

### 1X18 (Right Mid Station)

#### Rack Mount Components w/Locations

Loc	Description	Vendor	Model	Designator
01	Fiber Optic Patch Panel			FPP-1
05	DAQ Cable Pull Through Keep Clear			
06	VME Crate	Knurr		VME-1
14	DAQ Cable Pull Through Keep Clear			
15	DAQS Interconnect Chassis (BNC)	LIGO		DAQIC-1
16	DAQS Interconnect Chassis (LEMO)	LIGO		DAQIC-2
17	GDS Interconnect Chassis (BNC)	LIGO		GDSIC-1
19	Endevco Accelerometer Conditioner	Endevco		ENDEV-1
21	VME Crate (suspensions)	Knurr		VME-2
30	LOS Controller Chassis	LIGO		LOSC-1
33	+15VDC Power Supply	Sorenson		PS-1
34	-15VDC Power Supply	Sorenson		PS-2
35	+24VDC Power Supply	Sorenson		PS-3
36	-24VDC Power Supply	Sorenson		PS-4
37	+225VDC Power Supply	Sorenson		PS-5
38	-225VDC Power Supply	Sorenson		PS-6
39	Uninterrupted Power Supply	Best Power		UPS-1

**Notes:**

- 1) This drawing is **PRELIMINARY**. It is only to be used for purposes of rack layout and initial installation of the CDS networking and DAQ.
- 2) Suspension controls are detailed in a separate drawing (See TBD drawing)
- 3) Endevco signal conditioning unit may be moved to back of rack if necessary.
- 4) FORE ES3810 Unit is located on back of rack in the top slots.

#### VME-1 Modules / Slot Assignments

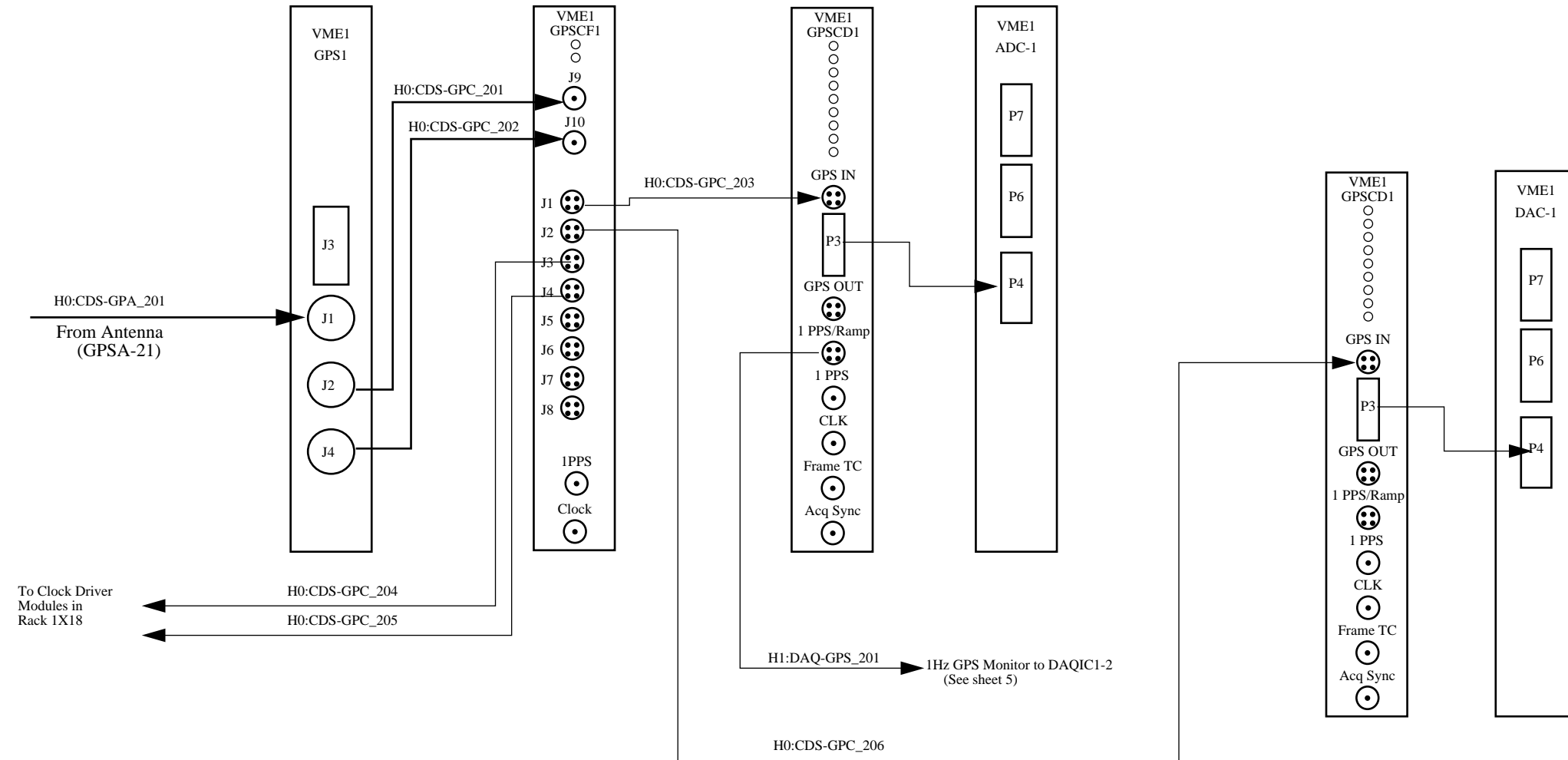
Slot	Description	Vendor	Model	Designator
1	MIPS Processor	Heurikon	4700	CPU-1
2	Reflected Memory	VMIC	5588DMA	RM-1
3	Single/Multi Mode Cnvrtter	VMIC		SMMC-1
4	GPS Clock Master	Brandywine		GPS-1
5	Timing Clock Fanout	LIGO		GPSCF-1
6	Timing Clock Driver	LIGO		GPSCD-1
7	ADC	ICS	110B1	ADC1
8	Timing Clock Driver	LIGO		GPSCD-2
9	DAC	ICS	115	DAC1
10				
11	68040 Processor	Motorola	MVME262	CPU-2
12				
13				
14				
15				

#### VME-2 Modules / Slot Assignments

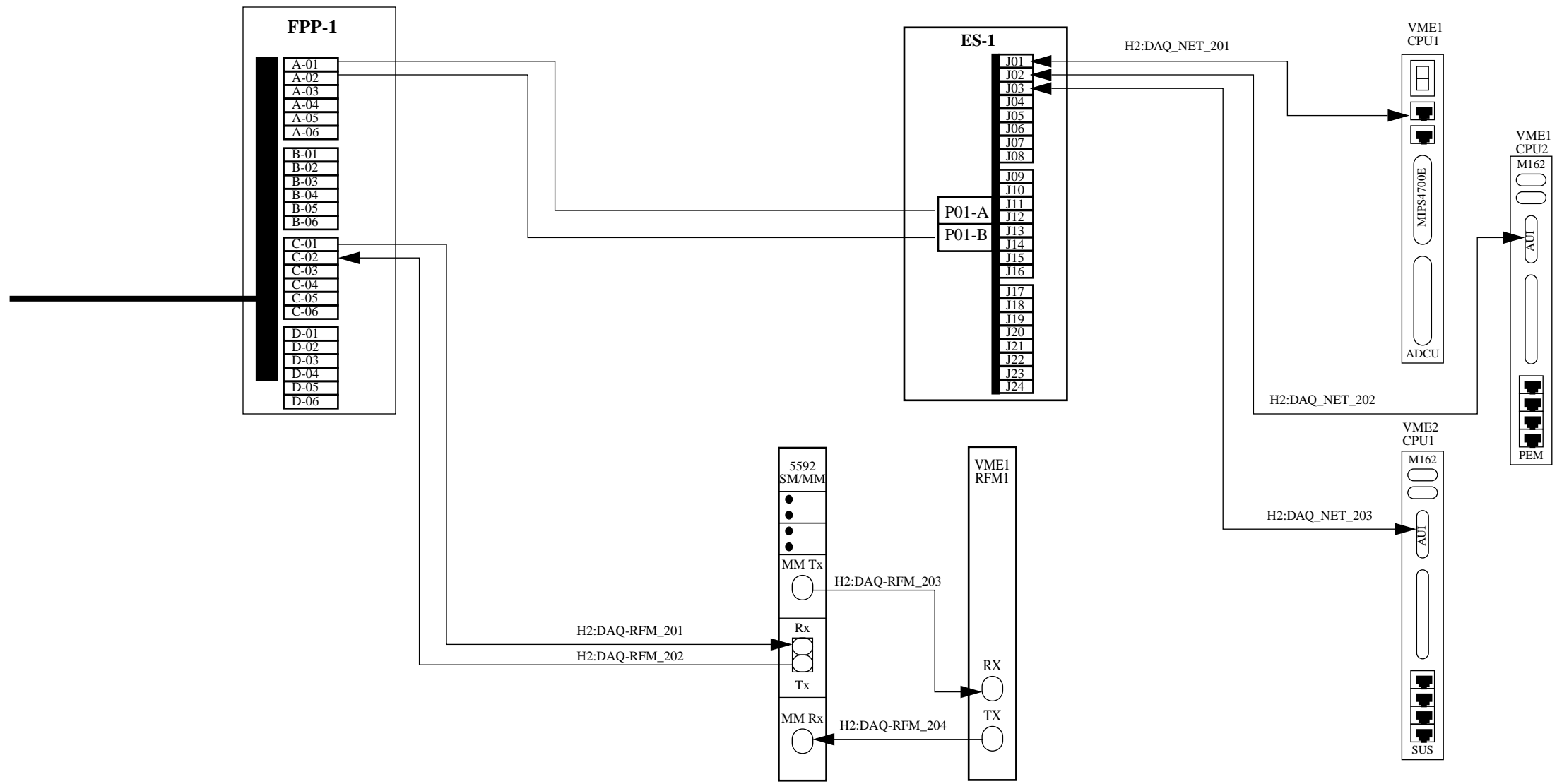
Slot	Description	Vendor	Model	Designator
1	68040 Processor	Motorola	MVME262	CPU-1
2	ADC	VMIC	3113A	ADC1
3	DAC	VMIC	4116	DAC1
4	Relay Output Module	Xycom	220	RO1
5				

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± FINISHED SURFACE RMS BREAK CORNERS IN REMOVE ALL BURRS		File: Hanford Observatory CDS hanford1:/opt/CDS/c/docs/daq/drawings/working/Rack_1X18.fm5		CURRENT REVISION APPROVAL		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
DO NOT SCALE THIS DRAWING		DO NOT SCALE THIS DRAWING		DRAWN R. Bork	GROUP	SIGNATURE	DATE 4/21/99
USED ON:		USED ON:		CHECKED			
NEXT ASS'Y:		NEXT ASS'Y:		D.Barker	LHO		03 Oct 99
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	REV	DESCRIPTION	SHEETS EFFECTED	DATE
6	REFERENCE DRAWINGS	5			ISSUE DESCRIPTION		
SCALE		SCALE		SCALE		SCALE	
SIZE DWG. NO.		SIZE DWG. NO.		SIZE DWG. NO.		SIZE DWG. NO.	
B D990179-00-C		B D990179-00-C		B D990179-00-C		B D990179-00-C	
SHEET 1 of 6		SHEET 1 of 6		SHEET 1 of 6		SHEET 1 of 6	
STD		STD		STD		STD	
VER. 01		VER. 01		VER. 01		VER. 01	

### Clock Distribution



				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR RADIUS ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± FINISHED SURFACE RMS BREAK CORNERS IN OUT, REMOVE ALL BURRS		CURRENT REVISION APPROVAL		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
				DO NOT SCALE THIS DRAWING		DRAWN: R. Bork CHECKED: R. Bork		SIGNATURE: _____ DATE: 4/26/99	
REFERENCE DRAWINGS				USED ON:		SHEETS EFFECTED		SCALE	
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	REV	DESCRIPTION	DATE	SCALE	SIZE	DWG. NO.
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NEXT ASS'Y:						DCC		SHEET 2 of 6	
								VER. 01	

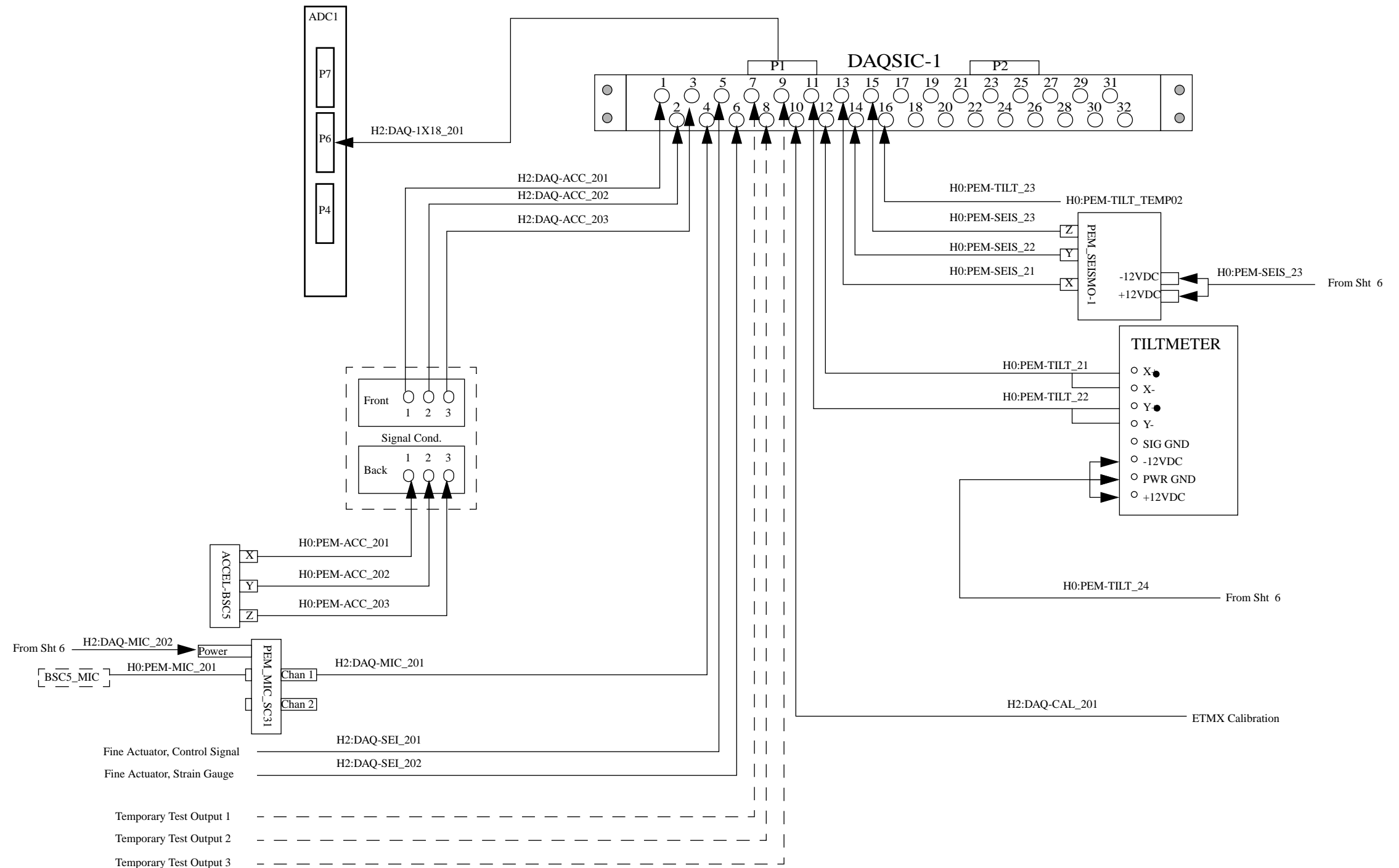


				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR MATCH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± FINISHED SURFACE RMS BREAK CORNERS IN OUT, REMOVE ALL BURRS				CURRENT REVISION APPROVAL				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
								DRAWN R. Bork				Hanford CDS Rack Layout - 1X18 CDS & DAQS Networking Connections			
								CHECKED				DATE 4/21/99			
				DO NOT SCALE THIS DRAWING								SCALE			
DWG. NO.				DESCRIPTION				DWG. NO.				DESCRIPTION			
6				5				4				3			
REFERENCE DRAWINGS				USED ON:				REV				DESCRIPTION			
				NEXT ASS'Y:								SHEETS EFFECTED			
												DATE			
												DCC			
												SCALE			
												SHEET 3 of 6			
												STD			
												VER. 01			

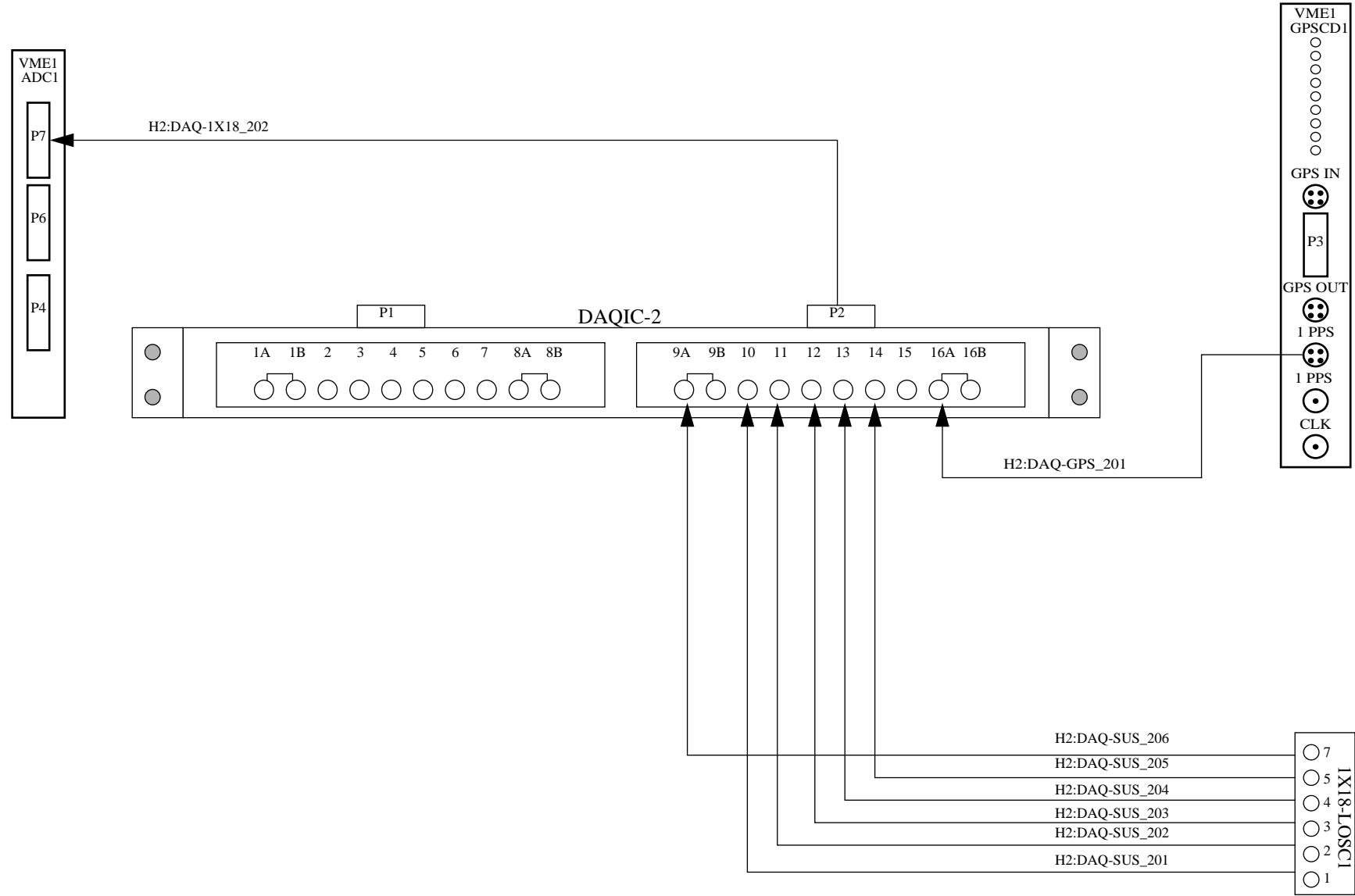
D  
C  
B  
A

# ADC-1

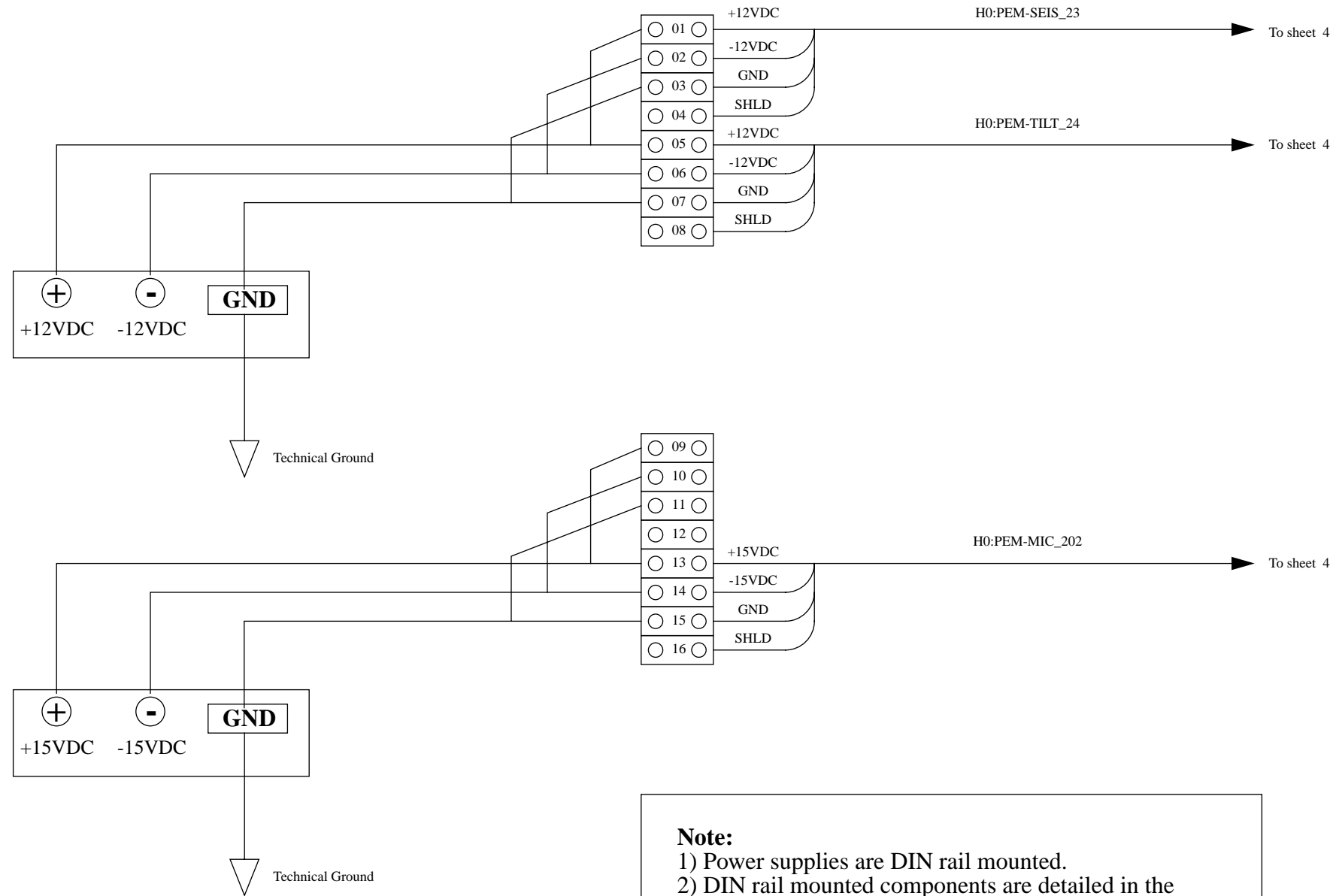
Chan	Name	Rate
00	H0:PEM-BSC5_ACCX	2048
01	H0:PEM-BSC5_ACCY	2048
02	H0:PEM-BSC5_ACCZ	2048
03	H0:PEM-BSC5_MIC	2048
04	H2:SEI-BSC5_FINE1	256
05	H2:SEI-BSC5_FINE2	256
06	H0:GDS-MX_TO1	16384
07	H0:GDS-MX_TO2	2048
08	H0:GDS-MX_TO3	2048
09	H2:LSC-ETMX_CAL	16384
10	H0:PEM-MX_TILTX	256
11	H0:PEM-MX_TILTY	256
12	H0:PEM-MX_SEISX	256
13	H0:PEM-MX_SEISY	256
14	H0:PEM-MX_SEISZ	256
15	H0:PEM-MX_TEMP2	16
16	H2:-SUS-BSC5_SENSOR_SIDE	256
17		
18	H2:SUS-BSC5_COIL_UL	2048
19	H2:SUS-BSC5_COIL_LL	2048
20	H2:-SUS-BSC5_COIL_UR	2048
21	H2:-SUS-BSC5_COIL_LR	2048
22	H2:-SUS-BSC5_COIL_SIDE	2048
23	H2:-SUS-BSC5_COIL_SUM	16384
24	H2:SUS-BSC5_SENSOR_UL	256
25	H2:SUS-BSC5_SENSOR_LL	256
26	H2:-SUS-BSC5_SENSOR_UR	256
27	H2:-SUS-BSC5_SENSOR_LR	256
28		
29		
30	H2:GDS-MX_RAMP3	16384
31	H2:GDS-MX_TRIG4	16384
	<b>TOTAL (BTYES/SEC)</b>	<b>215056</b>



				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± FINISHED SURFACE RMS BREAK CORNERS ON REMOVE ALL BURRS		CURRENT REVISION APPROVAL		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
				DO NOT SCALE THIS DRAWING		DRAWN: <b>R. Bork</b> GROUP: SIGNATURE: DATE: <b>9/24/99</b>		Hanford CDS Rack Layout - 1X18 DAQIC-1 Connections			
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	USED ON:	REV	DESCRIPTION	SHEETS EFFECTED	DATE	SCALE	SIZE DWG. NO.	REV.
6	REFERENCE DRAWINGS	5		NEXT ASS'Y:		ISSUE DESCRIPTION				B	D990179-00-C
										SHEET 4 of 6 STD VER. 01	



				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR RACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± FINISHED SURFACE RMS BREAK CORNERS IN OUT, REMOVE ALL BURRS				CURRENT REVISION APPROVAL		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
				DO NOT SCALE THIS DRAWING				DRAWN R. Bork	GROUP	SIGNATURE	DATE 4/21/99
				USED ON:		REV	DESCRIPTION	SHEETS EFFECTED	DATE	Hanford CDS Rack Layout - 1X18 DAQS Interconnect Chassis (1X18_DAQIC-2)	
REFERENCE DRAWINGS				NEXT ASS'Y:		ISSUE DESCRIPTION		DEC		SCALE	SIZE B
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION							D990179-00-C	
6		5								SHEET 5 of 6	
										STD	
										VER. 01	



**Note:**  
 1) Power supplies are DIN rail mounted.  
 2) DIN rail mounted components are detailed in the rack 1X18 suspension control drawing (D-99xxxxx).

				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR RACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± FINISHED SURFACE RMS BREAK CORNERS IN OUT, REMOVE ALL BURRS				CURRENT REVISION APPROVAL				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
				DO NOT SCALE THIS DRAWING				DRAWN: R. Bork				GROUP: SIGNATURE: DATE: 9/24/99			
				USED ON:				CHECKED:				Hanford CDS Rack Layout - 1X18 DC Power Distribution			
REFERENCE DRAWINGS				NEXT ASS'Y:				REV: DESCRIPTION				SCALE: SIZE: DWG. NO. D990179-00-C			
6				5				3				1			
								SHEETS EFFECTED: DATE:				CAD FILE: SCALE: SHEET 6 of 6 STD VER: 01			