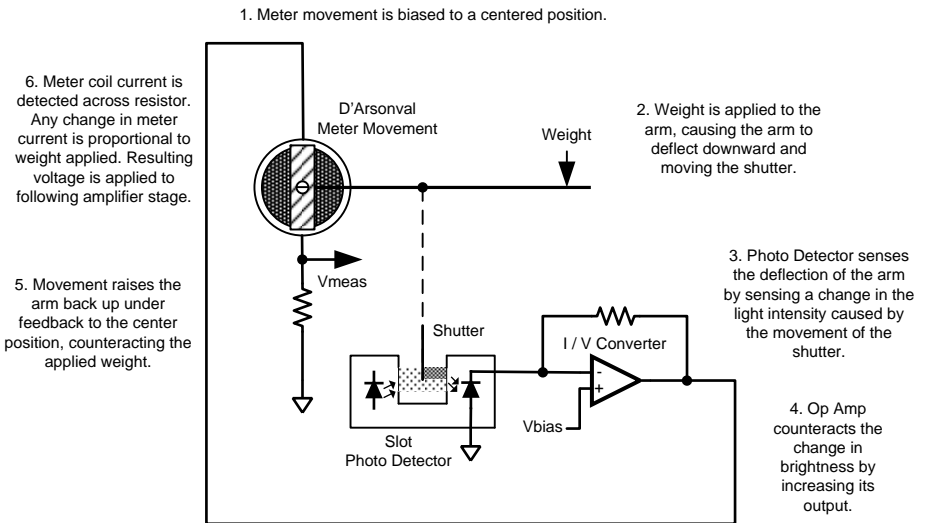


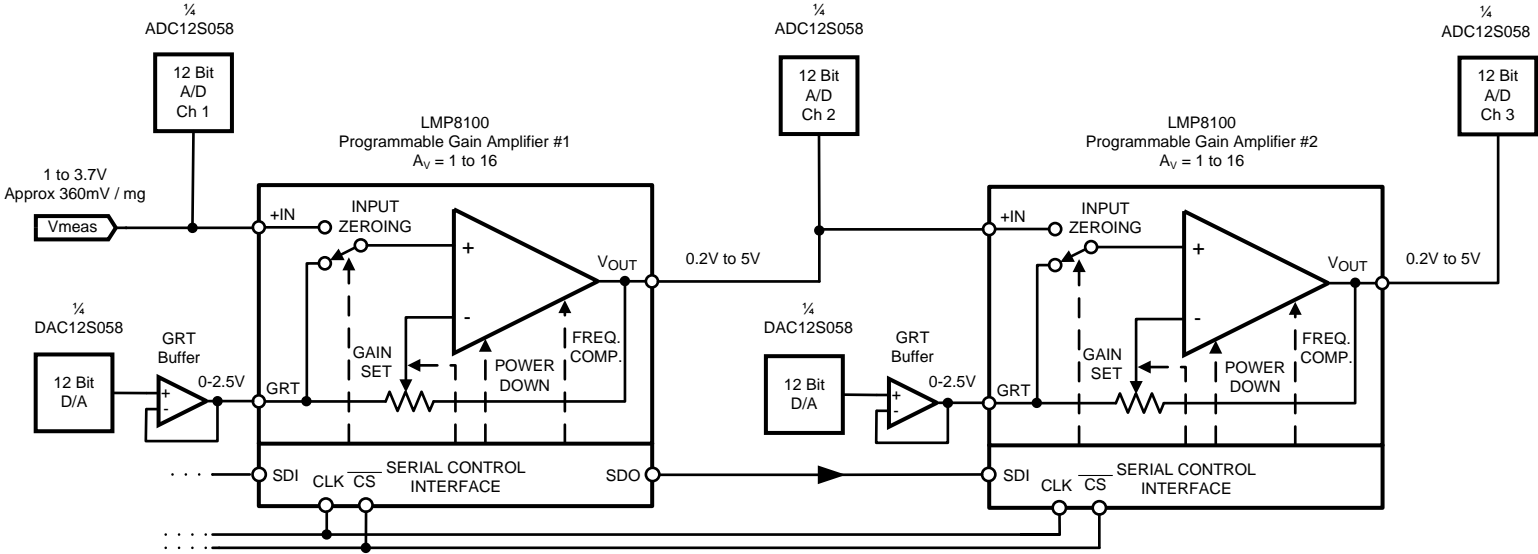
Microgram Resolution Scale Built from D'Arsonval Panel Meter Movement

Weights as small as a microgram (0.001g) can be measured by using the movement from a surplus panel meter.

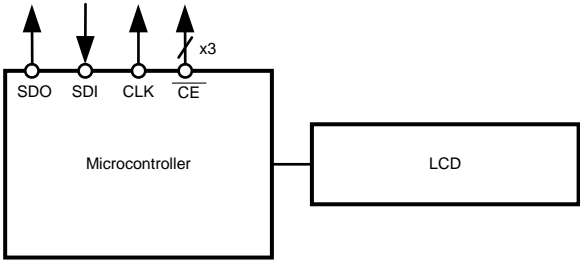


Digital Scale Analog Section using LMP8100 Variable Gain Amplifier

Block Diagram

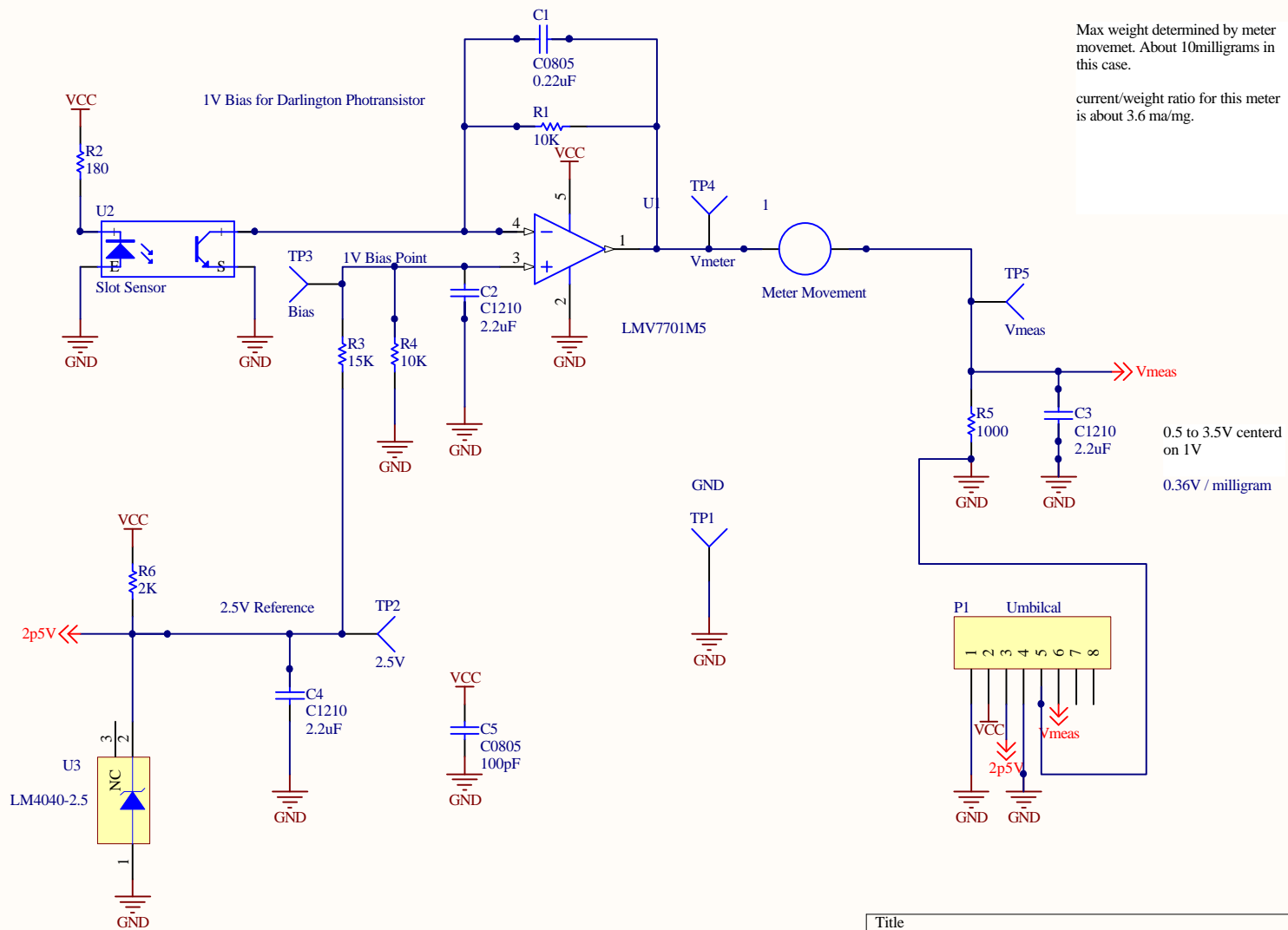


Cascaded serial output allows control of multiple 8100's using the same CLK, SDI and CS lines.



Two cascaded LMP8100 Variable Gain Amplifier sections allows gain selection of 1 to 256.

D/A's provide programmable baseline scaling through GRT pin.



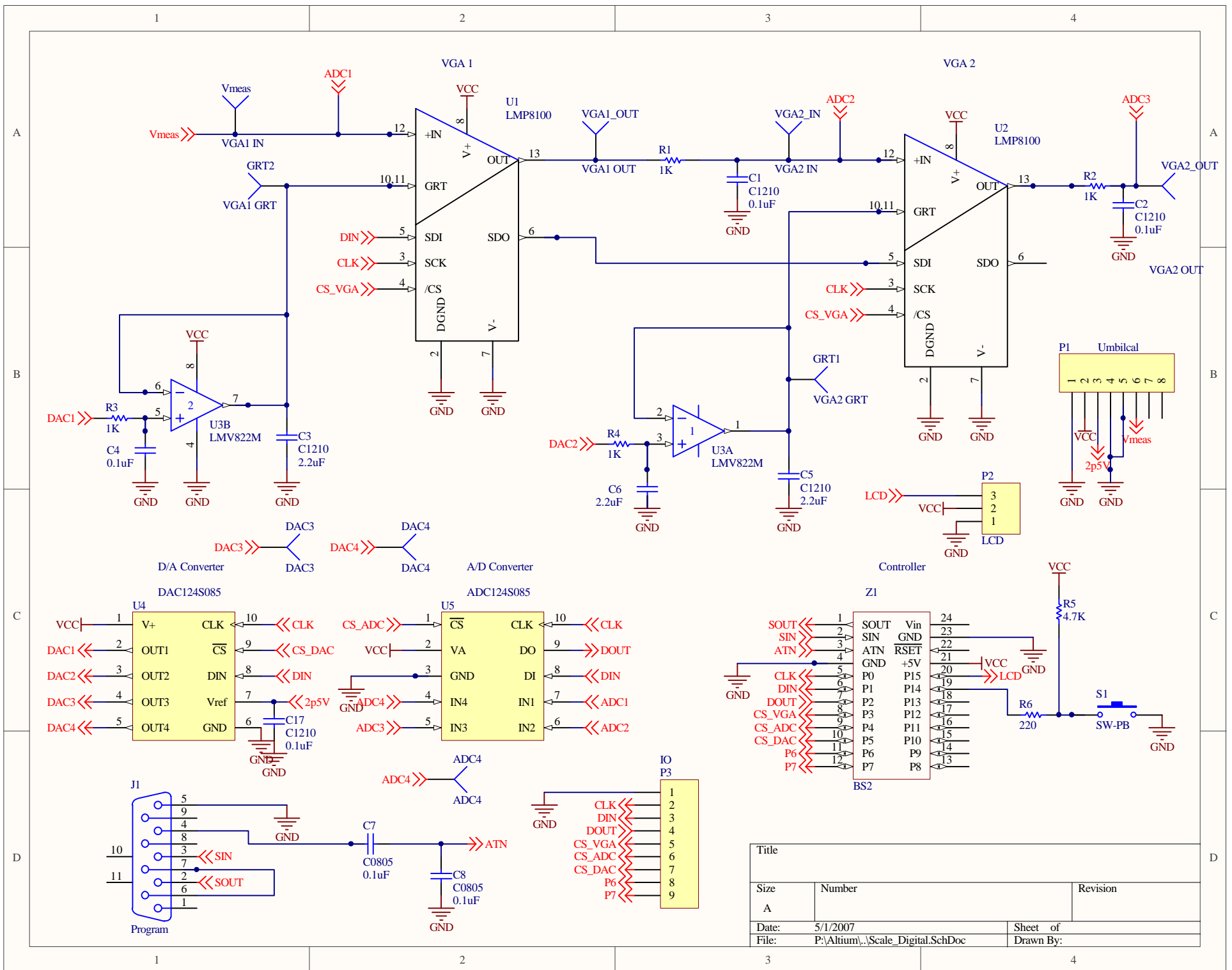
Max weight determined by meter movemet. About 10milligrams in this case.

current/weight ratio for this meter is about 3.6 ma/mg.

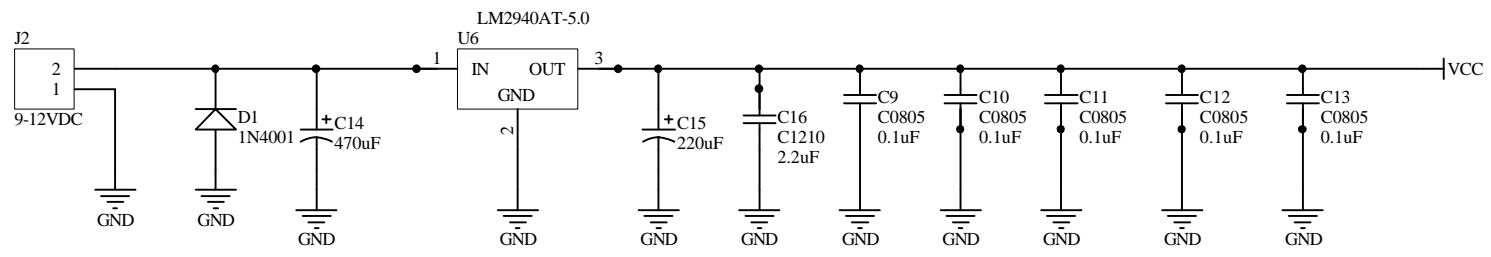
0.5 to 3.5V centerd on 1V

0.36V / milligram

Title		
Size	Number	Revision
A		
Date:	5/1/2007	Sheet of
File:	P:\Altium\.\Scale_Simple.SchDoc	Drawn By:



Title		
Size	Number	Revision
Date:	5/1/2007	Sheet of
File:	P:\Altium\...\Scale_Digital.SchDoc	Drawn By:



Title		
Size	Number	Revision
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Date:	5/1/2007	Sheet of
File:	P:\Altium\Scale_Power.SchDoc	Drawn By: