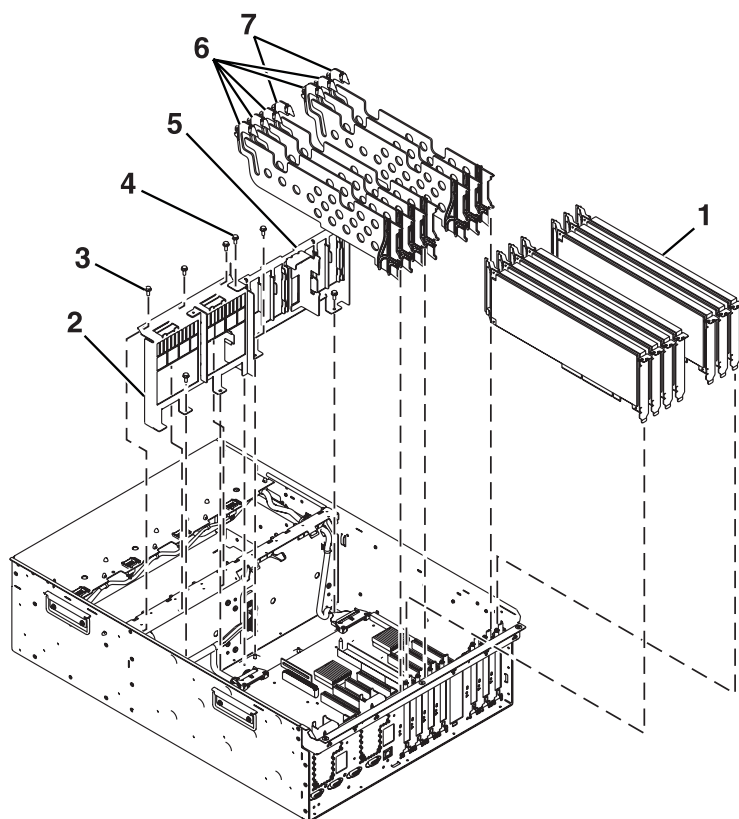
Table 101. 0595 and 7311-D20 PCI adapters assembly part numbers

Index number	CCIN	Part number	Units	Description
1		See Managing PCI adapters.	7 (maximum quantity)	PCI adapter
2		39J1118* 53P0248**	1	Power supply bulkhead
3		44H7366*	4	Screw, power bulkhead mounting
4		44H7366*	3	Screw, PCI plate mounting
5		39J1119*	1	PCI adapter headstock bracket
6		53P2728*	5	PCI dividers
7		53P2729*	2	PCI dividers

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Power, RIO/HSL adapter, and cabling assembly
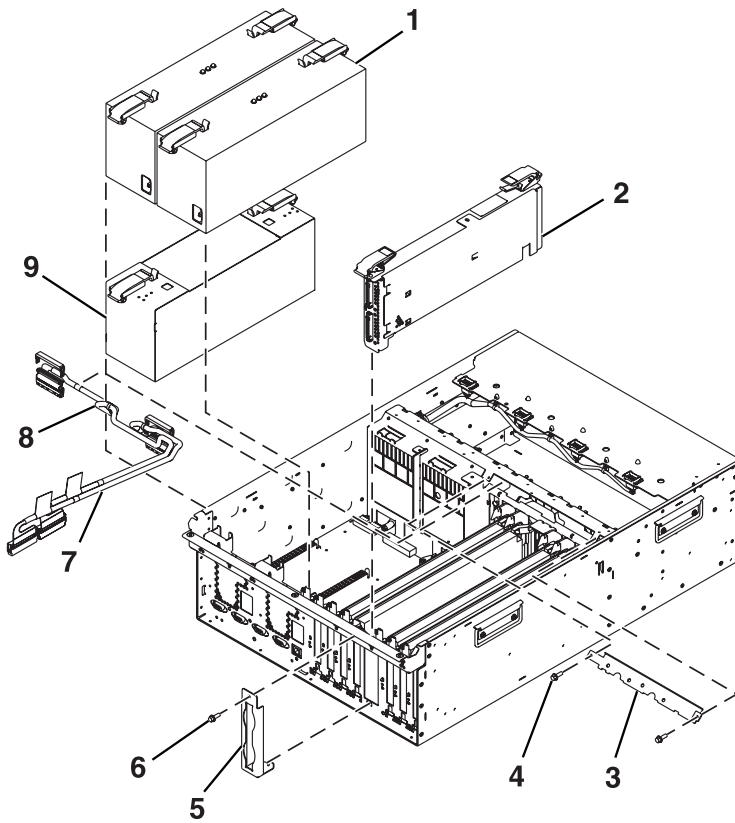
Table 102. 0595 and 7311-D20 power, RIO/HSL adapter, and cabling assembly part numbers

Index number	CCIN	Part number	Units	Description
1		39J2781* 53P4832**	2 (maximum quantity)	Power supply
2	2887	39J0527* 97P2670**	1	bus adapter RIO/HSL card (bus adapter with two external ports)
	28E7	39J0523* 97P2459**	1	-2 bus adapter RIO/HSL-2 card
3		39J1170*	3	Cable bracket, SCSI
4		44H7366*	1	Screw, SCSI cable
5		39J3287* 53P0639**	5	RIO/HSL-2 cable bracket
6		44H736*	2	Screw, RIO/HSL-2 cable bracket
7		53P0417*	Configuration dependent	SCSI bus cable
8		53P0418* 53P0418**	Configuration dependent	SCSI bus cable
9		39J1175* 53P0233**	1	Power supply filler

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Operator panel assembly
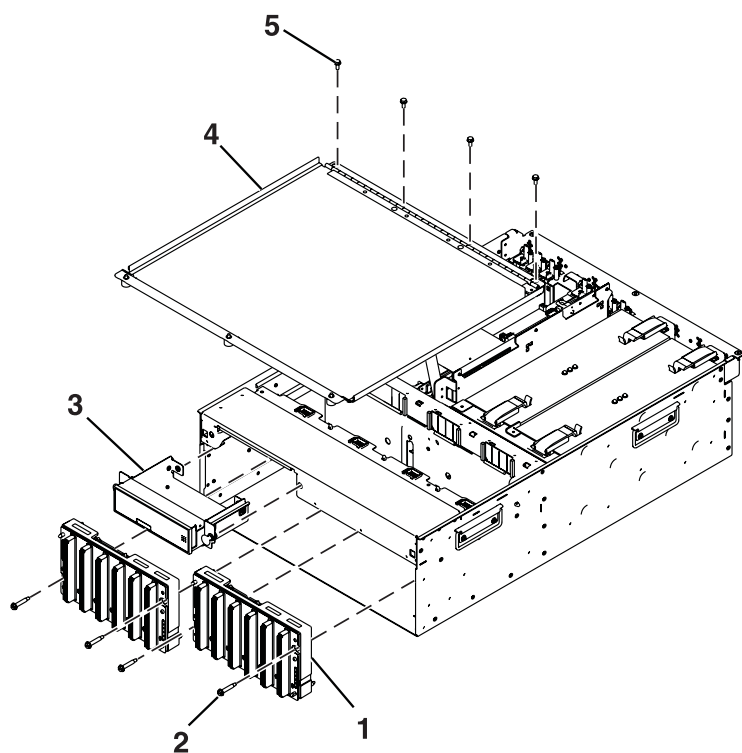
Table 103. 0595 and 7311-D20 operator panel assembly part numbers

Index number	CCIN	Part number	Units	Description
1		39J1695[*] 97P3138[**]	2	Disk drive backplane (disk drive enclosure included)
2		39J3284[*]	4	Screw, disk-drive-backplane mounting
3	250D	39J3087[*] 53P2535[**]	1	Operator panel
4		39J1178[*] 53P0275[**]	1	Processor cover
5		44H736[*]	4	Screw, cover-mounting

[*] Designed to comply with RoHS requirement
[**] Not designed to comply with RoHS requirement

Fans and disk drives assembly
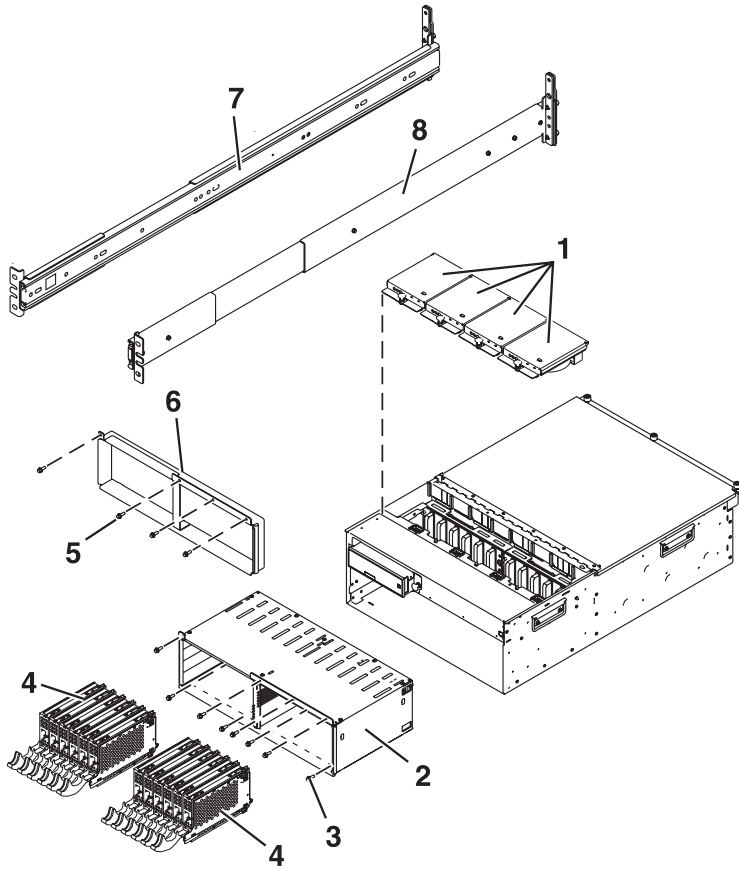
Table 104. 0595 and 7311-D20 fans and disk drives assembly part numbers

Index number	CCIN	Part number	Units	Description
1		39J1176* 53P0262**	4	Fan assembly
3		39J3383* 53P0250**	1	Disk-drive enclosure 12 pack (disk drive backplanes included)
4		39J3283*	8	Screw, disk drive enclosure mounting
5		03N5270* 80P3157** 03N6335* 80P3400**		300 GB Ultra320 10K rpm 80 pin SCSI disk drive/carrier
5		80P3161** 00P2697**		36.4 GB 15K RPM Ultra3 SCSI disk drive/carrier
5		09P3928** 09P4890**		73.4 GB 10K RPM, 80-pin SCSI disk drive/carrier
5		00P3829** 00P3064**		18.2 GB 10K RPM SCSI disk drive/carrier **Note:** The FRU part numbers are interchangeable. Order the FRU part number that matches the FRU part number you are replacing.

Table 104. 0595 and 7311-D20 fans and disk drives assembly part numbers (continued)

Index number	CCIN	Part number	Units	Description
5		00P3831[**] 00P3068[**]		36.4 GB 10K RPM SCSI disk drive/carrier **Note:** The FRU part numbers are interchangeable. Order the FRU part number that matches the FRU part number you are replacing.
5		05J7982[*]		Front spring for 36.4 GB 10K RPM ultra320 SCSI disk drive assembly
6		44H736[*]	4	Screw, filler-plate mounting
7		44H736[*]	1 (optional)	Disk drive filler plate
8		42R5254[*] 53P3451[**]	1	Left rail
9		42R5255[*] 53P3452[**]	1	Right rail

[*] Designed to comply with RoHS requirement
[**] Not designed to comply with RoHS requirement

Covers and brackets assembly
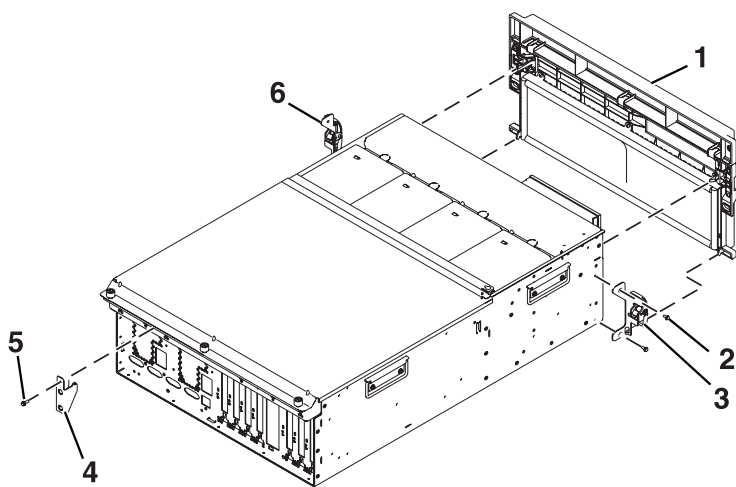
Table 105. 0595 and 7311-D20 cover and bracket assembly part numbers

Index number	CCIN	Part number	Units	Description
1		0595: 39J3326[*] 53P1457[**] and 7311-D20: 39J4661	1	Front cover
2		44H736[*]	2	Screw, latch bracket
3		53P2572[*]	1	Latch bracket assembly left
4		42R4299[*] 53P6019[**]	4	Cable arm bracket
5		44H736[*]	1	Screw, cable arm bracket
6		53P2573[*]	1	Latch bracket assembly right

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Cover assembly for 5095
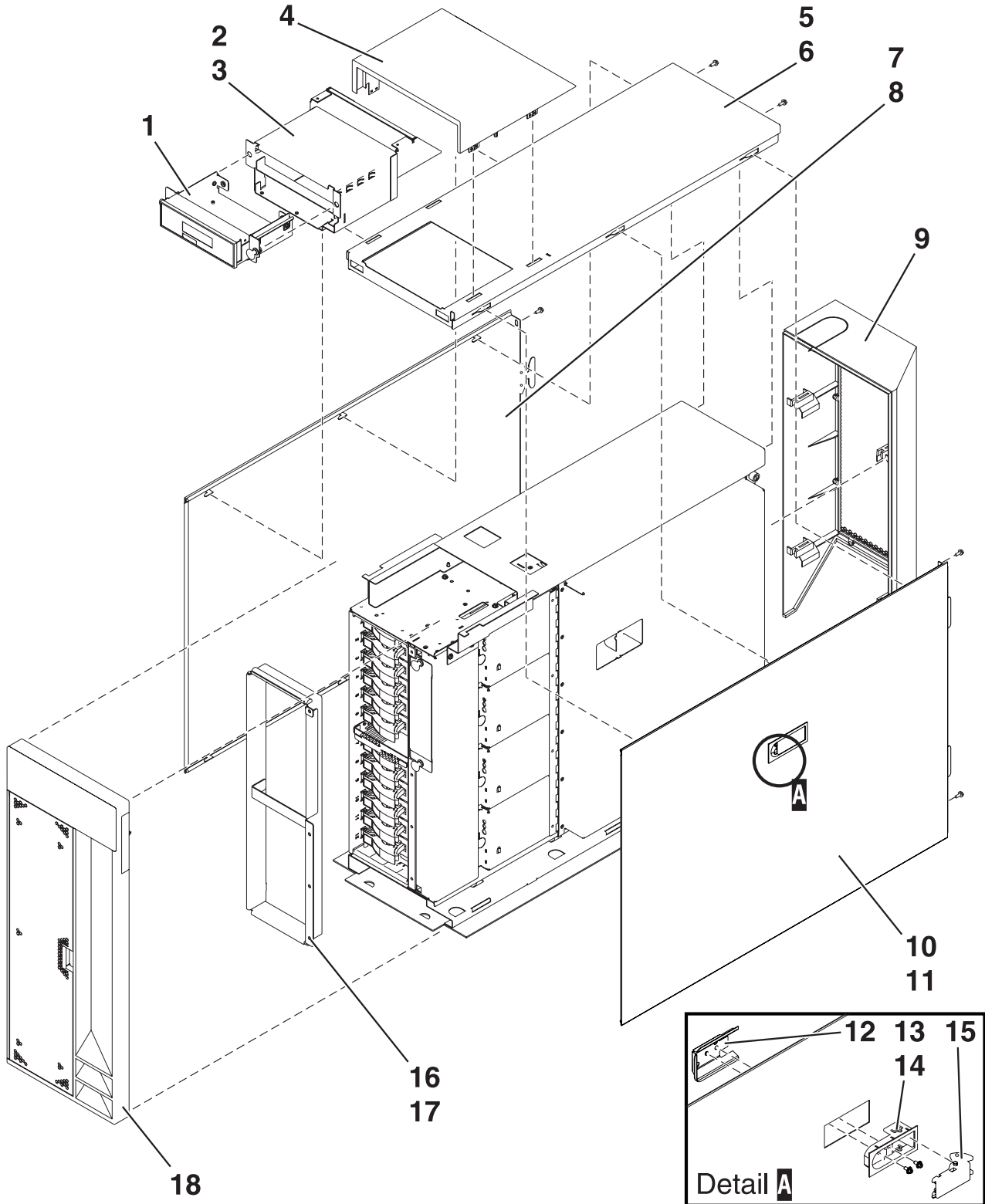
RZAR6690-0

Table 106. Cover assembly part numbers for 5095

Index	CCIN	Part number	Units	Description
1		39J3084* 53P0330**	1	Display panel tray assembly
2		NONUM	1	Display panel enclosure assembly
3		53P0320	5	Screw
4		53P0308*	1	Cover, display panel
5		53P0280	1	Cover, top
6		53P0320	2	Screw
7		53P0285*	1	Cover, left side
8		53P0320	2	Screw
9		53P0303*	1	Cover assembly, back
10		39J1179* 53P0286**	1	Cover assembly, right side
11		53P0320	2	Screw
12		(order part listed in index 10)	1	EMC bracket
13		06P5858 (order part listed in index 10)	1	Latch housing
14		03K9553* (order part listed in index 10)	2	Screw, M3.5 x 7
15		06P5857 (order part listed in index 10)	1	Latch handle
16		NONUM	1	Bracket, DASD filler
17		NONUM	4	Screw
18		39J3317* 53P1359**	1	Cover assembly, front

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Table 107. Cables

CCIN	Description	Part number
	Operator panel cable	42R4054*
	SCSI bus 0 cable	42R4057*
	SCSI bus 1 cable	42R4058*
	3000 MM GX Dual-port 4x HCA cable	42R6244*
	8000 MM GX Dual-port 4x HCA cable	42R6245*
	1500 MM GX Dual-port 4x HCA cable	42R6243*
	Y cable	52G0173*
	ASM differential SCSI-2 cable	52G4291**
	ASM differential SCSI-2 cable	52G4233**
	SCSI-4 drop table	42R4756*
	1 meter RIO G cable	39J2562*
	3.5 meter RIO G cable	39J2554*

Table 107. Cables (continued)

CCIN	Description	Part number
	10 meter RIO G cable	39J2561*
	3.7 meter serial cable	10N7158*
	2 meter SPCN cable	22R5217*
	3 meter SPCN cable	22R5239*
	15 meter SPCN cable	22R5221*
	6 meter SPCN cable	22R5219*

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Table 108. Miscellaneous parts

CCIN	Description	Part number
	External cables	See Site and hardware planning.
	Removable media	See Managing devices.
	PCI adapters	See Managing PCI adapters.
	Cable configuration	See Enclosures and expansion units.
	Bezel filler	97P4179* 53P6213**
	Wrap plug	12R9315* 12R6249**
	Wrap plug	42R4761* 6298964**
	Scurry card bracket	80P7033**
	Plug 232	10N6539*
	Wrap, 15 pin	34F0876*
	Wrap connector	33F8985*
	Wrap plug	43G0928*
	Wrap plug	73H2508**
	Wrap plug	87H3442**
	Wrap plug	87H3588**
	Wrap plug	40F9904**
	128 MB DRAM option card	34L5388**
	Bracket	12R6965*
	Remote asynchronous node (rack).	09P4096**
	Differential SCSI adapter	11K0671**
	Front cover	39J4661* 53P2020**
	PCI cover	39J1177* 53P0268**
	Bracket	00P4885**

Table 108. Miscellaneous parts (continued)

CCIN	Description	Part number
	Front cover	53P1355**
	V.35 wrap	71F0163**
	Fiber-Distributed Data Interface (FDDI) adapter	73H3401**
	Hot plug kit	44P0322**
	Wrap plug	04H7648**
	Battery pack	44L0305**
	Bracket	44P3912**
	PCI slot filler	80P2341**

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

5094, 5294, 5096, and 5296 system parts

Indexed drawings show parts system part numbers.

The 5294 is comprised of two 5094 units, and the 5296 is comprised of two 5096 units

Note: The parts are applicable for every system, except where the machine type model is listed.

Cover assembly
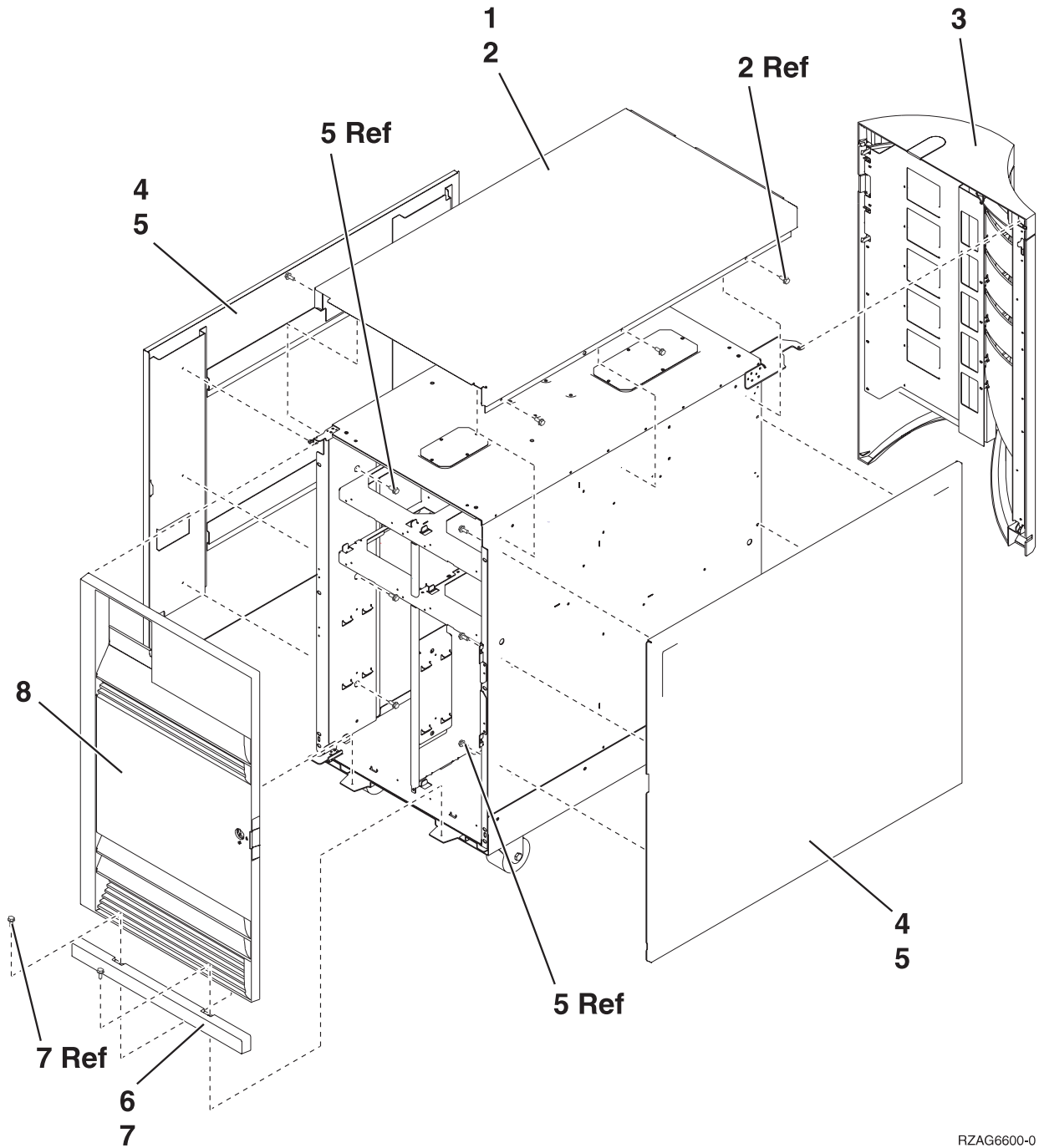
RZAG6600-0

Table 109. Cover assembly part numbers

Index	CCIN	Part number	Units	Description
1		39J4314* 24L0825**	1	Top cover
2		1621811*	4	Screw, M4 (10 mm)
3		42R4064*	1	Back cover
		24L1071**	1	Hinge pin, top

Table 109. Cover assembly part numbers (continued)

Index	CCIN	Part number	Units	Description
4		39J4313* 24L0824**	1	Side cover
5		1621811*	12	Screw, M4 (10 mm)
6		24L1078**	1	Front filler cover
7		1621811*	2	Screw, M4 (10 mm)
8		42R4039*	1	Front cover
		24L1071**		Hinge pin, top

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement
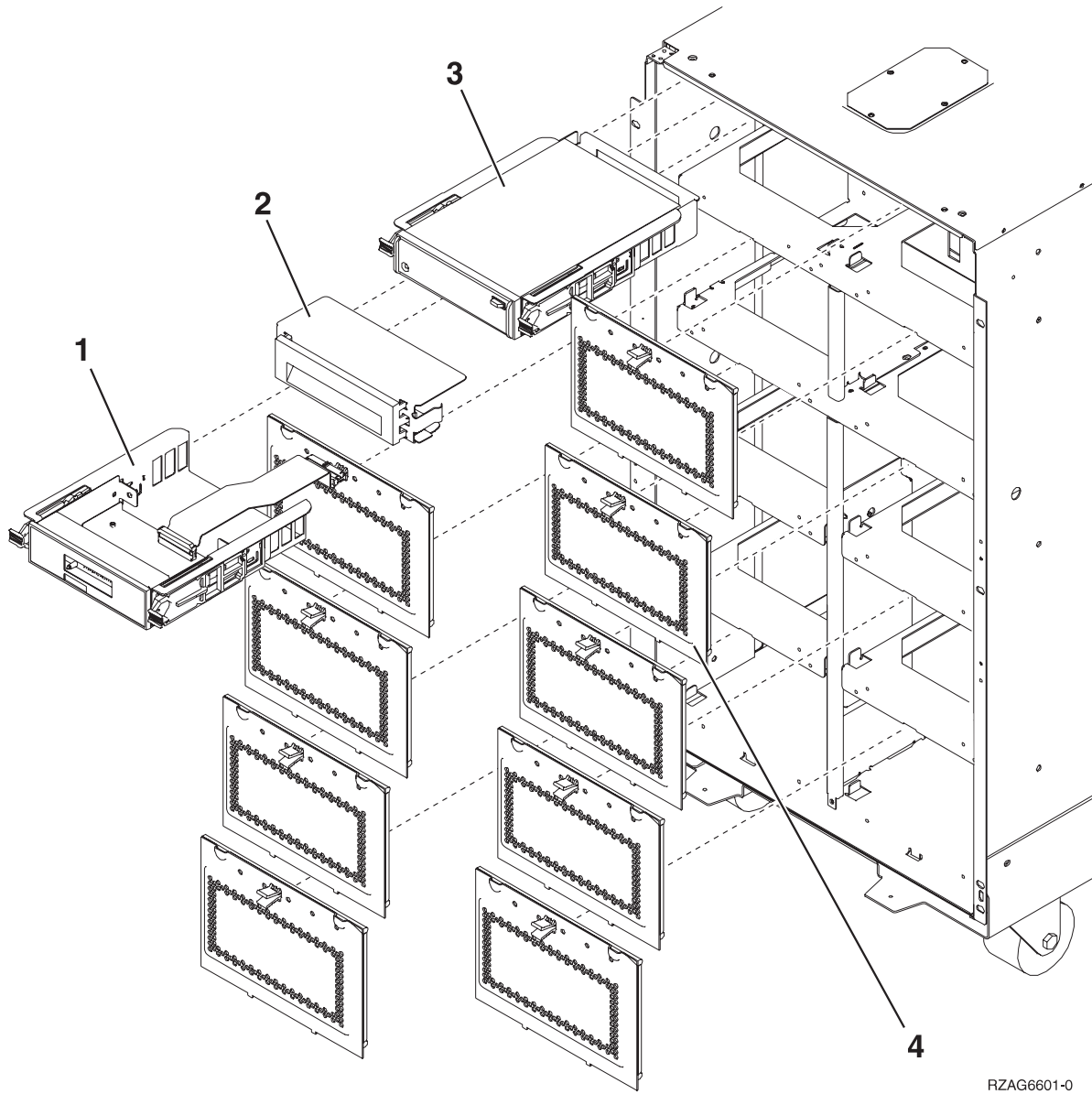
Final assembly

RZAG6601-0
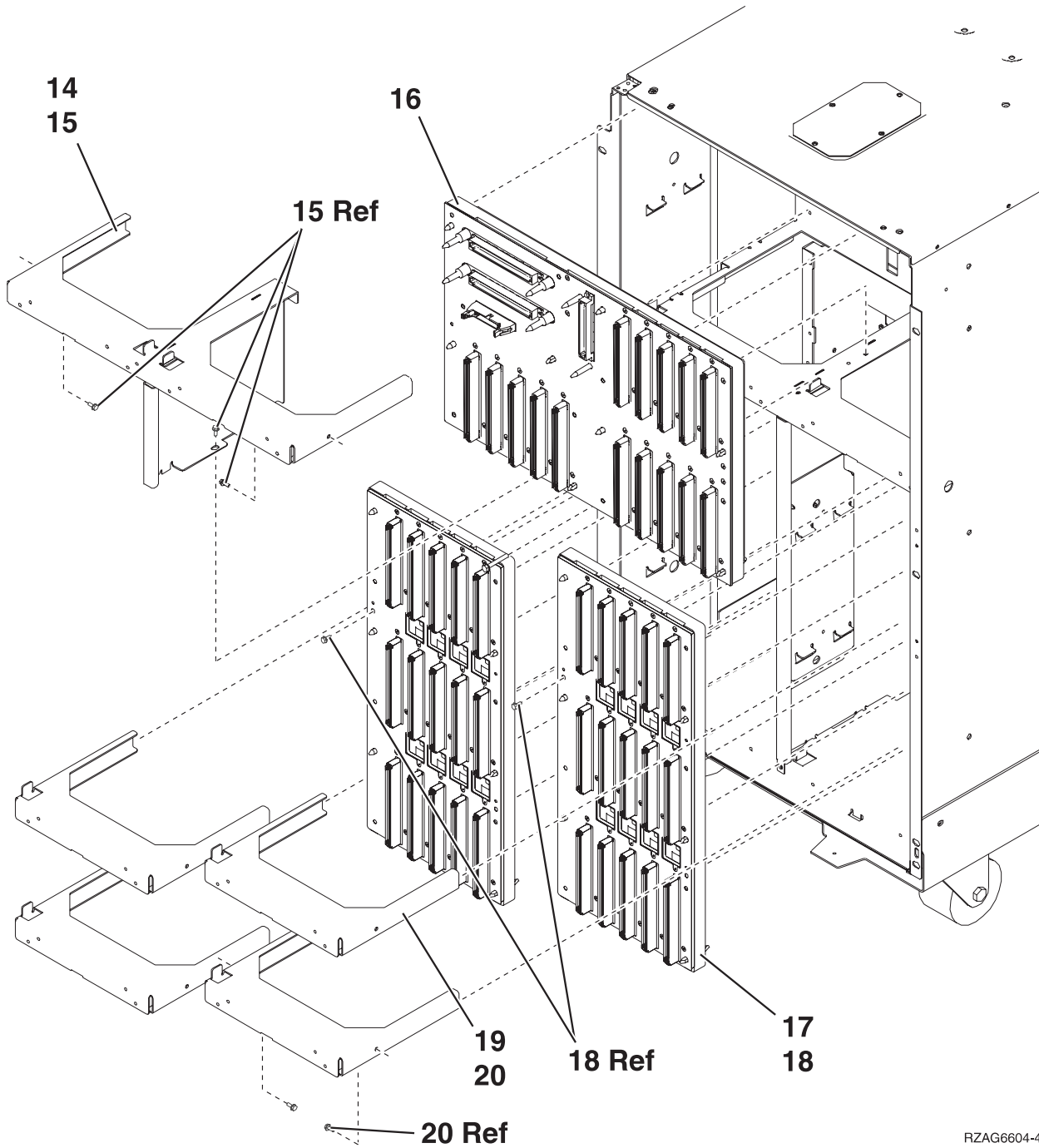
Table 110. Final assembly part numbers

Index	CCIN	Part number	Units	Description
1	247B	39J4611* 24L0962**	1	Display panel
2		42R4037* 44H8406**	AR	Filler (removable media)
3		See Managing devices.	AR	Removable media.
4		42R4045* 24L0821** for 5094 42R7229* for 5096	AR	Disk unit EMC access plate

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement
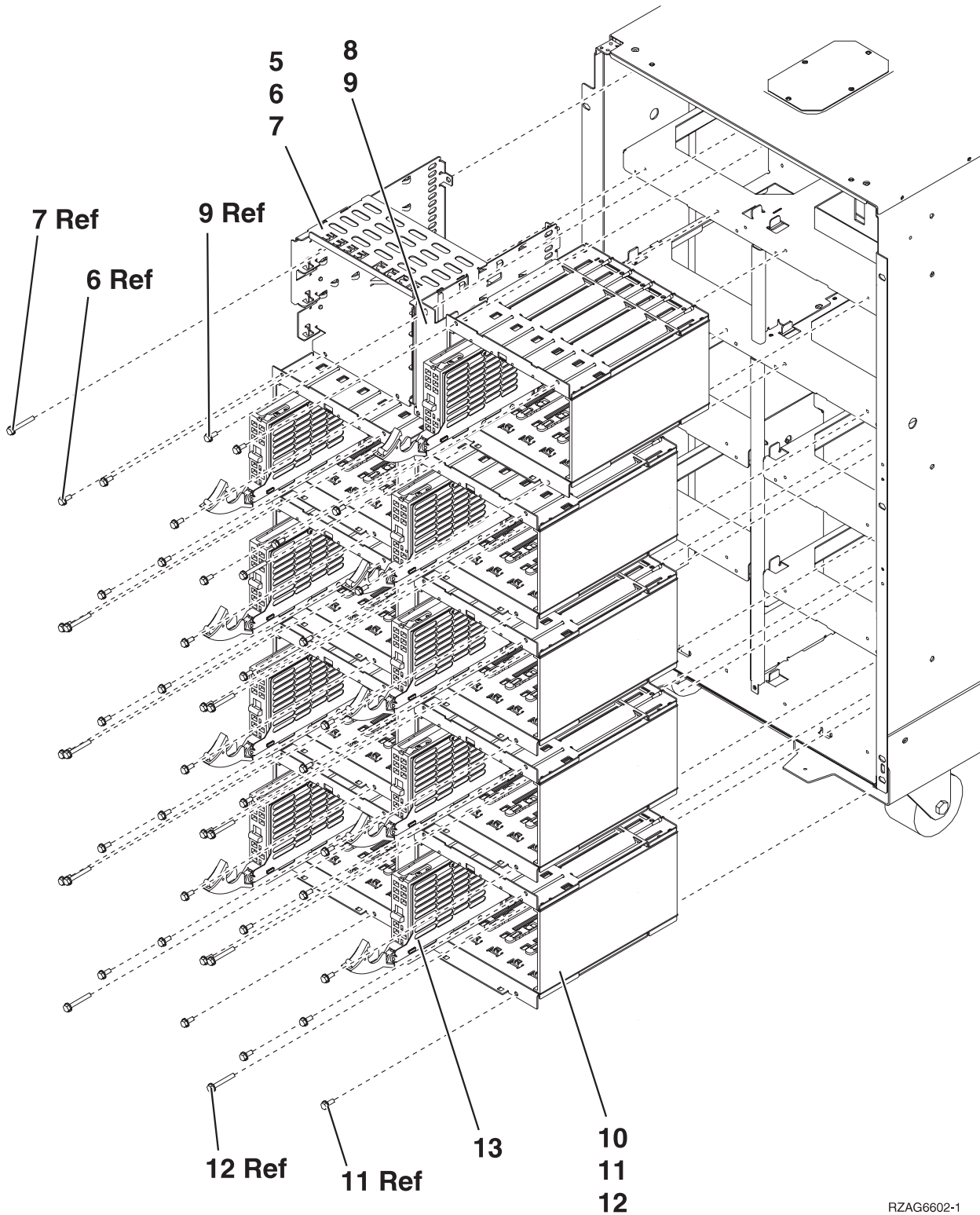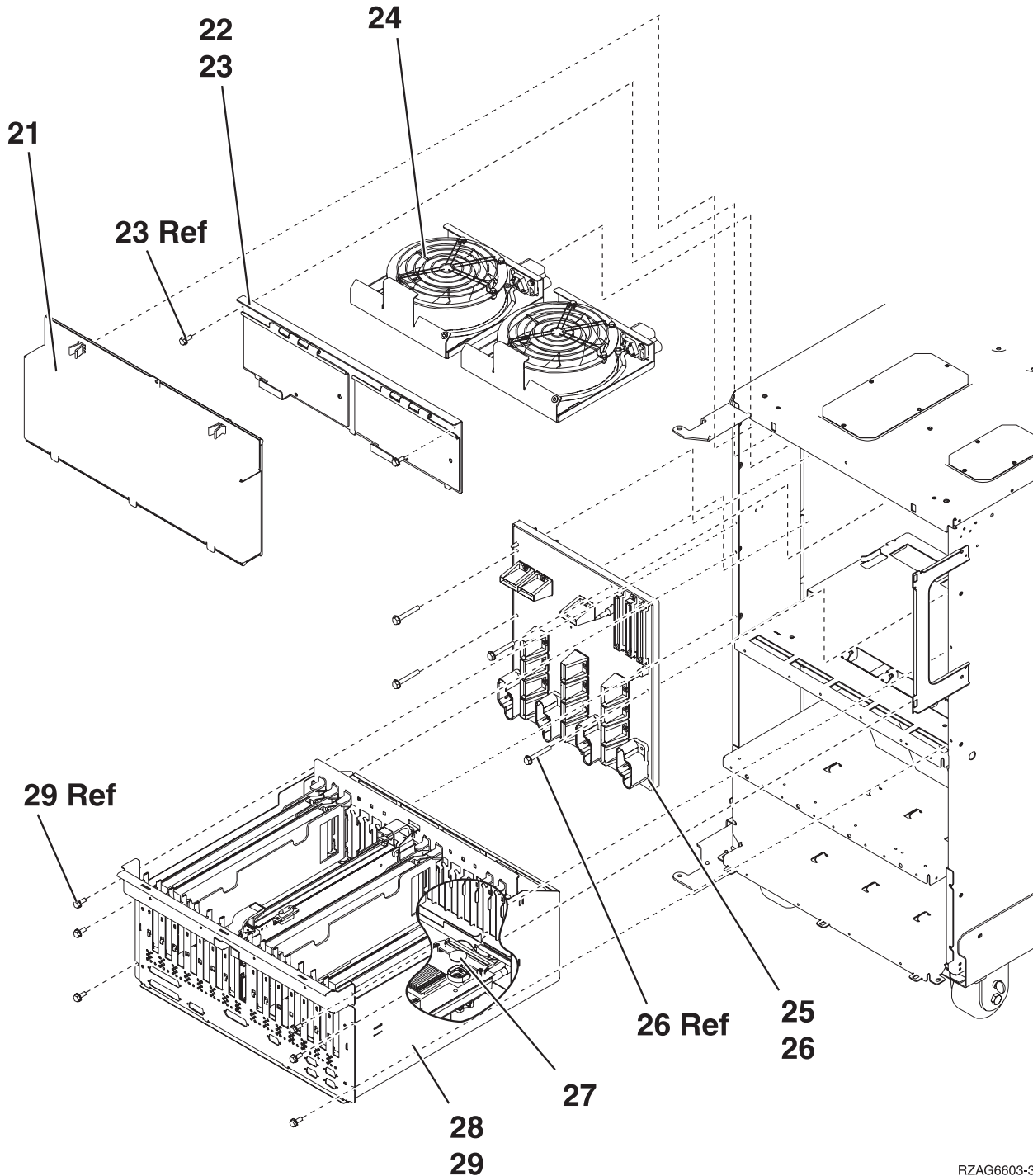
RZAG6602-1

Table 111. Final assembly part numbers

Index	CCIN	Part number	Units	Description
5		NONUM	1	Removable media enclosure assembly
6		1621811[*]	2	Screw, M4 (10 mm)

Table 111. Final assembly part numbers (continued)

Index	CCIN	Part number	Units	Description
7		1621817[*]	2	Screw
8		39J5598 [*] 24L1067[**]	1	Center support bracket
9		1621811[*]	2	Screw, M4 (10 mm)
10		NONUM	AR	Five disk unit enclosure assembly
11		1621811[*]	12	Screw, M4 (10 mm)
12		1621817[*]	6	Screw
13	6714	44L0063[**] 5094	AR	Disk unit assembly
13	6717	53P5970[**] 5094		Disk unit assembly
13		44H4637[**] 5094		Disk unit assembly
13	6718	53P5971[**] 5094		18 GB unit assembly
13	6719	53P5972[**] 5094		36 GB unit assembly

[*] Designed to comply with RoHS requirement
[**] Not designed to comply with RoHS requirement

RZAG6604-4

Table 112. Final assembly part numbers

Index	CCIN	Part number	Units	Description
14		NONUM	1	Shelf, base disk unit
15		1621811*	3	Screw, M4 (10 mm)
16	28CB	42R3859* 53P4001** for 5094 42R7006* for 5096	1	Base disk unit board/stiffener assembly
17		42R7218*	AR	Disk unit board/stiffener assembly
18		1621838*	1	Screw

Table 112. Final assembly part numbers (continued)

Index	CCIN	Part number	Units	Description
19		NONUM	AR	Shelf, disk unit
20		1621811*	2	Screw, M4 (10 mm)

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

RZAG6603-3

Table 113. Final assembly part numbers

Index	CCIN	Part number	Units	Description
21		42R7229 *	1	EMC access plate
22		NONUM	1	Air-moving device (fan) door assembly
23		1621811*	2	Screw, M4 (10 mm)
24		39J5235* 04N3345**	2	Air-moving device (fan)
25		39J3082* 21P3793**	1	Power board/stiffener assembly
26		1621816*	6	Screw
27			1	Time of day (TOD) battery
28		97H7307**	1	I/O backplane

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Final assembly

38 Ref

30
31

32 33

34

35

34 Ref
35 Ref

38

36
37
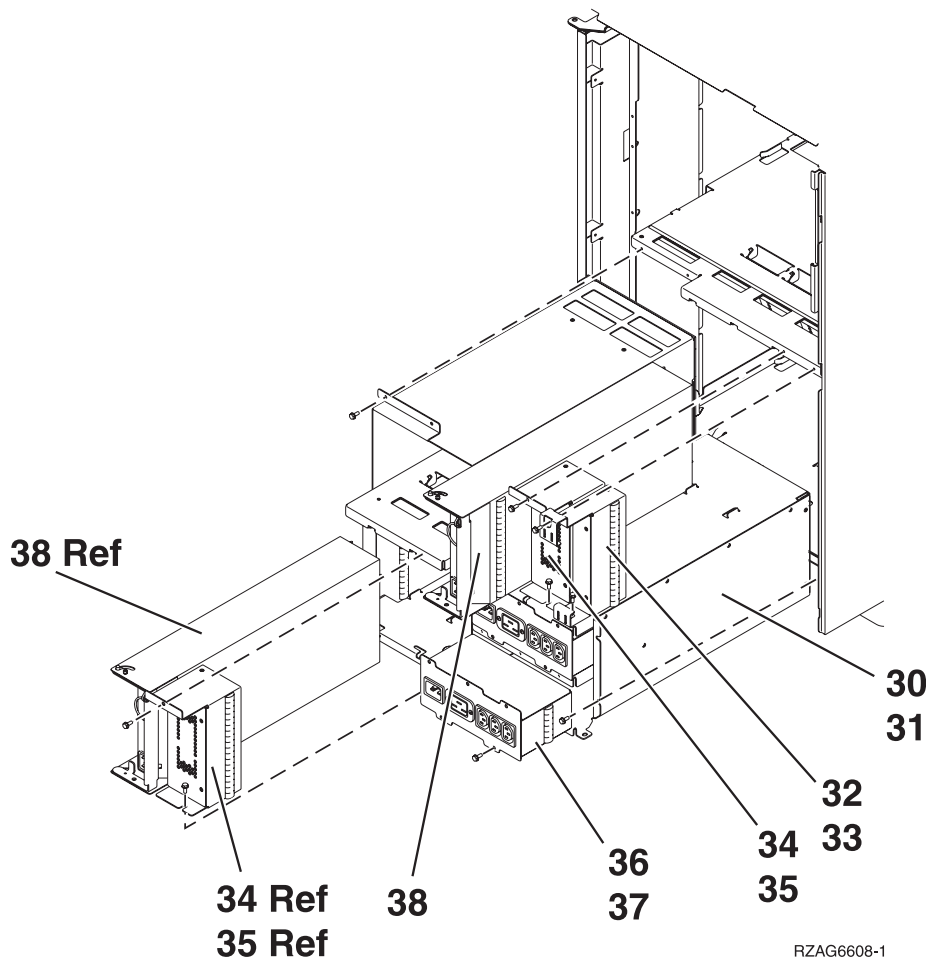
RZAG6608-1

Table 114. Final assembly part numbers

Index	CCIN	Part number	Units	Description
30		42R4295* 53P5259**	1	Power subframe assembly for dual line cord
31		1621811*	8	Screw, M4 (10 mm)
32		39J5845* 24L0940**	2	Filler, spacer
33		1621811*	2	Screw, M4 (10 mm)
34		39J5844*	2	Filler, power supply
35		1621811*	4	Screw, M4 (10 mm)
36		39J5171* 53P5263**	2	AC power distribution assembly
37		1621811*	4	Screw, M4 (10 mm)
38		39J5273* 53P1038**	4	Power supply assembly, 840 W

`* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Optional hardware assembly for 5294 and 5296 expansion units
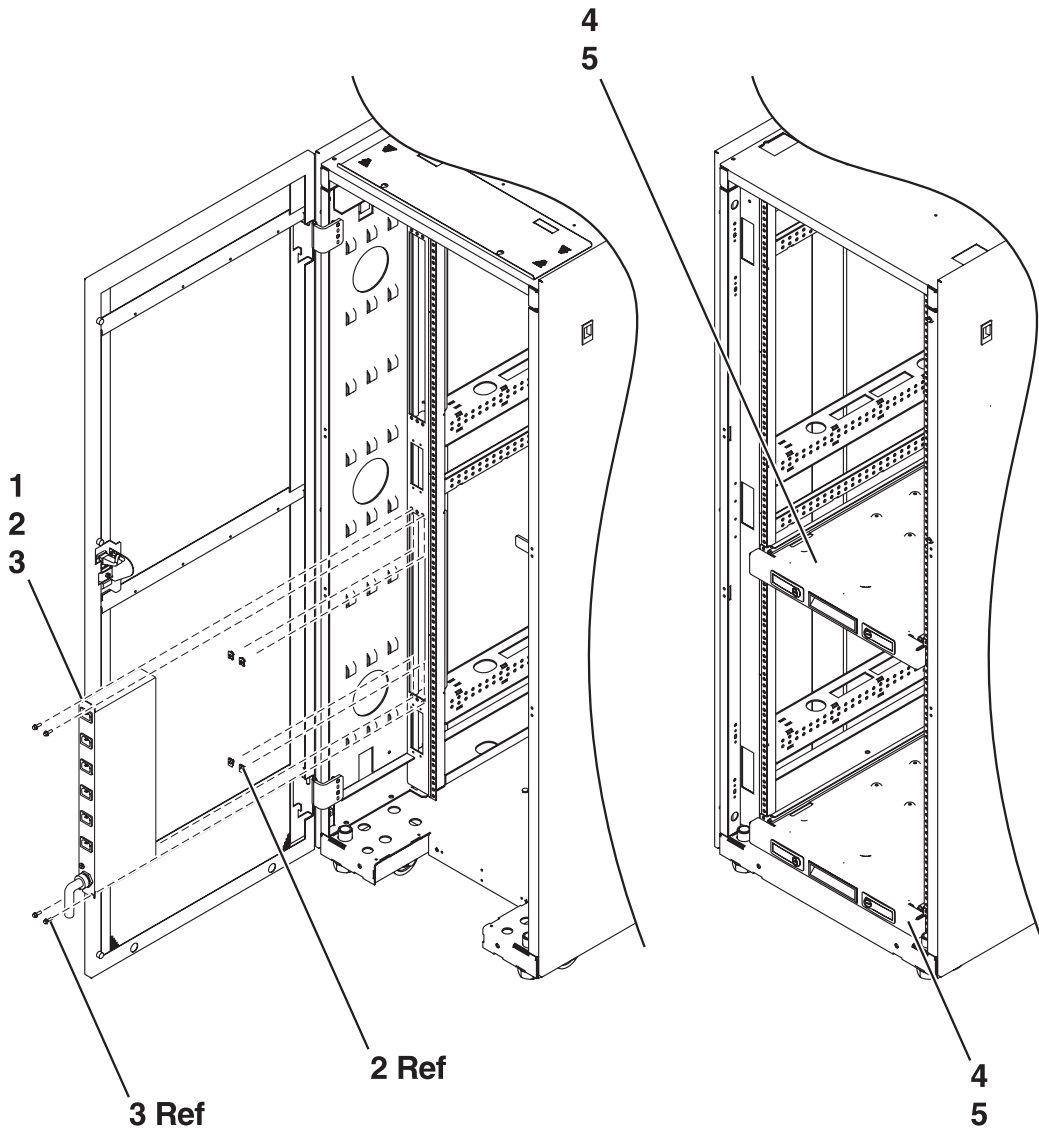
RZAG6804-0

Table 115. Optional hardware assembly part numbers for 5294 and 5296 expansion units

Index	Part number	Units	Description
1	00P2200**	1	Type 6 power distribution unit single phase U.S.
	00P2201**	1	Type 6 power distribution unit two phase
	00P2202**	1	Type 6 power distribution unit three phase
	09P2891**	1	Type 6 power distribution unit single phase World Trade
	00P3663**	1	Type 7 Power distribution panel (1 Phase)
	97P3574**	1	Type 7 Power distribution panel (1 Phase World Trade)
	97P3575**	1	Type 7 Power distribution panel (3 Phase World Trade)

Table 115. Optional hardware assembly part numbers for 5294 and 5296 expansion units (continued)

Index	Part number	Units	Description
2	74F1823* 0375867**	4	Nut clip
3	1624779* 6200684**	4	Screw
5	1624779* 6200684**	16	Screw

* Designed to comply with RoHS requirement

** Not designed to comply with RoHS requirement

Table 116. Miscellaneous parts

CCIN	Description	Part number
	External cables and cords	See Site and hardware planning.
	Removable media	See Managing devices.
	PCI adapters	See Managing PCI adapters.
	Cable configuration	See Enclosures and expansion units.
28B7	I/O backplane	39J3058* 53P6023**
	Signal cable	42R4116* 97H7474**
	Operator panel cable	24L1752**
	Operator panel cable	04N6113* 97H7473**
	Fan cable	42R4035* 97H7475**
	SPCN cable	42R4047* 97H7544**
	SCSI cable	42R4049* 53P5651**
	SCSI cable	42R4034* 53P5649**
	SCSI cable	42R4050* 53P5650**
2691	HSL I/O bridge	04N6907**
	DASD cage	39J4304* 24L0761**
	Full length airflow filler	46G3556**
	Battery pack	97H7318**
	DASD expansion shelf, plate	39J5597*
	Cable assembly	24L0843* 97H7607**

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

5786, 5787, 7031-D24, and 7031-T24 system parts

Indexed drawings show parts system part numbers.

Cover assemblies

Note:

- For external cable FRU part number and description for your I/O enclosure, see the *Site and hardware planning*, order number SA76-0091.
- For procedures on cabling your I/O enclosure, see *Customer-Installable Features for the IBM p 570 (9117-MMA)*, order number SA76-0104. and go the topic "Connecting the 5786, 5787, 7031-D24 or 7031-T24 SCSI disk drive enclosure".
- Throughout this chapter the abbreviation RoHS is used. RoHS refers to European Union Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment *Site and hardware planning* All part numbers are suitable for the 7031-T24, 7031-D24, 5786, and 5787 unless otherwise indicated.
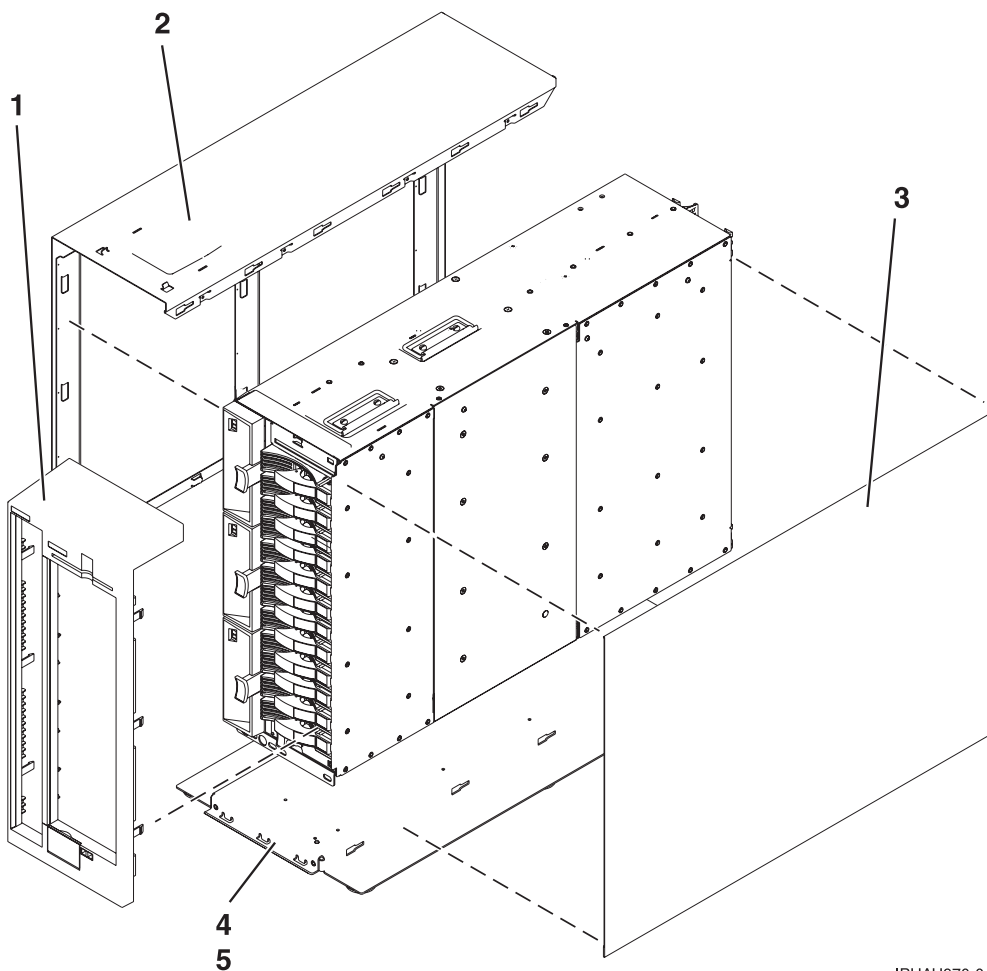
IPHAU970-0

Table 117. Stand-alone cover assembly part numbers for 5787 and 7031-T24

Index number	CCIN	Part number	Units per assembly	Description
1		12R8505*	1	Front cover assembly – stand-alone
2		12R8373*	1	Side cover assembly – stand-alone, left
3		12R8376*	1	Side cover assembly – stand-alone, right
4		12R8379*	1	Footstand assembly – stand-alone
5		1624741*	4	Screw, M3 x 4 – pan head

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement
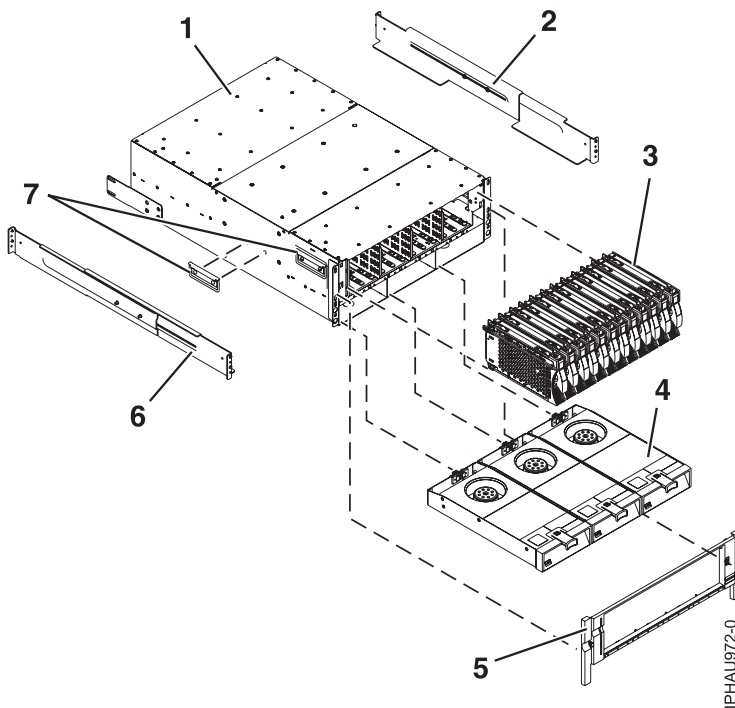
Table 118. I/O enclosure assembly (front view)

Index number	CCIN	Part number	Units per assembly	Description
1		41U0299*	1	Rack configured chassis assembly (includes chassis, disk drive backplane, VPD card). Removal and replacement procedures are sent with the FRU.
1		41U0301*	1	Stand-alone configured chassis assembly (includes chassis, disk drive backplane, VPD card). Removal and replacement procedures are sent with the FRU.
2		39J2051*	1	Mount Rail assembly (7031-D24 only)
		97P4178* 3P5556**		DASD bezel (not shown)
		97P4179* 53P6213**		DASD filler panel (not shown)

Table 118. I/O enclosure assembly (front view) (continued)

Index number	CCIN	Part number	Units per assembly	Description
3		03N5260* 00P3833**	up to 12 per side	73.4 GB Disk drive with U320 carrier, 10K RPM, 80 pin
3		03N6325* 00P3072**	up to 12 per side	73.4 GB Disk drive with U320 carrier, 10K RPM, 80 pin
3		03N5265* 00P3835**	up to 12 per side	146.8 GB Disk drive with U320 carrier, 10K RPM, 80 pin
3		03N6330* 00P2665**	up to 12 per side	146.8 GB Disk drive with U320 carrier, 10K RPM, 80 pin
3		03N5270* 80P3157**	up to 12 per side	300 GB Disk drive with U320 carrier, 10K RPM, 80 pin
3		03N6335* 80P3400**	up to 12 per side	300 GB Disk drive with U320 carrier, 10K RPM, 80 pin
3		03N5275* 80P3159**	up to 12 per side	36.4 GB Disk drive with U320 carrier, 15K RPM, 80 pin
3		03N6340* 00P2693**	up to 12 per side	36.4 GB Disk drive with U320 carrier, 15K RPM, 80 pin
3		03N5280* 80P3163**	up to 12 per side	73.4 GB Disk drive with U320 carrier, 15K RPM, 80 pin
3		03N6345* 00P2685**	up to 12 per side	73.4 GB Disk drive with U320 carrier, 15K RPM, 80 pin
3		03N5285* 80P3911**	up to 12 per side	3.5 inch 146 GB SCSI DASD, 15 K RPM
3		10N8578*	up to 12 per side	300 GB Disk drive with U320 carrier, 15K RPM, 80 pin
3		03N5270* 80P3157**		300 GB Ultra320 10K rpm 80 pin SCSI disk drive/carrier
4		15R6792* 12R9950*	3	Fan assembly
5		41U0264*	1	Front bezel (Rack unit only)
6		39J2051*	1	Mount Rail assembly (See index number 2 in this table)
7		12R8511* 90H9196*	3	Chassis handle

* Designed to comply with RoHS requirement
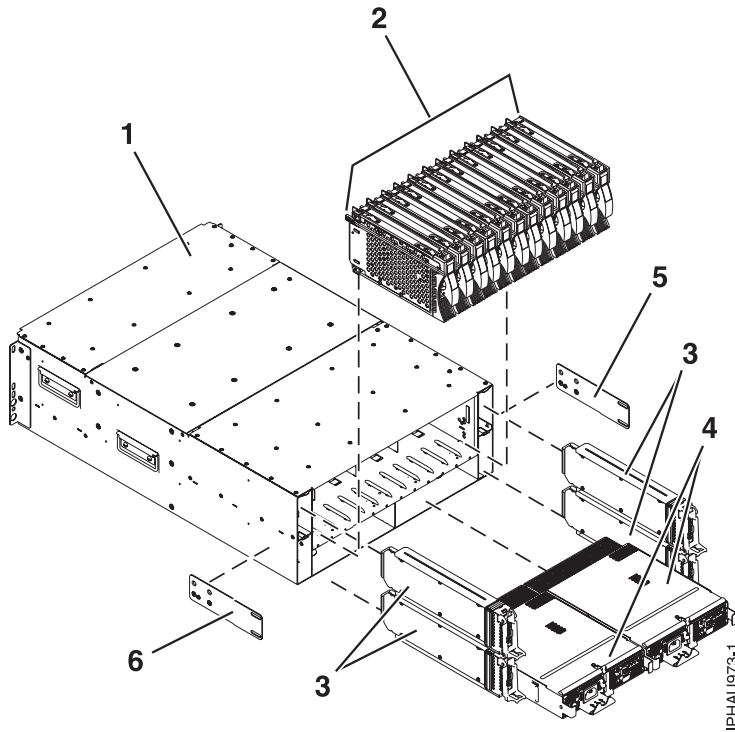** Not designed to comply with RoHS requirement

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Table 119. I/O enclosure assembly (back view)

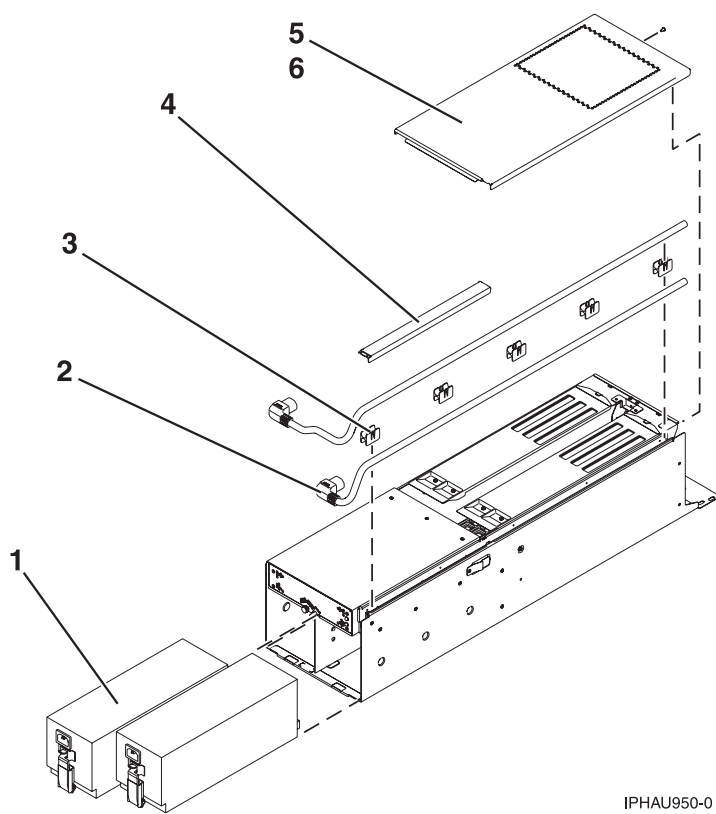| Index number	CCIN	Part number	Units per assembly	Description
1				Chassis assembly (refer to table 2 for part number)
2				Disk drive assemblies (refer to table 2 for part number)
3	506E	12R9042* 12R7477*	up to 4	SCSI repeater card assembly – single
3	506D	12R9040* 12R7475*	up to 4	SCSI repeater card assembly – dual
3		12R7457*	up to 3	SCSI repeater card filler assembly (not shown)
4		12R9078**	up to 2	966 W power supply assembly. Do not use in combination with another power supply.
4		12R7454*	1	Power supply filler assembly (not shown)
5		12R6121*	1	Left chassis bracket
6		12R6122*	1	Right chassis bracket

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

5790 and 7311-D11 system parts

Indexed drawings show parts system part numbers.

All part numbers are suitable for both the 5790 and 7311-D11 unless otherwise indicated.
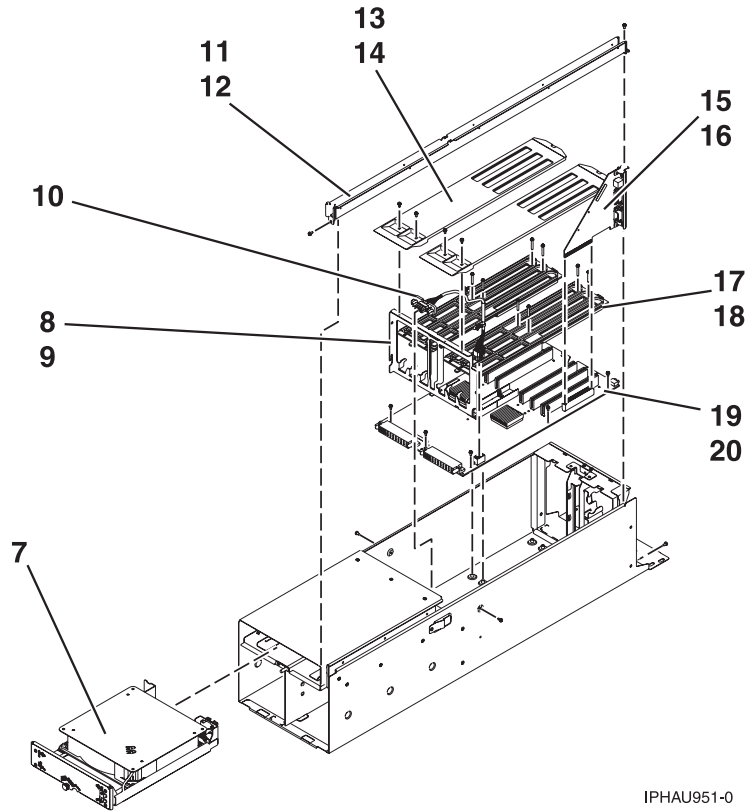
Final assembly

IPHAU950-0

Table 120. Final assembly part numbers

Index number	CCIN	Part number	Units	Description
1		22R3958* 22R5494**	2	228 W Power supply
2		See Managing PCI adapters.	2	Cable, power
3		09P3185**	5	Guide, power cable
4		80P2654*	1	Cover, power cable channel
5		80X2646**	1	Access cover
6		1624743**	2	Screw, access cover

* Designed to comply with RoHS requirement
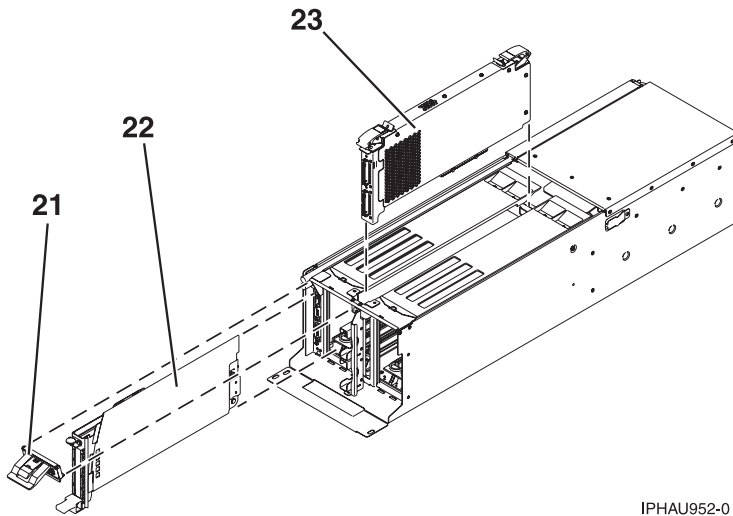** Not designed to comply with RoHS requirement

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Table 121. Final assembly, continued

Index number	CCIN	Part number	Units	Description
7		32N1256* 03N6069**	1	Fan assembly
8		80X2646**	1	Bracket, bulkhead
9		1621829**	2	Screw, bulkhead bracket
10		03N6196* 09P5417**	1	Cable, fan
11		80X2646**	1	Tray, power cable
12		1621829**	2	Screw, tray mounting
13		80X2646**	2	Guide, upper
14		1621829**	4	Screw, upper guide mounting
15		NONUM		SPCN connector card (included with index number 19)
16		NONUM		Screw (included with index number 19)
17		80X2646**	2	Guide, lower
18		1624749**	8	Screw, lower guide mounting
19		23R0181* 22R6222**	1	I/O backplane assembly (includes SPCN connector card)
19		80P6626**		I/O drawer backplane
20		1624743**	6	Screw, backplane mounting

[*] Designed to comply with RoHS requirement
^{**} Not designed to comply with RoHS requirement

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Table 122. Final assembly, continued

Index number	CCIN	Part number	Units	Description
21		80P2669[*]	2	Filler, EMC
22		See Managing PCI adapters.	AR	PCI cassette
23	28FF	03N5633[*] 80P6006^{**}	1	RIO/HSL card

[*] Designed to comply with RoHS requirement
^{**} Not designed to comply with RoHS requirement
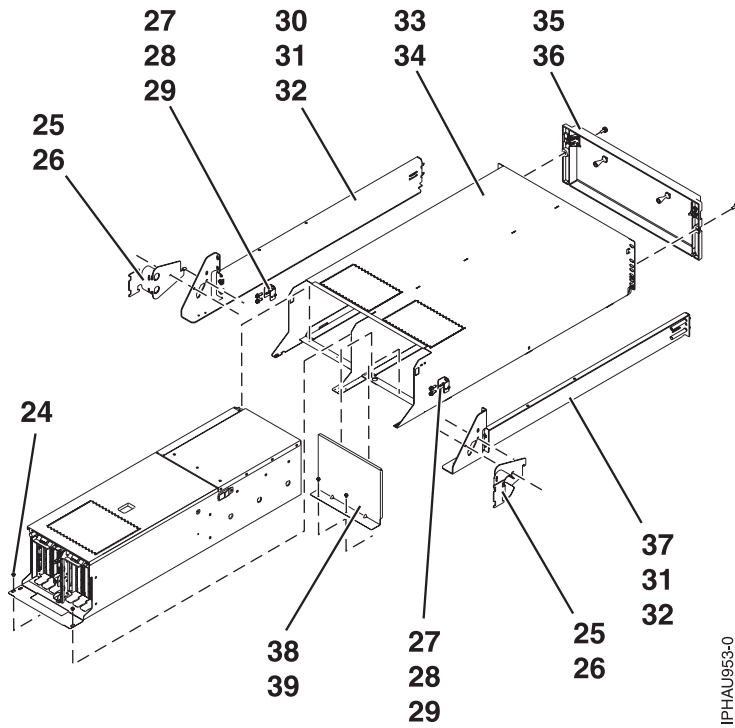
Rack-mounting enclosure

IPHAU953-0

Table 123. Rack-mounting enclosure

Index number	CCIN	Part number	Units	Description
24		93H4729*	2	Screw, chassis
25		80P2665*	2	Cable support bracket
26		00G1268* 40F9987**	2	Screw, bracket mounting
27		NUNUM	2	I/O subsystem retention bracket
28		1624779* 6200684**	4	Screw, I/O subsystem mounting
29		1621829**	2	Screw
30		39J4472* 03N3847**	1	Right rail
31		1624779* 6200684**	4	Screw, rail mounting
32		74F1823* 0375867**	12	Nut clip, rail mounting
33		NONUM	1	Chassis
34		1624779* 6200684**	4	Screw, rail mounting
35		80P5233* 09P4778**	1	Front cover
36		04N6587*	2	Thumbscrew, shipping
37		39J4471* 03N3845**	1	Left rail
38		80P2664*	1	Back filler for empty I/O subsystem space

Finding parts, locations, and addresses **209**

Table 123. Rack-mounting enclosure (continued)

Index number	CCIN	Part number	Units	Description
39		93H4729*	2	Screw, filler mounting

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Table 124. Cables

CCIN	Description	Part number
	3000 MM GX Dual-port 4x HCA cable	42R6244*
	8000 MM GX Dual-port 4x HCA cable	42R6245*
	1500 MM GX Dual-port 4x HCA cable	42R6243*
	Y cable	52G0173**
	SCSI2 cable	52G4291**
	SCSI cable	52G4233**
	3.7 M serial cable	10N7158*
	8 M serial cable	10N7159*
	1 M I/O cable	39J2562*
	3. 5 M I/O cable	39J2554*
	2 M SPCN cable	22R5217*
	3 M SPCN cable	22R5239*
	15 M SPCN cable	22R5221*
	6 M SPCN cable	22R5219*
	15 feet cable	43G0937**
	9 inch cable	43G0936**
	SCSI cable	42R4756*

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

Table 125. Miscellaneous parts

CCIN	Description	Part number
	External cables and cords	See Site and hardware planning.
	Removable media	See Managing devices.
	PCI adapters	See Managing PCI adapters.
	Cable configuration	See Enclosures and expansion units.
	Cassette filler	80P6749* 80P5354**
	Wrap plug	12R9315* 12R6249**
	Wrap plug	42R4761* 6298964**

Table 125. Miscellaneous parts (continued)

CCIN	Description	Part number
	Scurry card bracket	80P7033**
	Interposer 4=1	43G0935* 51G8610**
	Plug 232	10N6539*
	Wrap connector	33F8985**
	Wrap plug	10N6541*
	Wrap plug	43G0928*
	Wrap plug	73H2508**
	Wrap plug	87H3442**
	Wrap plug	87H3588**
	Wrap plug	40F9904**
	128 MB DRAM option card	34L5388*
	Universal 4 port 10/100 ethernet adapter	80P3553*
	Bracket	00P2402**
	Bracket	09P4911**
	Bracket	12R6965*
	Bracket	41V0606*
	Remote asynchronous node (rack).	09P4096**
	Filler plate	09P4912**
	Differential SCSI adapter	11K0671**
	Mechanical assembly	09P3118**
	Bracket	09P2853**
	V.35 wrap	71F0163**
	FRU FDDI DAS	73H3401**
	Hot plug kit	44P0322**
	Right rail	21P7876**
	Wrap plug	04H7648**
	Bracket	00P2753**
	Blind swap assembly	97P6654**
	32 MB fast-write cache option card	44L0305**
	Bracket	44P3912* 44P2650**
	Blind swap guide, upper	00P2750**
	Bracket	09P2753**
	Drawer assembly	09P4746**
	Left rail assembly	21P7875**
	Cover assembly	00P2788**
	Filler,10 Gbps, Ethernet IOA (long)	80P2341**
	Bracket, bulkhead	00P2752**
	Half-drawer mechanical assembly	00P2751**

* Designed to comply with RoHS requirement
** Not designed to comply with RoHS requirement

5791, 5794, 5797, and 5798 system parts

Indexed drawings show parts system part numbers.

Final assembly
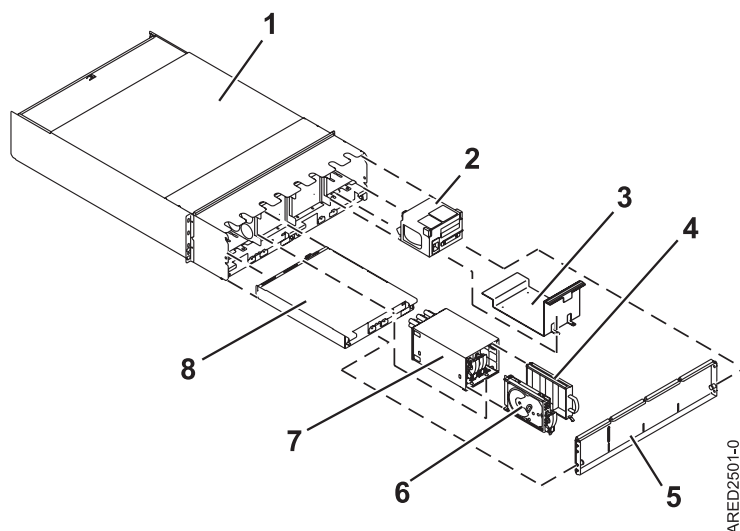

Table 126. Final assembly (front) part numbers

Index number	Part number	Units per assembly	Description
1	41V0453	1	Chassis
2	45D2252	4	Fan assembly (features 5794, 5797, and 5798)
2	45D1692	4	Fan assembly (feature 5791)
3	44P1277	2	Disk drive enclosure filler (feature 5794)
4	11P3662	AR	Disk drive filler
5	44P4573	1	Front cover
6	See Disk drives	AR	Disk drive
7	41V0608	AR	Disk unit enclosure and backplane assembly
	41V1064		Screw
	11P3457		Screw (feature 5794)
8	41V0943	2	Power supply (5DCA-BCS) (features 5791, 5794)
8	41V2069	2	Power supply (features 5797, 5798)

Back view
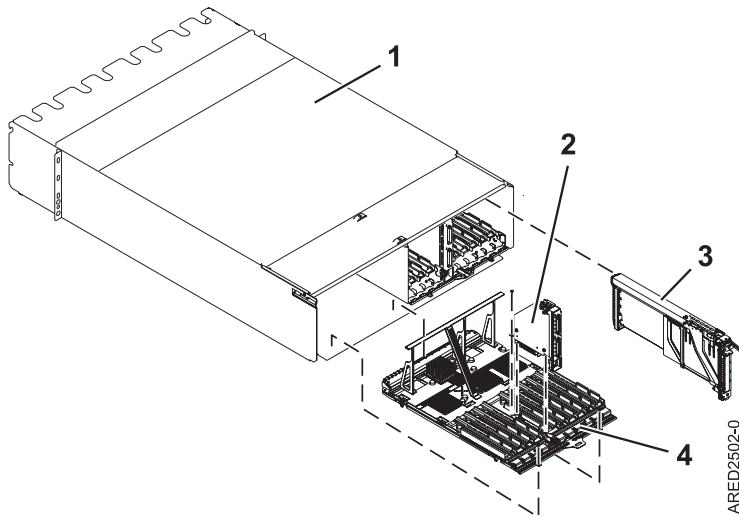
Table 127. Final assembly (back) part numbers

Index number	Part number	Units per assembly	Description
1	41V0453	1	Chassis
2	NONUM	AR	GX riser card, part of the I/O backplane (see index number 4)
3	16R0091	AR	PCI adapter cassette assembly
4	45D2064	2	I/O backplane (feature 5798)
4	45D2068	2	I/O backplane (feature 5797)
4	41V1231	2	I/O backplane (features 5791, 5794)

Table 128. Miscellaneous parts

CCIN	Part number	Description
	44P2629	Tool
	7H5247	Bracket (features 5791, 5797, and 5798)
	11P2344	Cable bracket
	1695244	Screw m4 (features 5791, 5797, and 5798)
	08L0358	Screw (feature 5797)
	54G2882	Screw
	74F1823	Nut
	80P6749	BS filler
	80F7499	Torx screw (feature 5797)
	44P0182	DASD tool (features 5797, and 5798)
	44P0549	Tool insert (features 5797, and 5798)

5796 and 7314-G30 system parts
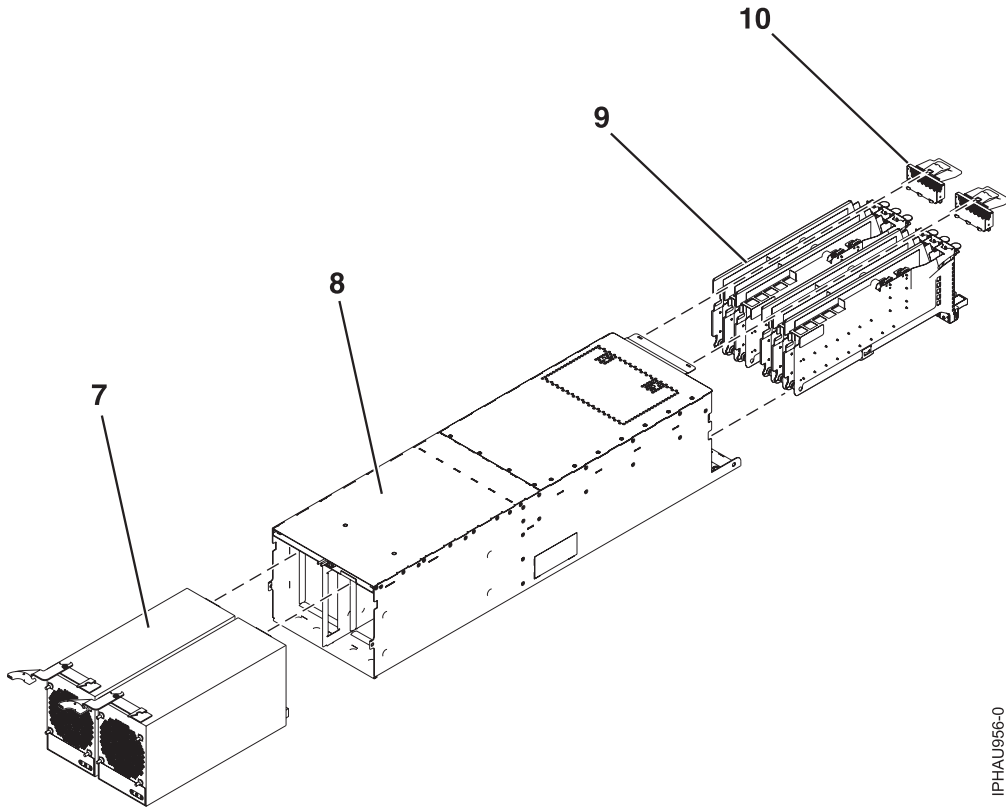
Indexed drawings show parts system part numbers.
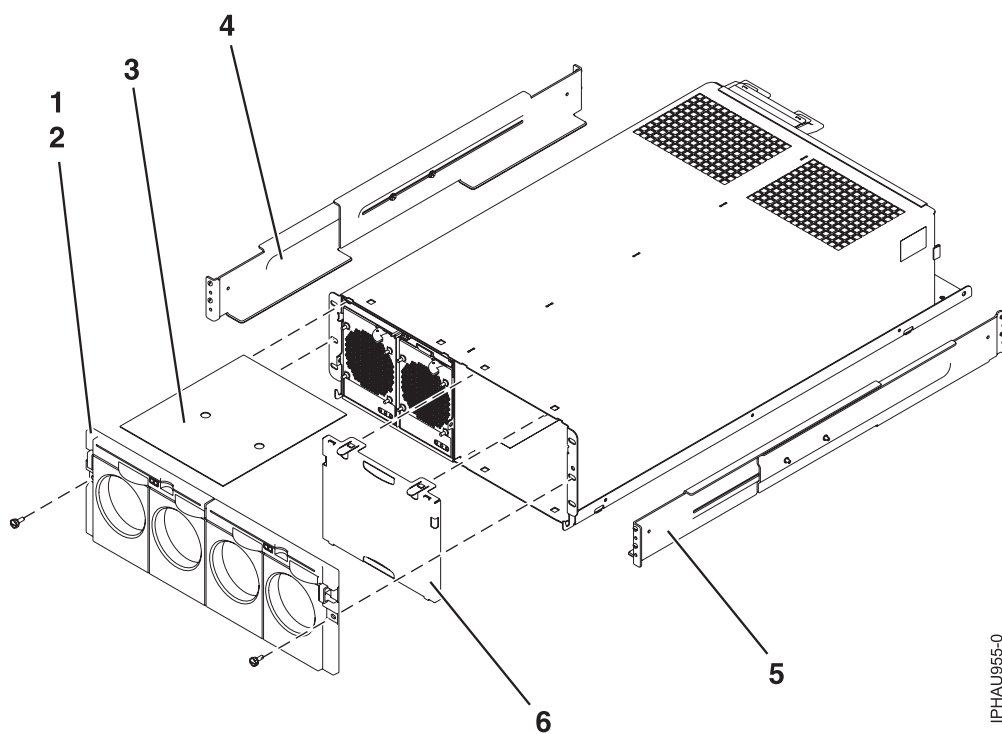
Cover assemblies

IPHAU955-0

Table 129. Cover assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
1		04N6587	1	Screw
2		80P5960	2	Front bezel
3		80P5955	1	Service label
4		39J5190	1	Rail assembly
5		39J5190	1	Rail assembly
6		80P6903	1	Air flow block

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Table 130. Assembly

Index number	CCIN	Part number	Units per assembly	Description
7		44V4294	2	300 W power supply
8		80P5880	1	Chassis assembly, includes power cables
9		See Managing PCI adapters.	6	PCI adapter cassette
10		10N7690	2	EMC shield assembly

IPHAU957-0
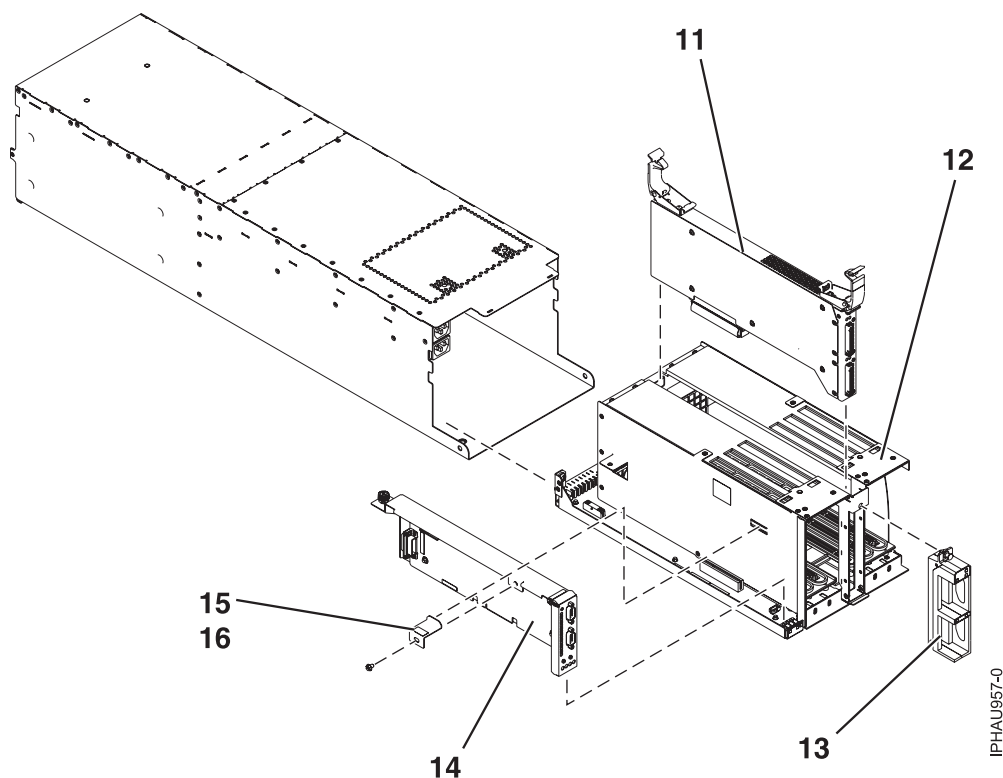
Table 131. Final assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
11		10N8782	1	GX card with hardware, RIO 12X long range
11		10N7774	1	GX card with hardware, RIO 12X short range
12		07P6949	1	Fabrication assembly
13		80P5940	1	Strain relief assembly (green), RIO 12X long range
13		03N5871	1	Strain relief assembly (olive), RIO 12X short range
14	520D	46K6826	1	SPCN card with hardware

Table 132. Cable parts

CCIN	Description	Part number
	2.5 meter RIO, short range	42V2131
	3 meter RIO, short range	42V2132
	3.5 meter RIO, short range	42V2133
	1500 MM RIO 12X, long range	42R6153
	2500 MM RIO 12X, long range	42R6154
	4000 MM RIO 12X, long range	42R6155
	6000 MM RIO 12X, long range	42R6156
	8000 MM RIO 12X, long range	42R6157
	10000 MM RIO 12X, long range	42R6158

Table 132. Cable parts (continued)

CCIN	Description	Part number
	6000 MM RIO 12X, long range	42R6159
	8000 MM RIO 12X, long range	42R6160
	Y cable	40H6603
	SCSI-3 cable	52G4233
	SCSI-4 cable	42R4756

Table 133. Miscellaneous parts

CCIN	Description	Part number
	External cables and cords	See Site and hardware planning.
	PCI adapters	See Managing PCI adapters.
	Cable configuration	See Enclosures and expansion units.
	Cassette kit assembly	42R4007
	PCI filler bracket	39J0260
	Wrap plug	87H3439
	Wrap plug	87H3442
	Wrap plug	87H3311
	Wrap plug	73H2508
	Wrap plug	93H5270

5802 and 5877 system parts

Indexed drawings show parts system part numbers.
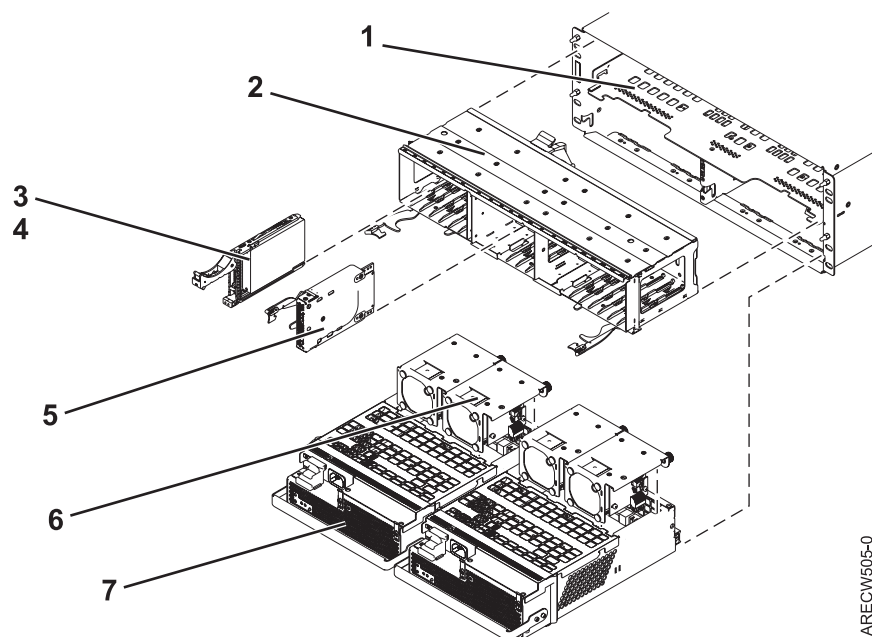
Front assembly

Table 134. Front assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
1		44V8264	1	Chassis assembly
2		44D4990	1	Disk unit cage assembly
2		44V7924	1	Disk unit cage filler
3			0-18	Disk unit
4		39Y8083	0-18	Disk unit filler
5		45D5192	4	Port card assembly
6		42R8429	4	Fan assembly
7		44V6774	2	Power supply

Back assembly
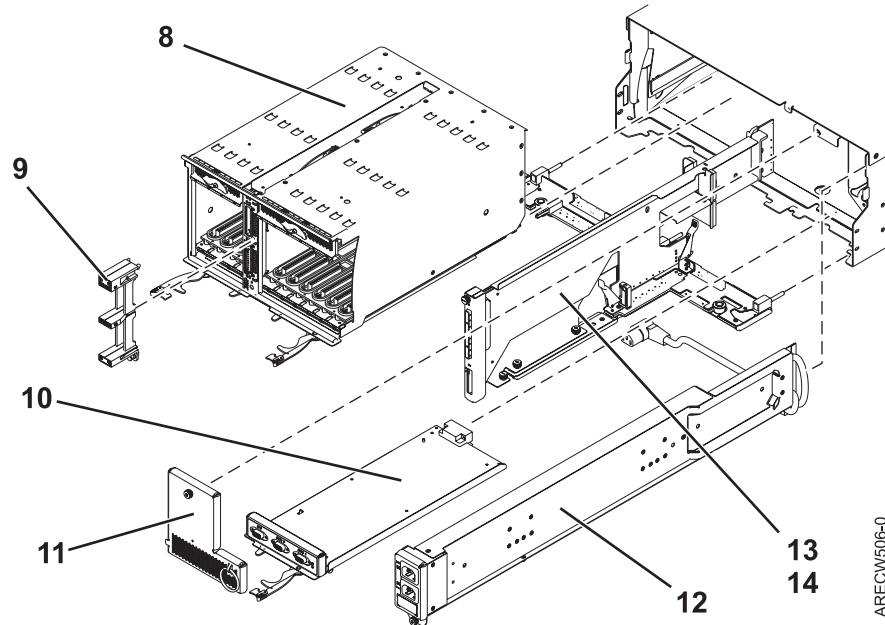
Table 135. Back assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
8		45D5115	1	PCI cage multicard assembly
9		44V4484	1	Bracket, strain relief
10		45D5228	1	EMC card assembly
11		44V5743	1	EMC filler bracket
12		44V5739	1	Power cable assembly
13		44V7286	1	SAS card filler
14		45D5220	1	Midplane assembly

Table 136. Miscellaneous parts

CCIN	Description	Part number
	External cables and cords	See Site and hardware planning.
	PCI adapters	See Managing PCI adapters.
	Cable configuration	See Enclosures and expansion units.

5803 and 5873 system parts

Indexed drawings show parts system part numbers.
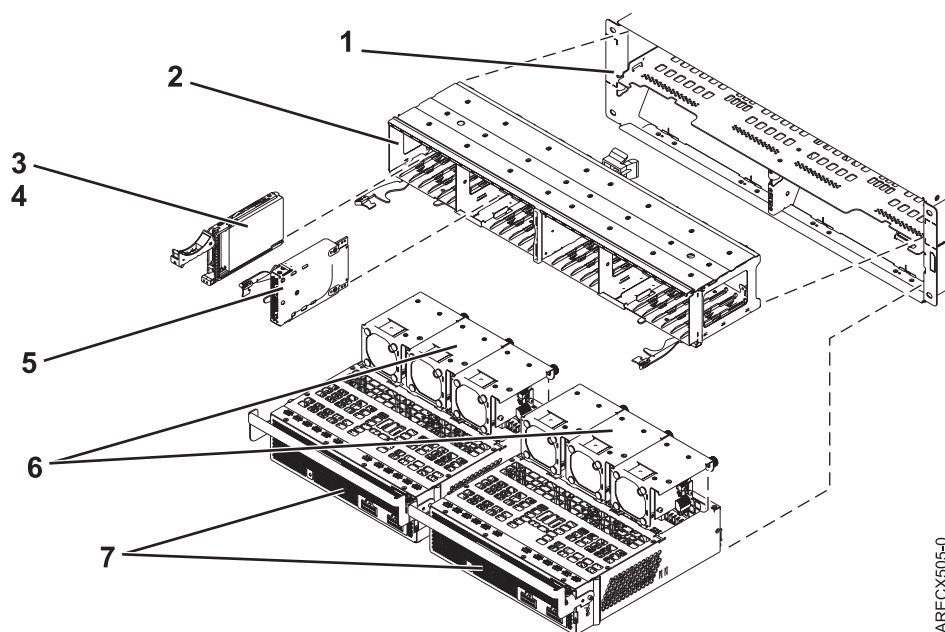
Front assembly

Table 137. Front assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
1		44V8265	1	Chassis assembly
2		45D5223	1	Disk unit cage assembly
2		44V5898	1	Disk unit cage filler
3			AR	Disk unit assembly
4		39Y8083	AR	Disk unit filler
5		45D5192	4	Port card assembly
6		42R8429	6	Fan assembly
7		45D3978	2	Power supply

Back assembly
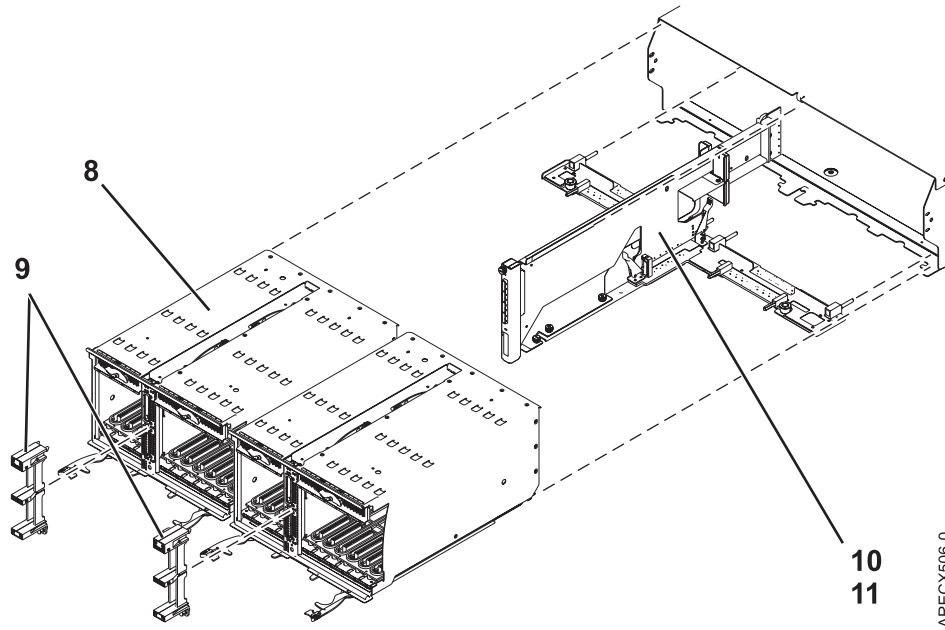
Table 138. Back assembly part numbers

Index number	CCIN	Part number	Units per assembly	Description
8		45D5115	2	PCI cage multicard assembly
9		44V4484	2	Strain relief bracket
10		45D5007	1	SAS card assembly
10		44V7286	1	SAS card filler
11		45D5217	1	Midplane assembly

Table 139. Miscellaneous parts

CCIN	Description	Part number
	External cables and cords	See Site and hardware planning.
	PCI adapters	See Managing PCI adapters.
	Cable configuration	See Enclosures and expansion units.

5886 system parts

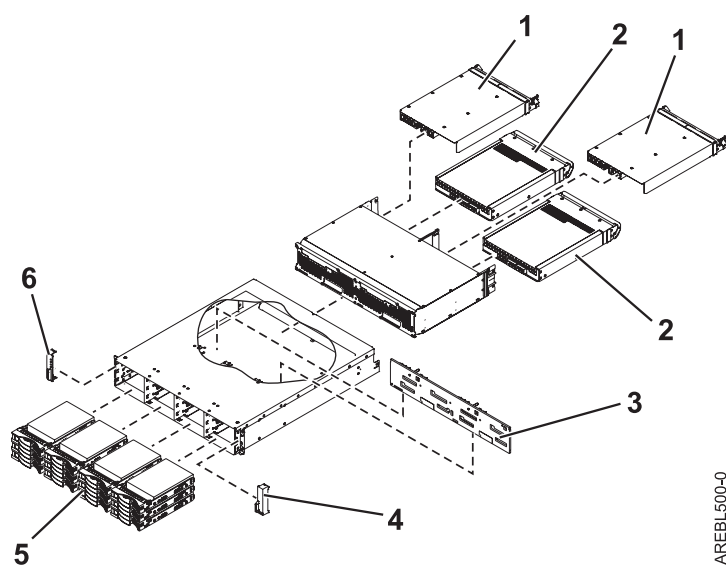Indexed drawings show parts system part numbers.

Assembly

Table 140. I/O backplane and cabling assembly part numbers

Index number	CCIN	Part number	Units	Description
1	509A	44V3937	2	Enclosure Services Manager (ESM)
2	509C	42C2140	2	Power supply
3	509B	42R7898	1	Midplane
4		39R6584	1	Right bezel
5		42R6690	1–12	69.7 GB SAS 15 K, IBM i
5		42R6691	1–12	139.5 GB SAS 15 K, IBM i
5		42R6692	1–12	283.7 GB SAS 15 K, IBM i
5		10N7230	1–12	73.4 GB SAS 15 K, AIX and Linux
5		10N7232	1–12	146.8 GB SAS 15 K, AIX and Linux
5		10N7234	1–12	300 GB SAS 15 K, AIX and Linux
6		39R6583	1	Left bezel

Table 141. Cables

CCIN	Part number	Description
	44V4041	1 meter SAS 4x AI cable
	44V4163	3 meter SAS 4x AE cable
	44V4164	6 meter SAS 4x AE cable
	44V4147	1 meter SAS 4x EE cable
	44V4148	3 meter SAS 4x EE cable
	44V4149	6 meter SAS 4x EE cable

Table 141. Cables (continued)

CCIN	Part number	Description
	44V4151	3 meter SAS 2x cable
	44V4152	6 meter SAS 2x cable
	44V4157	1.5 meter SAS YO cable
	44V4158	3 meter SAS YO cable
	44V4159	6 meter SAS YO cable
	44V4160	15 meter SAS YO cable
	44V4161	1.5 meter SAS YI cable
	44V4162	3 meter SAS YI cable
	44V4154	3 meter SAS X cable
	44V4155	6 meter SAS X cable
	44V4156	15 meter SAS X cable
	42R6748	SAS W cable

Table 142. Miscellaneous parts

CCIN	Part number	Description
	External cables and cords	See Site and hardware planning.
	Cable configuration	See Enclosures and expansion units.
	42R6748	Wrap plug
	39R6548	ESM blank
	39M4375	DASD blank
	39M5377	Power cord rack jumper
	39R6550	Rail kit
	22R2809	DASD filler

Appendix. Notices

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Electronic emission notices

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Properly shielded and grounded cables and connectors must be used in order to meet FCC emission limits. IBM is not responsible for any radio or television interference caused by using other than recommended cables and connectors or by unauthorized changes or modifications to this equipment. Unauthorized changes or modifications could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Compliance Statement

This Class A digital apparatus complies with Canadian ICES-003.

Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la classe A respecte est conforme à la norme NMB-003 du Canada.

European Community Compliance Statement

This product is in conformity with the protection requirements of EU Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility. IBM cannot accept responsibility for any failure to satisfy the protection requirements resulting from a non-recommended modification of the product, including the fitting of non-IBM option cards.

This product has been tested and found to comply with the limits for Class A Information Technology Equipment according to European Standard EN 55022. The limits for Class A equipment were derived for commercial and industrial environments to provide reasonable protection against interference with licensed communication equipment.

European Community contact:
IBM Technical Regulations
Pascalstr. 100, Stuttgart, Germany 70569
Tele: 0049 (0)711 785 1176
Fax: 0049 (0)711 785 1283
E-mail: tjahn@de.ibm.com

Warning: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

VCCI Statement - Japan

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Electromagnetic Interference (EMI) Statement - People's Republic of China

声　　明

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该产品可能会造成无线电干扰。
在这种情况下，可能需要用户对其
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Declaration: This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may need to perform practical action.

Electromagnetic Interference (EMI) Statement - Taiwan

警告使用者：
這是甲類的資訊產品，在
居住的環境中使用時，可
能會造成射頻干擾，在這
種情況下，使用者會被要
求採取某些適當的對策。

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IBM Taiwan Contact Information:

台灣IBM 產品服務聯絡方式：
台灣國際商業機器股份有限公司
台北市松仁路7號3樓
電話：0800-016-888

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Deutschsprachiger EU Hinweis: Hinweis für Geräte der Klasse A EU-Richtlinie zur Elektromagnetischen Verträglichkeit

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Deutschland: Einhaltung des Gesetzes über die elektromagnetische Verträglichkeit von Geräten

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Verantwortlich für die Konformitätserklärung nach des EMVG ist die IBM Deutschland GmbH, 70548 Stuttgart.

Generelle Informationen:

Das Gerät erfüllt die Schutzanforderungen nach EN 55024 und EN 55022 Klasse A.

Electromagnetic Interference (EMI) Statement - Russia

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