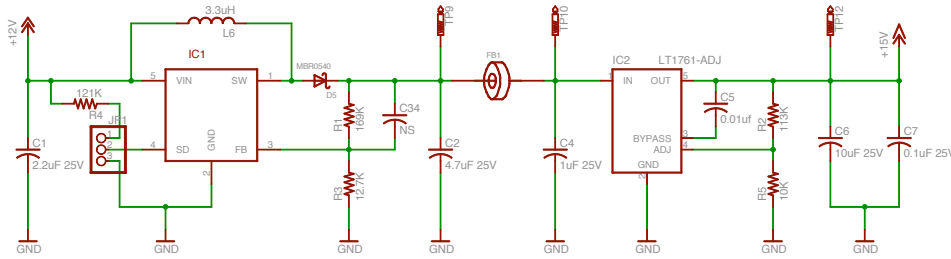


Dear Sir/Madam

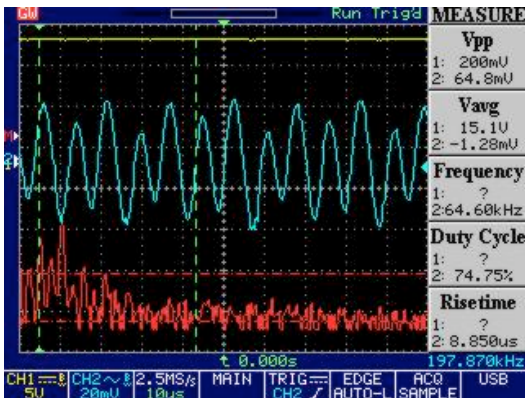
I am experiencing some problems with the LT1761 LDO regulator I want to use to generate a clean +15V. I have it set up in the following circuit



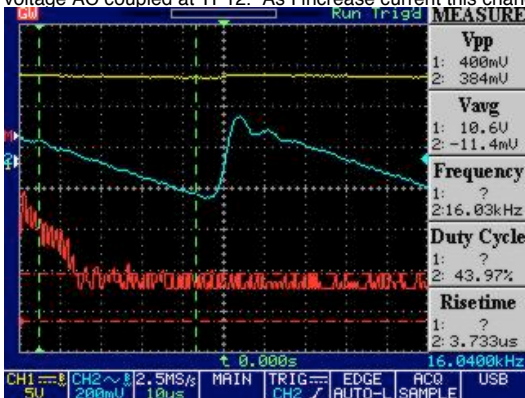
The circuit seems to oscillate at around 100KHz. Initially I thought this was related the to the switching regulator (LT1930A) but when I removed FB1 and tied an 18V linear bench supply to TP10 I continued to have problems at the output of the LDO TP12. The frequency components changed from 100KHz but in someways the problem is just as severe.

A continuity check between TP10 and TP9 showed no connection between TP10 and TP9 after FB1 was removed.

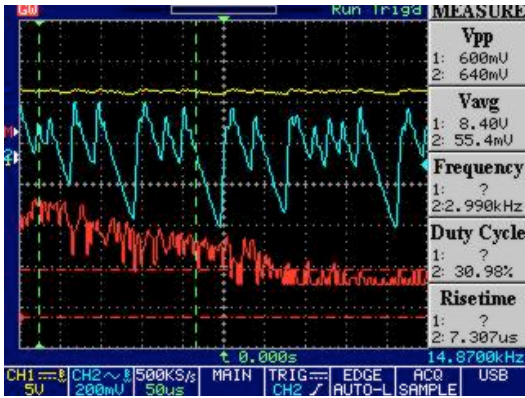
The following pictures are taken with FB1 removed from the circuit.



At 26mA of load the output looks like the picture above. The yellow line is voltage DC coupled into the scope at TP12. The blue line is the voltage AC coupled at TP12. As I increase current this changes to a output that looks like:

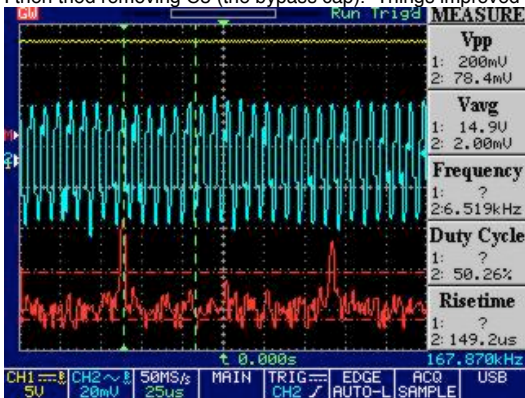


Here the voltage has dropped to ~10.5V and the circuit has a definite ringing in it now. (Note the voltage at TP10 remains 18V). As I increase current things get worse

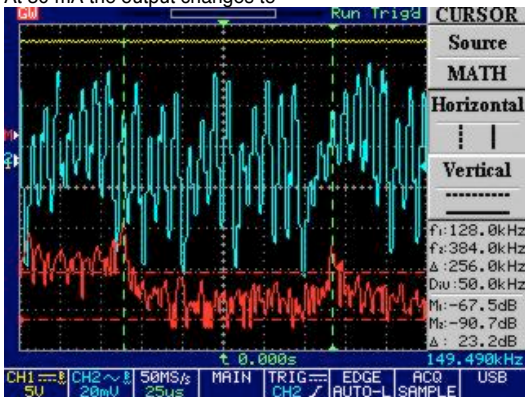


at 50mA we become pretty unstable. The output voltage has now drooped to ~8.5V.

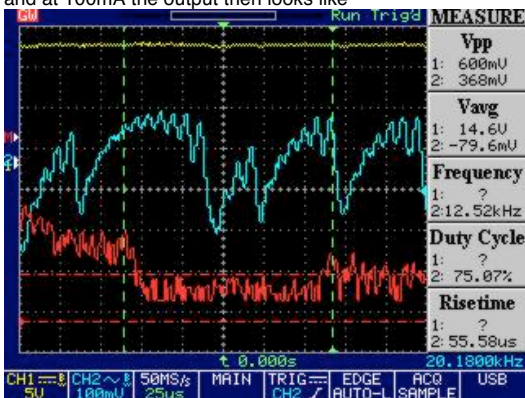
I then tried removing C5 (the bypass cap). Things improved quite a bit. At 15mA I got this



At 30 mA the output changes to



and at 100mA the output then looks like



The type of cap I am using for C6 10uF is an X5R ECJ-3YB1E106K ECJ Multilayer Ceramic Capacitors - High Capacitance

C7 is an X7R CC1206KRX7R9BB104
C4 is an X7R ECJ-3YB1E105K