

1Y19 (Left 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 (LEMO)	LIGO		DAQIC-1
16	DAQS Interconnect Chassis (BNC)	LIGO		DAQIC-2
17	GDS Interconnect Chassis (BNC)	LIGO		GDSIC-1
19	Endevco Accelerometer Signal Cond.	LIGO		ENDEV-1
21	VME Crate	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

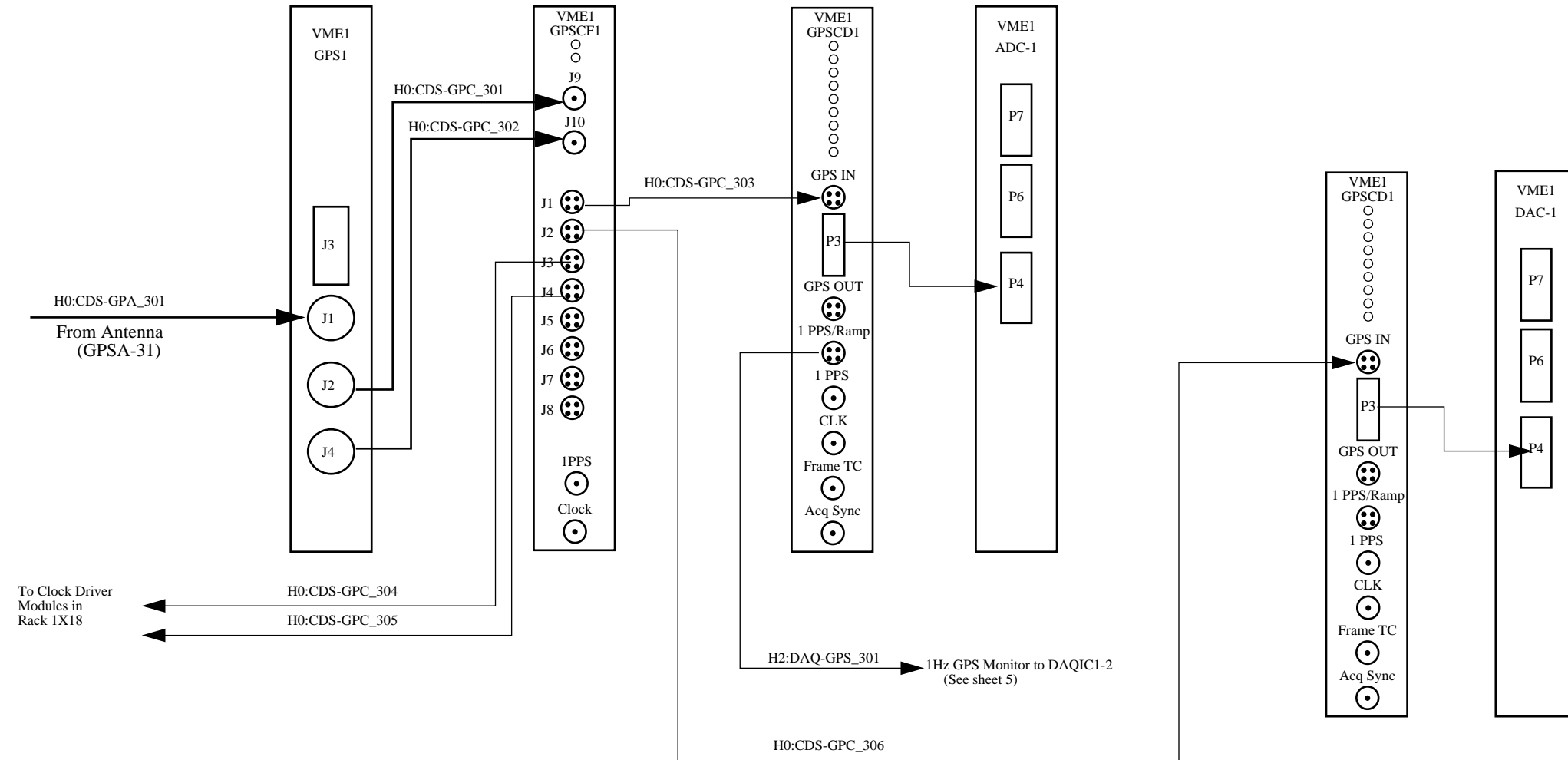
Slot	Description	Vendor	Model	Designator
1	MIPS Processor	Heurikon	4700	CPU-1
2	Reflected Memory	VMIC	5588DMA	RM-1
3	Single/Multi Mode Cnvrtter	VMIC	5592	SMMC-1
4	GPS Clock Master	Brandywine		GPS-1
5	Timing Clock Fanout	LIGO		GPSCF-1
6	Timing Clock Driver	LIGO		GPSCD-1
7	ADC	ICS	110B1	ADC1
8	ADC	ICS	110B1	ADC2
9	Timing Clock Driver	LIGO		GPSCD-2
10	DAC	ICS	115	DAC1
11	68040 Processor	Motorola	MVME262	CPU-2
12				
13				
14				
15				

VME-2 Modules / Slot Assignments

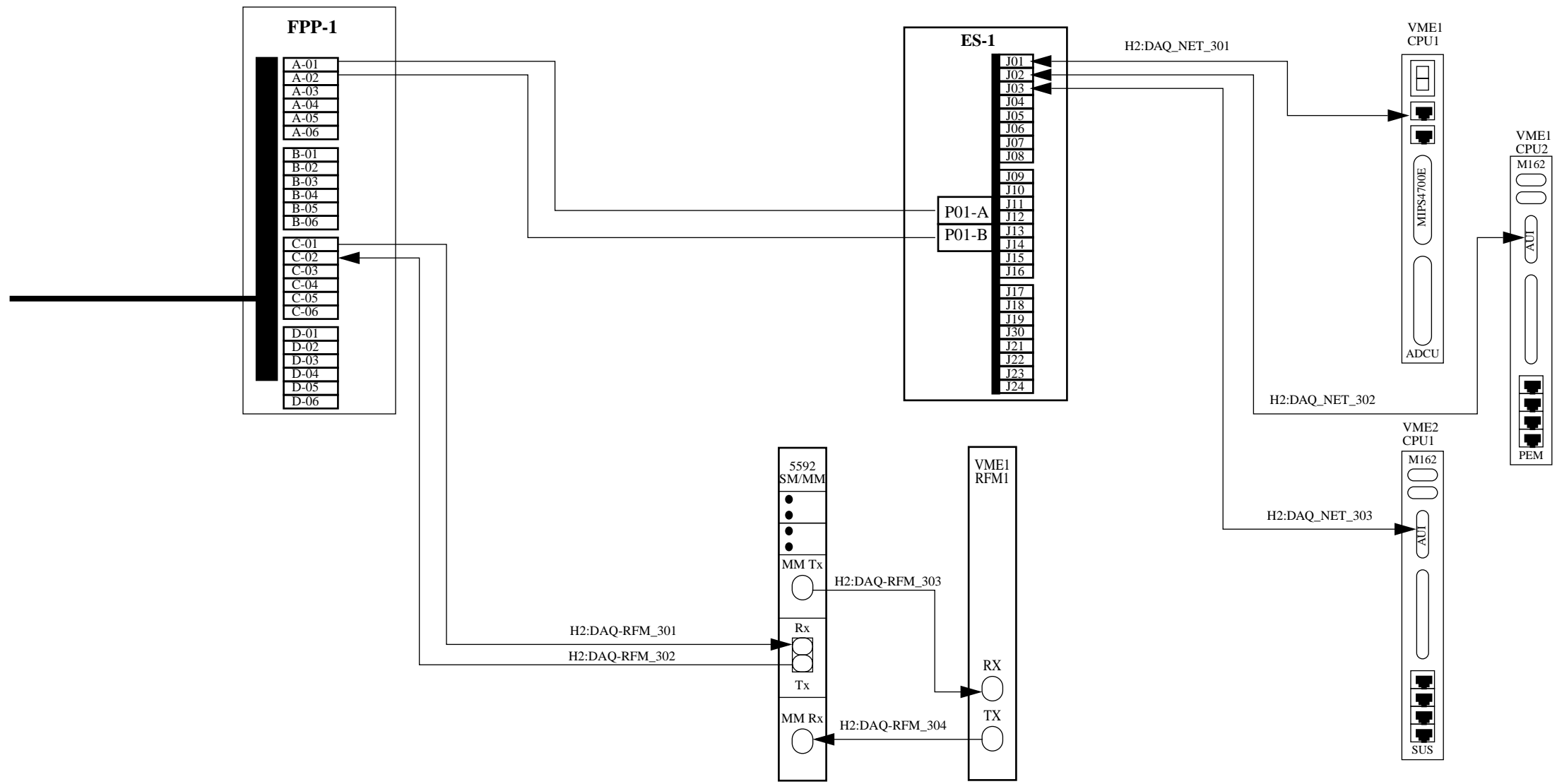
Slot	Description	Vendor	Model	Designator
1	68040 Processor	Motorola	MVME262	CPU-1
2	ADC	VMIC	3113A	ADC1
3	DAC	VMIC	4116	DAC1
4	Relay Output Module	Xycom	220	ROI
5				

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 BLURS		File: Hanford Observatory CDS hanford1/opt/CDS/c/docs/daq/drawings/working/Rack_1Y19.fm5		CURRENT REVISION APPROVAL		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
DO NOT SCALE THIS DRAWING		REV		DRAWN R. Bork		SIGNATURE DATE 4/21/99	
USED ON:		DESCRIPTION		CHECKED D.Barker		LHO 03 Oct 99	
NEXT ASS'Y:		SHEETS EFFECTED		DATE		SCALE	
REFERENCE DRAWINGS		ISSUE DESCRIPTION		BCC		SIZE DWG. NO. D990181-00-C	
6		5		4		3	
						SHEET 1 of 6	
						STD VER. 01	

Clock Distribution



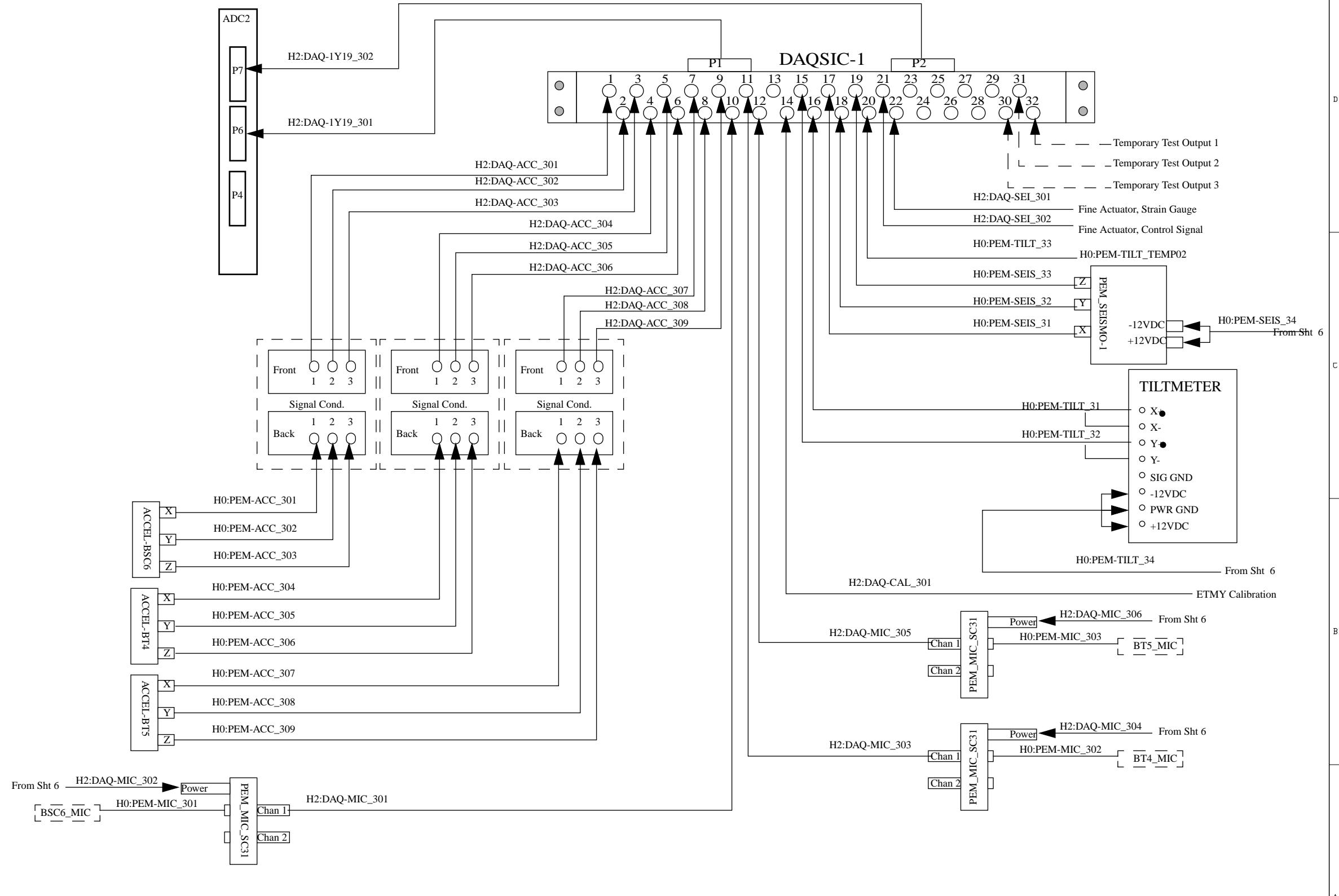
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				DO NOT SCALE THIS DRAWING		REV		DRAWN: R. BARKER CHECKED: D. BARKER		DATE: 4/26/99 03 Oct 99	
REFERENCE DRAWINGS				USED ON:		SHEETS EFFECTED		GROUP: LHO		SCALE: B	
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								BCC		SHEET 2 of 6	



				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± FINISHED SURFACE RMS BREAK CORNERS IN OUT. REMOVE ALL BLURS		File: Hanford Observatory CDS hanford1/opt/CDS/c/docs/daq/drawings/working/Rack_1Y19.fm5		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													
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REFERENCE DRAWINGS				NEXT ASS'Y:				REV				DESCRIPTION				SHEETS EFFECTED				DATE							
												BCC				SCALE				SHEET 3 of 6				STD			
																D990181-00-C				VER. 01							

ADC-2

Chan	Name	Rate
00	H0:PEM-BSC6_ACCX	2048
01	H0:PEM-BSC6_ACCY	2048
02	H0:PEM-BSC6_ACCZ	2048
03	H0:PEM-BT4_ACCX	2048
04	H0:PEM-BT5_ACCY	2048
05	H0:PEM-BT4_ACCZ	2048
06	H0:PEM-BT5_ACCX	2048
07	H0:PEM-BT5_ACCY	2048
08	H0:PEM-BT5_ACCZ	2048
09	H0:PEM-BSC6_MIC	2048
10	H0:PEM-BT4_MIC	2048
11	H0:PEM-BT5_MIC	2048
12		
13	H2:LSC-ETMY_CAL	16384
14	H0:PEM-MY_TILTY	256
15	H0:PEM-MY_TILTX	256
16	H0:PEM-MY_SEISX	256
17	H0:PEM-MY_SEISY	256
18	H0:PEM-MY_SEISZ	256
19	H0:PEM-MY_TEMP2	16
20	H2:SEI-BSC6_FINE1	256
21	H2:SEI-BSC6_FINE2	256
22		
23		
24		
25		
26		
27		
28		
29	H0:GDS-MY_TO1	16384
30	H0:GDS-MY_TO2	2048
31	H0:GDS-MY_TO3	2048
	TOTAL (BTYES/SEC)	126496



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 BLARS

File: Hanford Observatory CDS
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CURRENT REVISION APPROVAL			
DRAWN	R. Bork	GROUP	SIGNATURE
CHECKED			DATE 2/24/99
	D. Barker	LHO	03 Oct 99

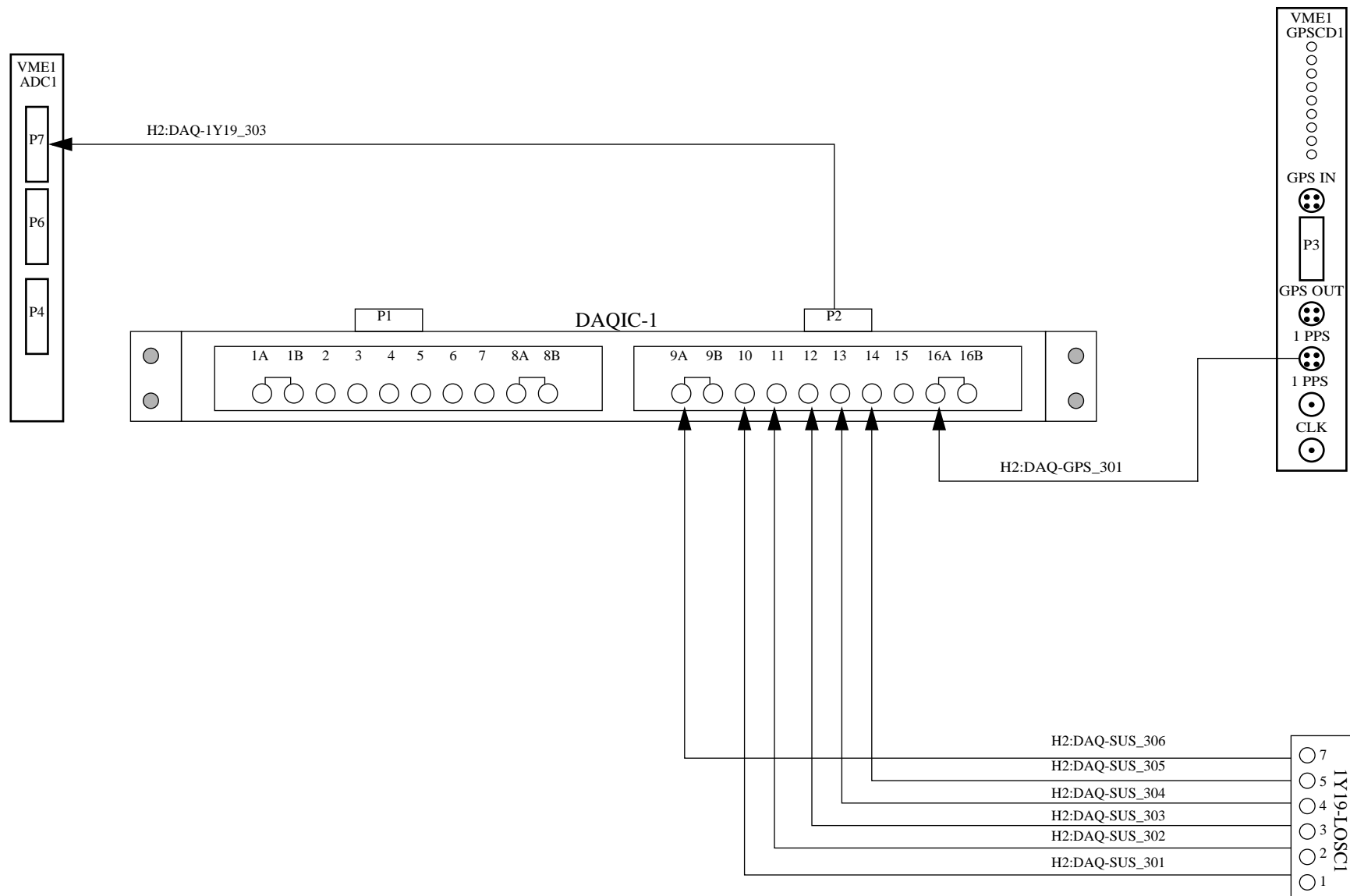
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Hanford CDS Rack Layout - 1Y19 DAQIC-1 Connections

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6	REFERENCE DRAWINGS	5								B	D990181-00-C	
											4 of 6	

ADC-1

Chan	Name	Rate
00		
01		
02		
03		
04		
05		
06		
07		
08		
09		
10		
11		
12		
13		
14		
15		
16	H2:-SUS-BSC6_SENSOR_SIDE	256
17		
18	H2:SUS-BSC6_COIL_UL	2048
19	H2:SUS-BSC6_COIL_LL	2048
20	H2:-SUS-BSC6_COIL_UR	2048
21	H2:-SUS-BSC6_COIL_LR	2048
22	H2:-SUS-BSC6_COIL_SIDE	2048
23	H2:-SUS-BSC6_COIL_SUM	16384
24	H2:SUS-BSC6_SENSOR_UL	256
25	H2:SUS-BSC6_SENSOR_LL	256
26	H2:-SUS-BSC6_SENSOR_UR	256
27	H2:-SUS-BSC6_SENSOR_LR	256
28		
29		
30	H2:GDS-MY_RAMP3	16384
31	H2:GDS-MY_TRIG4	16384
	TOTAL (BYTES/SEC)	121344



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 BARRS

File: Hanford Observatory CDS
hanford1/opt/CDS/c/docs/daq/drawings/working/Rack_1Y19.fm5

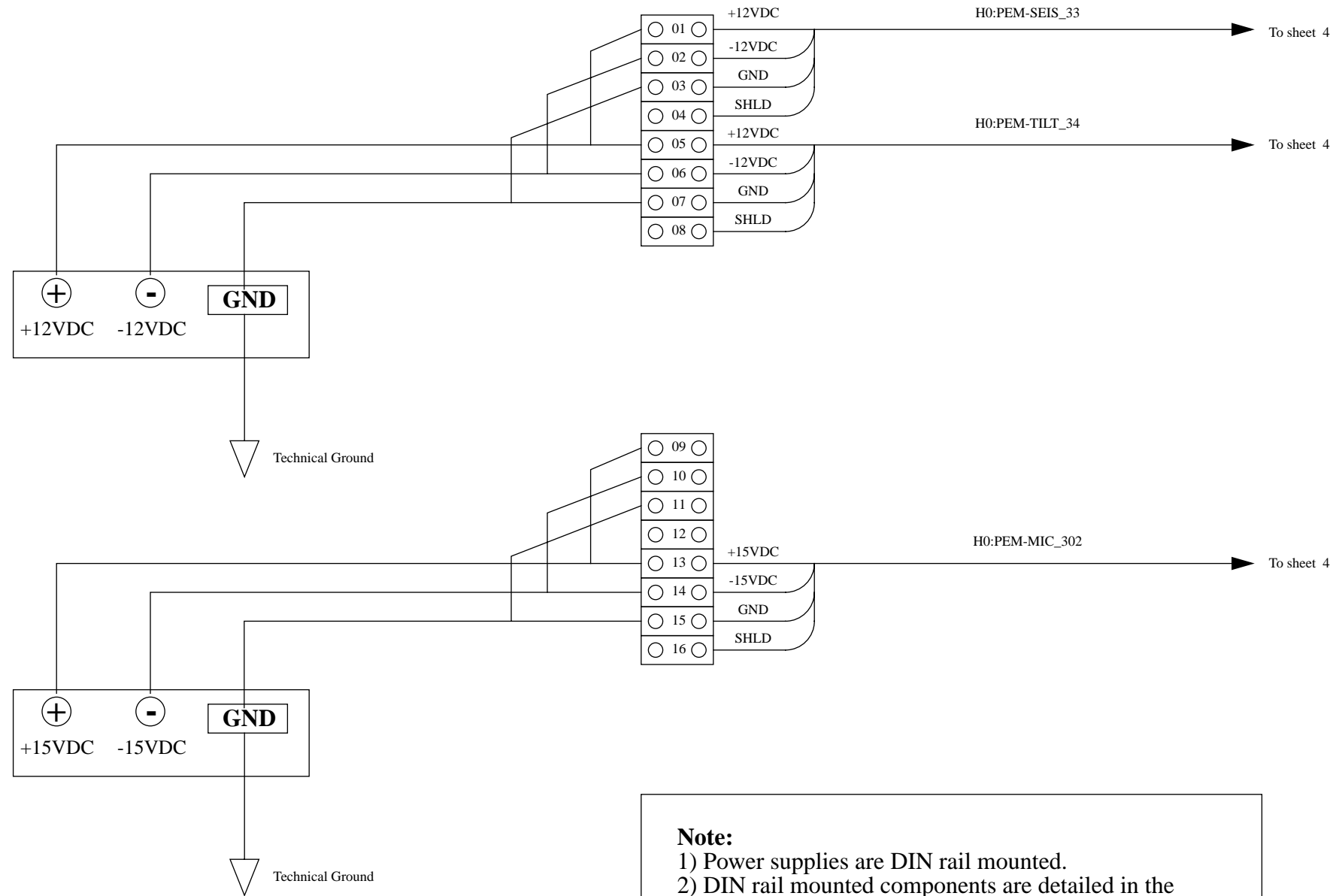
CURRENT REVISION APPROVAL			
DRAWN	R. Bork	GROUP	SIGNATURE
CHECKED			DATE
	D.Barker	LHO	03 Oct 99

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Hanford CDS Rack Layout - 1Y19
DAQS Interconnect Chassis
(1Y19_DAQIC-2)

DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	USED ON:	REV.	DESCRIPTION	SHEETS EFFECTED	DATE	BCC	SCALE	SHEET	STD.	VER.
6	REFERENCE DRAWINGS	5									5 of 6		D1

D
C
B
A



Note:
 1) Power supplies are DIN rail mounted.
 2) DIN rail mounted components are detailed in the rack 1Y19 suspension control drawing (D-99xxxxx).

				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		File: Hanford Observatory CDS hanford1/opt/CDS/c/docs/daq/drawings/working/Rack_1Y19.fm5		CURRENT REVISION APPROVAL				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
				TOLERANCES: FRACTIONAL ± ANGULAR MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± FINISHED SURFACE RMS BREAK CORNERS ON OUT. REMOVE ALL BURRS				DRAWN	R. Bork	GROUP	SIGNATURE	DATE	7/24/99		
				DO NOT SCALE THIS DRAWING				CHECKED		LHO		03 Oct 99			
				USED ON:		REV		DESCRIPTION		SHEETS EFFECTED		DATE			
REFERENCE DRAWINGS				NEXT ASS'Y:		ISSUE DESCRIPTION		BCC		SCALE		SIZE DWG. NO. D990181-00-C			
6				5				4				3			
												6 of 6		STD	VER. 01