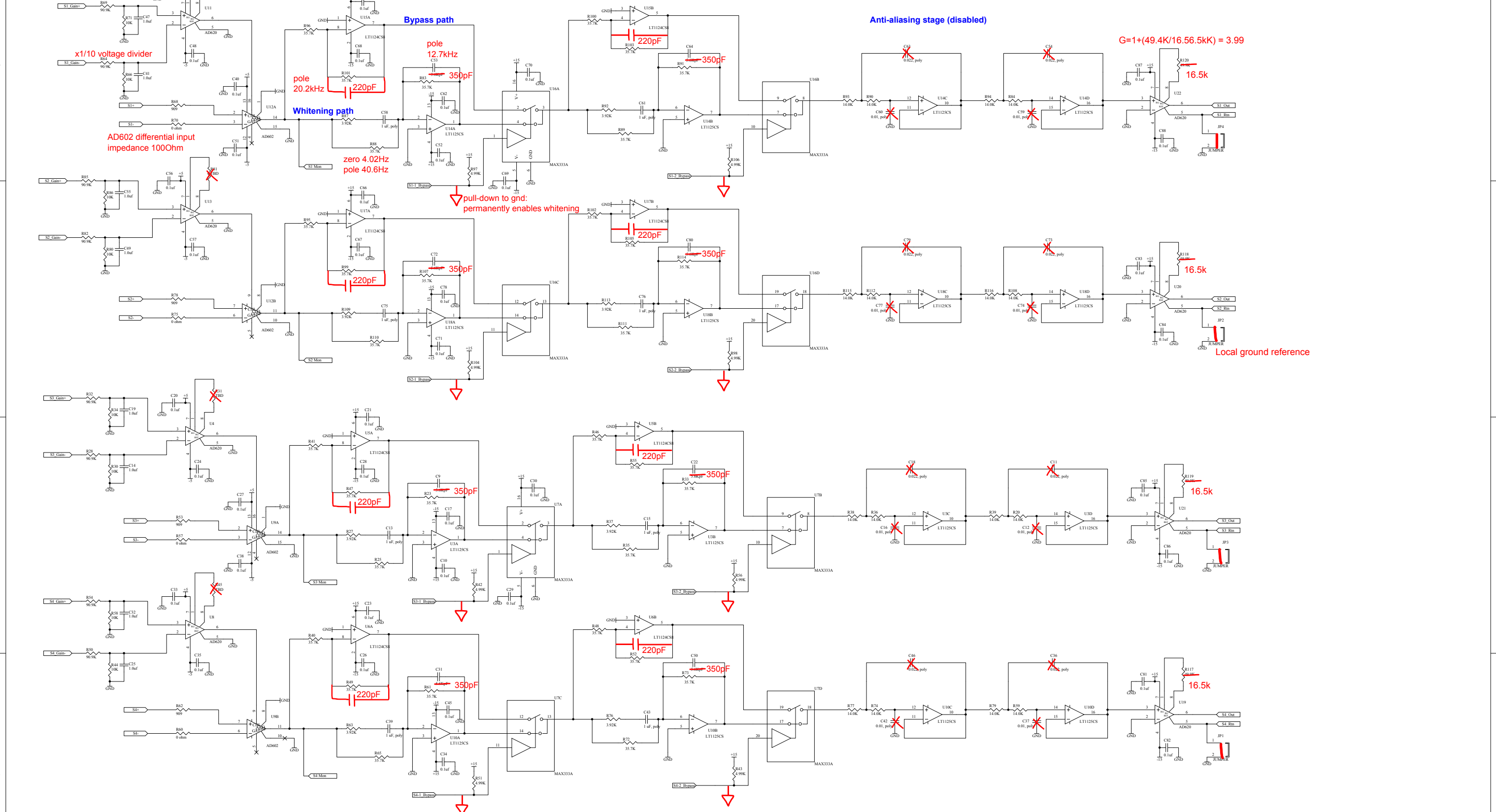


Nominal whitening is 2ea 4Hz zeros and 2ea 40Hz poles, Gain 4@DC

VGA gain control stage
 -10V~+10V: -22dB ~ +42dB
 actual gain range: -10dB ~ +30dB



$$G = 1 + (49.4k / 16.565k) = 3.99$$

Local ground reference

1 2 3 4 5 6

D

D

- QPDwhiteRevB1
QPDwhiteRevB1.sch
- S1+
 - S1-1_Bypass
 - S1-2_Bypass
 - S1_Out
 - S1_Rtn
 - S1-
 - S1_Gain+
 - S1_Gain-
 - S2+
 - S2-1_Bypass
 - S2-2_Bypass
 - S2_Out
 - S2_Rtn
 - S2-
 - S2_Gain+
 - S2_Gain-
 - S3+
 - S3-1_Bypass
 - S3-2_Bypass
 - S3_Out
 - S3_Rtn
 - S3-
 - S3_Gain+
 - S3_Gain-
 - S4+
 - S4-1_Bypass
 - S4-2_Bypass
 - S4_Out
 - S4_Rtn
 - S4-
 - S4_Gain+
 - S4_Gain-

- QPDwhiteRevB2
QPDwhiteRevB2.sch
- S1_Gain+
 - S1_Gain-
 - S2_Gain+
 - S2_Gain-
 - S3_Gain+
 - S3_Gain-
 - S4_Gain+
 - S4_Gain-
 - I1_Out
 - I1_Rtn
 - I2_Out
 - I2_Rtn
 - I3_Out
 - I3_Rtn
 - I4_Out
 - I4_Rtn
 - Q1_Out
 - Q1_Rtn
 - Q2_Out
 - Q2_Rtn
 - Q3_Out
 - Q3_Rtn
 - Q4_Out
 - Q4_Rtn
 - S1-1_Bypass
 - S1-2_Bypass
 - S2-1_Bypass
 - S2-2_Bypass
 - S3-1_Bypass
 - S3-2_Bypass
 - S4-1_Bypass
 - S4-2_Bypass
 - S1
 - S2
 - S3
 - S4

- SW1
- SW2
- SW3
- SW4
- SW1
- SW2
- SW3
- SW4

C

C


B

B

A

A

1 2 3 4 5 6

Title		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology		LIGO 
ASC Quad Photodiode Whitening Board				
Size: B	DCC Number: D990399	SCH / PCB Revision: B/B	Engineer: J. Heefner	Date: 17-Oct-2000
File: K:\hcad\ligo\users\jay\QPDwhite\RevB\qpdwhiteRevB.prj				Time: 09:49:30
				Sheet 0 of 2