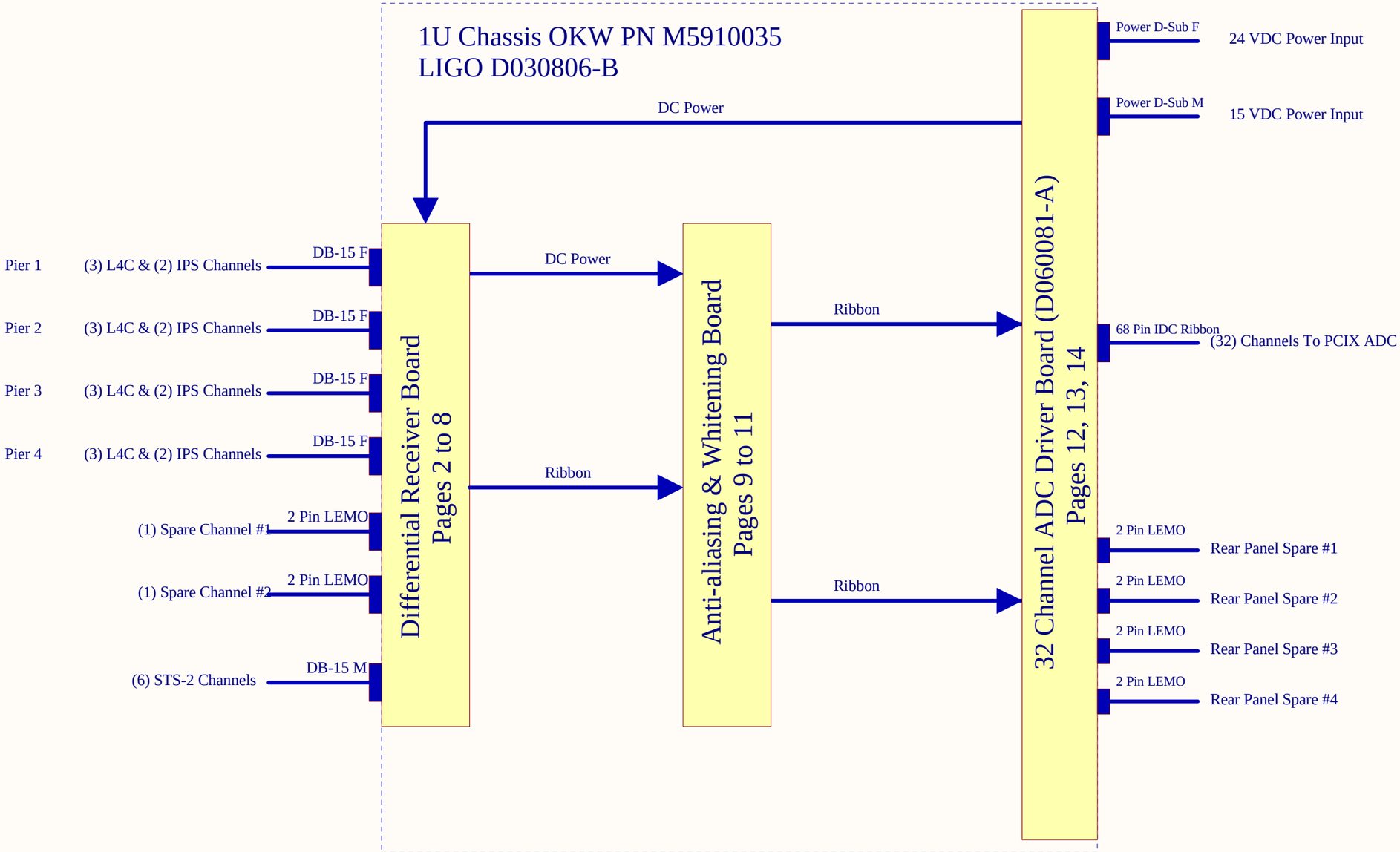
Seismic Interface Chassis Overview



Title: *Seismic Interface Chassis Overview*			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: B	Engineer: *RS Abbott*	Date: 4/20/2006 Time: 2:35:38 PM
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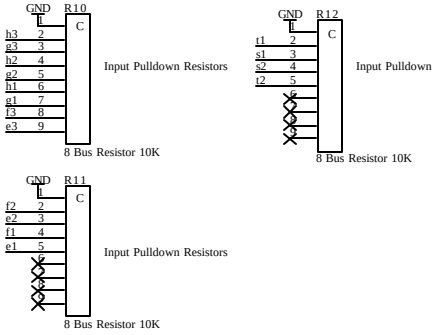
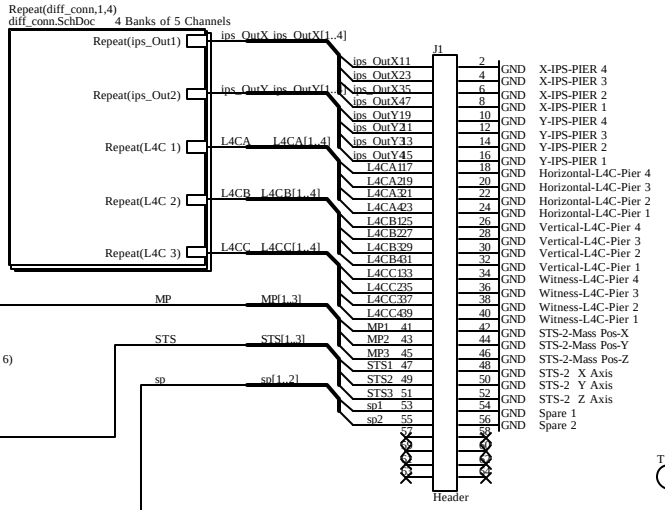
Seismic Interface Chassis Differential Inputs High Level View

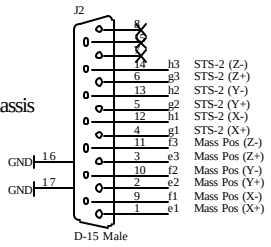


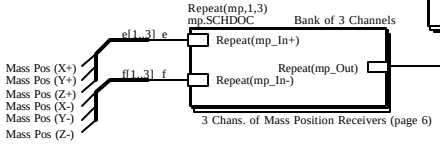
This block shows details of the 4 DB-15 inputs from the L4C/IPS field interface box
See Page 3 of 15 for details

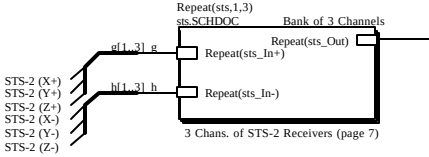


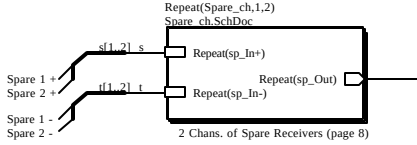
To Anti-aliasing & Whitening Board

Input From STS-2 Chassis



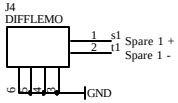




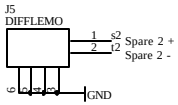


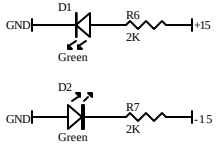
MP
STS
sp

Spare Input #1

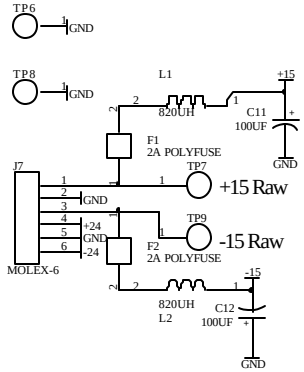


Spare Input #2

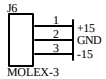




DC Power In



DC To AA/White Bd



Title: ***SEI Interface Chassis Differential Input Board***			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 4/6/2004 Time: 2:26:16 PM
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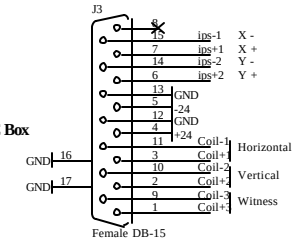
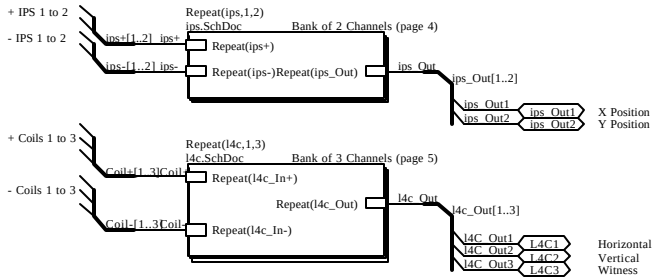
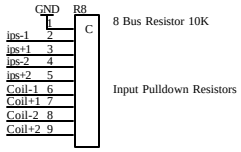
Detail of 4 D-sub Inputs from L4C & IPS Field Boxes

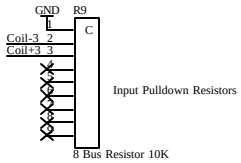
Input From Remote L4C Box

1 of 4



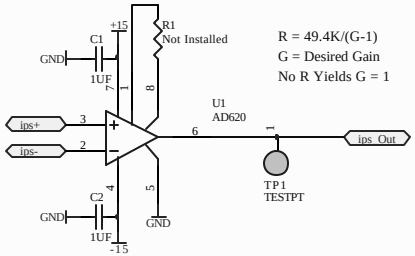






Title: *L4C/IPC Connection Details*			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 4/6/2004 Time: 2:26:16 PM
File: C:\Rich's Files\Mycadfiles\Sei_int\HEPI\SEI_Interface\diff_conn.SchDoc				Sheet 3 of 15

Inductive Position Sensor Details



Title: *Inductive Position Sensor Details*				*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 6/16/2004 Time: 10:37:39 AM	
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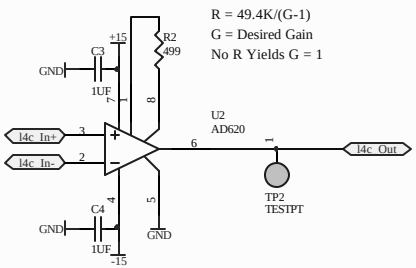
L4C Channel Details



Title: *L4C Differential Receiver*			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 6/16/2004 Time: 10:38:05 AM
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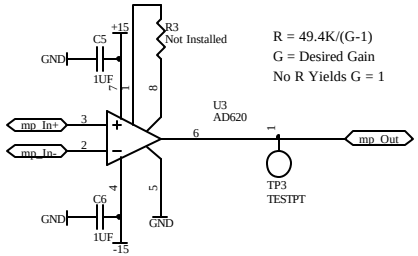
Mass Position Channel Details



Title: ***Mass Position Differential Receiver***				*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 4/6/2004 Time: 2:26:16 PM	
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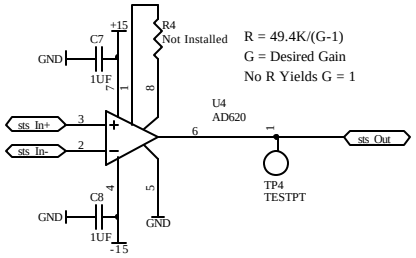
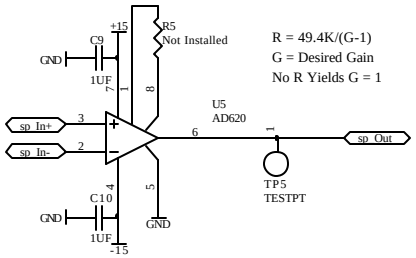
STS-2 Channel Details



R = 49.4K/(G-1)
G = Desired Gain
No R Yields G = 1

Title: ***STS-2 Differential Receiver***			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 4/6/2004 Time: 2:26:17 PM
File: C:\Rich's Files\Mycadfiles\Sei_int\HEPI\SEI_Interface\sts.SCHDOC				Sheet 7 of 15

Spare Channel Schematic Detail



Title: ***Spare Channel Differential Receiver***				*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A		Engineer: *RS Abbott*	Date: 4/6/2004 Time: 2:26:17 PM
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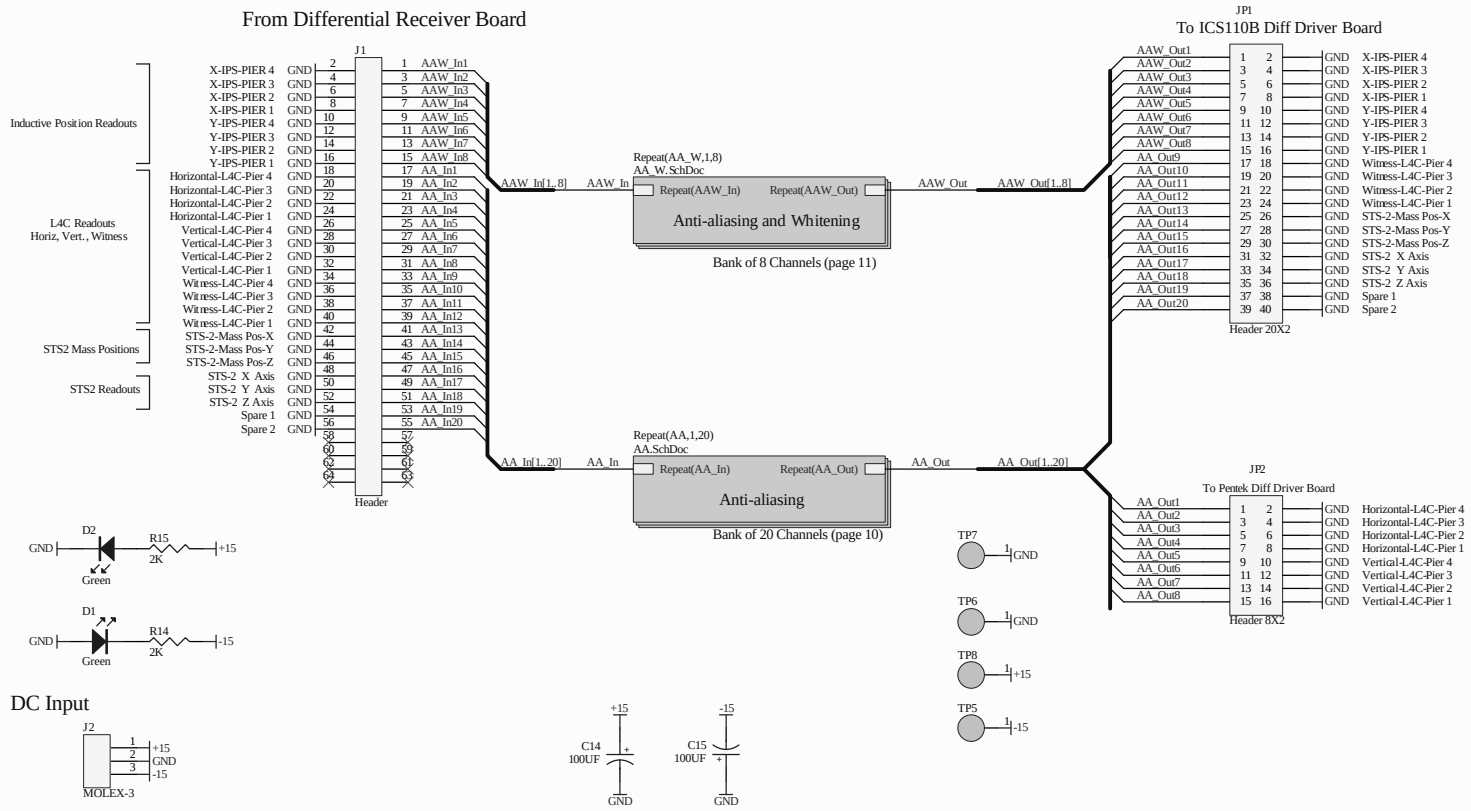
Connector View of AA and Whitening Board



Title: *AA & Whitening Board Overview*				*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 4/6/2004 Time: 2:27:28 PM	
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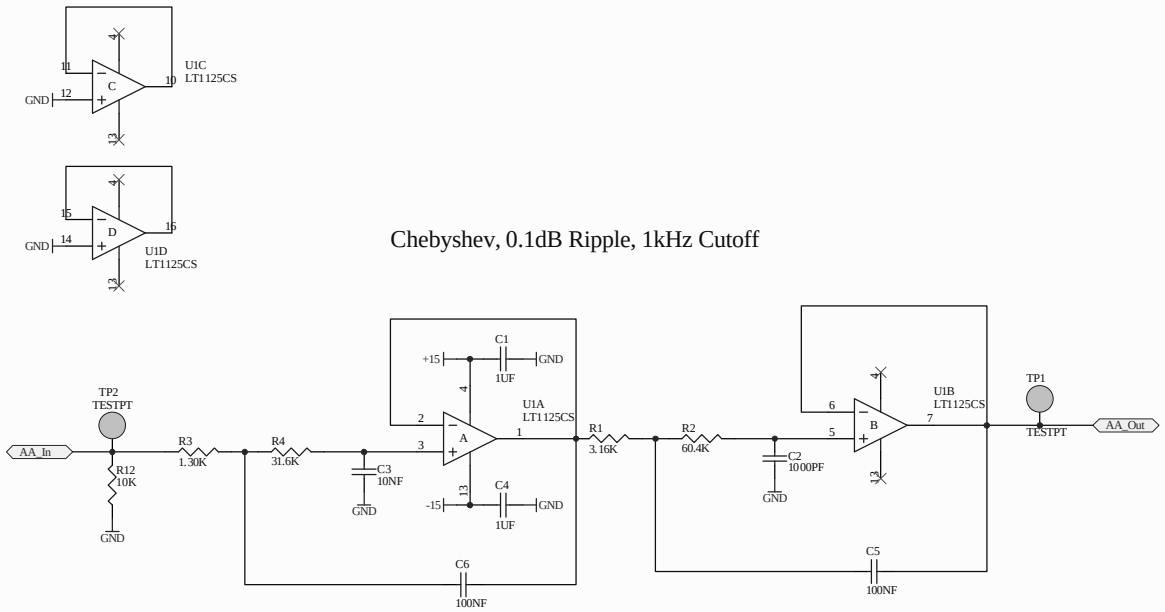
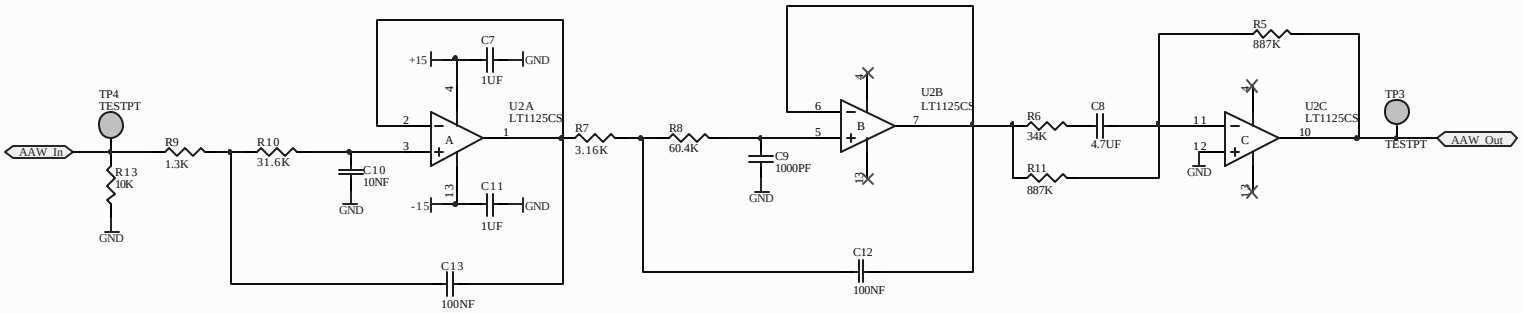


Anti-aliasing Filter Channel Only

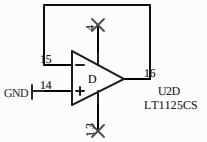
Title: ***AA Filter***			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 4/6/2004 Time: 2:27:28 PM
File: C:\Rich's Files\Mycadfiles\Sei_int\HEPI\SEI_Interface\AA_White\AA.SchDoc				Sheet 10 of 15

Chebyshev, 0.1dB Ripple, 1kHz Cutoff

Zero = 0.03 Hz
Pole = 1Hz



Anti-aliasing and Whitening Filter Channel Only



Title: *AA & Whitening Filter*			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: B	DCC Number: D030806	SCH / PCB Revision: A	Engineer: *RS Abbott*	Date: 6/16/2004 Time:10:38:33 AM
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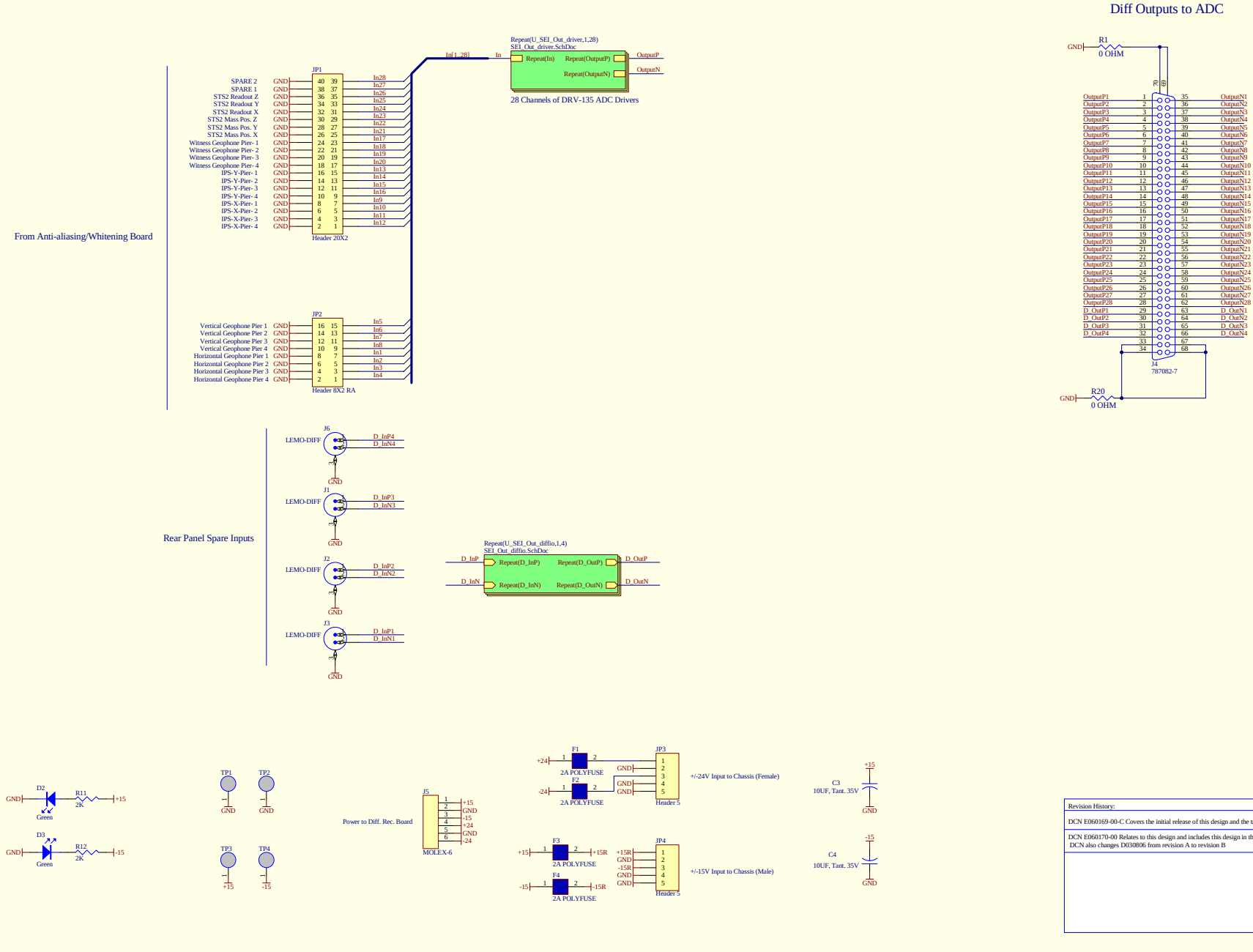
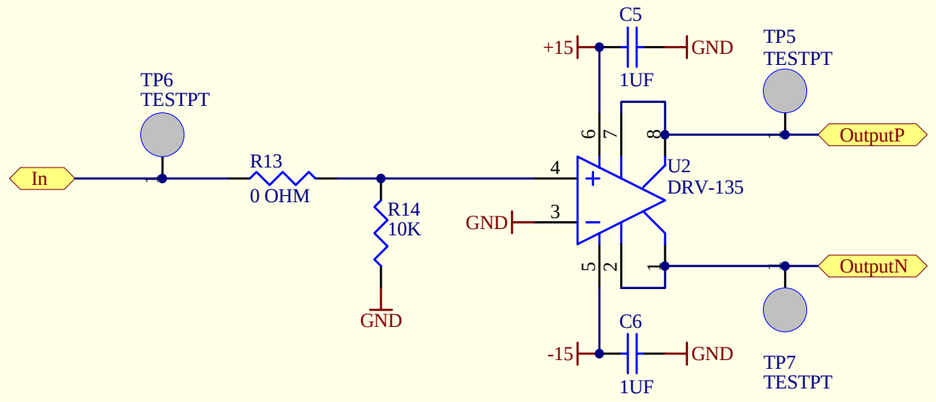


Revision History:
DCN E060169-00-C Covers the initial release of this design and the transition from revision 00 to A
DCN E060170-00 Relates to this design and includes this design in the overall chassis D030806-B. This DCN also changes D030806 from revision A to revision B

Title: **HEPI SEI-Int ADC Interface Board**			LIGO Laboratory, California Institute of Technology, Massachusetts Institute of Technology	LIGO
Size: C	DCC Number: D060081	SCH / PCB Revision: A	Engineer: R. Abbott	Date: 4/20/2006
File: C:\Rich\s Files\Mycadfiles\Jay\SEI_Out\SEI_Out.SCHDOC				Time: 1:54:19 PM
				Sheet 1 of 3

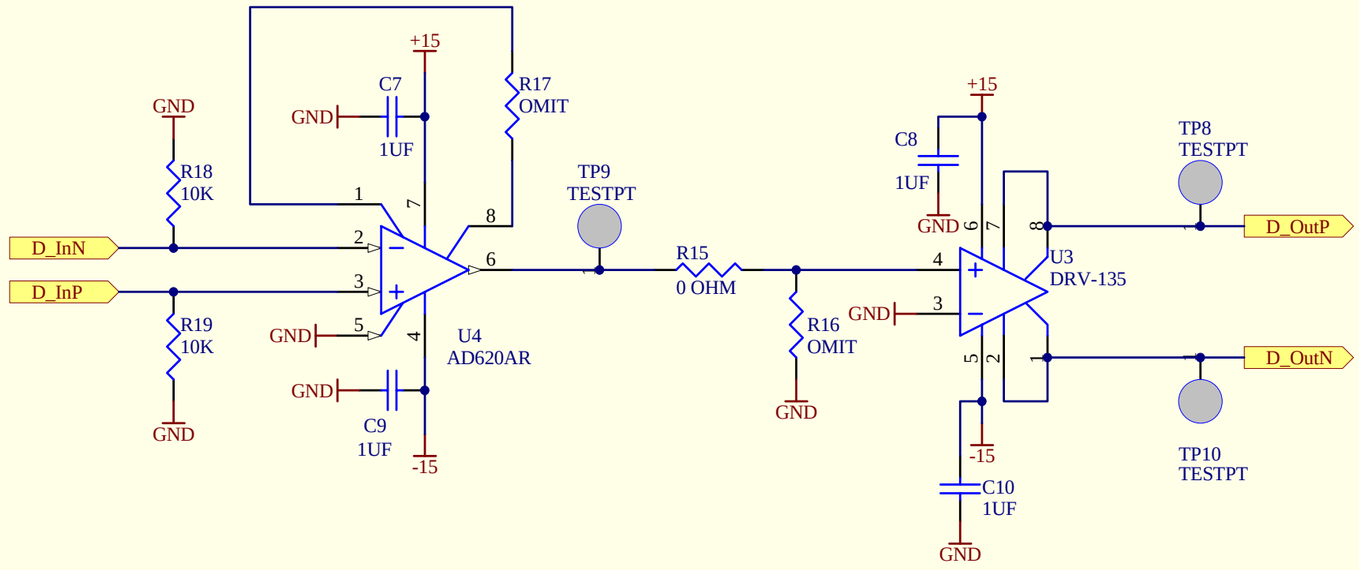
Differential Driver Detail



Title: ***SEI-Int Differential Driver***			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: A	DCC Number: D060081	SCH / PCB Revision: A	Engineer: R. Abbott	Date: 4/20/2006 Time: 1:57:14 PM
File: C:\Rich's Files\Mycadfiles\Jay\SEI_Out\SEI_Out_driver.SchDoc				Sheet 2 of 3

Differential Receiver/Driver Detail

R = 49.4K/(G-1)
G = Desired Gain
No R Yields G = 1



Title: ***Differential Receiver Driver, SEI Int***			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: A	DCC Number: D060081	SCH / PCB Revision: A	Engineer: R. Abbott	Date: 4/20/2006 Time: 1:59:08 PM
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