Rackmount Placement Matrix

Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054 U.S.A.
650-960-1300

Send comments about this document to: docfeedback@sun.com

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Rackmount Placement Matrix

This document contains hole assignments for Sun™ products that can be mounted in system or expansion cabinet racks. The information contained here supersedes any that may be in other documentation.

Supported configurations are listed in the following tables.

Note – Front and rear holes are the same except where noted.

Note – Last updated June 26, 2002.

Components:

- Sun Enterprise™ 250
- Sun Enterprise 450
- Sun Enterprise 4x00
- Netra ST D130
- Sun Enterprise E450X-R
- Sun Enterprise 220R/420R Servers
- Sun StorEdge™ A1000/D1000

see also Sun StorEdge A3500 System

- Sun StorEdge A3000 Controller Module

see also Sun StorEdge A3500 System

- Sun StorEdge A5000 Disk Array

see also Sun StorEdge A5000 Disk Arrays in a StorEdge Expansion Cabinet

- Mixing Sun StorEdge A5000 Disk Arrays with D1000 and RSM Trays in a Flanged Disk Array Mounting Tray

see also Sun StorEdge™ A1000/D1000 and SPARCstorage RSM™

- Mixing Sun StorEdge A5000 Disk Arrays with D1000 and RSM Trays in an Unflanged Disk Array Mounting Tray

see also Sun StorEdge™ A1000/D1000 and SPARCstorage RSM™

- Sun StorEdge FC-100 Hub

see also Sun StorEdge A5000 Disk Arrays in a StorEdge Expansion Cabinet

- Sun StorEdge FlexiPack
- Sun StorEdge L140
- Sun StorEdge L280
- Sun StorEdge L400
- Sun StorEdge L1000
- SPARCserver 1000 Series
- SPARCstorage Array Model 100 Series
- SPARCstorage Array Model 200 Series
- SPARCstorage RSM™
- SPARCstorage Library 8/140 *See* Sun StorEdge L140
- SPARCstorage Library 8/400 *See* Sun StorEdge L400
- Sun Enterprise Network Array™ *See* Sun StorEdge A5000 Disk Array
- RSM Array 2000 *See* Sun StorEdge A3000 Controller Module
- Ultra™ Enterprise 4000 *See* Sun Enterprise 4x00
- Netra ST D130

Sun StorEdge Systems:

- Sun StorEdge A3500 System
- Sun StorEdge A5000 Disk Arrays in a StorEdge Expansion Cabinet
- Sun StorEdge™ T3
- Sun Fire 6800 System

Device Rack Units

Cabinet Rack Units

Definitions

Components

Sun Enterprise™ 250

- Enterprise Expansion Cabinet
- Enterprise 68-Inch Expansion Cabinet

TABLE 1-1 Enterprise 250

System Number	Mounting Bracket	System Maximum
1	2,3,5	
2	23,24,26	
3	44,45,47	
4	65,66,68	Enterprise Expansion Cabinet
5	86,87,89	Enterprise 68-Inch Expansion Cabinet

Note – You must remove the front door of the Enterprise Expansion Cabinet or the Enterprise 68-Inch Expansion Cabinet if you install the Enterprise 250 system. This means that no more than one A5000 disk array can be installed in the expansion cabinet with an Enterprise 250 system.

If you are installing three or four E250 systems in an Enterprise 56-Inch or 68-inch Expansion Cabinet, you will need to remove and install the rear door latch.

1. **Remove the door latch from the rear rack rail.**

   See the documentation that shipped with the expansion cabinet.

2. **Install the rack kit for the third E250.**

   See the documentation that shipped with the expansion cabinet.

3. **Re-install the door latch at locations 47-49.**

   The latch is going to sit over the top of the slide bracket. The screws are long enough to go through both the slide bracket and the door latch.

- StorEdge Expansion Cabinet

The following table lists the bracket mounting holes for installing multiple servers' slide assemblies in a 72-Inch expansion cabinet.

Note – The Sun StorEdge Expansion Cabinet (72-Inch) is configured with a power sequencer in the bottom six holes.

TABLE 1-2 Enterprise 250

System Number	Mounting Bracket	System Maximum
1	8,9,11	
2	29,30,32	
3	50,51,53	
4	71,72,74	
5	92,93,95	

Sun Enterprise 450

- Enterprise Expansion Cabinet
- Enterprise 68-Inch Expansion Cabinet

TABLE 1-3 Enterprise 450

System Number	Bottom Bracket	Top Bracket
1	2,3,4,5	41,42
2	44,45,46,47	83,84

Note – You must remove the front door of the Enterprise 68-Inch Expansion Cabinet if you install the Enterprise 450 system. This means that no more than one A5000 disk array can be installed in the expansion cabinet with an Enterprise 450 system.

If you are installing two E450 systems in an Enterprise 56-Inch or 68-Inch Expansion Cabinet, you will need to remove and install the rear door latch.

1. **Remove the door latch from the rear rack rail.**

   See the documentation that shipped with the expansion cabinet.

2. **Install the rack kit for the second E450.**

   See the documentation that shipped with the expansion cabinet.

3. **Re-install the door latch at locations 47-49.**

   The latch is going to sit over the top of the slide bracket. The screws are long enough to go through both the slide bracket and the door latch.

- StorEdge Expansion Cabinet

TABLE 1-4 Enterprise 450

System Number	Bottom Bracket	Top Bracket
1	8,9,10,11	47,48
2	50,51,52,53	89,90

Sun Enterprise 4*x*00

- Enterprise Expansion Cabinet
- Enterprise 5000

TABLE 1-5 Enterprise 4500

Side Rail Holes	Position 0	Position 1	Position 2	Position 3
Top	24	48	72	96
Middle	18	42	66	90
Bottom	12	36	60	84
	Cooling requirements: No empty space between units. The redundant fan tray cooling package is required. X9819a			

TABLE 1-6 Enterprise 4*x*00

Tray Number	Holes	System Maximum
1	10,16,22	Enterprise 5*000*
2	34,40,46	
3	58,64,70(1)	

1. With optional baffles installed on 76,79,83 (front) and 77,79,83 (rear).

- Enterprise 5500
- Enterprise 6500
- Enterprise 68-inch Expansion Cabinet

TABLE 1-7 Enterprise 4*x*00

Tray Number	Holes	System Maximum
1	7,13,19	
2	31,37,43	Enterprise 5500 and Enterprise 6500 (3)
3	55,61,67 (1)	
4	79,85,91 (2)	

1. With optional 6-inch baffles installed on 90,94 and 100,104 and a 9-inch baffle installed on 85,84.
2. With optional 6-inch baffle installed on 100,104.
3. With optional 2-inch baffle (x9630A) installed on 49, 50.

Netra ST D130

- Netra ST D130 in E450X-R System Cabinets

TABLE 1-8 Netra ST D130 in E450X-R System Cabinets

	Mounting Rails	Mounting Rails	Rack Units
Blank Filler			2
1	106	108	1
2	103	105	1
3	100	102	1
4	97	99	1
5	94	96	1
6	91	93	1

TABLE 1-9 D130 in E5500, E6500 and 68-inch Expansion Cabinets

	Mounting Rails	Mounting Rails	Rack Units
1	103	105	1

TABLE 1-9 D130 in E5500, E6500 and 68-inch Expansion Cabinets *(Continued)*

	Mounting Rails	Mounting Rails	Rack Units
2	100	102	1
3	97	99	1
4	94	96	1

Sun Enterprise E450X-R

SBus IO Boards Thermal Requirements

The SBus Blank Filler Panel (1099A) and the SBus Card Thermal Baffle (1098A) imporove the thermal conditions in the SBus+ I/O boards and Graphics+ I/O boards when they are installed correctly.

Two conditions determine when to use the SBus Card Thermal Baffle and Blank Filler Panel rules.

- New Enterprise 6500, 5500, or 4500 systems with three or more SBus+ or Graphics+ I/O boards, in any combination, require an SBus Blank Filler Panel or SBus Card Thermal Baffle for each SBus+ or Graphics+ I/O board.
- Installed base Enterprise 6500, 5500, or 4500 systems should have an SBus Blank Filler Panel or SBus Card Thermal Baffle for each SBus+ or Graphics+ I/O board.

Rules for Using the SBus Blank Filler Panel or SBus Card Thermal Baffle

- The SBus Blank Filler Panel can be used in either an SBus+ or Graphics+ I/O board. The SBus Card Termal Baffle can be used only in the SBus+ I/O board.
- Install the SBus Blank Filler Panel only in the SBus 2 slot on an SBus+ or Graphics+ I/O board. No Sbus card may be installed in that slot.
- Install the SBus Card Thermal Baffle in the SBus 2 slot *only*, and at all times in conjunction with an SBus card.
- All empty SBus+ or Graphics+ I/O boards require the SBus Blank Filler Panel in the SBus 2 slot. Do not install an SBus card in the SBus 2 slot.
- The first SBus card to be configured in an SBus+ I/O board must be configured in the SBus 2 slot in conjunction with the SBus Card Thermal Baffle. Other cards, if any, may be installed in any remaining SBus slot.
- All Graphics+ I/O boards must have an SBus Blank Filler Panel installed in Sbus slot 2.

The following table shows E450X-R matrix referencing tables that contain various configuration combinations.

E450X-R Matrix Referencing Tables

Table Number	E4500	A5X00	A / D 1000	A3500 - Lite	T3 (7RU Tray)	T3 (4RU Tray)	L280	FC100
1-10	1	3	2	0	0	0	0	0
1-11	1	3	1	0	0	0	0	1
1-12	1	2	3	0	0	0	0	0
1-13	1	2	2	0	0	0	0	1
1-14	1	1	4	0	0	0	0	0
1-15	1	0	6	0	0	0	0	0
1-16	1	4	0	0	0	0	0	1
1-17	1	0	0	1	0	0	0	0
1-18	1	0	3	1	0	0	0	0
1-19	1	0	0	0	0	6	0	0
1-20	1	0	0	0	6	0	0	0
1-21	1	0	0	0	0	0	8	0
1-22	1	1	1	1	0	0	2	0
1-23	2	2	0	0	0	0	0	1
1-24	2	1	2	0	0	0	0	0
1-25	2	0	4	0	0	0	0	0
1-26	2	0	1	1	0	0	0	0
1-27	3	1	0	0	0	0	0	0
1-28	3	0	2	0	0	0	0	0
1-29	4	0	0	0	0	0	0	0

- Sun StorEdge Expansion Cabinet

Options:

- Air Baffle Kit (Part No. X9660A), required above E4500 #1 for all configurations
- Fan Tray (Part No. X9819A), required for all configurations
- Front Door (Part No. X9818A), required when installing 2 or more A5200s
- SBus Blank Filler Panel (Part No. X1099A), or SBus Card Thermal Baffle (Part No. 1098A) required when installing SBus IO boards the E4500.

■ For Netra ST D130 placement, refer to D130 in this document.

TABLE 1-10 E450X-R with 1 E4500, 3 A5200s and 0-2 A1000 or D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
A/D1000 #2	Front Holes	96		99	98	101	4
	Rear Holes	95		99			
A/D1000 #1	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
Air Baffle		53					1
A5200 #3		40		49	42	46	5
A5200 #2		25		34	27	31	5
A5200 #1		10		19	12	16	5
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-11 E450X-R with 1 E4500, 3 A5200s, 1 FC100 Tray, and 0-1 A1000 or D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							3
FC-100 Tray		97		98			2
A / D1000 #1	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
Air Baffle		53					1
A5200 #3		40		49	42	46	5
A5200 #2		25		34	27	31	5
A5200 #1		10		19	12	16	5
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-12 E4502-R with 1 E4500, 2 A5200s, and 0-3 A1000 or D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
A / D1000 #3	Front Holes	96		99	98	101	4

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-12 E4502-R with 1 E4500, 2 A5200s, and 0-3 A1000 or D1000 *(Continued)*

		Mounting Rails			Tray to Cabinet		Rack Units
	Rear Holes	95		99			
A/D1000 #2	Front Holes	84		87	86	89	4
		83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
A/D1000 #1	Front Holes	45		48	47	50	4
	Rear Holes	44		48			
Blank Filler							1
Air Baffle		38					1
A5200 #2		25		34	27	31	5
A5200 #1		10		19	12	16	5
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-13 E4502-R with 1 E4500, 2 A5200s, 0-2 A1000 or D1000, and 1 FC-100 Hub Tray

	Mounting Rails		Tray to Cabinet		Rack Units
Blank Filler*					2
Blank Filler					3
FC-100 Tray	97	98			2

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-13 E4502-R with 1 E4500, 2 A5200s, 0-2 A1000 or D1000, and 1 FC-100 Hub Tray

		Mounting Rails			Tray to Cabinet		Rack Units
A / D1000 #2	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
A / D1000 #1	Front Holes	45		48	47	50	4
	Rear Holes	44		48			
Blank Filler							1
Air Baffle		38					1
A5200 #2		25		34	27	31	5
A5200 #1		10		19	12	16	5
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-14 E4502-R with 1 E4500, 1 A5200s, and 0-4 A1000 or D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
A / D1000 #4	Front Holes	96		99	98	101	4
	Rear Holes	95		99			

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-14 E4502-R with 1 E4500, 1 A5200s, and 0-4 A1000 or D1000 *(Continued)*

		Mounting Rails			Tray to Cabinet		Rack Units
A / D1000 #3	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
A / D1000 #1	Front Holes	45		48	47	50	4
	Rear Holes	44		48			
A / D1000 #2	Front Holes	33		36	35	38	4
	Rear Holes	32		36			
Blank Filler							2
Air Baffle		23					1
A5200 #1		10		19	12	16	5
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-15 E450X-R with 1 E4500, and 0-6 A1000 or D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
A / D1000 #6	Front Holes	96		99	98	101	4
	Rear Holes	95		99			
A / D1000 #5	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
A / D1000 #1	Front Holes	45		48	47	50	4
	Rear Holes	44		48			
A / D1000 #2	Front Holes	33		36	35	38	4
	Rear Holes	32		36			
A / D1000 #3	Front Holes	21		24	23	26	4
	Rear Holes	20		24			
A / D1000 #4	Front Holes	9		12	11	14	4
	Rear Holes	8		12			
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-16 E450X-R with 1 E4500, 4 A5200, and 1 FC-100 Hub Tray

	Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*						2
Blank Filler						2
FC-100 Tray	100		101			2
A5200 #4	85		94	87	91	5
Air Baffle	80					1
E4500 #1**	60	66	72			8
Air Baffle	53					1
A5200 #3	40		49	42	46	5
A5200 #2	25		34	27	31	5
A5200 #1	10		19	12	16	5
Total						36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-17 E450X-R with 1 E4500, and 1 A3500 Light

	Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*						2
Blank Filler						9
Air Baffle	80					1
E4500 #1**	60	66	72			8

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-17 E450X-R with 1 E4500, and 1 A3500 Light *(Continued)*

		Mounting Rails			Tray to Cabinet		Rack Units
D1000 #1	Front Holes	45		48	47	50	4
	Rear Holes	44		48			
D1000 #2	Front Holes	33		36	35	38	4
	Rear Holes	32		36			
A3500 Controller	Front Holes	21	24	27			4
	Rear Holes	20		23			
Blank Filler							4
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-18 E450X-R with 1 E4500, 1 A3500 Light, and 0-3 D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
D1000 #5	Front Holes	96		99	98	101	4
	Rear Holes	95		99			
D1000 #4	Front Holes	84		87	86	89	4
	Rear Holes	83		87			

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** SBus Blank Filler Panel in SBus 2 slot required when installing SBus IO board in Slot #7 of E4500.

TABLE 1-18 E450X-R with 1 E4500, 1 A3500 Light, and 0-3 D1000 *(Continued)*

		Mounting Rails			Tray to Cabinet		Rack Units
Air Baffle		80					1
E4500 #1**		60	66	72			8
D1000 #1	Front Holes	45		48	47	50	4
	Rear Holes	44		48			
D1000 #2	Front Holes	33		36	35	38	4
	Rear Holes	32		36			
A3500 Controller	Front Holes	21	24	27			4
	Rear Holes	20		23			
D1000 #3	Front Holes	9		12	11	14	4
	Rear Holes	8		12			
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** SBus Blank Filler Panel in SBus 2 slot required when installing SBus IO board in Slot #7 of E4500.

TABLE 1-19 E450X-R with 1 E4500, 0 to 6 T3 (4RU Trays)

	Mounting Rails		Tray to Cabinet		Rack Units
Blank Filler*					2
Blank Filler					1
T3 #6	97	101	98	101	4

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-19 E450X-R with 1 E4500, 0 to 6 T3 (4RU Trays) *(Continued)*

	Mounting Rails			Tray to Cabinet		Rack Units
1/2 RU Filler						
T3 #5	85		89	86	89	4
1/2 RU Filler						
Air Baffle, Filler	80					1
E4500 #1**	60	66	72			8
T3 #1	46		50	47	50	4
1/2 RU Filler						
T3 #2	34		38	35	38	4
1/2 RU Filler						
T3 #3	22		26	23	26	4
1/2 RU Filler						
T3 #4	10		14	11	14	4
Total						36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-20 E450X-R with 1 E4500, 0 to 6 T3 (7RU Trays)

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							2
T3 #5 & 6	Tray #3	85	90	100	85	90	7
1/2 RU Filler							
Air Baffle, Filler		80					1
E4500 #1**		60	66	72			8
T3 #1 &2	Tray #1	37	42	52	37	42	7
1/2 RU Filler							
T3 #3 & 4	Tray #2	16	21	31	16	21	7
1/2 RU Filler							
Blank Filler							2
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-21 E450X-R with 1 E4500, 8 L280‡

		Front Screws		Rear Screws		Rack Units
Blank Filler*						2
Blank Filler						4
L280 7 & 8	Tray #4	83	95	84	86	5

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.‡ 2 L280s per Mounting Tray

TABLE 1-21 E450X-R with 1 E4500, 8 L280‡ *(Continued)*

		Front Screws			Rear Screws		Rack Units
Air Baffle, Filler		80					1
E4500 #1**		60	66	72			8
L280 1 & 2	Tray #1	41		53	42	44	5
L280 3 & 4	Tray #2	26		38	27	29	5
L280 5 & 6	Tray #3	11		23	12	14	5
Blank Filler							1
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.‡ 2 L280s per Mounting Tray

TABLE 1-22 E450X-R with 1 E4500, 1 A5200, 1 A3500 Light, and 2 L280‡

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
A3500 #1	Front Holes	96	99	102			4
	Rear Holes	95		98			
D1000 #2	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle, Filler		80					1

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

‡ 2 L280s per Mounting Tray

TABLE 1-22 E450X-R with 1 E4500, 1 A5200, 1 A3500 Light, and 2 L280‡ *(Continued)*

		Mounting Rails			Tray to Cabinet		Rack Units
E4500 #1**		60	66	72			8
D1000 #1	Front Holes	45		48	47	50	4
	Rear Holes	44		48			
Blank Filler							1
L280 1 & 2	Front/Rear Screws	26		38	27	29	5
A5200 #1		10		19	12	16	5
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

‡ 2 L280s per Mounting Tray

TABLE 1-23 E450X-R with 2 E4500, 0-2 A5200, and 1 FC-100 Hub Tray

	Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*						2
Blank Filler						2
FC-100 Tray	100		101			2
A5200 #2	85		94	87	91	5
Air Baffle	80					1
E4500 #1**	60	66	72			8
E4500 #2 **	36	42	48			8

Constraints:

The E4500 #1 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-23 E450X-R with 2 E4500, 0-2 A5200, and 1 FC-100 Hub Tray *(Continued)*

	Mounting Rails		Tray to Cabinet		Rack Units
Air Baffle	29				1
Blank Filler					2
A5200 #1	10	19	12	16	5
Total					36

Constraints:

The E4500 #1 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-24 E450X-R with 2 E4500, 1 A5200, and 0-2 A/D1000

		Mounting Rails		Tray to Cabinet		Rack Units
Blank Filler*						2
Blank Filler						1
A/D1000 #2	Front Holes	96	99	98	101	4
	Rear Holes	95	99			
A/D1000 #1	Front Holes	84	87	86	89	4
	Rear Holes	83	87			
Air Baffle		80				1
E4500 #1**		60	66 72			8
E4500 #2 **		36	42 48			8
Air Baffle		29				1

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-24 E450X-R with 2 E4500, 1 A5200, and 0-2 A/D1000 *(Continued)*

	Mounting Rails		Tray to Cabinet		Rack Units
Blank Filler					2
A5200 #1	10	19	12	16	5
Total					36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-25 E450X-R with 2 E4500, and 0-4 A/D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
A/D1000 #4	Front Holes	96		99	98	101	4
	Rear Holes	95		99			
A/D1000 #3	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
E4500 #2 **		36	42	48			8
A/D1000 #1	Front Holes	21		24	23	26	4
	Rear Holes	20		24			

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-25 E450X-R with 2 E4500, and 0-4 A/D1000 *(Continued)*

		Mounting Rails		Tray to Cabinet		Rack Units
A/D1000 #2	Front Holes	9	12	11	14	4
	Rear Holes	8	12			
Total						36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-26 E450X-R with 2 E4500, A3500 Light, and 0-1D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
D1000 #3	Front Holes	96		99	98	101	4
	Rear Holes	95		99			
D1000 #2	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
E4500 #2 **		36	42	48			8
D1000 #1	Front Holes	21		24	23	26	4
	Rear Holes	20		24			

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-26 E450X-R with 2 E4500, A3500 Light, and 0-1D1000 *(Continued)*

		Mounting Rails			Tray to Cabinet		Rack Units
A3500 Controller	Front Holes	13	16	19			4
	Rear Holes	12		15			
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-27 E450X-R with 3 E4500, 0-1 A5200, and 0-1 FC-100 Hub Tray

	Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*						2
Blank Filler						2
FC-100 Tray	100		101			2
A5200	85		94	87	91	5
Air Baffle	80					1
E4500 #1**	60	66	72			8
E4500 #2**	36	42	48			8
E4500 #3**	12	18	24			8
Total						36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-28 E450X-R with 3 E4500, and 0-2 A/D1000

		Mounting Rails			Tray to Cabinet		Rack Units
Blank Filler*							2
Blank Filler							1
A/D1000 #2	Front Holes	96		99	98	101	4
	Rear Holes	95		99			
A/D1000 #1	Front Holes	84		87	86	89	4
	Rear Holes	83		87			
Air Baffle		80					1
E4500 #1**		60	66	72			8
E4500 #2**		36	42	48			8
E4500 #3**		12	18	24			8
Total							36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-29 E450X-R with 4 E4500

	Mounting Rails			Tray to Cabinet	Rack Units
Blank Filler*					2
Blank Filler					1
Air Baffle	104				1
E4500 #4**	84	90	96		8

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

TABLE 1-29 E450X-R with 4 E4500 *(Continued)*

	Mounting Rails			Tray to Cabinet	Rack Units
E4500 #1**	60	66	72		8
E4500 #2**	36	42	48		8
E4500 #3**	12	18	24		8
Total					36

Constraints:

The E4500 must always have an air baffle in the space above it.

* 2RU Blank Filler Mandatory

** See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.See the SBus I/O Board Thermal Requirements at the beginning of the E450X-R section.

Sun Enterprise 220R/420R Servers

- StorEdge Expansion Cabinet

The following table lists the bracket mounting holes for installing multiple servers' slide assemblies in a 72-Inch expansion cabinet.

Note – The Sun StorEdge Expansion Cabinet (72-Inch) is configured with a power sequencer in the bottom six holes.

TABLE 1-30 Sun Enterprise 220R/420R Servers

Server	Lowest Hole	Other Two
1	9	10 or 11
2	21	22 or 23
3	33	34 or 35
4	45	46 or 47
5	57	58 or 59
6	69	70 or 71

Note: The system documentation ships with a Rackmount Template and includes instructions for determining which holes to use for mounting the slide brackets in an EIA 310-compliant expansion cabinet.

TABLE 1-30 Sun Enterprise 220R/420R Servers

Server	Lowest Hole	Other Two
7	81	82 or 83
8	93	94 or 95
9	105	106 or 107

Note: The system documentation ships with a Rackmount Template and includes instructions for determining which holes to use for mounting the slide brackets in an EIA 310-compliant expansion cabinet.

Sun Enterprise 280R Server

- StorEdge Expansion Cabinet

The following table lists the bracket mounting holes for installing multiple servers' slide assemblies in a 72-Inch expansion cabinet.

The Sun StorEdge Expansion Cabinet (72-Inch) is configured with a power sequencer in the bottom six holes.

TABLE 1-31 Sun Enterprise 280R Server

Server	Lowest Hole	Other Two
1	9	10 or 11
2	21	22 or 23
3	33	34 or 35
4	45	46 or 47
5	57	58 or 59
6	69	70 or 71
7	81	82 or 83
8	93	94 or 95
9	105	106 or 107

Note: The system documentation ships with a Rackmount Template and includes instructions for determining which holes to use for mounting the slide brackets in an EIA 310-compliant expansion cabinet.

Sun StorEdge™ A1000 / D1000

- StorEdge Expansion Cabinet

TABLE 1-32 Sun StorEdge A1000 / D1000

Tray Number	Tray to Cabinet	Mounting Rails
1	11,14	8,12
2	23,26	20,24
3	35,38	32,36
4	47,50	44,48
5	59,62	56,60
6	71,74	68,72
7	83,86	80,84
8	95,98	92,96
9	107,110	104,108

- Enterprise 5000
- Enterprise 5500
- Enterprise 6000
- Enterprise 6500
- Enterprise Expansion Cabinet
- Enterprise 68-inch Expansion Cabinet

TABLE 1-33 Sun StorEdge A1000 / D1000

Tray Number	Tray to Cabinet	Mounting Rails	Maximum
1	5,8	3,6	
2	17,20	15,18	Enterprise 6000
3	29,32	27,30	Enterprise 5000
4	41,44	39,42	Enterprise 6500
5	53,56	51,54	Enterprise 5500
6	65,68	63,66	
7	77,80	75,78	Enterprise Expansion
8	89,92	87,90	Enterprise 68-inch

see also Sun StorEdge A3500 System

TABLE 1-34 Sun StorEdge A1000/D1000 for Enterprise 5500 with New Universal Bezel

Tray Number	Tray to Cabinet	Mounting Rails	Maximum
6[1]	96,99	94,97	Enterprise 5501

1. UG-SF-Bezel Kit

TABLE 1-35 Sun StorEdge A1000/D1000 for Enterprise 6500 with New Universal Bezel

Tray Number	Tray to Cabinet	Mounting Rails	Maximum
5[1]	96,99	94,97	Enterprise 6501

1. UG-SF-Bezel Kit

Sun StorEdge A3000 Controller Module

- SPARCcenter Expansion Cabinet
- Enterprise Expansion Cabinet
- Sun StorEdge A3000 System

TABLE 1-36 Sun StorEdge A3000 Controller Module

Tray Number	Front Holes	Rear Holes
1	56,59,62	56,59

see also Sun StorEdge A3500 System

Sun StorEdge A5000 Disk Array

- SPARCcenter™ Expansion Cabinet
- SPARCcenter 2000
- Enterprise 5000
- Enterprise 6000
- Enterprise Expansion Cabinet

TABLE 1-37 Sun StorEdge A5000 disk array

Tray Number	Holes	Box ID	System Maximum
1	4,8	3	SPARCcenter 2000 Enterprise 5000 Enterprise 6000
2	22,26	2	
3	40,44	1	
4	58,62	0	Enterprise and SPARCcenter Expansion Cabinets

- Enterprise 68-inch Expansion Cabinet
- Enterprise 5500
- Enterprise 6500

Hole placements for the old-style (flanged) disk array mounting tray:

TABLE 1-38 Sun StorEdge A5000 disk array (flanged mounting tray)

Enterprise 5500 Tray Number	Enterprise 6500 Tray Number	Enterprise 68-inch Cabinet Tray Number	Holes	Box ID (2)
		1	83,87	0
		2	67,71	1
1		3	51,55	2
2	1	4	35,39	0
3 (1)	2 (1)	5(1)	19,23	1
4	3	6	3,7	2
5(3)	4(3)		93,97	

1. With an additional air baffle in the empty slot (7,13) X9622A
2. A maximum of four A5000 disk arrays can be connected on the same loop.
3. With the new universal bezel on top. UG-SF-Bezel Kit

NOTE: A front screen door is required for two or more A5000 disk arrays.

Use two screws, one per each side, to secure each side of the mounting tray to the front of the expansion cabinet.

Mixing Sun StorEdge A5000 Disk Arrays with D1000 and RSM Trays in a Flanged Disk Array Mounting Tray

In Enterprise systems and expansion cabinets, you may mix A5000 Disk Arrays with D1000 trays and RSM trays. Some rules apply.

Some configurations of A5000s require an air baffle to be installed. Any combination adding up to the maximum minus one requires an air baffle. Any combination adding up to the maximum or to the maximum minus two or more does not require an air baffle.

- 9-inch Air Baffle X9622A
- 6-inch Air Baffle X9625A
- EMI Screen door in 68-inch Expansion Cabinet X9624A
- EMI Screen door in system cabinets for E5500 and E6500 X9623A

NOTE: A front screen door is required for two or more A5000 disk arrays.

Refer to Sun StorEdge™ A1000/D1000 or to SPARCstorage RSM™ for tray placement holes.

Air baffle hole placements for the flanged disk array mounting tray:

TABLE 1-39 Sun StorEdge A5000 disk array with D1000 and or RSM

Enterprise 5500	Number of A5000s	Number of D1000 or RSM	Holes
	3	1	No Baffle
	3	0	7, 13
	2	1	22,28
	1	2	37, 43
A maximum of four disk arrays can be installed in a cabinet.			

TABLE 1-40 Sun StorEdge A5000 disk array with D1000 and or RSM

Enterprise 6500	Number of A5000s	Number of D1000 or RSM	Holes
	2	1	No Baffle
	2	0	7, 13
	1	1	22,28
A maximum of three disk arrays can be installed in a cabinet.			

TABLE 1-41 Sun StorEdge A5000 disk array with D1000 and or RSM

Enterprise 68-inch Cabinet	Number of A5000s	Number of D1000 or RSM	Holes
	5	1	No Baffle
	5	0	7, 13
	4	1	22,28
	3	2	37,43
	2	3	52,58
	1	4	67,73

A maximum of six disk arrays can be installed in a cabinet.

TABLE 1-42 Sun StorEdge A5000 disk array (unflanged mounting tray)

Enterprise 5500 Tray Number	Enterprise 6500 Tray Number	Enterprise 68-inch Cabinet Tray Number	Holes	Box ID (2)
		1	78,82	0
		2	63,67	1
1		3	48,52	2
2	1	4	33,37	0
3 (1)	2 (1)	5(1)	18,22	1
4	3	6	3,7	2
5(3)	4 (3)		93,97	

1. With an additional air baffle in the empty slot (7,13) X9622A
2. A maximum of four A5000 disk arrays can be connected on the same loop.
3. With the new universal bezel on top. UG-SF-Bezel Kit

NOTE: A front screen door is required for two or more A5000 disk arrays.

Use two screws, one per each side, to secure each side of the mounting tray to the front of the expansion cabinet.

see also Sun StorEdge A5000 Disk Arrays in a StorEdge Expansion Cabinet

Mixing Sun StorEdge A5000 Disk Arrays with D1000 and RSM Trays in an Unflanged Disk Array Mounting Tray

In Enterprise systems and expansion cabinets, you may mix A5000 Disk Arrays with D1000 trays and RSM trays. Some rules apply.

Some configurations of A5000s require an air baffle to be installed. Any combination adding up to the maximum minus one requires an air baffle. Any combination adding up to the maximum or to the maximum minus two or more does not require an air baffle.

- 9-inch Air Baffle X9622A
- 6-inch Air Baffle X9625A
- EMI Screen door in 68-inch Expansion Cabinet X9624A
- EMI Screen door in system cabinets for E5500 and E6500 X9623A

NOTE: A front screen door is required for two or more A5000 disk arrays.

Refer to Sun StorEdge™ A1000/D1000" or to SPARCstorage RSM™" for tray placement holes.

Air baffle hole placements for the new-style (unflanged) disk array mounting tray:

TABLE 1-43 Sun StorEdge A5000 disk array with D1000 and or RSM

Enterprise 5500	Number of A5000s	Number of D1000 or RSM	Holes
	3	1	No Baffle
	3	0	7, 13
	2	1	22,28
	1	2	37, 43
A maximum of four disk arrays can be installed in a cabinet.			

TABLE 1-44 Sun StorEdge A5000 disk array with D1000 and or RSM

Enterprise 6500	Number of A5000s	Number of D1000 or RSM	Holes
	2	1	No Baffle
	2	0	7, 13
	1	1	22,28
A maximum of three disk arrays can be installed in a cabinet.			

TABLE 1-45 Sun StorEdge A5000 disk array with D1000 and or RSM

Enterprise 68-inch Cabinet	Number of A5000s	Number of D1000 or RSM	Holes
	5	1	No Baffle
	5	0	7, 13
	4	1	22,28
	3	2	37,43
	2	3	52,58
	1	4	67,73

A maximum of six disk arrays can be installed in a cabinet.

Sun StorEdge FC-100 Hub

- SPARCcenter Expansion Cabinet
- Enterprise Expansion Cabinet

TABLE 1-46 Sun StorEdge FC-100 Hub

Tray Number	Holes
1	80,81

- Enterprise 5500
- Enterprise 6500

When installed with StorEdge A5000 disk arrays using the old-style (flanged) mounting tray:

TABLE 1-47 Sun StorEdge FC-100 Hub

Tray Number	Holes
1(1)	95,95 / 96
1(2)	4,4 / 5

1. With maximum number of Sun StorEdge A5000 disk arrays.

2. With less than maximum number of Sun StorEdge A5000 disk arrays.

When installed with StorEdge A5000 disk arrays using the new-style (unflanged) mounting tray:

TABLE 1-48 Sun StorEdge FC-100 Hub

Tray Number	System	Holes
1	Enterprise 5500	64,65
1	Enterprise 6500	49,50
2	Enterprise 5500, 6500	95,95 / 96

- Enterprise 68-inch Expansion Cabinet

TABLE 1-49 Sun StorEdge FC-100 Hub

Tray Number	Holes
1	95, 95 / 96
2	101, 101 / 102

see also Sun StorEdge A5000 Disk Arrays in a StorEdge Expansion Cabinet

Sun StorEdge FlexiPack

- Enterprise 5000
- Enterprise 6000

TABLE 1-50 Sun StorEdge FlexiPack

Tray Number	Holes
1	74,77

- Enterprise 5500
- Enterprise 6500
- Enterprise 68-inch Expansion Cabinet

TABLE 1-51 Sun StorEdge FlexiPack

Tray Number	Holes	System Maximum
1	95,98	Enterprise 5500 and Enterprise 6500
2	85,88	Enterprise 68-inch Expansion Cabinet

- SPARCcenter Expansion Cabinet
- Enterprise Expansion Cabinet

TABLE 1-52 Sun StorEdge FlexiPack

Tray Number	Holes
1	76,79
2	66,69

Sun StorEdge L140

- Enterprise Expansion Cabinet
- SPARCcenter Expansion Cabinet

TABLE 1-53 Sun StorEdge L140

Tray Number	Holes	Locking Brackets	System Maximum
1	71,72	75,78	
2	50,51	54,57	SPARCcenter Expansion Cabinet
3	29,30	33,36	
4	8,9	12,15	Enterprise Expansion Cabinet

- Enterprise 68-inch Expansion Cabinet

TABLE 1-54 Sun StorEdge L140

Tray Number	Holes	Locking Brackets
1	92,93	96,99
2	71,72	75,78
3	50,51	54,57
4	29,30	33,36
5	8,9	12,15

- Enterprise 5000

- Enterprise 6000

TABLE 1-55 Sun StorEdge L140

Tray Number	Holes	Locking Brackets
1	73,74	77,80

- Enterprise 5500
- Enterprise 6500

TABLE 1-56 Sun StorEdge L140

Tray Number	Holes	Locking Brackets
1	94,95	98,101

Sun StorEdge L280

- StorEdge Expansion Cabinet

TABLE 1-57 Sun StorEdge L280

Tray Number	Front Screws	Rear Screws
1	101,113	102,104
2	86,98	87,89

- Enterprise 68-inch Expansion Cabinet
- Enterprise 5500
- Enterprise 6500

TABLE 1-58 Sun StorEdge L280

Tray Number	Front Screws	Rear Screws	System Maximum
1	92,104	93,95	Enterprise 5500 and 6500 with new universal bezel[1]
2	71,83	72,74	

1. UG-SF-Bezel Kit

Sun StorEdge L400

- Enterprise Expansion Cabinet
- SPARCcenter Expansion Cabinet

TABLE 1-59 Sun StorEdge L400

Tray Number	Holes	Locking Brackets	System Maximum
1	71,72	75,78	
2	50,51	54,57	SPARCcenter Expansion Cabinet
3	29,30	33,36	
4	8,9	12,15	Enterprise Expansion Cabinet

- Enterprise 68-inch Expansion Cabinet

TABLE 1-60 Sun StorEdge L400

Tray Number	Holes	Locking Brackets
1	85,88	89,92
2	64,65	68,71
3	43,44	47,50
4	22,23	26,29

- Enterprise 5000
- Enterprise 6000

TABLE 1-61 Sun StorEdge L400

Tray Number	Holes	Locking Brackets
1	73,74	77,80

- Enterprise 5500

- Enterprise 6500

TABLE 1-62 Sun StorEdge L400

Tray Number	Holes	Locking Brackets
1	94,95	98,101

Sun StorEdge L1000

- StorEdge Expansion Cabinet

TABLE 1-63 Sun StorEdge L1000

Tray Number	Mounting Rails	
	Front	Rear
1	8,10	8,9,10
2	44,46	44,45,46
3	80,82	80,81,82

SPARCserver 1000 Series

- SPARCcenter 2000
- Enterprise 6500
- Enterprise 6000
- Enterprise 5500
- Enterprise 5000
- SPARCcenter Expansion Cabinet(1)
- Enterprise 68-inch Expansion Cabinet

TABLE 1-64 SPARCserver 1000 Series

Tray Number	Front Holes	Rear Holes	System Maximum
1	4,12	3,12	
2	19,27	18,27	SPARCcenter 2000 and Enterprise 6000
3	34,42	33,42	Enterprise 6500 and Enterprise 5000
4	49,57	48,57	Enterprise 5500

TABLE 1-64 SPARCserver 1000 Series *(Continued)*

Tray Number	Front Holes	Rear Holes	System Maximum
5	64,72	63,72	SPARCcenter Expansion Cabinet(1)
6	79,87	78,87	
7	94,102	93,102	Enterprise 68-inch Expansion Cabinet

1. In SPARCcluster™™ HA and PDB™™ configurations with optional fan and baffles.

- Enterprise Expansion Cabinet
- SPARCcenter Expansion Cabinet

TABLE 1-65 SPARCserver 1000 Series

Tray Number	Front Holes	Rear Holes	System Maximum
1	10,18	9,18	
2	28,36	28,36	
3	46,54	45,54	
4	64,72	63,72	Enterprise and SPARCcenter Expansion Cabinets

SPARCstorage Array Model 100 Series

- SPARCcenter 2000
- Enterprise 6500
- Enterprise 6000
- Enterprise 5500
- Enterprise 5000
- SPARCcenter ExpansionCabinet(1)
- Enterprise 68-inch Expansion Cabinet

TABLE 1-66 SPARCstorage Array Model 100 Series

Tray Number	Front Holes	Rear Holes	System Maximum
1	4,12	3,12	
2	19,27	18,27	SPARCcenter 2000 and Enterprise 6000
3	34,42	33,42	Enterprise 6500 and Enterprise 5000
4(2)	49,57	48,57	Enterprise 5500

TABLE 1-66 SPARCstorage Array Model 100 Series *(Continued)*

Tray Number	Front Holes	Rear Holes	System Maximum
5(2)	64,72	63,72	SPARCcenter Expansion Cabinet(1)
6	79,87	78,87	
7	94,102	94,102	Enterprise 68-inch Expansion Cabinet

1. In SPARCcluster™ HA and PDB configurations with optional fan and baffles.
2. Tray 4 for the Enterprise 6500 with the new universal bezel. Tray 5 for the Enterprise 5500 with the new universal bezel. UG-SF-Bezel Kit

- Enterprise Expansion Cabinet
- SPARCenter Expansion Cabinet

TABLE 1-67 SPARCstorage Array Model 100 Series

Tray Number	Front Holes	Rear Holes	System Maximum
1	10,18	9,18	
2	28,36	28,36	
3	46,54	45,54	
4	64,72	63,72	Enterprise and SPARCcenter Expansion Cabinets

SPARCstorage Array Model 200 Series

- SPARCcenter Expansion Cabinet
- Enterprise Expansion Cabinet

TABLE 1-68 SPARCstorage Array Model 200 Series

Tray Number	Holes
1	65,69,80,84

- Enterprise 68-inch Expansion Cabinet

TABLE 1-69 SPARCstorage Array Model 200 Series

Tray Number	Holes
1	86,90,101,105

SPARCstorage RSM™

- SPARCenter 2000
- Enterprise 5000
- Enterprise 5500
- Enterprise 6000
- Enterprise 6500
- Enterprise 68-inch Expansion Cabinet

TABLE 1-70 SPARCstorage RSM

Tray Number	Holes	Front Locking Brackets	Rear Locking Brackets	System Maximum
1	6,9	2,3	3,4	
2	16,19	12,13	13,14	SPARCcenter 2000
3	26,29	22,23	23,24	Enterprise 6000
4	36,39	32,33	33,34	Enterprise 5000
5	46,49	42,33	43,44	Enterprise 6500
6	56,59	52,53	53,54	Enterprise 5500
7	66,69	62,63	63,64	
8	76,79	72,73	73,74	
9	86,89	82,83	83,84	
10 (1)	96,99	92,93	93,94	Enterprise 68-inch Expansion Cabinet

(1) Tray 6 for the Enterprise 6500 with the new universal bezel. Tray 7 for the Enterprise 5500 with the new universal bezel. UG-SF-Bezel Kit

- SPARCcenter Expansion Cabinet
- Enterprise Expansion Cabinet
- Sun StorEdge A3000 System
- SPARCstorage RSM 214 or 219

TABLE 1-71 SPARCstorage RSM

Tray Number	Holes	Front Locking Brackets	Rear Locking Brackets	System Maximum
1	7,10	3,4	4,5	
2	17,20	13,14	14,15	SPARCcenter 2000
3	27,30	23,24	24,25	

TABLE 1-71 SPARCstorage RSM *(Continued)*

Tray Number	Holes	Front Locking Brackets	Rear Locking Brackets	System Maximum
4	37,40	33,34	34,35	
5	47,50 (1)	43,44	44,45	Sun StorEdge A3000 System
6	57,60	53,54	54,55	SPARCstorage RSM 214 or 219
7	67,70	63,64	64 (2),65	
8	77,80	73,74	74,75	SPARCcenter and Enterprise Expansion Cabinets

1. Left side rear top hole is 49.

2. Use only hole 65 on the left side rear.

Sun StorEdge Systems

Sun StorEdge A3500 System

1 StorEdge A3000 controller module and 2 StorEdge D1000 disk arrays in:

- Enterprise 68-inch Expansion Cabinet
- Enterprise 5500
- Enterprise 6500

TABLE 1-72 Sun StorEdge A3500 Light) 1x2 Configuration (A)

Tray Number	Device	Tray to Cabinet	Front Holes	Rear Holes
3	A3000		3,6,9	2,5
2	D1000	17,20	14,18	
1	D1000	29,32	26,30	

With filler panels installed in the unused slots.

The following configurations are in StorEdge Expansion Cabinets.

TABLE 1-73 Sun StorEdge A3500 1x2 Configuration (B)

Tray Number	Device	Tray to Cabinet	Front Holes	Rear Holes
3	D1000	71,74	69,72	
2	D1000	69.62	57,60	
1	A3000		45,48,51	44,47
With filler panels installed in the unused slots.				

- 1 StorEdge A3000 controller module and 5 StorEdge D1000 disk arrays

TABLE 1-74 Sun StorEdge A3500 1x5 Configuration

Tray Number	Device	Tray to Cabinet	Mounting Rails	
			Front Holes	Rear Holes
6	A3000		69,72,75	68,71
5	D1000	69.62	57,60	
4	D1000	47,50	45,48	
3	D1000	35,38	33,36	
2	D1000	23,26	21,24	
1	D1000	11,14	9,12	
With filler panels installed in the unused slots.				

- 2 StorEdge A3000 controller modules and 7 StorEdge D1000 disk arrays

TABLE 1-75 Sun StorEdge A3500 2x7 Configuration

Tray Number	Device	Tray to Cabinet	Mounting Rails	
			Front Holes	Rear Holes
9	D1000	107,110	105,108	
8	D1000	95,98	93,96	
7	D1000	83,86	81,84	
6	D1000	71,74	69,72	
5	D1000	69.62	57,60	
4	A3000		45,48,51	44,47

TABLE 1-75 Sun StorEdge A3500 2x7 Configuration *(Continued)*

Tray Number	Device	Tray to Cabinet	Mounting Rails	
			Front Holes	Rear Holes
3	D1000	35,38	33,36	
2	D1000	23,26	21,24	
1	D1000	11,14	9,12	

With filler panels installed in the unused slots.

- 1 StorEdge A3000 controller modules and 8 StorEdge D1000 disk arrays

TABLE 1-76 Sun StorEdge A3500 1x8 Configuration

Tray Number	Device	Tray to Cabinet	Mounting Rails	
			Front Holes	Rear Holes
9	D1000	107,110	105,108	
8	D1000	95,98	93,96	
7	D1000	83,86	81,84	
6	D1000	71,74	69,72	
5	D1000	69.62	57,60	
4	A3000		45,48,51	44,47
3	A3000		33,36,39	32,35
2	D1000	23,26	21,24	
1	D1000	11,14	9,12	

With filler panels installed in the unused slots.

Sun StorEdge A5000 Disk Arrays in a StorEdge Expansion Cabinet

TABLE 1-77 Sun StorEdge A5000

Tray Number	Device (1)	Tray to Cabinet	Mounting Brackets	Box ID (2)
8	FC-100 Hubs (x2)	106,107	106,107	N / A
7	FC-100 Hubs (x2)	100,101	100,101	N / A
6	A5000 disk array	87,91	85,94	2
5	A5000 disk array	72,76	70,79	1
4	A5000 disk array	54,61	55,64	0
3	A5000 disk array	42,46	40,49	2
2	A5000 disk array	27,31	25,34	1
1	A5000 disk array	12,16	10,19	0

1. With 5U filler panels over empty slots.

2. A maximum of four A5000 disk arrays can be connected on the same loop.

NOTE: A front screen door is required for two or more A5000 disk arrays.

Use four screws, two per each side, to secure each side of the mounting tray to the front of the expansion cabinet.

Sun StorEdge™ T3

- StorEdge Expansion Cabinet

TABLE 1-78 Sun StorEdge T3 4u Rack Kit

Tray Number	Inside Mounting Rails	Outside Mounting Rails
1	10,14	11,14
2	22,26	23,26
3	34,38	35,38
4	46,50	47,50
5	58,62	59,62

TABLE 1-78 Sun StorEdge T3 4u Rack Kit *(Continued)*

Tray Number	Inside Mounting Rails	Outside Mounting Rails
6	70,74	71,74
7	82,86	83,86
8	94,98	95,98

Use eight screws, four on each side, to secure the tray rails to the inside mounting rails of the cabinet.

Use four screws, two on each side, to secure the front of the tray rails to the outside mounting rails of the cabinet.

TABLE 1-79 Sun StorEdge T3 7u Rack Kit

Tray Number	Inside Mounting Rails	Outside Mounting Rails
1	10,15,25	10,15
2	31,36,46	31,36
3	52,57, 67	52,57
4	73,78,88	73,78

Use 12 screws, 6 on each side, to secure the tray rails to the inside mounting rails of the cabinet.

Use 4 screws, 2 on each side, to secure the front of the tray rails to the outside mounting rails of the cabinet.

TABLE 1-80 E6500 and E5500 with 2 T3 (4RU Trays)

Tray Number	Mounting Rails	Tray to Cabinet	Rack Units
Air Baffle	24, 24		
T3 #2	16, 20	17,20	4
T3 #1	4, 8	5,8	4

TABLE 1-81 E6500 and E5500 with 1-2 T3 (7RU Trays)

Tray Number	Mounting Rails	Tray to Cabinet	Rack Units
Air Baffle	23,23		
T3 #1&2 Tray #1[1]	4,9,19	4,9	7

1. 1 RU Air Baffle for T3 Array (Part no. X9629A) required above the Top T3.

TABLE 1-82 E6500 and E5500 with 1 T3 (4RU Trays)

Tray Number	Mounting Rails	Tray to Cabinet	Rack Units
Air Baffle	12,12		
T3 #1	4, 8	5,8	4

Sun Fire 6800 System

See the Sun Fire 6800 System and Sun Fire Cabinet Rackmount Placement Matrix in the Sun Fire 6800/4810/4800/3800 Systems documentation collection.

http://www.sun.com/products-n-solutions/hardware/docs/Servers/Midrange_Servers/Sun_Fire_6438x/

Device Rack Units

This table lists the heights of Sun components in rack units (U). A rack unit is equal to 1.75 inches.

TABLE 1-83 Device Rack Units

Device	Rack Units
Sun Enterprise™ 250	7U
Sun Enterprise 450	14U
Sun Enterprise 4X00	8U
Sun StorEdge™ A1000/D1000	4U
Sun StorEdge A3000 Controller Module	4U
Sun StorEdge A5000 Disk Array	5U
Sun StorEdge FC-100 Hub	2U
Sun StorEdge L280	5U
Sun StorEdge L1000	12U
SPARCserver 1000 Series	5U

Cabinet Rack Units

This table lists the usable height of Sun system and expansion cabinets in rack units (U). A rack unit is equal to 1.75 inches.

TABLE 1-84 Cabinet Rack Units

Device	Maximum Static Load	Rack Units
StorEdge Expansion Cabinet	1300 pounds (589 kg)	36U
Sun Enterprise 68-inch Expansion Cabinet	1200+ pounds (545 kg)	35U
Sun Enterprise 56-inch Expansion Cabinet	1200 pounds (545 kg)	28U

Definitions

TABLE 1-85 Definitions

Definition	Example
Expansion cabinet	
A cabinet that doesn't have an integrated server. These cabinets are available empty or preconfigured with storage components.	Enterprise Expansion Cabinet StorEdge Expansion Cabinet
System cabinet	
A cabinet with an integrated server.	Enterprise 5500 System Cabinet Enterprise 6500 System Cabinet
56-inch cabinet	
Cabinets with 56-inches of usable cabinet space.	SPARCCluster 2000 System Cabinet Enterprise 5000 System Cabinet Enterprise 6000 Stem Cabinet
68-inch cabinet	
Cabinets with 68-inches of usable cabinet space.	Enterprise 68-inch Expansion Cabinet Enterprise 5500 System Cabinet Enterprise 6500 System Cabinet
72-inch cabinet	
Cabinets with 72-inches of usable cabinet space.	StorEdge Expansion Cabinet StorEdge A3500