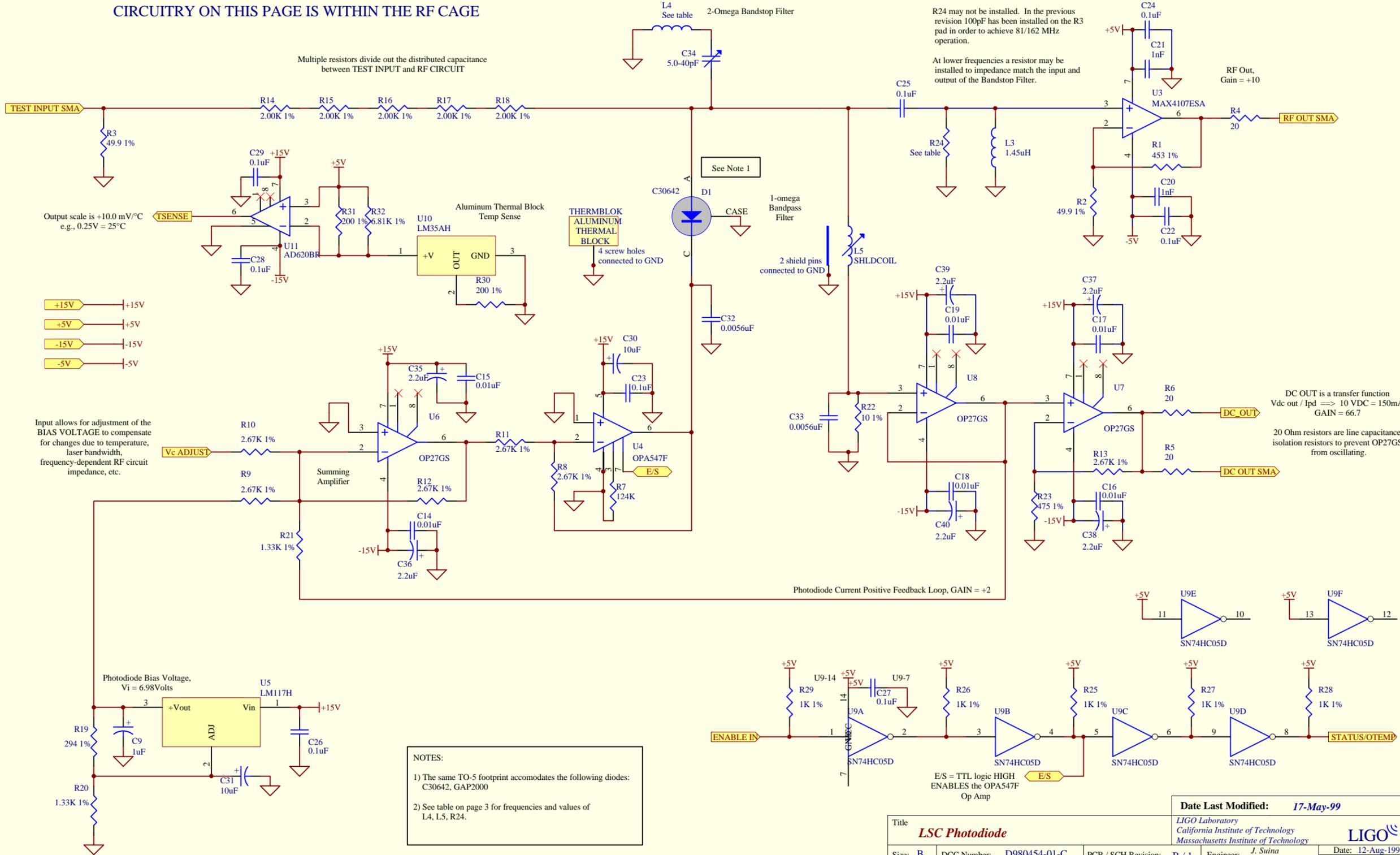


ENABLE IN must be HIGH (i.e. +5V) to enable the photodiode.

Title LSC Photodiode		Date Last Modified: 17-May-99	
Size: B		LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology	
DCC Number: D980454-01-C	PCB / SCH Revision: B / 1	Engineer: J. Suina D. Ouimette	Date: 12-Aug-1999
File: S:\SYSTEMS\LSC\PHOTOD-1\FINAL\SCHEMA-1\8045400A.PRJ		Time: 16:56:47	
		Sheet 1 of 2	

CIRCUITRY ON THIS PAGE IS WITHIN THE RF CAGE



Multiple resistors divide out the distributed capacitance between TEST INPUT and RF CIRCUIT

Output scale is +10.0 mV/°C
e.g., 0.25V = 25°C

- +15V → +15V
- +5V → +5V
- 15V → -15V
- 5V → -5V

Input allows for adjustment of the BIAS VOLTAGE to compensate for changes due to temperature, laser bandwidth, frequency-dependent RF circuit impedance, etc.

R24 may not be installed. In the previous revision 100pF has been installed on the R3 pad in order to achieve 81/162 MHz operation.
At lower frequencies a resistor may be installed to impedance match the input and output of the Bandstop Filter.

DC OUT is a transfer function
Vdc out / Ipd => 10 VDC = 150mA
GAIN = 66.7
20 Ohm resistors are line capacitance isolation resistors to prevent OP27GS from oscillating.

NOTES:
1) The same TO-5 footprint accomodates the following diodes: C30642, GAP2000
2) See table on page 3 for frequencies and values of L4, L5, R24.

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File: S:\SYSTEMS\LSC\PHOTOD-1\FINAL\SCHEMA-1\8045401A.SCH			Date: 12-Aug-1999 Time: 16:56:25 Sheet 2 of 2