

Rack Mount Components w/Locations

Loc	Description	Vendor	Model	Designator
02	+/- 0-30VDC Power Supply	Sorenson		PS-1
03	+/- 0-30VDC Power Supply	Sorenson		PS-2
04	+/- 0-30VDC Power Supply	Sorenson		PS-3
05	+/- 0-30VDC Power Supply	Sorenson		PS-4
07	DIN Rail w/terminal blocks (rear mount)			DIN-1
08	VME Crate (Data Acquisition)			VME-1
17	DAQS Interface Chassis (LEMO)	LIGO		DAQIC-1
18	DAQS Interface Chassis (LEMO)	LIGO		DAQIC-2
20	DAQS Interface Chassis (BNC/1KFilter)	LIGO		DAQIC-3
21	Accelerometer Signal Conditioner	Endevco		ACCSC-1
22	Accelerometer Signal Conditioner	Endevco		ACCSC-2
23	DAQS Interface Chassis (BNC/1KFilter)	LIGO		DAQIC-4
29	VME Crate (Global Diagnostics)			VME-2
38	GDS BNC Patch Panel	LIGO		GDSIC-1

NOTES:
 1) This drawing is PRELIMINARY and is only to be used for initial installation of rack mount components and connection of PEM signals. Cabling to other Detector components and GDS are pending final equipment designs for those subsystems.

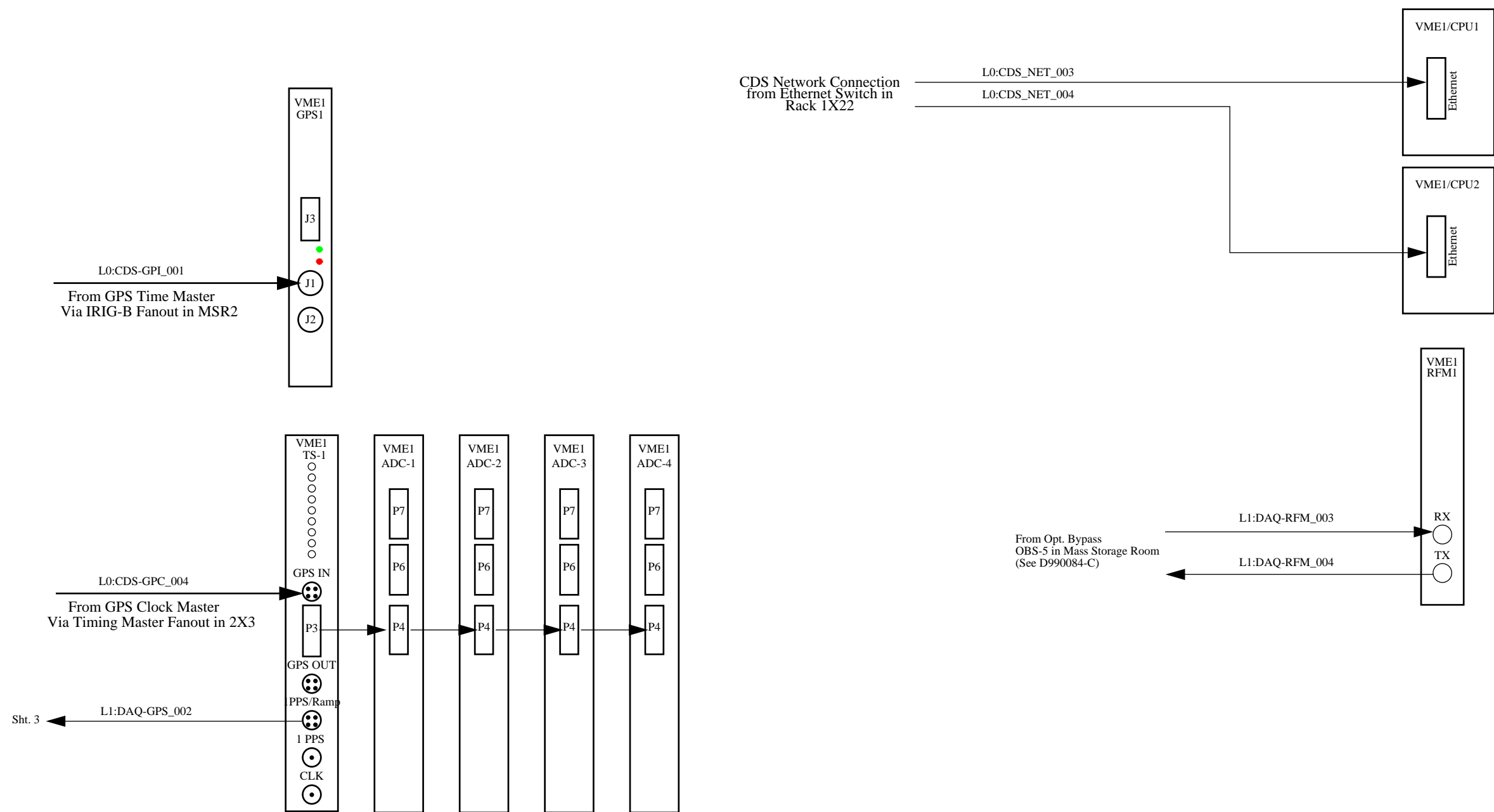
VME1 Modules / Slot Assignments

Slot	Description	Vendor	Model	Designator
1	MIPS Processor	Heurikon	4700E	CPU-1
2	MIPS Processor	Heurikon	4700E	CPU-2
3	Reflected Memory	VMIC	5588DMA	RFM-1
4	GPS Slave	Brandywine		GPS-1
5	Timing Slave	LIGO		TS-1
6	32 channel ADC	ICS	110B1	ADC-1
7	32 channel ADC	ICS	110B1	ADC-2
8	32 channel ADC	ICS	110B1	ADC-3
9	32 channel ADC	ICS	110B1	ADC-4
10				
11	Backplane Split -----	-----	-----	-----
12	68040 Processor	Motorola	162-333	CPU-3
13-21	Empty	-----	-----	-----

VME2 Modules / Slot Assignments

Slot	Description	Vendor	Model	Designator
1	MIPS Processor	Heurikon	4700E	CPU-1
2	MIPS Processor	Heurikon	4700E	CPU-2
3	Reflected Memory	VMIC	5588DMA	RFM-1
4	GPS Slave	Brandywine		GPS-1
5	Timing Slave	LIGO		TS-1
6	32 channel DAC	ICS	115	DAC-1

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	
DRAWN R. Bork	GROUP	SIGNATURE	DATE 1/21/00	Livingston CDS Rack Layout - 1X5 Chassis Layouts	
CHECKED				SCALE	SIZE DWG. NO. B D990163-00-C
DO NOT SCALE THIS DRAWING	REV	DESCRIPTION	SHEETS EFFECTED	DATE	REV. D1
USED ON:		ISSUE DESCRIPTION			VER. D1
NEXT ASS'Y:					
DWG. NO. 6	DESCRIPTION	DWG. NO. 5	DESCRIPTION	DWG. NO. 4	DESCRIPTION
REFERENCE DRAWINGS					



D990084-C	Livingston DAQS Network			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 Livingston CDS Rack Layout - 1X5 Network and Timing Connections VME Crate 1 (ADCU 3 & 4)					
D990085-C	Livingston Control and Monitoring Network				DRAWN	GROUP	SIGNATURE	DATE						
D990083-C	Livingston Timing System Connections				CHECKED			1/21/00						
				DO NOT SCALE THIS DRAWING	REV	DESCRIPTION	SHEETS EFFECTED	DATE	SCALE	SIZE	DWG. NO.	REV.		
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	USED ON:						B	D990163-00-C			
REFERENCE DRAWINGS				NEXT ASS'Y:	ISSUE DESCRIPTION				DCC	CAD FILE	SCALE	SHEET 2 of 9	STD	VER. 01

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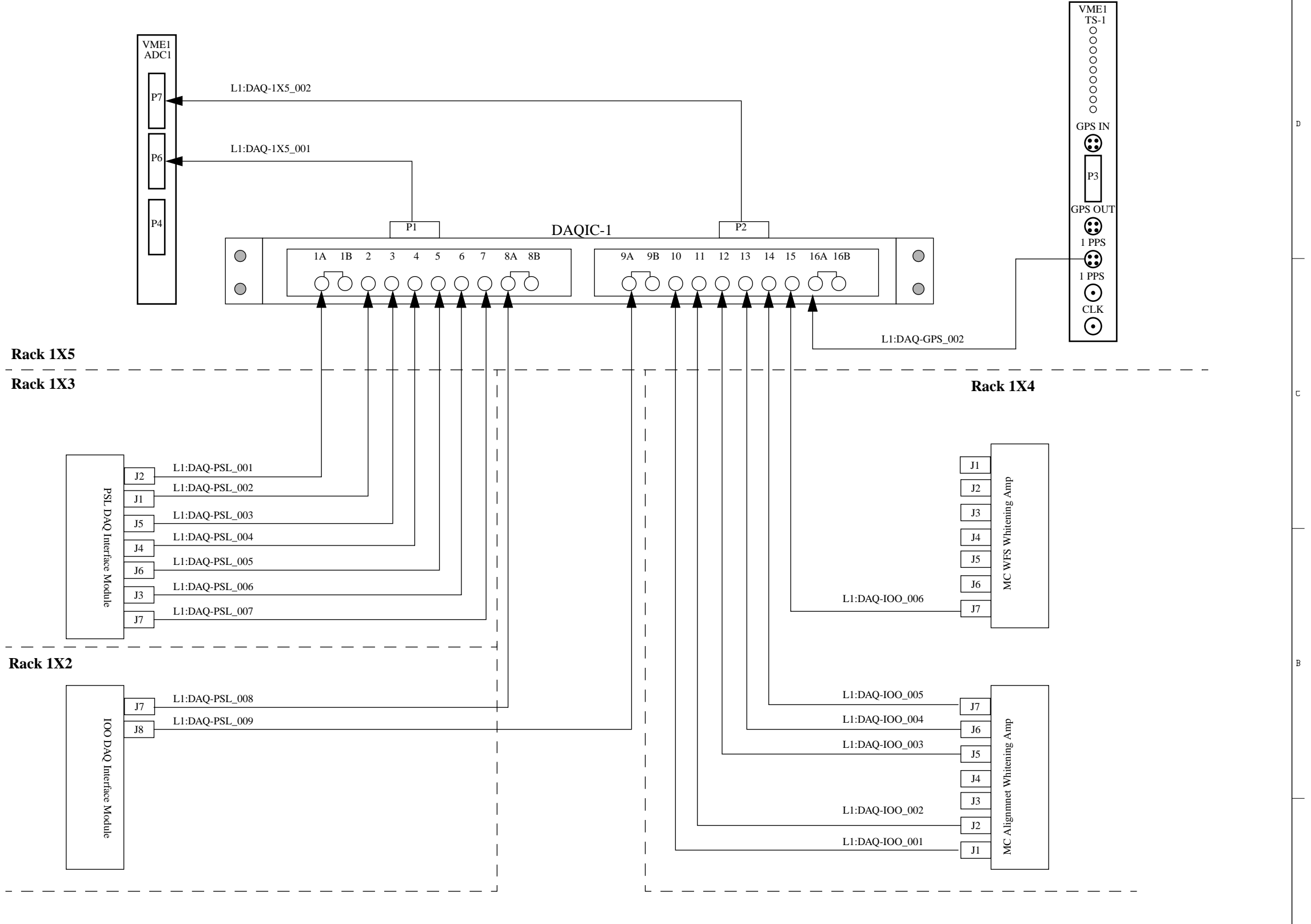
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ADC-1

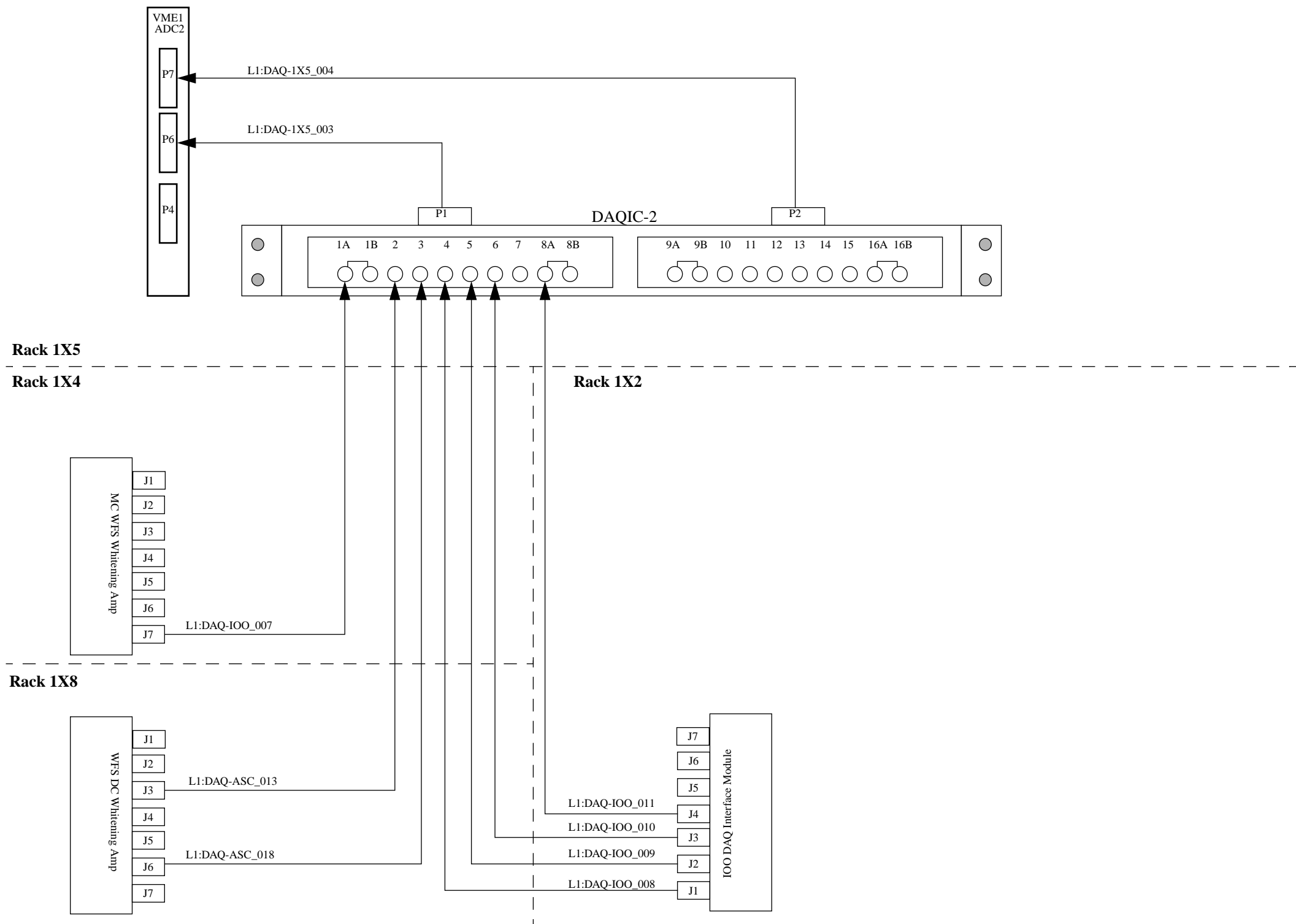
Conn	Chan	Name	Rate
1A	00		
	01	L1:PSL-FSS_FAST_F	16384
2	02	L1:PSL-FSS_MIXERM_F	16384
	03	L1:PSL-FSS_PCDRIVE_F	16384
3	04	L1:PSL-FSS_RFPDDC_F	256
	05	L1:PSL-FSS_RCTRANSPD_F	256
4	06	L1:PSL-PMC_ERR_F	16384
	07	L1:PSL-PMC_PZT_F	2048
5	08	L1:PSL-PMC_RFPDDC_F	256
	09	L1:PSL-PMC_TRANSPD_F	256
6	10	L1:PSL-ISS_ISERR_F	16384
	11	L1:PSL-ISS_ACTM_F	16384
7	12	L1:PSL-ISS_MC1_F	16384
	13	L1:PSL-ISS_MC2_F	16384
8A	14	L1:PSL-QPD2_1F	2048
	15	L1:PSL-QPD2_2F	2048
9A	16	L1:PSL-QPD2_3F	2048
	17	L1:PSL-QPD2_4F	2048
10	18	L1:IOO-WFS1_P	2048
	19	L1:IOO-WFS1_Y	2048
11	20	L1:IOO-WFS2_P	2048
	21	L1:IOO-WFS2_Y	2048
12	22	L1:IOO-MC1_P	2048
	23	L1:IOO-MC1_Y	2048
13	24	L1:IOO-MC1_REF	2048
	25	L1:IOO-MC2_P	2048
14	26	L1:IOO-MC2_Y	2048
	27	L1:IOO-MC2_REF	2048
15	28	L1:IOO-WFS1_DCP	2048
	29	L1:IOO-WFS1_DCY	2048
16A	30	L1:GDS-GPS_RAMP2	16384
	31	L1:GDS-GPS_TRIG2	16384
TOTAL (BTYES/SEC)			399360



				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		CURRENT REVISION APPROVAL		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY	
				DO NOT SCALE THIS DRAWING		DRAWN: R. Bork		Livingston CDS Rack Layout - 1X5 DAQIC-1 Connections	
DWG. NO.		DESCRIPTION		USED ON:		CHECKED:		SCALE	
6		REFERENCE DRAWINGS		NEXT ASS'Y:		DATE		SIZE DWG. NO.	
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						DATE		STD	
						DATE		VER. 01	

ADC-2

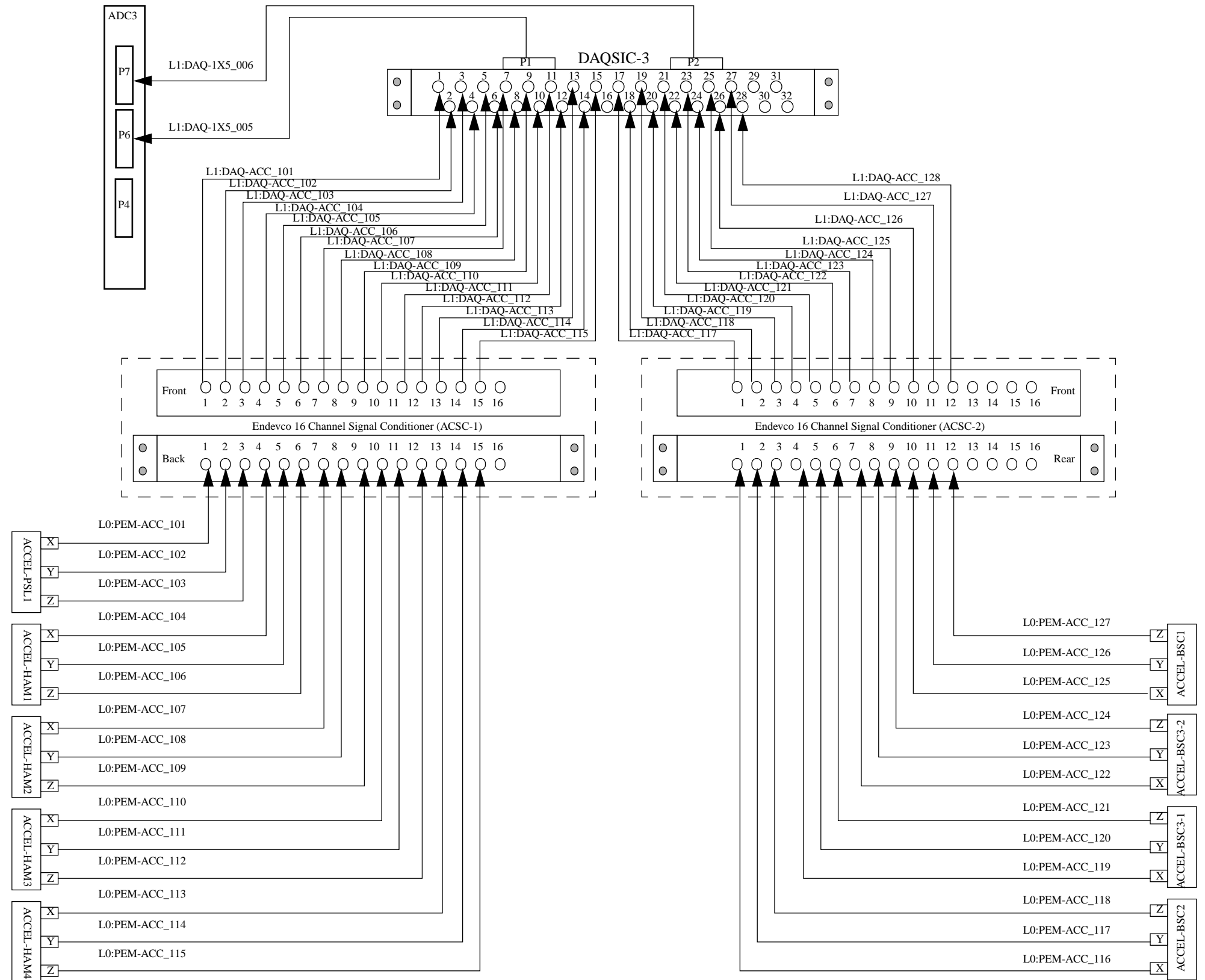
Conn	Chan	Name	Rate
1A	00	L1:IOO-WFS2_DCP	2048
1B	01	L1:IOO-WFS2_DCPY	2048
2	02	L1:IOO-WFS3_DCP	2048
	03	L1:IOO-WFS3_DCPY	2048
3	04	L1:IOO-WFS4_DCP	2048
	05	L1:IOO-WFS4_DCPY	2048
4	06	L1:IOO-MC_I	2048
	07	L1:IOO-MC_LOOP	2048
5	08	L1:IOO-MC_AO	2048
	09	L1:IOO-MC_TEST_MON	2048
6	10	L1:IOO-PSL_TEST_MON	2048
	11	L1:IOO-MCA_OUT_MON	2048
7	12		
	13		
8A	14	L1:IOO-PSL_OUT_MON	16384
8B	15		
9A	16		
	17		
10	18		
	19		
11	20		
	21		
12	22		
	23		
13	24		
	25		
14	26		
	27		
15	28		
	29		
16A	30		
	31		
TOTAL (BTYES/SEC)			114688



				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			
				DO NOT SCALE THIS DRAWING				DRAWN: R. Bork CHECKED: []			
DWG. NO.				DESCRIPTION				DATE: 1/21/00			
REFERENCE DRAWINGS				USED ON:				SHEETS EFFECTED			
NEXT ASS'Y:				REV				DATE			
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								LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
								Livingston CDS Rack Layout - 1X5 DAQIC-2 Connections			
								SCALE: B			
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								SHEET 4 of 9			
								STD			
								VER. 01			

ADC-3

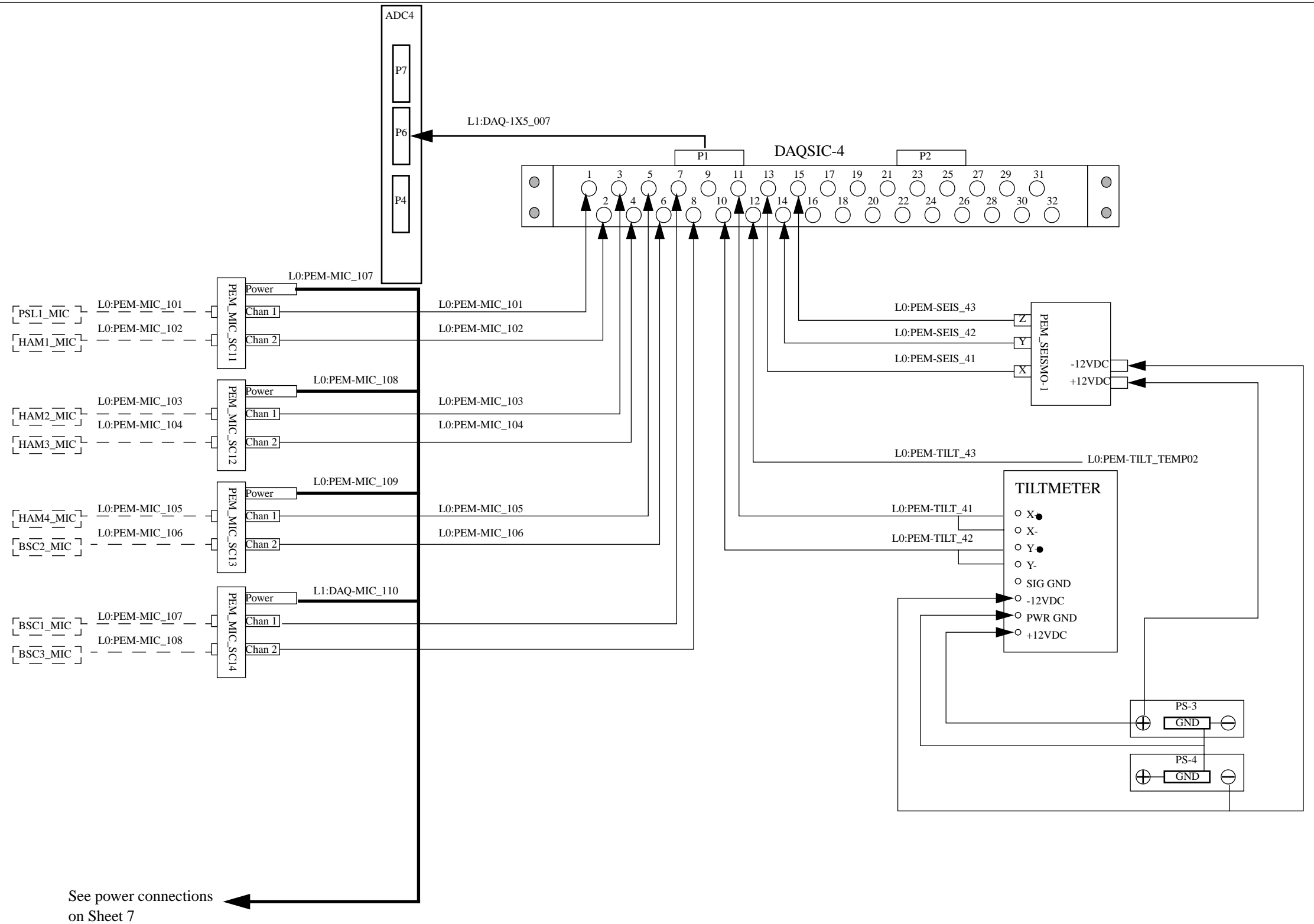
Conn	Chan	Name	Rate
1	00	L0:PEM-PSL1_ACCX	2048
2	01	L0:PEM-PSL1_ACCY	2048
3	02	L0:PEM-PSL1_ACCZ	2048
4	03	L0:PEM-HAM1_ACCX	2048
5	04	L0:PEM-HAM1_ACCY	2048
6	05	L0:PEM-HAM1_ACCZ	2048
7	06	L0:PEM-HAM2_ACCX	2048
8	07	L0:PEM-HAM2_ACCY	2048
9	08	L0:PEM-HAM2_ACCZ	2048
10	09	L0:PEM-HAM3_ACCX	2048
11	10	L0:PEM-HAM3_ACCY	2048
12	11	L0:PEM-HAM3_ACCZ	2048
13	12	L0:PEM-HAM4_ACCX	2048
14	13	L0:PEM-HAM4_ACCY	2048
15	14	L0:PEM-HAM4_ACCZ	2048
16	15		
17	16	L0:PEM-BSC2_ACCX	2048
18	17	L0:PEM-BSC2_ACCY	2048
19	18	L0:PEM-BSC2_ACCZ	2048
20	19	L0:PEM-BSC3_ACC1X	2048
21	20	L0:PEM-BSC3_ACC1Y	2048
22	21	L0:PEM-BSC3_ACC1Z	2048
23	22	L0:PEM-BSC3_ACC2X	2048
24	23	L0:PEM-BSC3_ACC2Y	2048
25	24	L0:PEM-BSC3_ACC2Z	2048
26	25	L0:PEM-BSC1_ACCX	2048
27	26	L0:PEM-BSC1_ACCY	2048
28	27	L0:PEM-BSC1_ACCZ	2048
29	28		
30	29		
31	30		
32	31		
		TOTAL (BTYES/SEC)	110592



				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR RACH ± 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: R. Bork CHECKED:		Livingston CDS Rack Layout - 1X5 DAQIC-3 Connections	
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								SHEET 5 of 9	
								STD VER. 01	

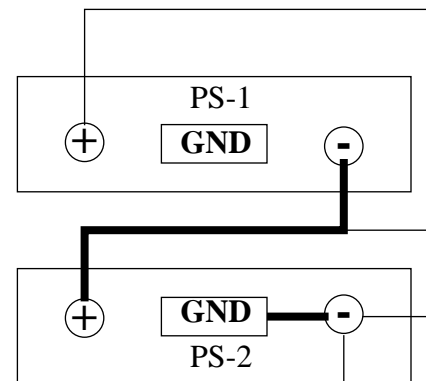
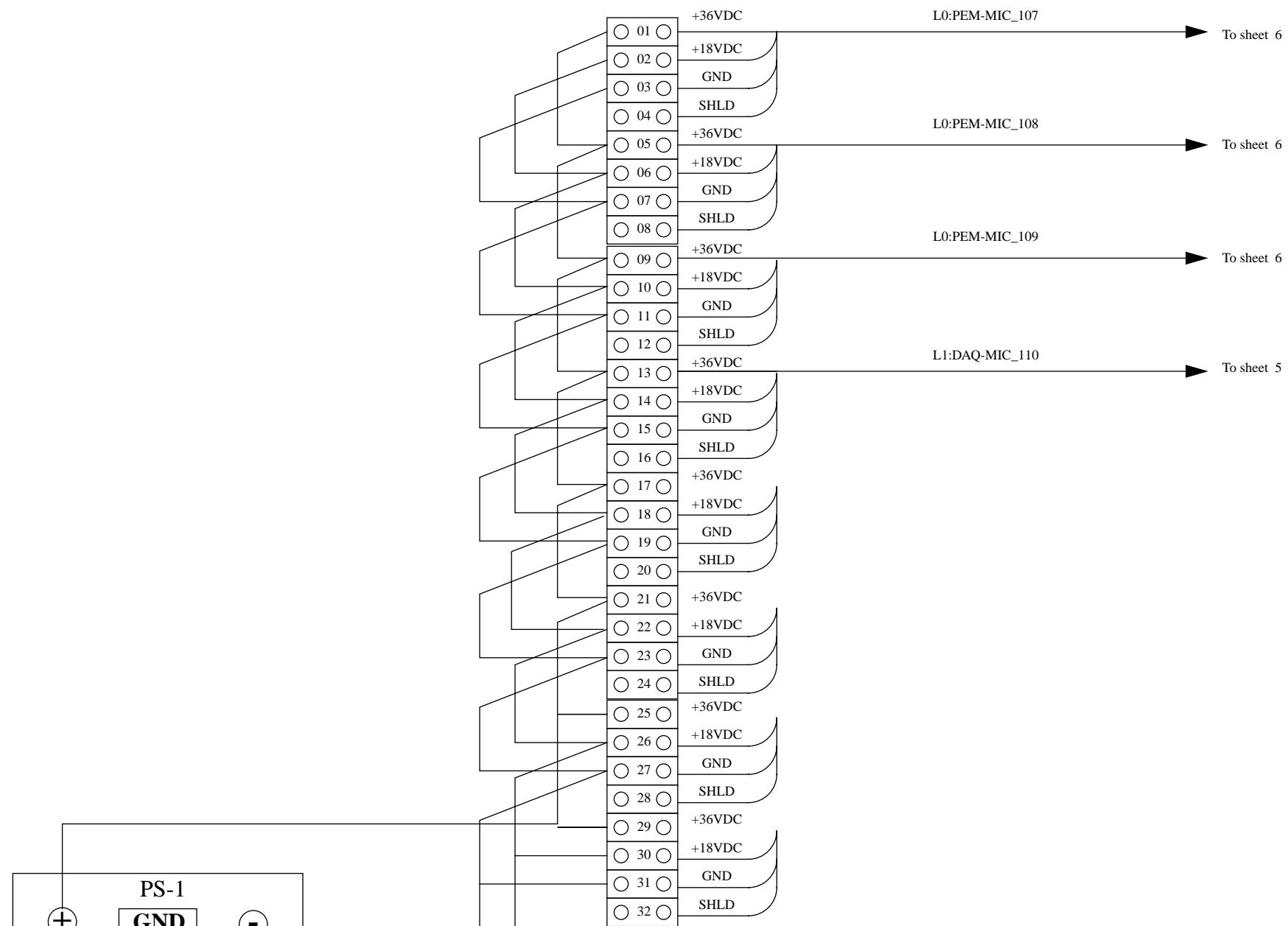
ADC-4

Conn	Chan	Name	Rate
1	00	L0:PEM-PSL1_MIC	2048
2	01	L0:PEM-HAM1_MIC	2048
3	02	L0:PEM-HAM2_MIC	2048
4	03	L0:PEM-HAM3_MIC	2048
5	04	L0:PEM-HAM4_MIC	2048
6	05	L0:PEM-BSC2_MIC	2048
7	06	L0:PEM-BSC1_MIC	2048
8	07	L0:PEM-BSC3_MIC	2048
9	08		
10	09	L0:PEM-TILTY	256
11	10	L0:PEM-TILTX	256
12	11	L0:PEM-TILTT	256
13	12	L0:PEM-LVEA_SEISX	256
14	13	L0:PEM-LVEA_SEISY	256
15	14	L0:PEM-LVEA_SEISZ	256
16	15		
17	16	L1:GDS-LVEA_DAC1	16384
18	17	L1:GDS-LVEA_DAC2	16384
19	18	L1:GDS-LVEA_TO1	16384
20	19	L1:GDS-LVEA_TO2	16384
21	20	L1:GDS-LVEA_TO3	16384
22	21	L1:GDS-LVEA_TO4	16384
23	22	L1:GDS-LVEA_TO5	2048
24	23	L1:GDS-LVEA_TO6	2048
25	24	L1:GDS-LVEA_TO7	2048
26	25	L1:GDS-LVEA_TO8	2048
27	26	L1:GDS-LVEA_TO9	2048
28	27	L1:GDS-LVEA_T10	2048
29	28	L1:GDS-LVEA_T11	2048
30	29	L1:GDS-LVEA_T12	2048
31	30	L1:GDS-LVEA_T13	2048
32	31	HPEM-NBR_2K	16384
		TOTAL (BTYES/SEC)	302080

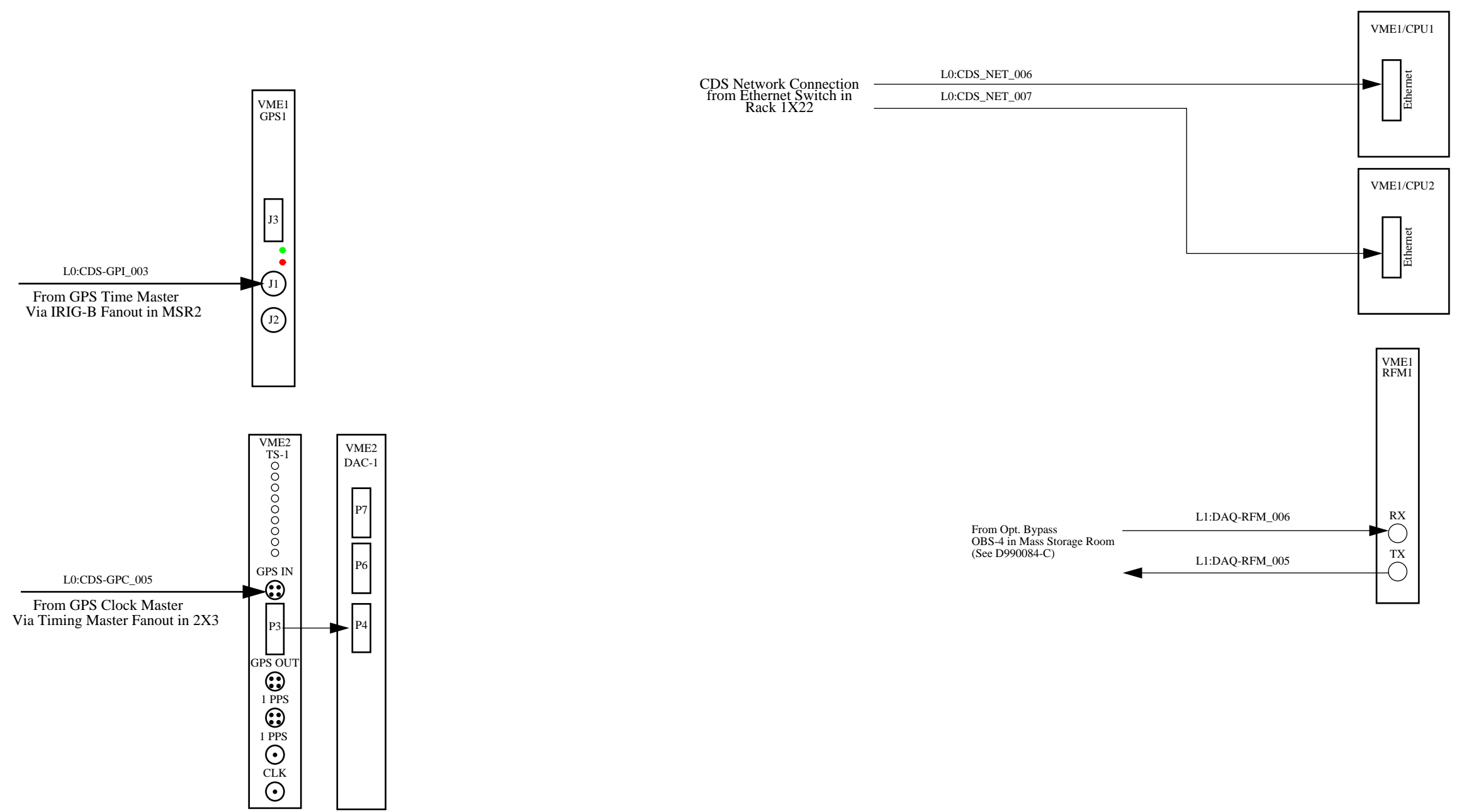


See power connections
on Sheet 7

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR RACH ± 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								
DWG. NO.	DESCRIPTION	DWG. NO.	DESCRIPTION	REV	DESCRIPTION	SHEETS EFFECTED	DATE	DRAWN R. Bork	CHECKED	GROUP	SIGNATURE	DATE 1/21/00	SCALE	SIZE B	DWG. NO. D990163-00-C	REV. 1
6	REFERENCE DRAWINGS	5		4		3										



				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 BURRS				CURRENT REVISION APPROVAL				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY			
				DO NOT SCALE THIS DRAWING				DRAWN R. Bork				Livingston CDS Rack Layout - 1X5 Microphone DC Power Distribution			
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REFERENCE DRAWINGS				NEXT ASS'Y:				REV				SCALE			
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				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 1/21/00	
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REFERENCE DRAWINGS				NEXT ASS'Y:		REV		DESCRIPTION		SHEETS EFFECTED		DATE	
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				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 DRAWN: R. Bork CHECKED: _____ GROUP: _____ SIGNATURE: _____ DATE: 1/21/00				LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY Livingston CDS Rack Layout - 1X5 GDS Connections			
DO NOT SCALE THIS DRAWING				REV	DESCRIPTION	SHEETS EFFECTED	DATE								
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6	REFERENCE DRAWINGS	5	NEXT ASS'Y:						B	D990163-00-C					
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