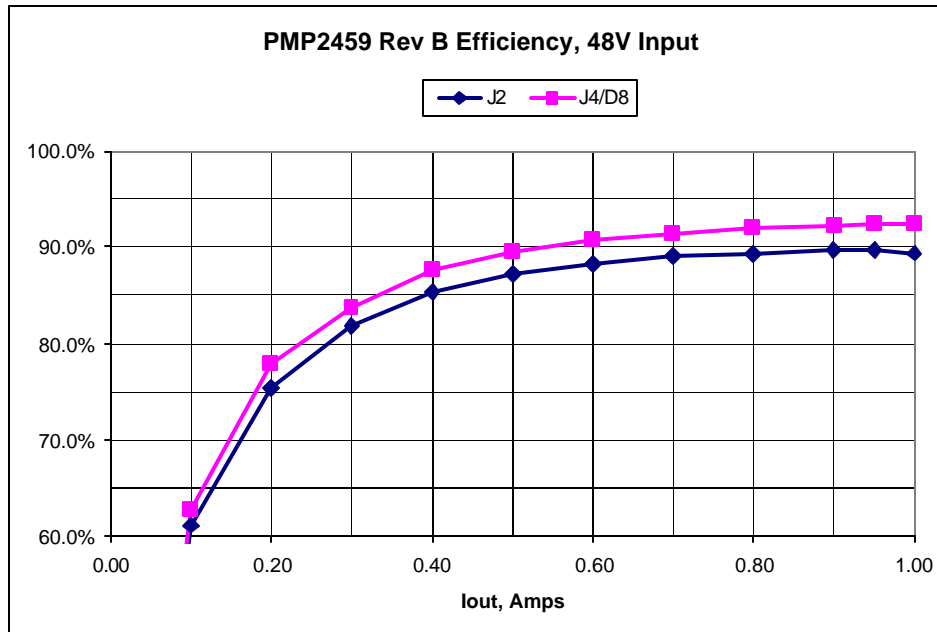


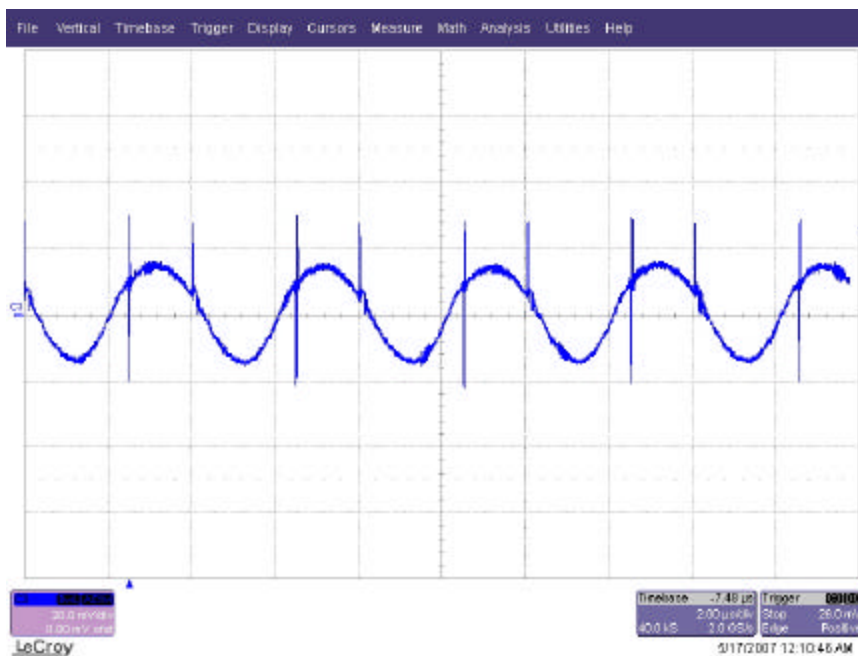
Efficiency

The efficiency with a 48V input is given below for the flyback converter (V_{in} measured on cathode of D8 and for the total power system (J2)):



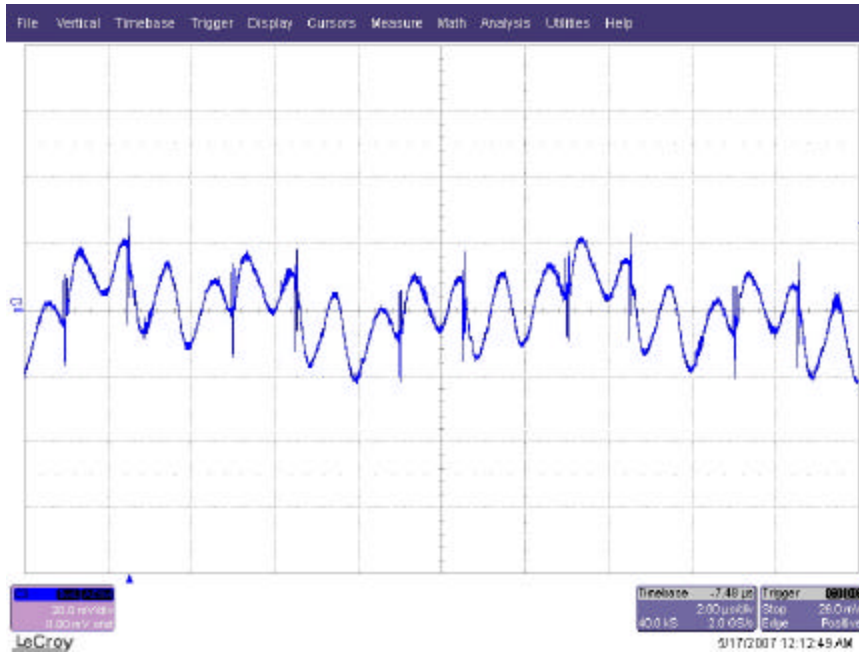
Output Ripple and Noise

Output voltage ripple with 48V input and 12V/1A load:



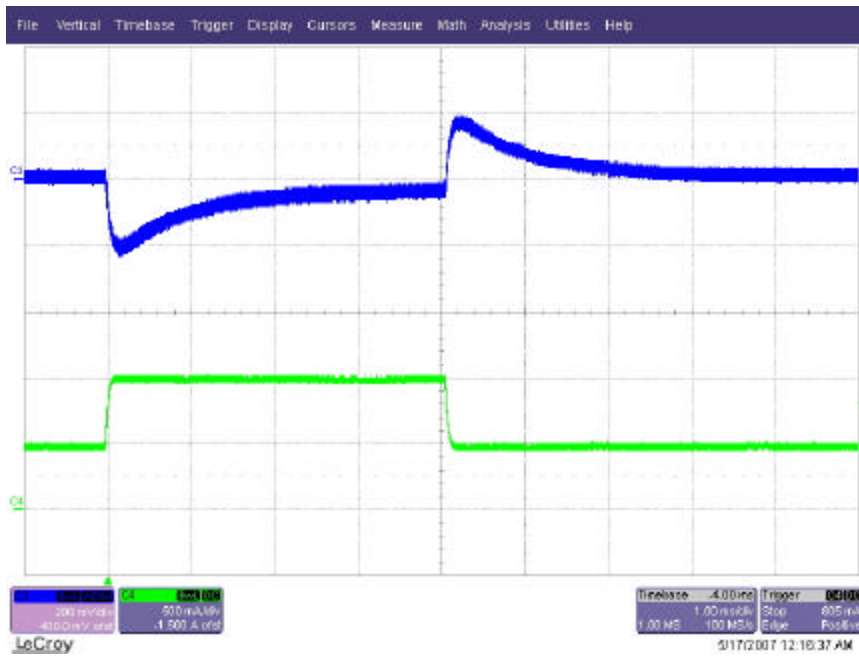
Input Ripple and Noise

Input voltage ripple and noise measured at D2 with 48V input and a 12V/1A load:



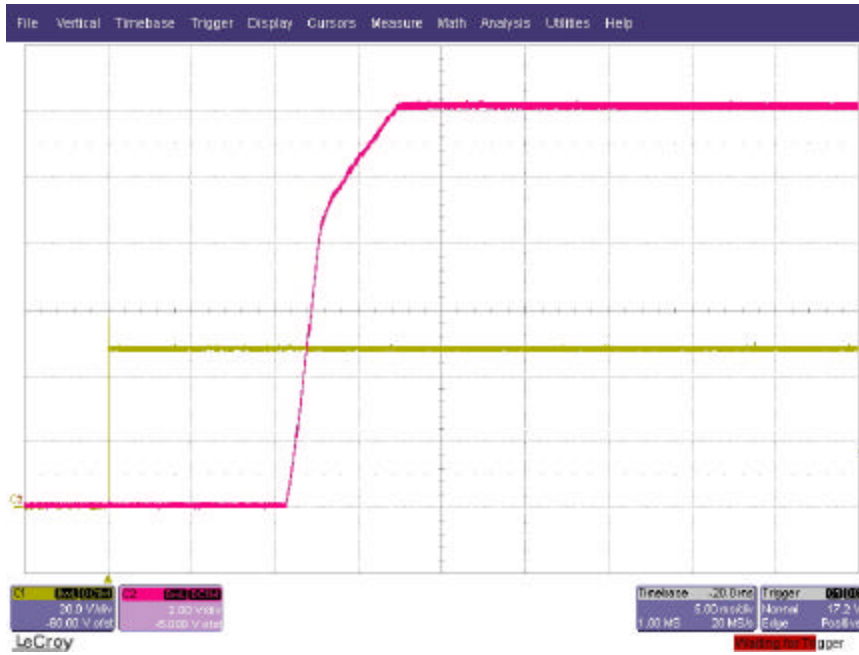
Dynamic Loading

The output voltage transient response with a load step from 50% to 100%:



Turn On Response

The output voltage turn-on response with a 48V input and a 1 A load:

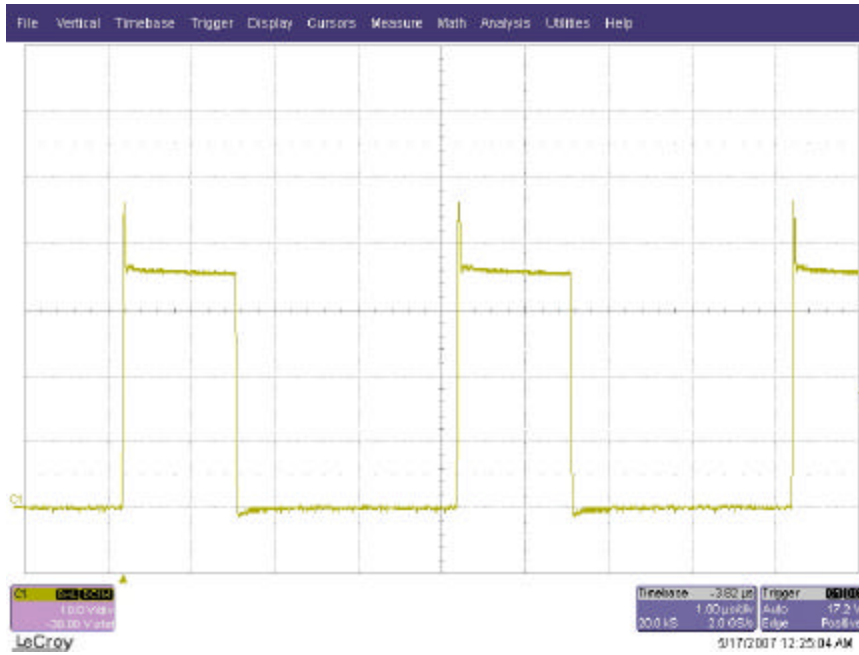


The output voltage turn-on response with a 48V input and a 0A load:

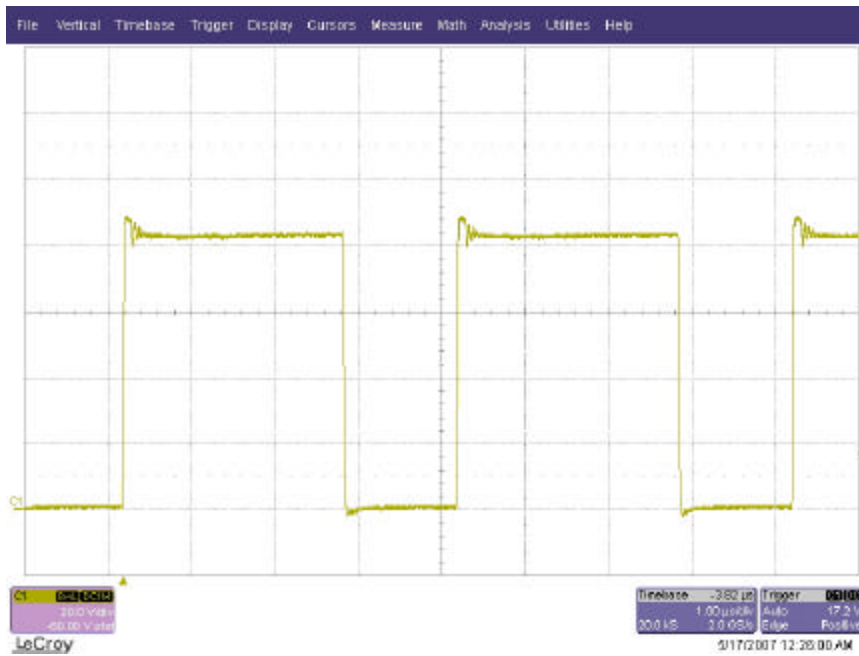


Misc Waveforms

Q1 drain with a 57V input and 1A load:

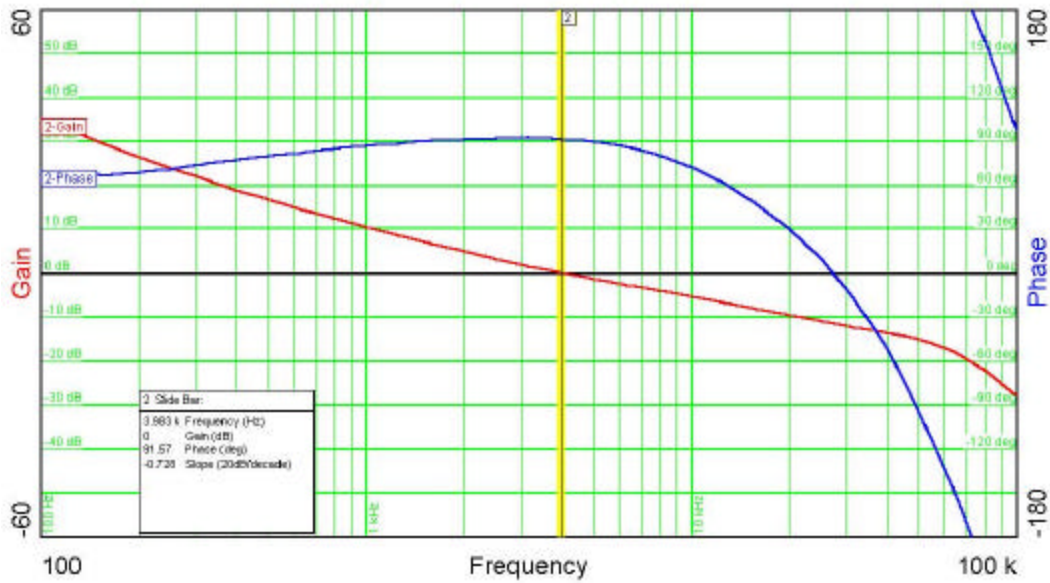


Q3 drain with a 57V input and 1A load:



Stability Analysis (Loop Gain)

The figure below is the loop gain of the flyback converter with a 48V input and a 1A load. The bandwidth is 4 KHz, the phase margin is 90 degrees, and the gain margin is 12dB.



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