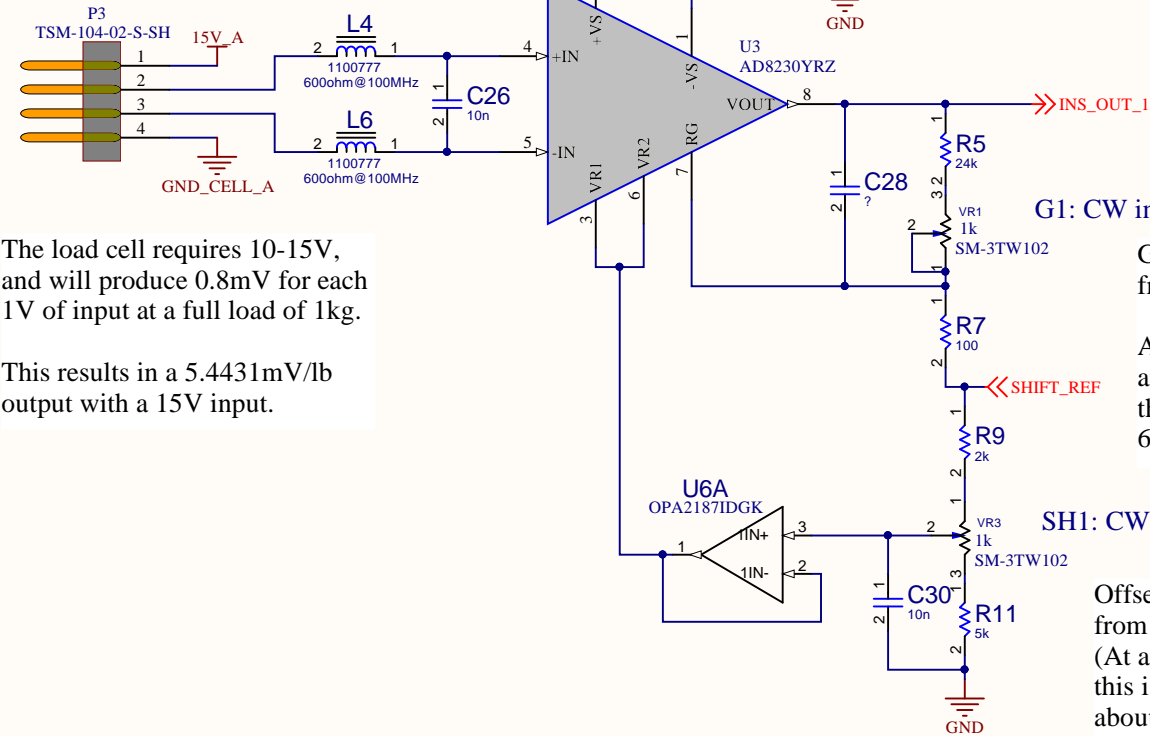


Mating connector:
TE/87499-8

Connection to load cell 1.



The load cell requires 10-15V, and will produce 0.8mV for each 1V of input at a full load of 1kg.

This results in a 5.4431mV/lb output with a 15V input.

G1: CW increases gain

Gain trim, adjustable from 482 to 502.

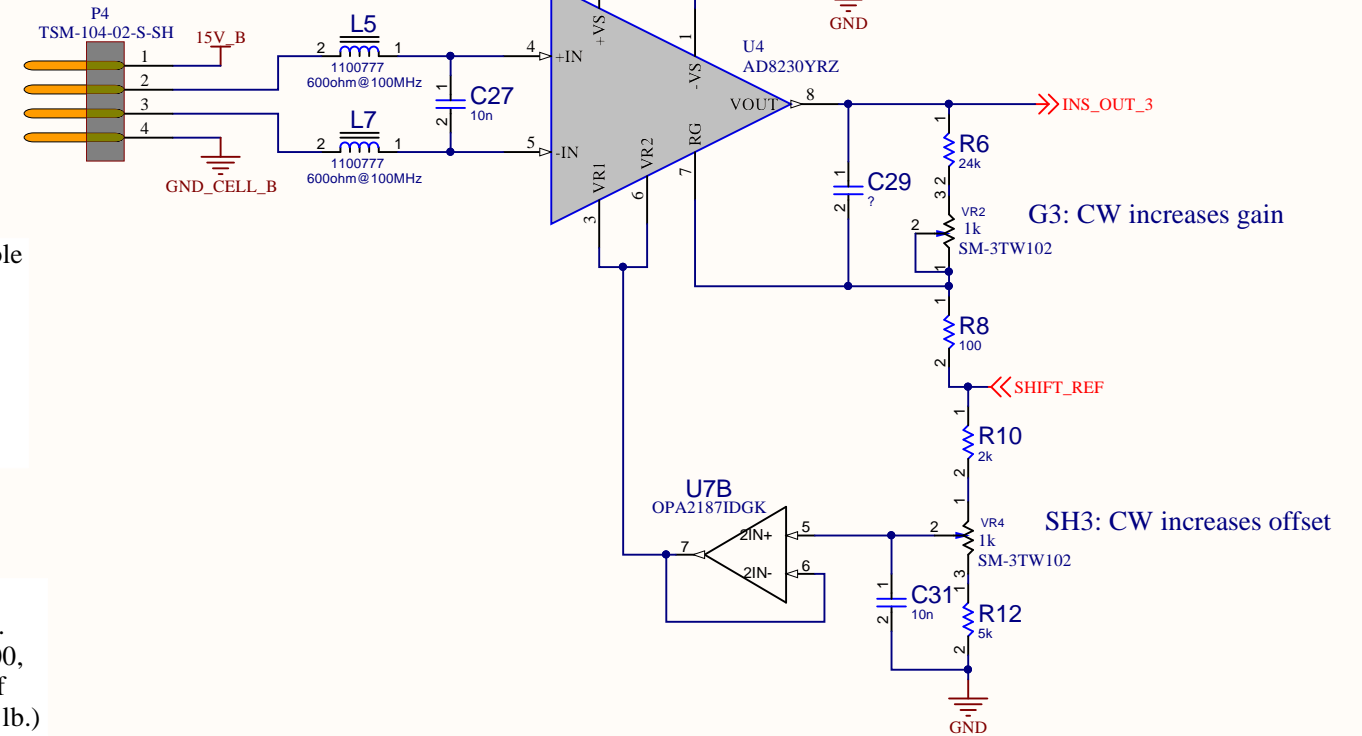
At a full 1kg load and a gain of 500, the output will be 6.00V full scale.

SH1: CW increases offset

Offset trim, adjustable from -1.25V to -1.88V. (At a gain setting of 500, this is the equivalent of about -0.46 lb to -0.69 lb.)

Mating connector:
TE/87499-8

Connection to load cell 3.

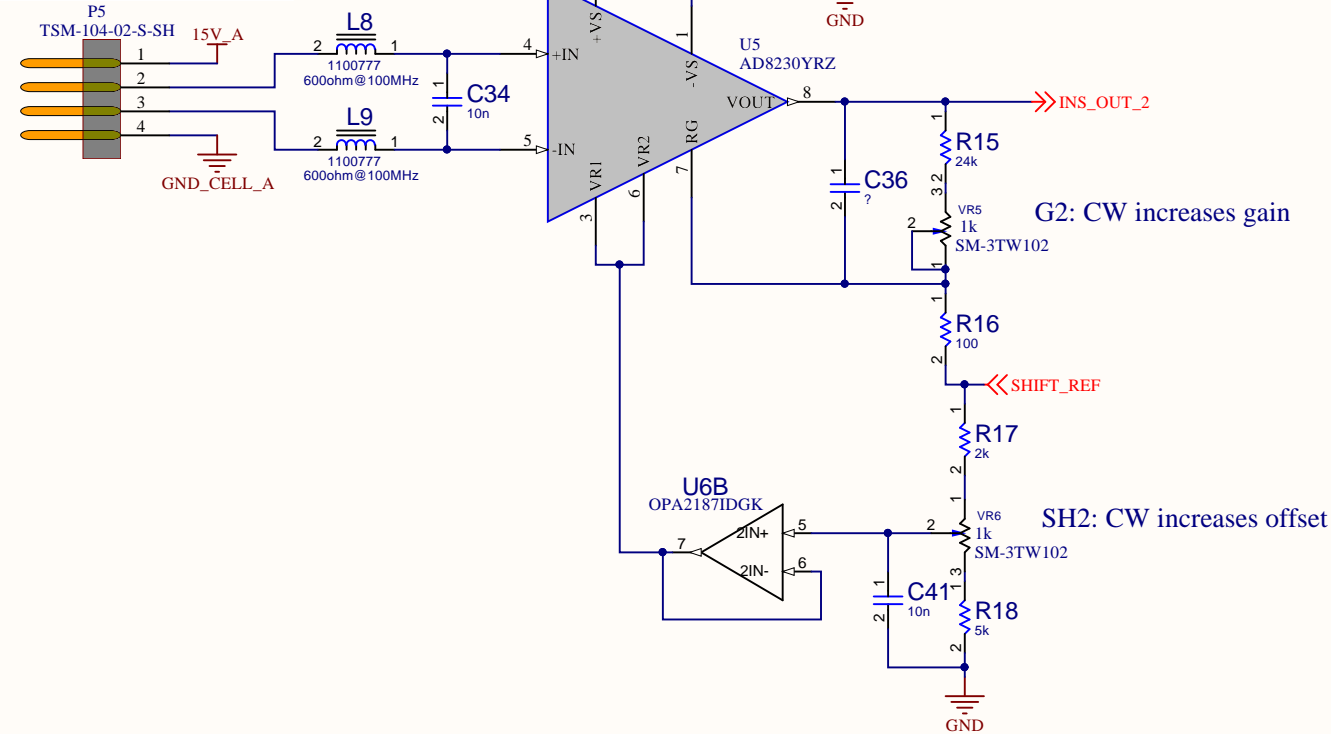


G3: CW increases gain

SH3: CW increases offset

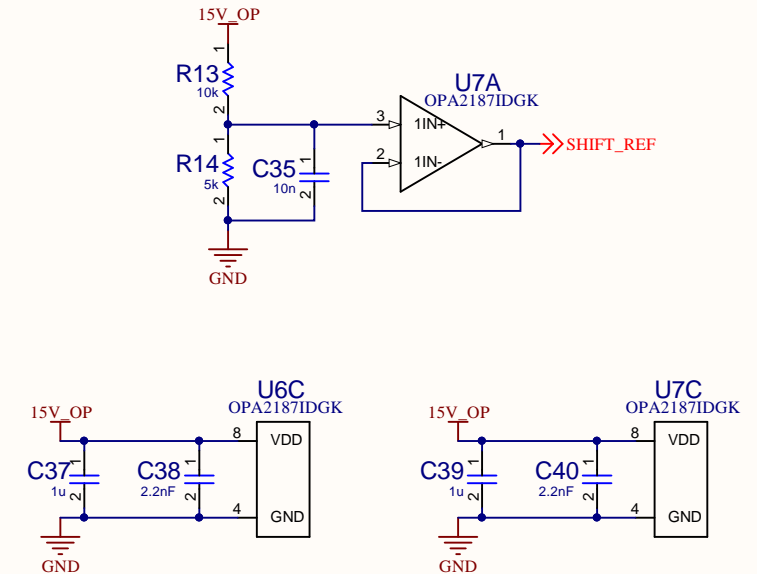
Mating connector:
TE/87499-8

Connection to load cell 2.



G2: CW increases gain

SH2: CW increases offset



Project Title: **Load Cell Summing Amplifier**

Sheet Name: Inputs.SchDoc

Assembly Number: 1109308

Date: 6/9/2020 Time: 3:06:02 PM

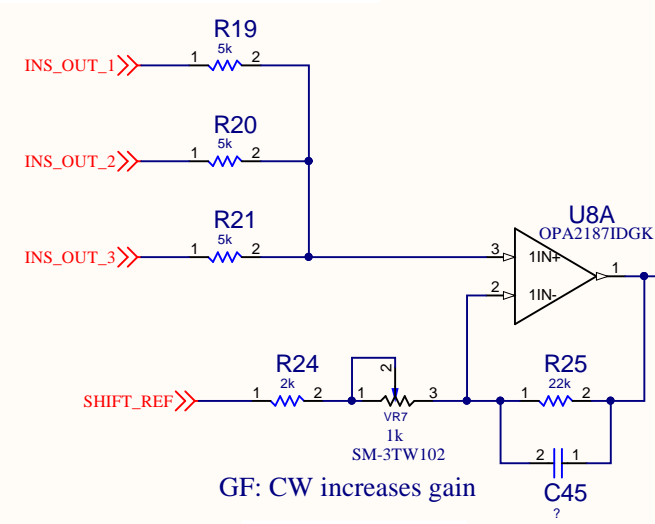
Revision: A1

Sheet # of 3

Teknic, Inc.
115 Victor Heights Parkway
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(585) 784-7454
Author: DRP



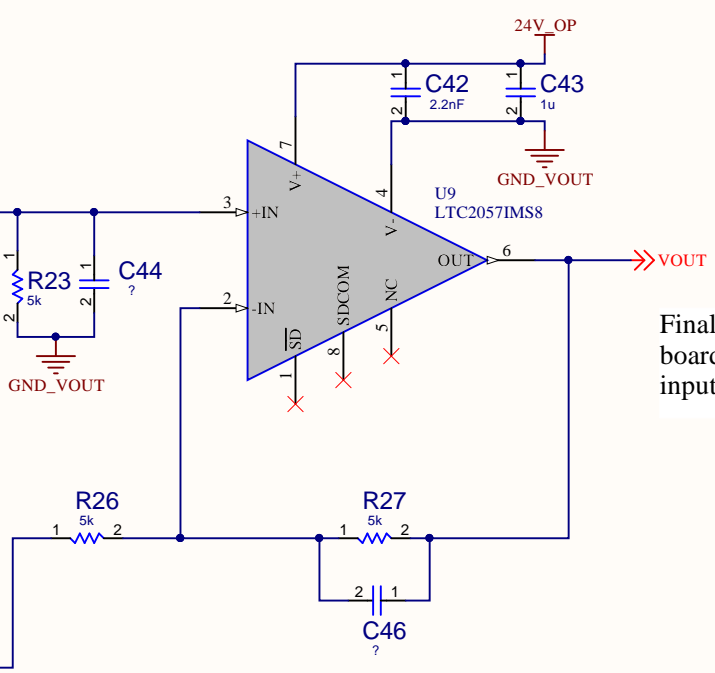
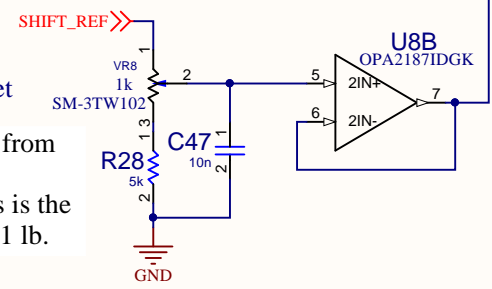
This stage averages the outputs of the 3 inst. amps. (The result is the sum/3.)



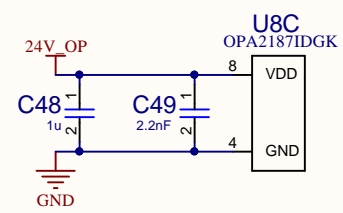
If stage 1 gain is 500 and the summing gain is 10 (/3), the total gain of 1667 results in an output of 9.07V/lb.

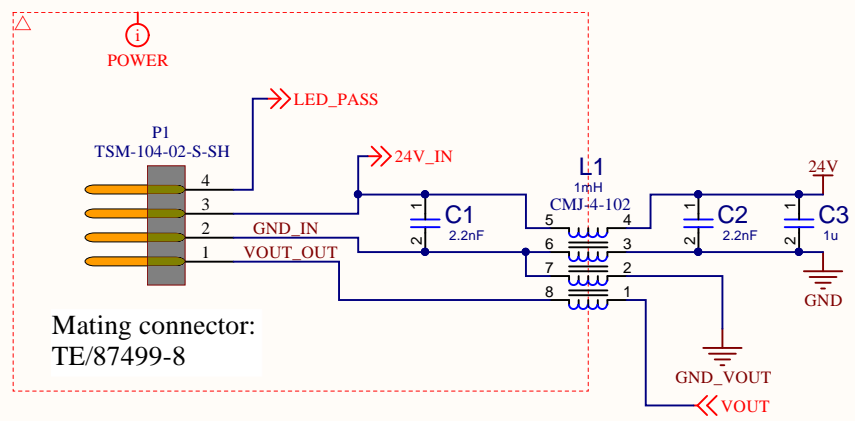
GF: CW increases gain
Output gain trim, adjustable from 8.33 to 12.

SHF: CW increases offset
Output offset trim, adjustable from 0.00V to +0.83V.
(At a total gain of 5000/3, this is the equivalent of 0.00 lb to +0.091 lb.)

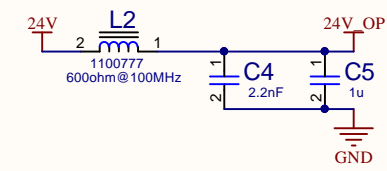


Final 0-10V output exits the board back at the main 24V input on the "Power" page.

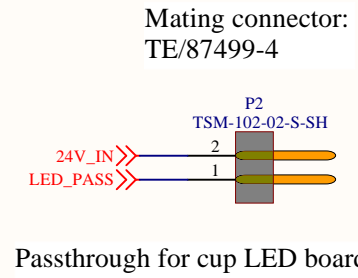




Mating connector:
TE/87499-8

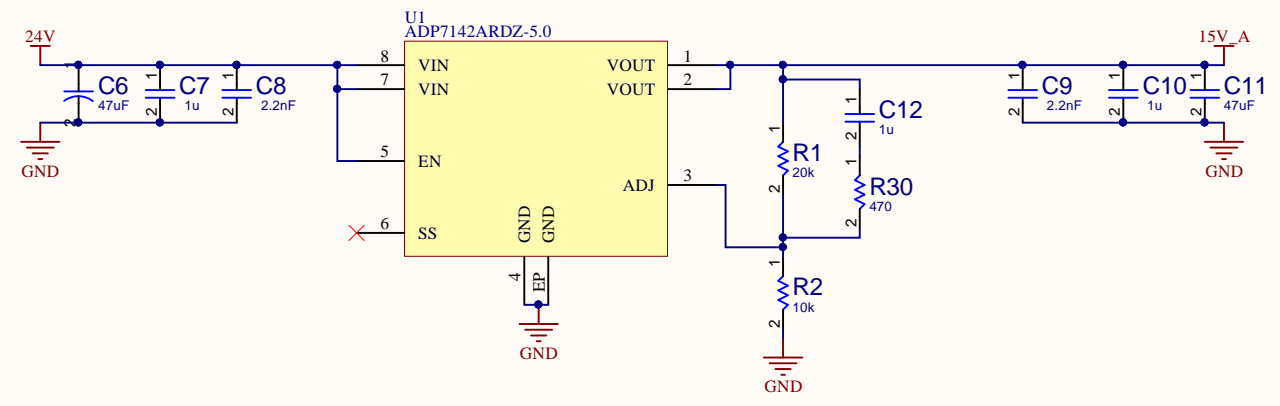


Filtered power for 24V op amps.

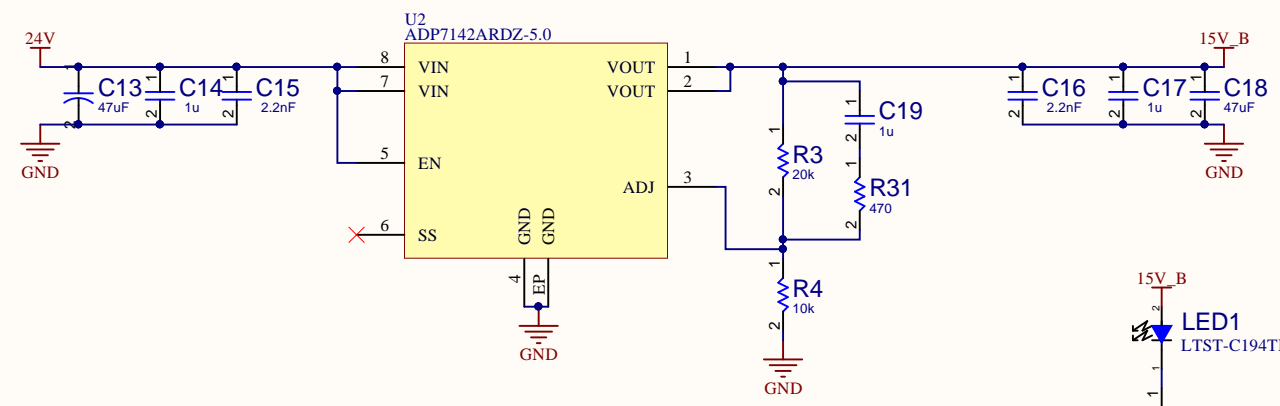


Passthrough for cup LED board.

Final 0-10V output from the "Output" page.



15V_A powers load cells 1 and 2.
Total load is 86mA @ 15V.



15V_A powers load cell 3 and the op amps.
(Op amps draw off of 15V_OP below.)
Total load is 66mA @ 15V.

