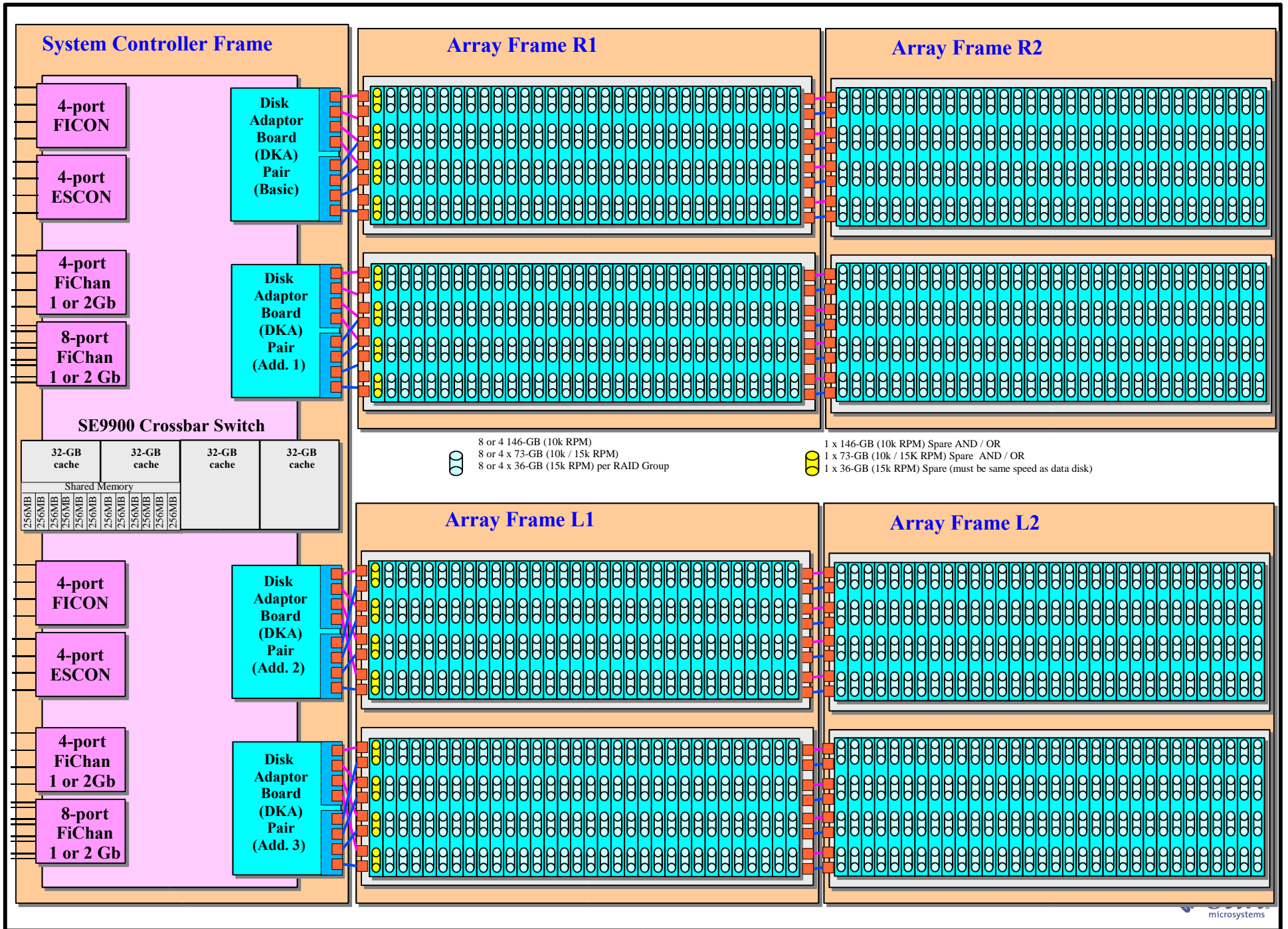


Sun StorEdge 9980



Full Configuration:

- 1024 x 146GB / 73 GB / 36 GB Disks (149.5 TB / 74.7 TB / 36.8 TB raw)
 - 16 of which can be global hot spares
- 8-64 Fiber Channel Host interfaces
- 6 GB Controller Memory
- 128 GB



iSCSI
Blade

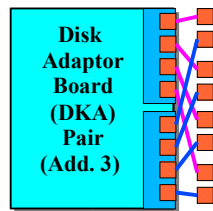
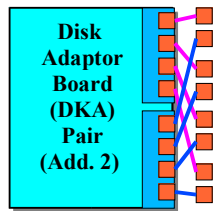
NAS
Blade

4-port
FICON

4-port
ESCON

4-port
FiChan
1 or 2Gb

8-port
FiChan
1 or 2 Gb

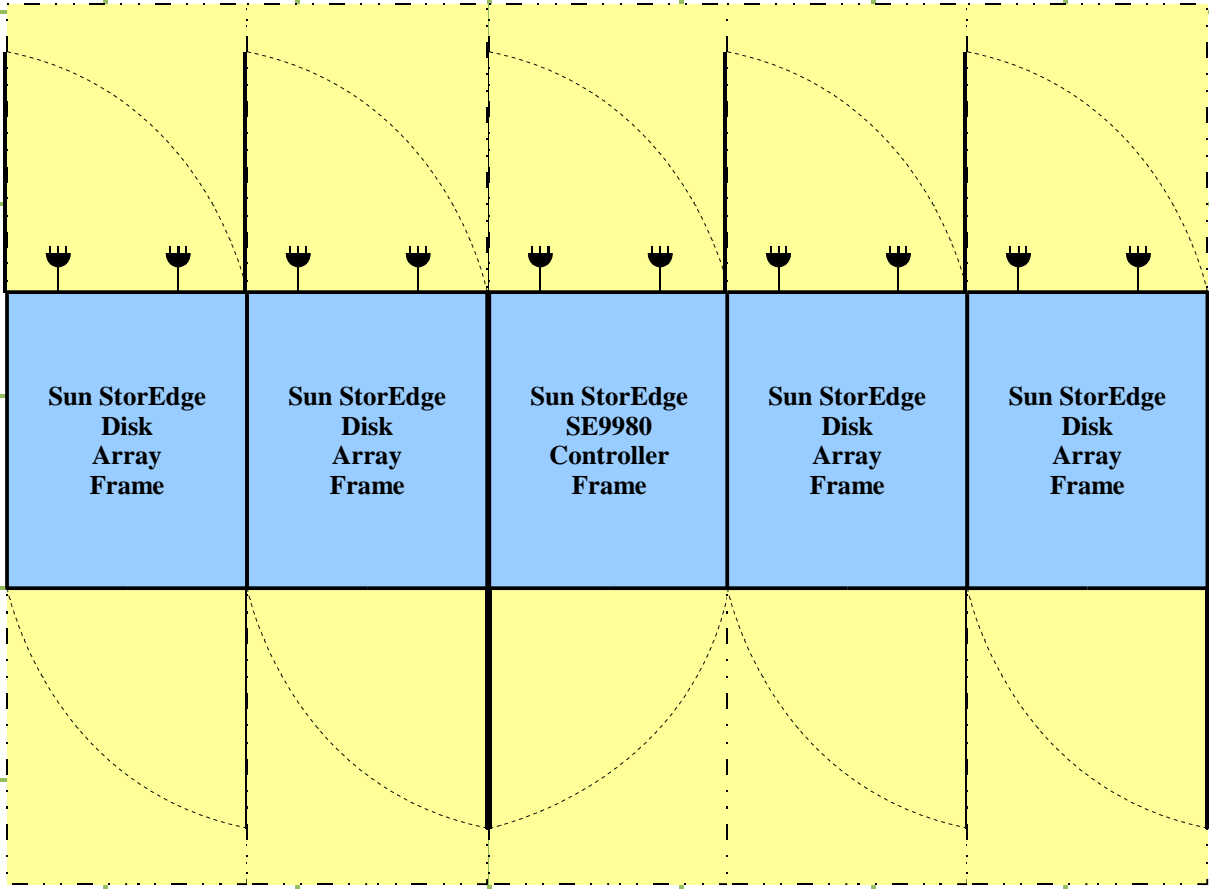


Power
Single-Phase:
 Power cords are
 RussellStol 9P53U2
 200/208/230 VAC
 50 Amps
3-Phase 60Hz:
 Power cords are
 Russell Stol RS460PGW
 200/208/230 VAC
 30 Amp

NOTE: If three phase
 is used, then power
 for the controller
 frame is supplied by
 the disk frame.

2 ft x 2 ft
 Tile

Controller Cabinet
 Dimensions:
 31" (782mm) Width
 31.5" (800mm) Depth
 73" (1860mm) Height
 0.6" (16mm) Side Cover
 Clearances:
 31.5" (800mm) Front
 31.5" (800mm) Back
Disk Array Frame
 Dimensions:
 29.5" (750mm) Width
 31.5" (800mm) Depth
 73" (1860mm) Height
 0.6" (16mm) Side Cover
 Clearances:
 31.5" (800mm) Front
 31.5" (800mm) Back



NEMA 5-15
 100/120 VAC
 15 amps

Remote Console

Keyboard

**Sun Workstation
 or Wintel PC
 to run HiCommand
 (Customer
 Supplied)**



Item		Sun StorEdge 9980 Controller (CNC)	Sun StorEdge 9080 Disk Unit (DKU)
Weight (kg)		553	755
Heat Output (kW)		2.17	6.61
Power Consumption (kVA)		2.31	7.16
Air Flow (m ³ /min.)		18	32
Dimensions (mm)	Width	762 ¹⁾	750
	Depth	800	800
	Height	1860	1860

Notes: 1: This includes the thickness of side covers (16 mm x 2).

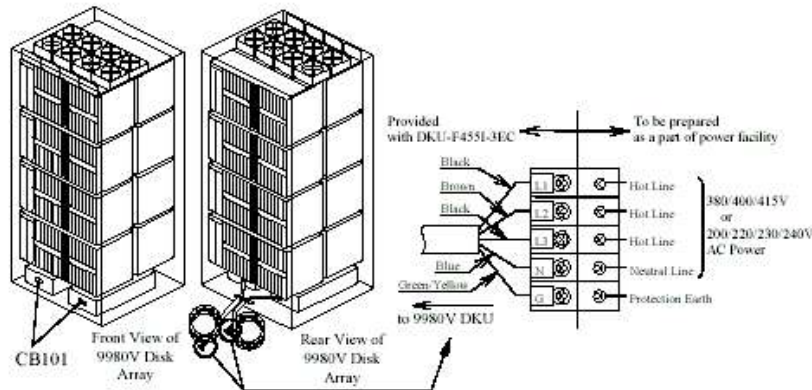


Figure 5.17 Power Plugs for Three-Phase 9980V Disk Array Unit (Europe)

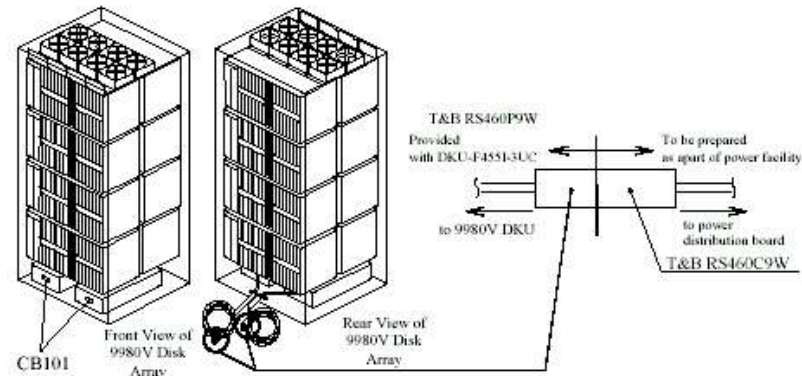


Figure 5.18 Power Plugs for Three-Phase 9980V Disk Array Unit (USA)

Table 5.8 9980V and 9970V Three-Phase Features

Model	Frame	Feature Number	Description	Comments
9980V	Controller	DKC-F4601-3PS	Breaker Box Kit for 3-Phase/60A	For three-phase/60A power, the controller frame receives its input power from the first disk array frame. All controller single-phase features must be removed to allow three-phase power for the controller.
	Disk Array	DKU-F4551-3PS	AC Box Kit for 3-Phase/60A	Consists of two AC boxes.
	Disk Array	DKU-F4551-3EC	Power Cable Kit for 3-Phase/60A	50 Hz for Europe
	Disk Array	DKU-F4551-3UC	Power Cable Kit for 3-Phase/60A	60 Hz for USA
	Controller	DKC-F4601-3PSD	Breaker Box Kit for 3-Phase/30A	For three-phase/30A power, the controller frame receives its input power from the power distributor. Therefore it is necessary to attach one power cable kit, AC box kit, and two 3-phase/30A plugs.
	Disk Array	DKU-F4551-3PSD	AC Box Kit for 3-Phase/30A	Necessary when DKU4551 is connected to 3-phase/30A power source.
	Disk Array	DKU-F4551-3ECD	Power Cable Kit for 3-Phase/30A	50 Hz for Europe, consists of two cables of 3-phase/30A
	Disk Array	DKU-F4551-3UCD	Power Cable Kit for 3-Phase/30A	60 Hz for USA, consists of two cables of 3-phase/30A
9970V	The 9970V consists of a single frame.	DKC-F4651-3PS	AC Box Kit for 3-Phase	Consists of two AC boxes.
		DKU-F4651-3EC	Power Cable Kit for 3-Phase	50 Hz for Europe
		DKU-F4651-3UC	Power Cable Kit for 3-Phase	60 Hz for USA

Table 5.9 Current Rating, Power Plug, Receptacle, and Connector for Three-Phase 9900V

Item	9970V	9980V DKC	9980V DKU
Hitachi Base Unit	DKC4651-5	DKC4601-5	DKU4551-18
Circuit Current Rating (amps)	30A	(from DKU)	60A 30A
Hitachi Feature(s) Required for 60A	N/A	DKC-F4601-3PS	DKU-F4551-3PS DKU-F4551-3UC
Hitachi Feature(s) Required for 30A	DKC-F4651-3PS DKC-F4651-3UC	DKC-F4601-3PSD DKC-F4601-3UCD	DKU-F4551-3PSD DKC-F4601-3UCD
60-Hz Power Plug (or equiv.) included with the product	T&B 3760PDG, or DDK 115J-AP8508	For 60A: N/A For 30A: T&B 3760PDG, or DDK 115J-AP8508	For 60A: T&B RS460P9W For 30A: T&B 3760PDG, or DDK 115J-AP8508
Box-Type Receptacle (or equiv.) (not provided)	T&B 3754 (2 per single frame)	For 60A: N/A For 30A: T&B 3754 (2 per DKC)	For 60A: T&B RS460P9W (2 per DKU) or Hubbell HBL460R9W, or Leviton 460R9W) For 30A: T&B 3754 (2 per DKU)
Inline Connector (or equiv.) (not provided)	T&B 3934 (2 per single frame)	For 60A: N/A For 30A: T&B 3934 (2 per DKC)	For 60A: T&B RS460C9W (2 per DKU) or Hubbell HBL460C9W, or Leviton 460C9W) For 30A: T&B 3934 (2 per DKU)
Back Box for Receptacle Note: Use T&B back box with T&B receptacle, Hubbell back box with Hubbell receptacle, etc.	Included	For 60A: N/A For 30A: included	For 60A: T&B JB6-B125 plus T&B AA6L 20-degree-angle adapter (or Hubbell BB601W, Leviton BX60-V) For 30A: included

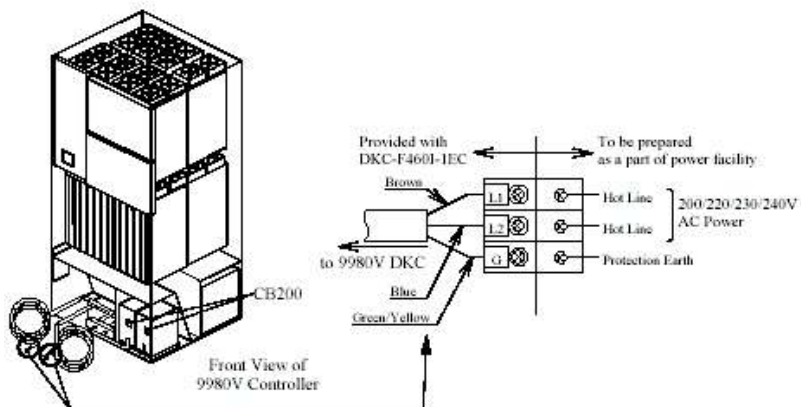


Figure 5.22 Power Plugs for Single-Phase 9980V Controller (Europe)

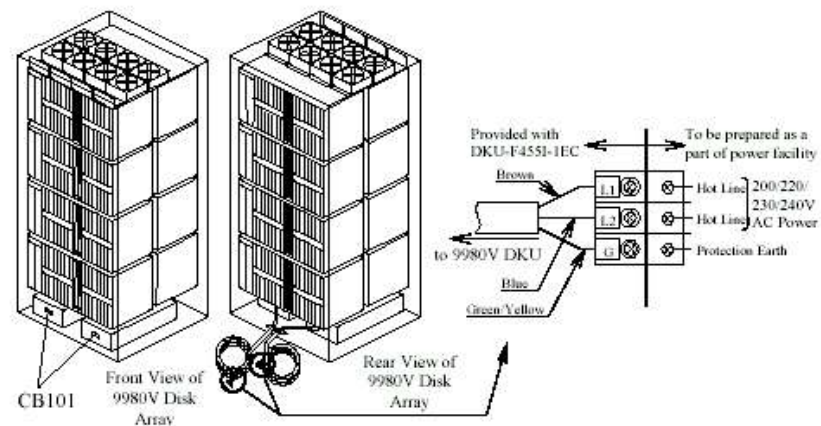


Figure 5.24 Power Plugs for a Single-Phase 9980V Disk Array Unit (Europe)

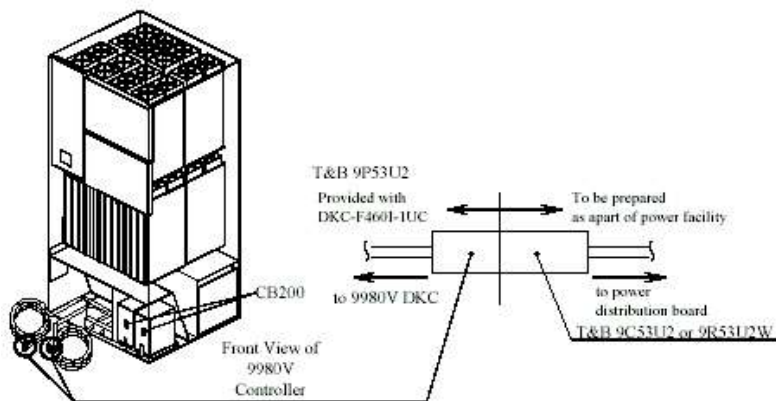


Figure 5.23 Power Plugs for Single-Phase 9980V Controller (USA)

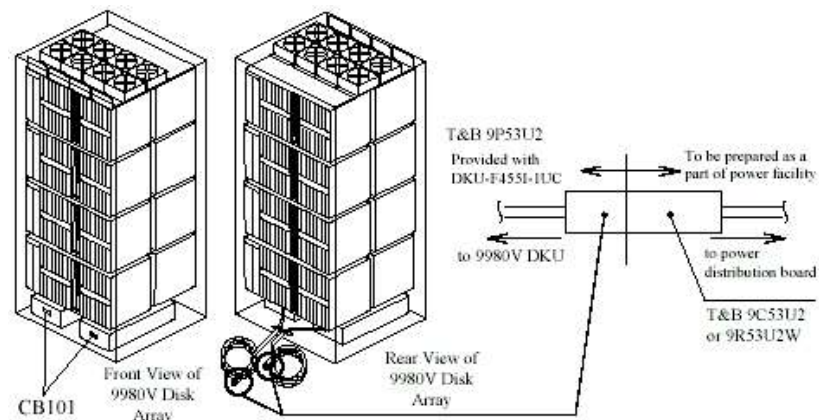


Figure 5.25 Power Plugs for a Single-Phase 9980V Disk Array Unit (USA)

Table 5.12 9900V Single-Phase Features

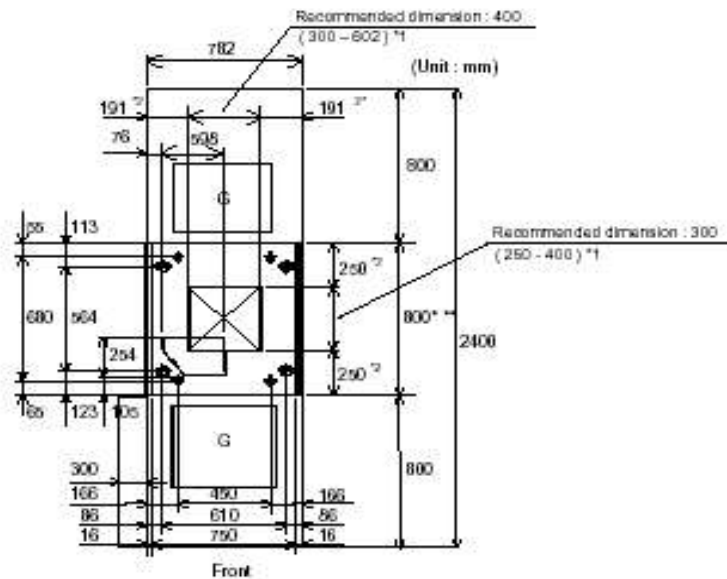
Model	Frame	Feature Number	Description
9980V	Controller	DKC-F4601-PS	AC Box Kit for Single Phase/40A
		DKC-F4601-EC	Power Cable Kit for Single Phase/50A, 50 Hz for Europe
		DKC-F4601-IUC	Power Cable Kit for Single Phase/50A, 60 Hz for USA
	Disk Array	DKU-F4551-1PS	AC Box Kit for Single Phase/50A
DKU-F4551-IEC		Power Cable Kit for Single Phase/50A, 50 Hz for Europe	
DKU-F4551-IUC		Power Cable Kit for Single Phase/50A, 60 Hz for USA	
9970V	The 9970V consists of a single frame.	DKC-F4651-IEC	Power Cable Kit for Single Phase, 50 Hz for Europe
		DKC-F4651-IUC	Power Cable Kit for Single Phase, 60 Hz for USA

Table 5.13 Current Rating, Power Plug, Receptacle, and Connector for Single-Phase 9900V

Item	9970V	9980V DKC	9980V DKU
Hitachi Base Unit	DKC4651-5	DKC4601-5	DKU4551-18
Circuit Current Rating	50 A	40 A	50 A
Hitachi Feature(s) Required	DKC-F4651-1PS DKC-F4651-IUC	DKC-F4601-1PS DKC-F4601-IUC	DKU-F4551-1PS DKU-F4551-IUC
60-Hz Power Plug (or equiv.) Included with the product	T&B 9P53U2	T&B 9P53U2	T&B 9P53U2
Box-Type Receptacle (or equiv.) (not provided)	T&B 9R53U2W (2 per single frame)	T&B 9R53U2W (2 per DKC)	T&B 9R53U2W (2 per DKU)
Back Box for Receptacle	T&B 3781A	T&B 3781A	T&B 3781A
Inline Connector (or equiv.) (not provided)	T&B 9C53U2 (2 per single frame)	T&B 9C53U2 (2 per DKC)	T&B 9C53U2 (2 per DKU)



The additional weight of the raised floor and the weight of the cables is 10 lb/ft² (50 kg/m²) uniformly across the total area used in the calculations. When personnel and equipment traffic occur in the service clearance area, a distributed weight of 15 lb/ft² (75 kg/m²) is allowed. This distributed weight is applied over half of the service clearance area up to a maximum of 760 mm (30 inches) from the machine.



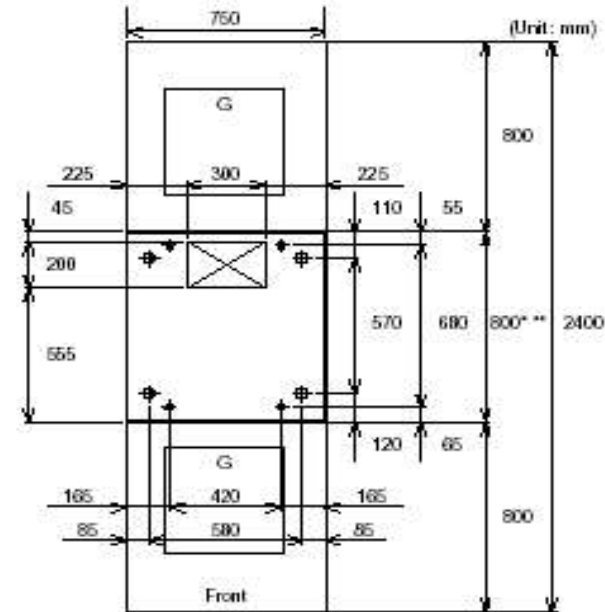
- Floor cutout area for cables
- Screw jack
- Caster
- Service clearance
- Grid panel (over 450 mm x 450 mm)
- Opening on the bottom of the frame (for external cable entry)

*1 Values in parentheses show the allowable range of the floor cutout dimension. The floor cutout should be in the center of the DKC. In case that the floor cutout is in the right position for the external cable work and is within the allowable range, the cutout position may be off-center. In this case, check the relation between the positions of the cutout and the opening on the bottom of the frame. If the floor cutout width is more than 552 mm, be careful about the restriction of the movable direction so that the caster wheels do not fall down into the cutout.

*2 These dimensions vary with the floor cutout dimension.

* The thickness of the door is different in the FRONT (35 mm) than in the REAR (25 mm).

** Overhang of the MOSAIC (LOUVER) of the FRONT DOOR (7 mm) is not included.



- Floor cutout area for cables
- Screw jack
- Caster
- Service clearance
- Grid panel (over 450mm x 450mm)

* The thickness of the door is different in the FRONT (35 mm) than in the REAR (25 mm).

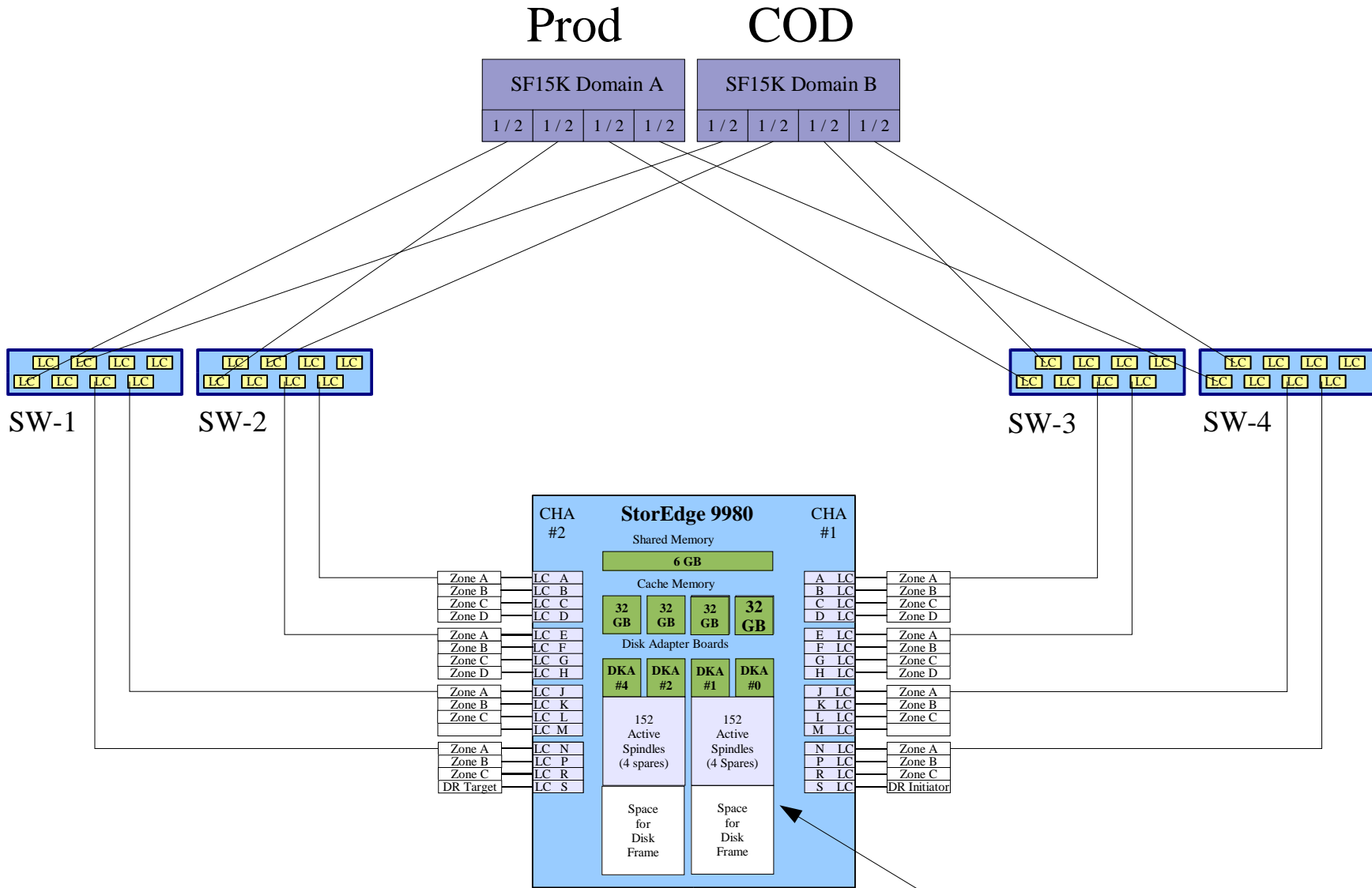
** Overhang of the MOSAIC (LOUVER) of the FRONT DOOR (7 mm) is not included.

The following formula can be used to calculate floor loading to ensure that the weight of all equipment to be installed is adequately supported. Total area is defined as machine area plus half the service clearance.

$$\frac{\text{machine weight} + (15 \text{ lb/ft}^2 \times 0.5 \text{ service clearance}) + (10 \text{ lb/ft}^2 \times \text{total area})}{\text{total area}}$$



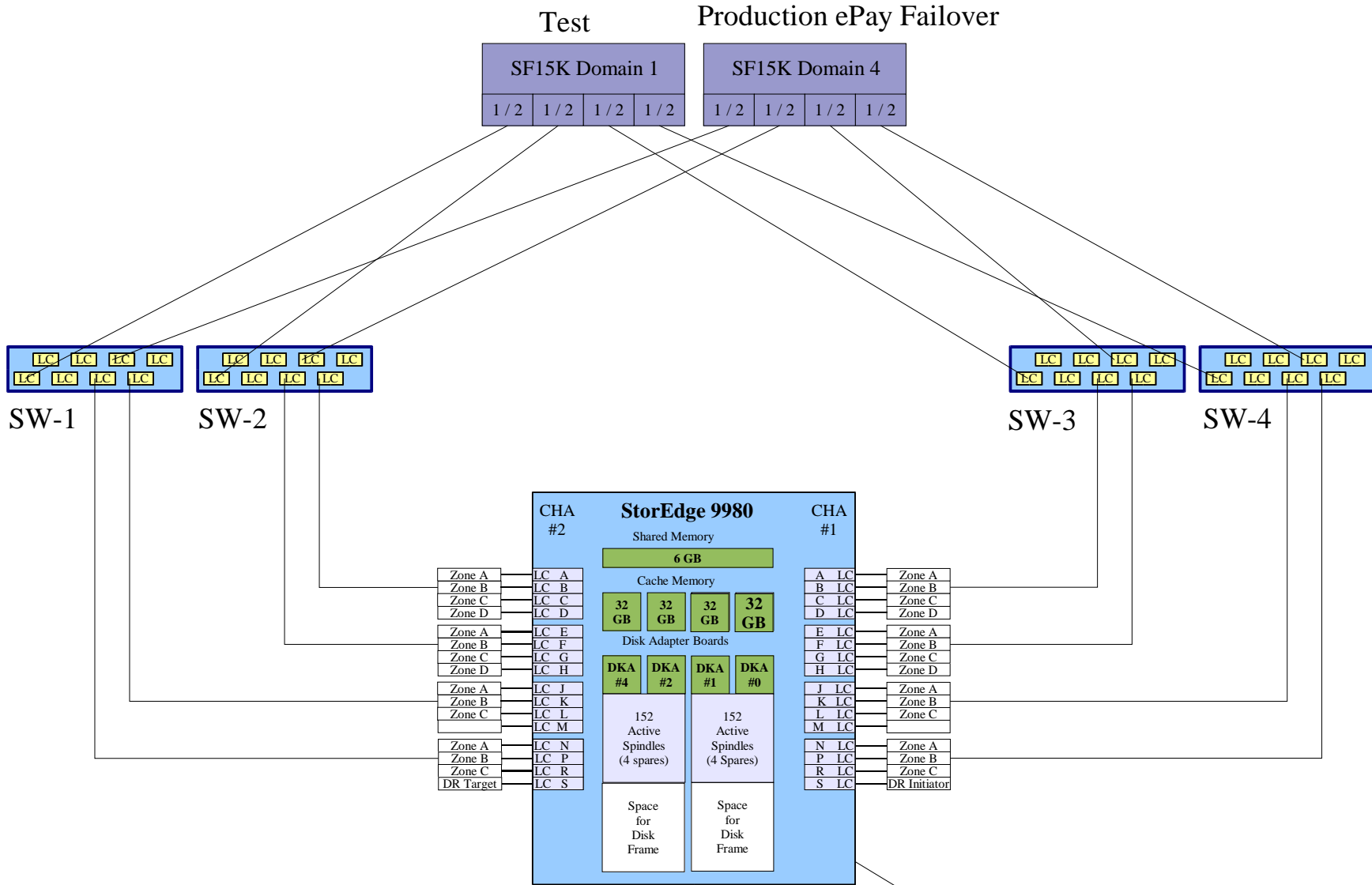
SAN Zone A Connectivity Example / Template



Adjust number of active spindles, spares, DKA, shared memory and cache



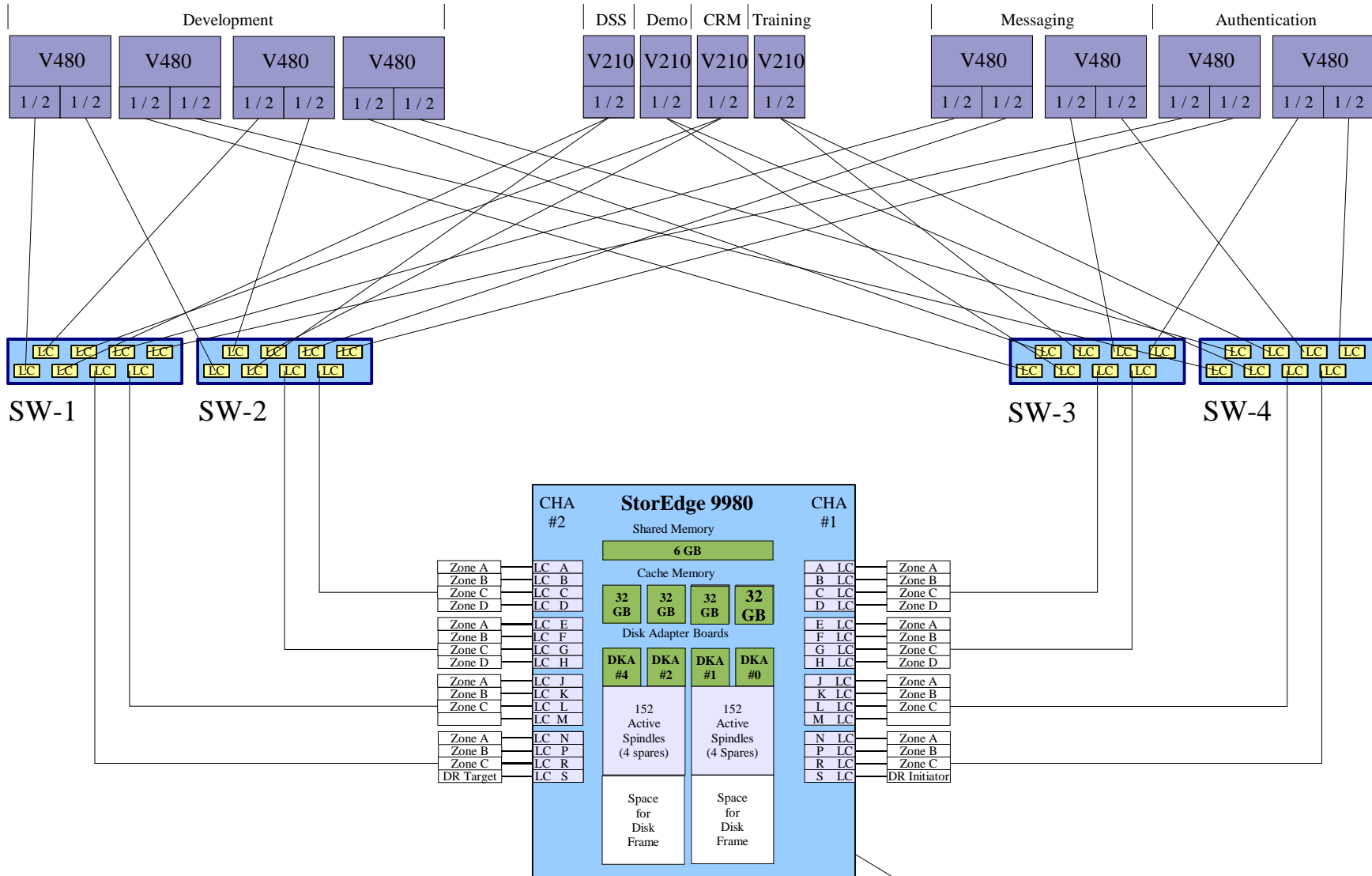
Production Test SAN Zone B Connectivity Example / Template



Adjust number of active spindles, spares, DKA, shared memory and cache



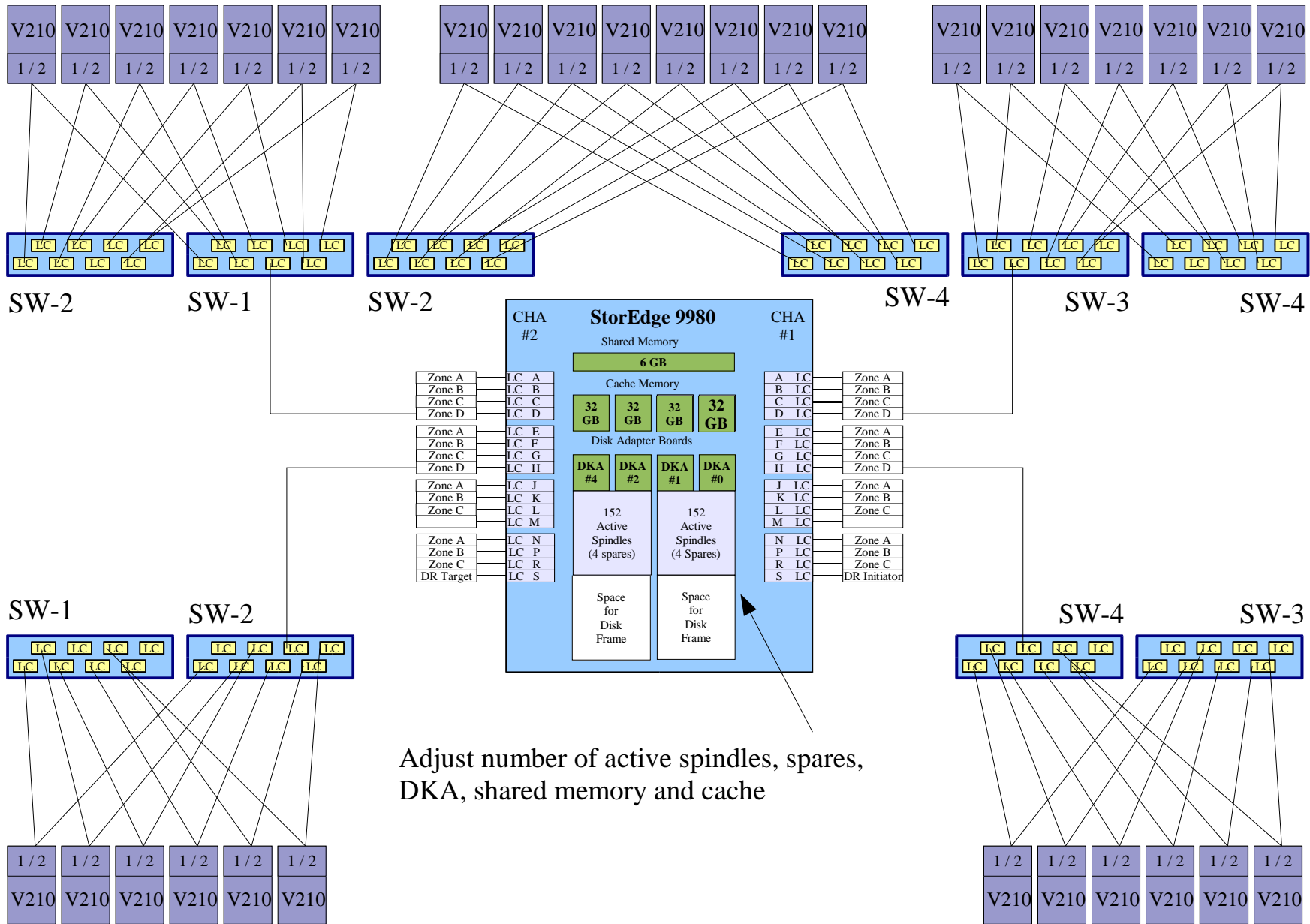
SAN Zone C Connectivity Example / Template



Adjust number of active spindles, spares, DKA, shared memory and cache



SAN Zone D Connectivity Example / Template



Adjust number of active spindles, spares,
DKA, shared memory and cache

