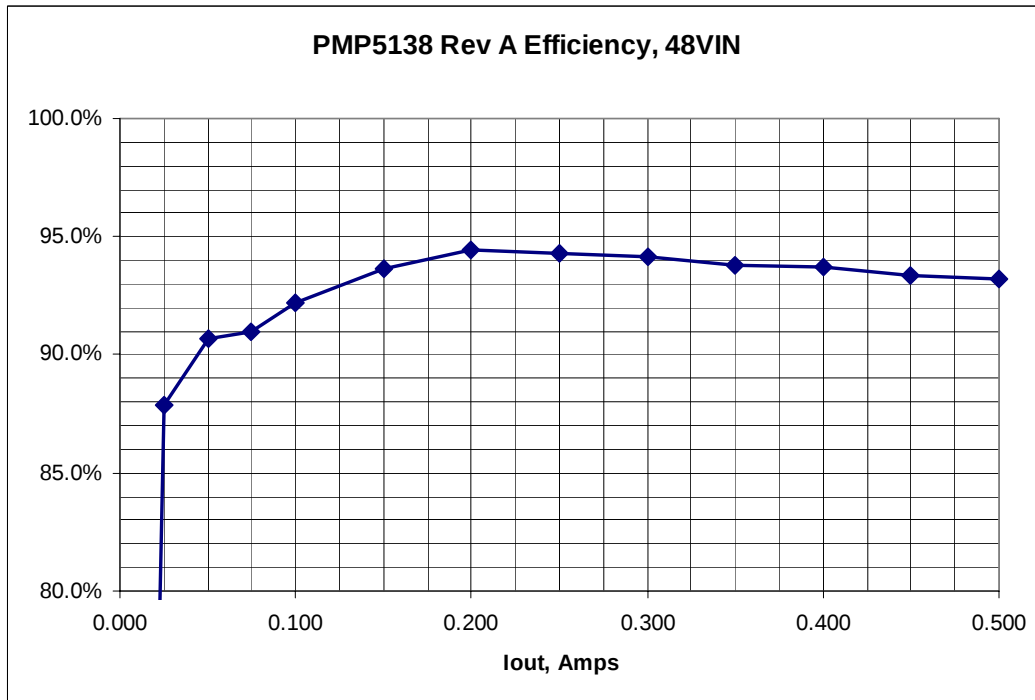
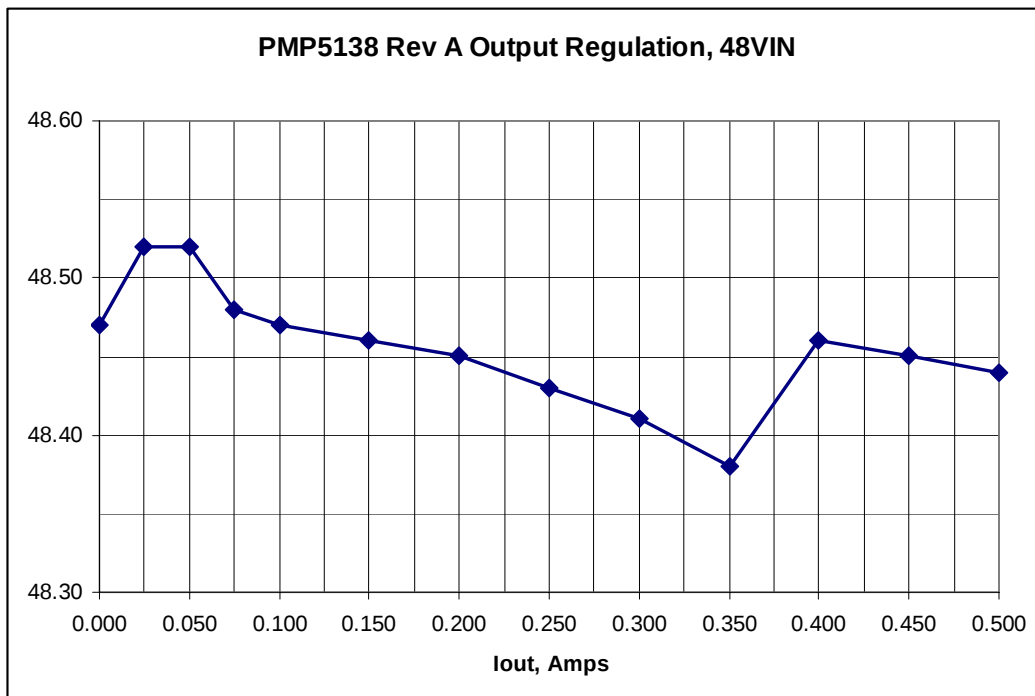


Efficiency

The efficiency is shown below:



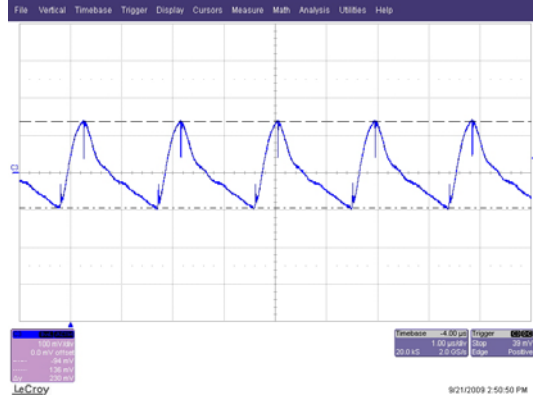
The load regulation is shown below:



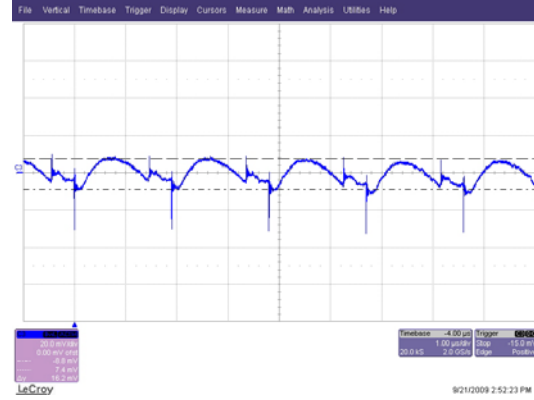
Ripple and Noise

Ripple measurements taken with a 48V input and maximum load on all outputs.

48V ripple at J2; 100mV/div, 1usec/div:

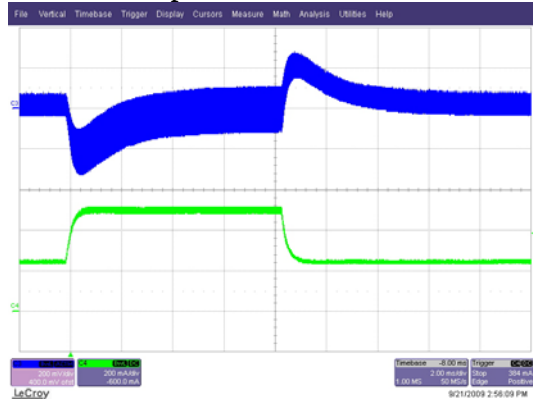


Input ripple at J1; 20mV/div, 1usec/div:



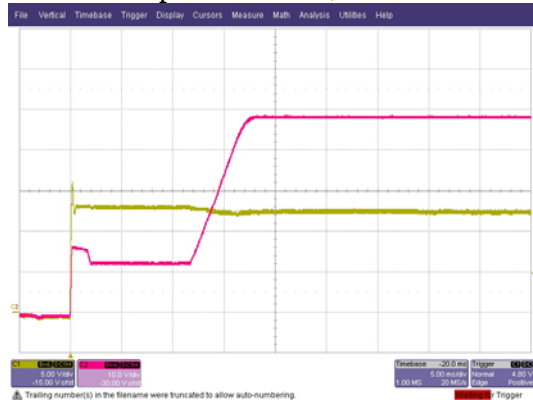
Dynamic Loading

48V load step; 200mV/div, 2msec/div:

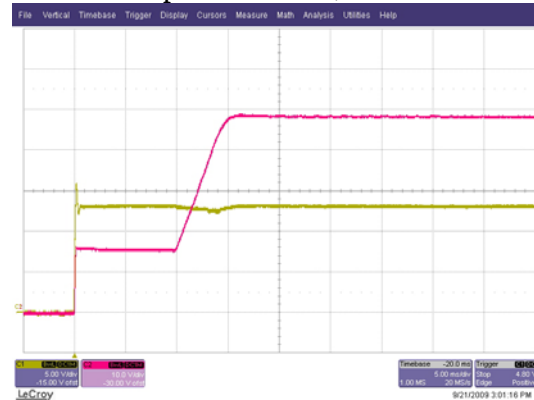


Turn On Response

Turn-on response: 48Vin, 0.5A load:

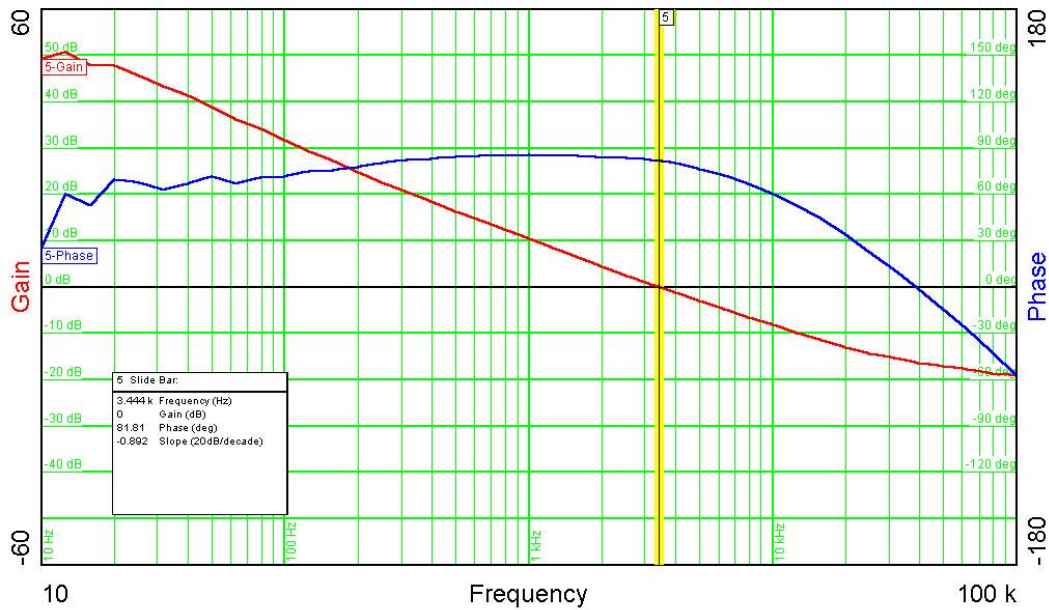


Turn-on response: 48Vin, 0A load:



Stability Analysis (Loop Gain)

The figure below is the loop gain of the converter with a 48V input and a 0.5A load. In order to measure the loop, R9 was changed to 49.4 Ohms and the test signal was injected across the R9. The Bandwidth is 3.4 KHz, the Phase Margin is 81 degrees, and the Gain Margin is 17 dB.



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