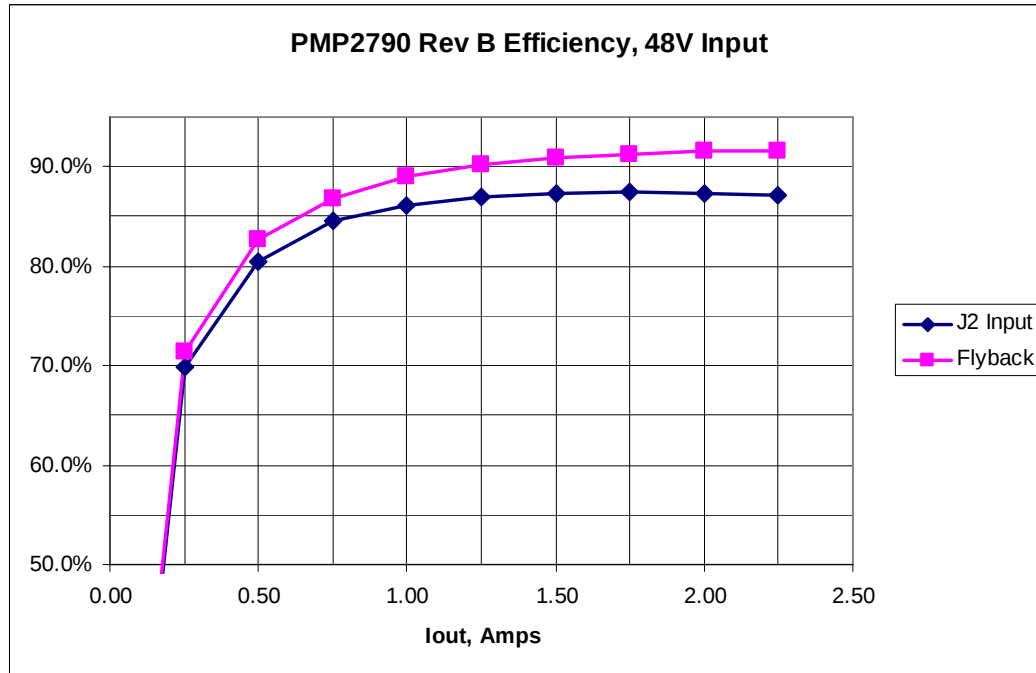


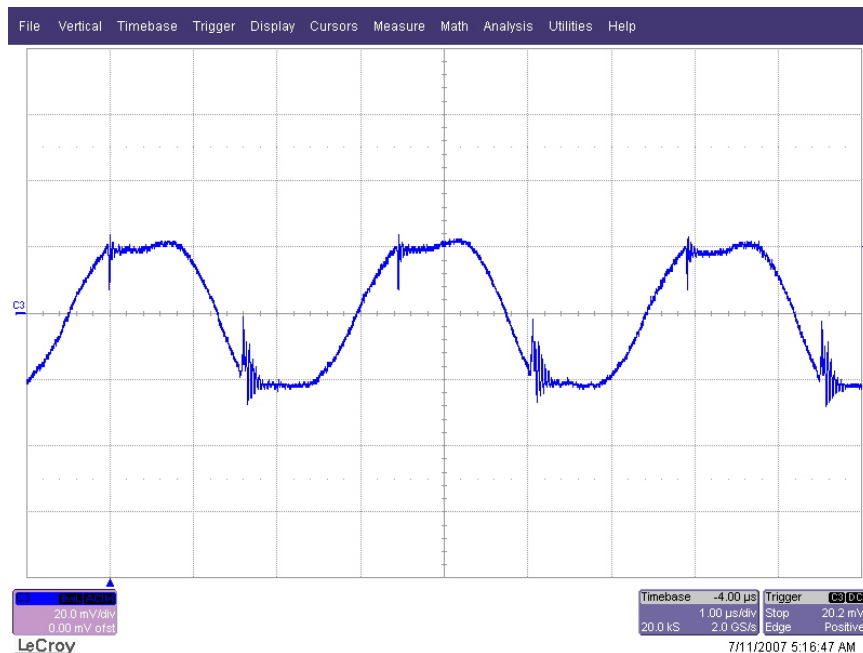
Efficiency

The efficiency with a 48V input is given below for the flyback converter (V_{in} measured at J3) and for the total power system (J2). V_{out} is measured at TP5/TP9:



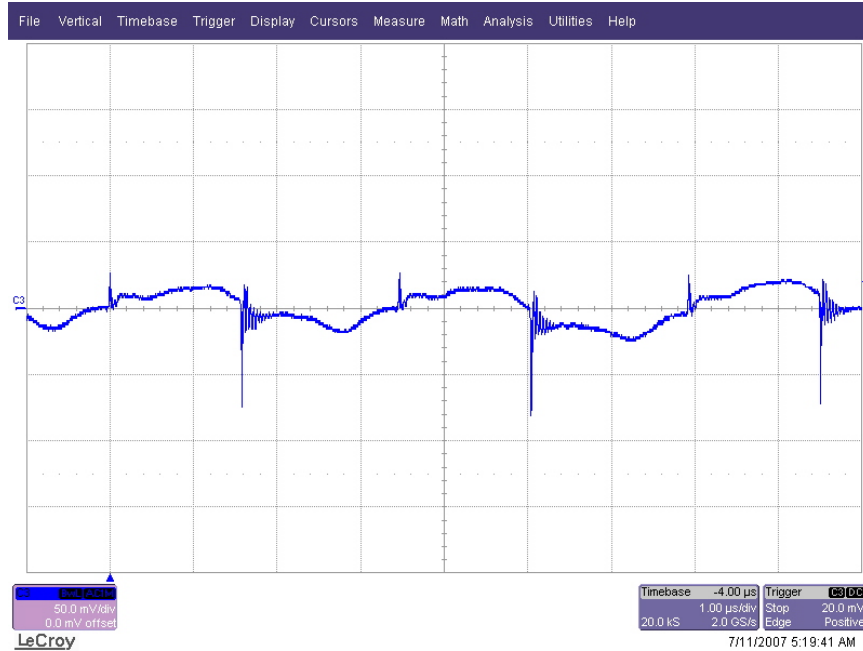
Output Ripple and Noise

Output voltage ripple with 48V input and 12V/2.5A load:



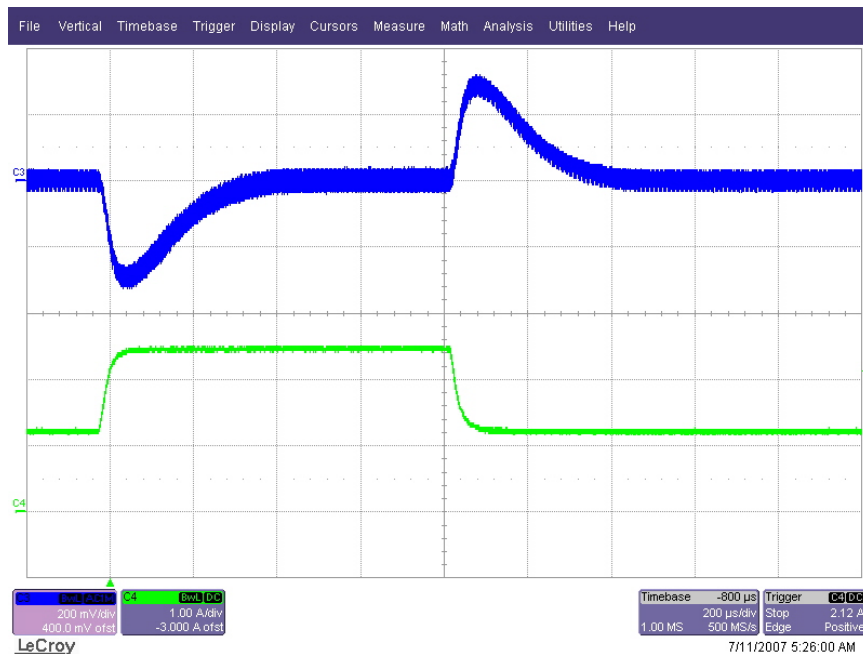
Input Ripple and Noise

Input voltage ripple and noise measured across J3 with 48V input and 12V/2.5A load:



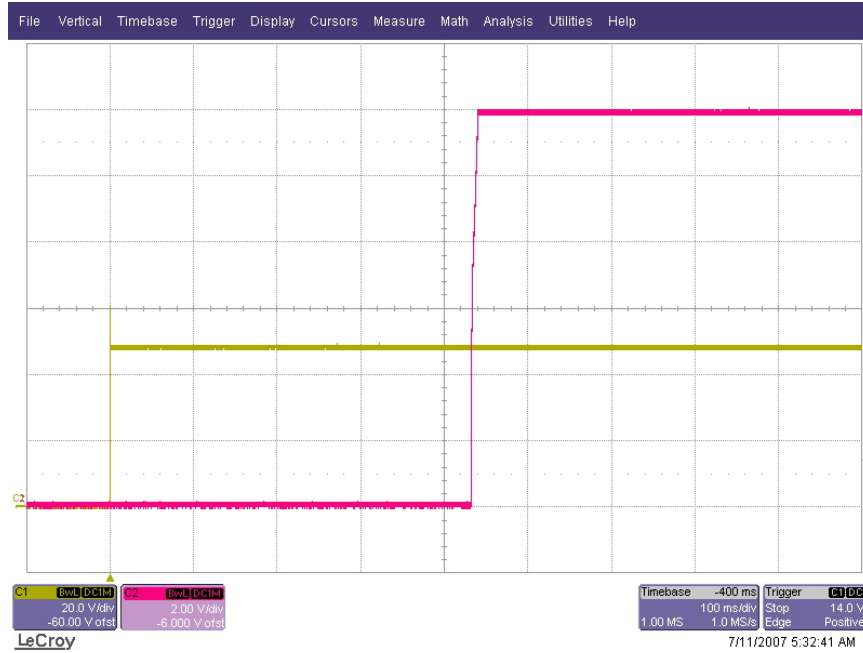
Dynamic Loading

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

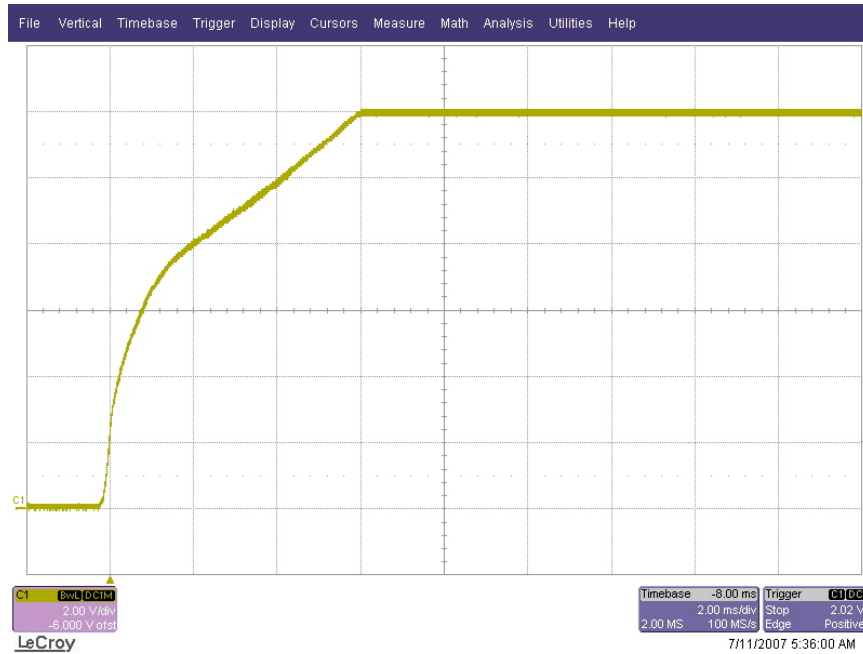


Turn On Response

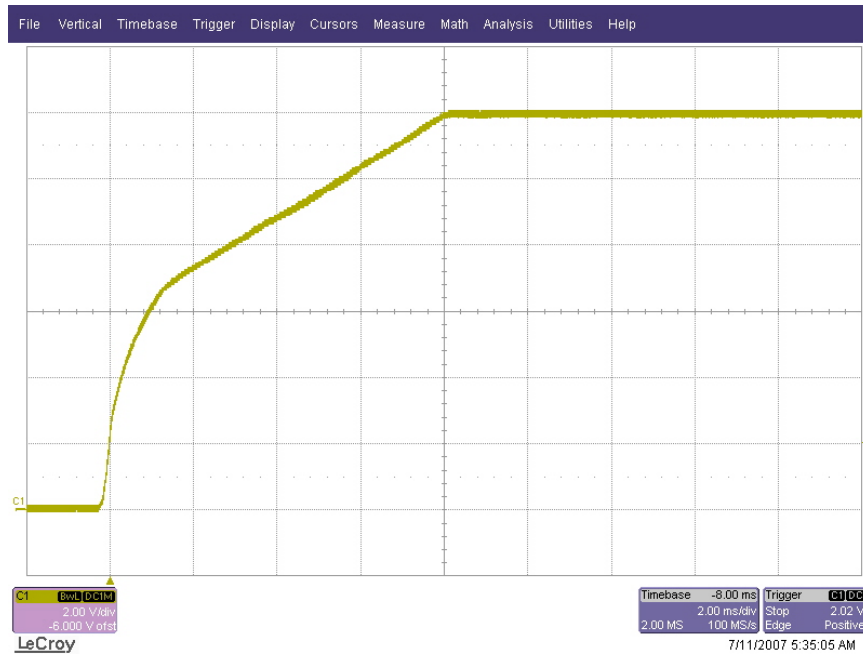
The output voltage turn-on response with a 48V input and a 2.5A load (J5 jumper installed):



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

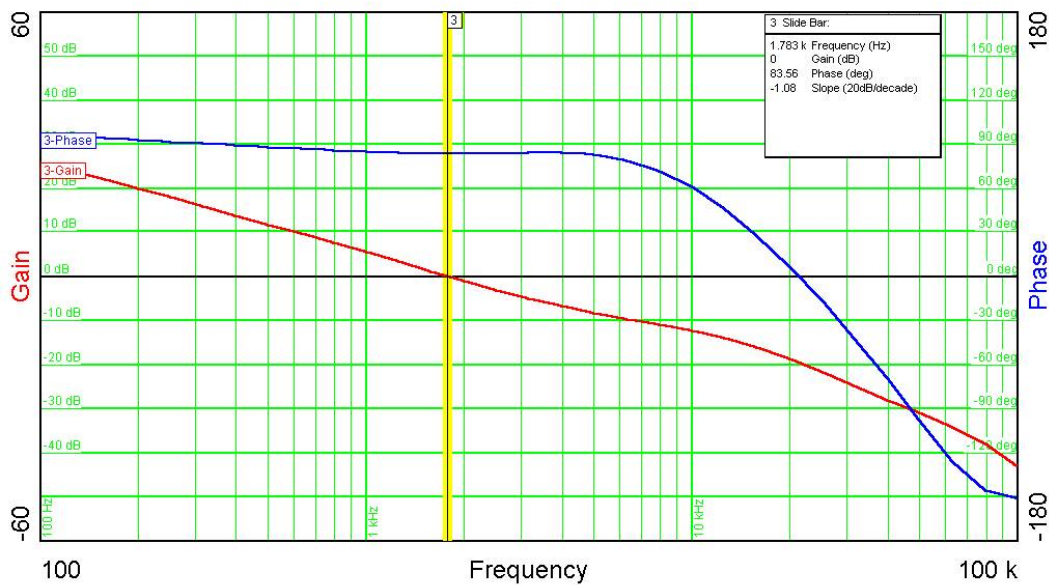


The output voltage turn-on response with a 48V input and a 2.5A load:



Stability Analysis (Loop Gain)

The figure below is the loop gain of the flyback converter with a 48V input and a 2.5A load. The bandwidth is 1.8 KHz, the phase margin is 83 degrees, and the gain margin is 20 dB.



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