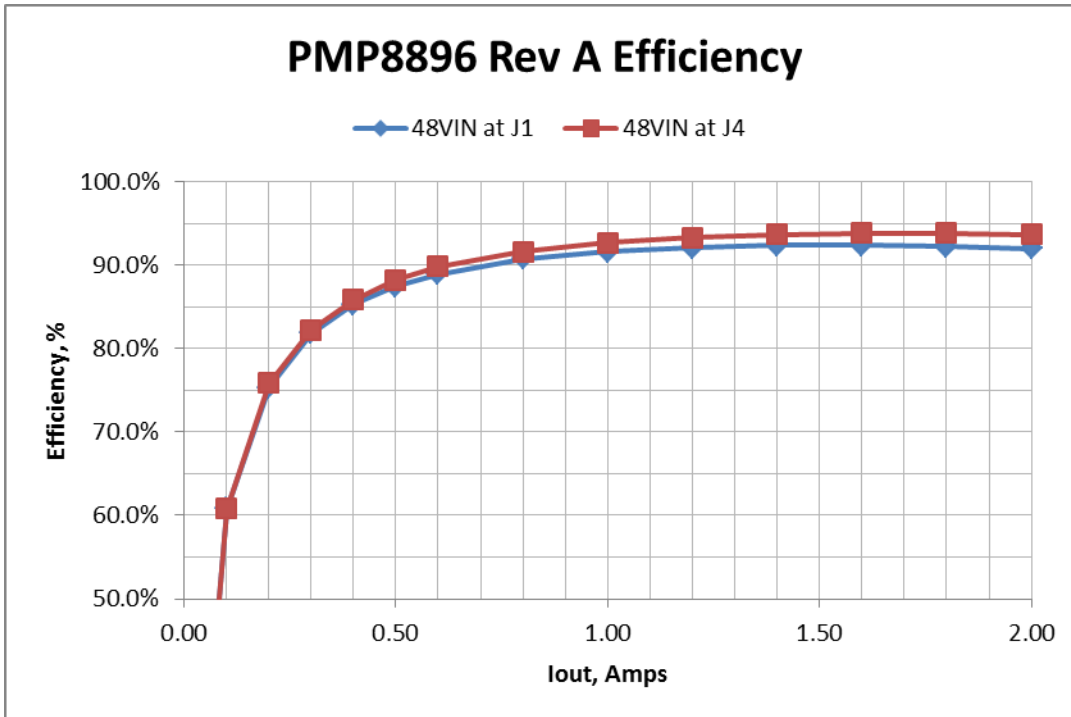


Efficiency

The efficiency of the converter is shown below:

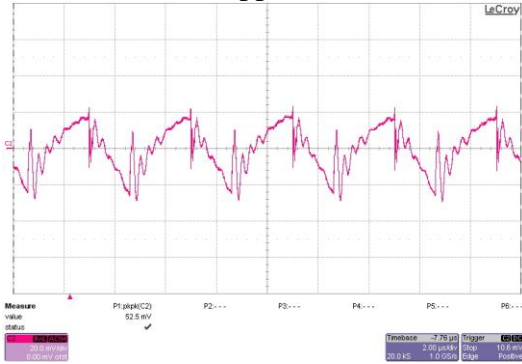
	TP5/TP6	J1	J1	J1	J4	J4	J4
Iout	Vout	Iin	Vin	Eff	Iin	Vin	Eff
0.00	4.989	0.0068	48.00	0.0%	0.0068	48.00	0.0%
0.10	4.989	0.0171	48.00	60.8%	0.0171	48.00	60.8%
0.20	4.989	0.0276	48.00	75.3%	0.0274	48.00	75.9%
0.30	4.989	0.0381	48.00	81.8%	0.0379	48.00	82.3%
0.40	4.988	0.0487	48.00	85.4%	0.0484	48.00	85.9%
0.50	4.988	0.0594	48.00	87.5%	0.0589	48.00	88.2%
0.60	4.988	0.0701	48.00	88.9%	0.0694	48.00	89.8%
0.80	4.988	0.0916	48.00	90.8%	0.0907	48.00	91.7%
1.00	4.988	0.1134	48.00	91.6%	0.1121	48.00	92.7%
1.20	4.988	0.1354	48.00	92.1%	0.1336	48.00	93.3%
1.40	4.988	0.1575	48.00	92.4%	0.1553	48.00	93.7%
1.60	4.988	0.1800	48.00	92.4%	0.1772	48.00	93.8%
1.80	4.988	0.2027	48.00	92.3%	0.1993	48.00	93.9%
2.00	4.988	0.2258	48.00	92.0%	0.2217	48.00	93.7%



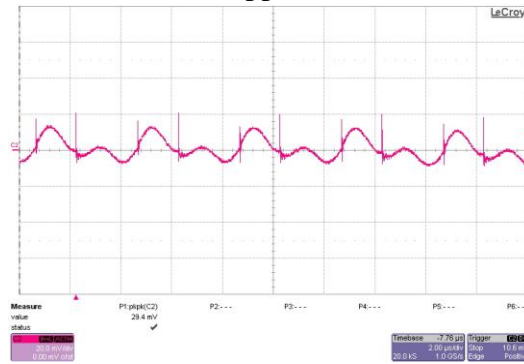
Ripple and Noise

Ripple measurements taken with 48VIN at J1, 2A load, and 20MHz BWL.

Output Ripple (C11), 20mV/div, 2us/div:
Measured 52.5mVpp

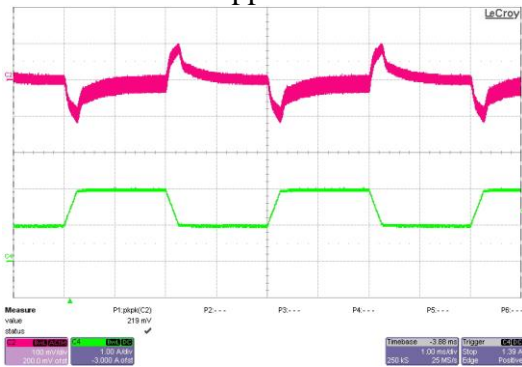


Input Ripple (J4), 20mV/div, 2us/div:
Measured 29.4mVpp

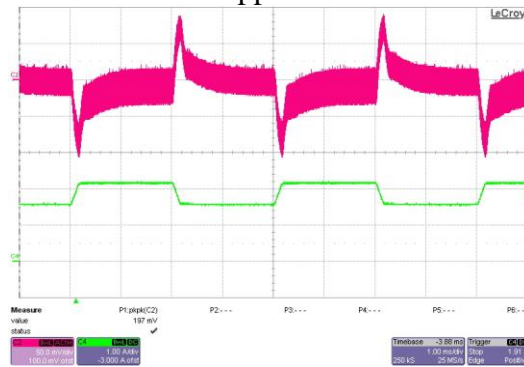


Dynamic Loading

Load Step, 1A to 2A, 100mV/div
1msec/div, 4mA/usec slew rate
Measured 219mVpp:

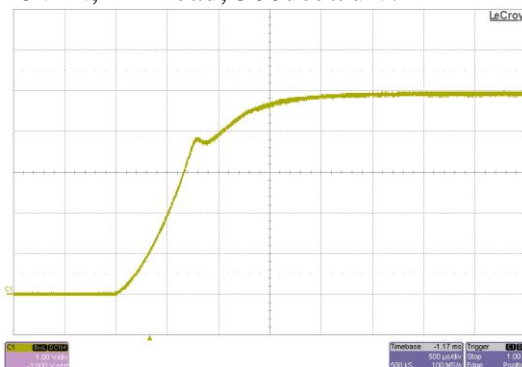


Load Step, 1.6A to 2.2A, 50mV/div
1msec/div, 4mA/usec slew rate
Measured 197mVpp:

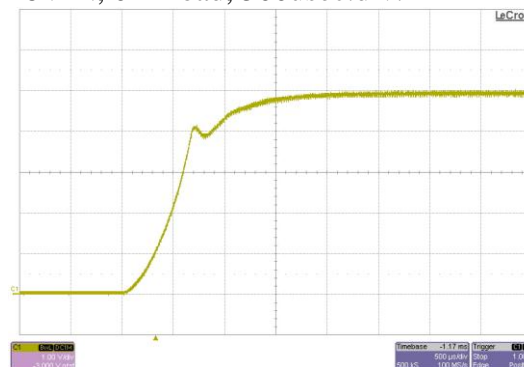


Turn On Response

48VIN, 2A Load, 500usec/div:

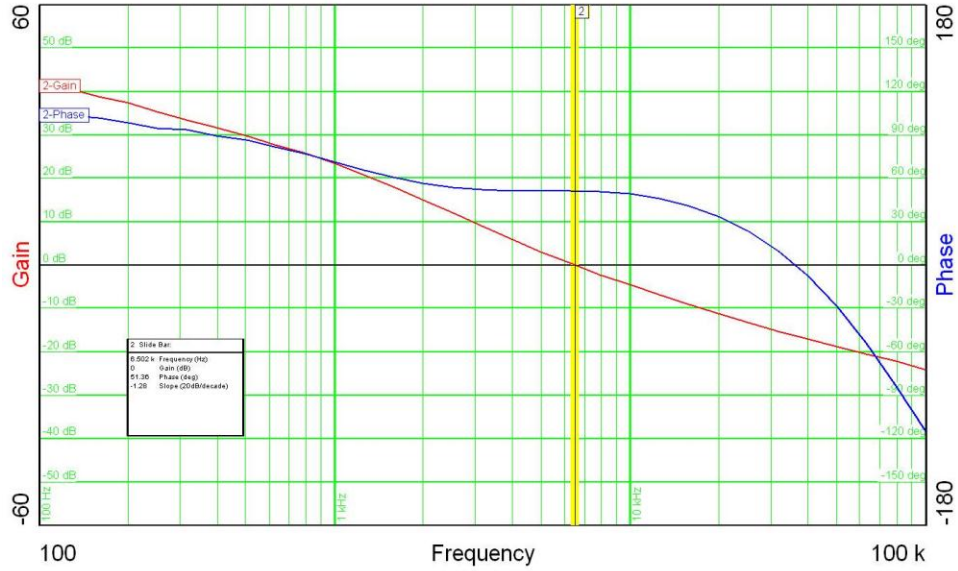


48VIN, 0A Load, 500usec/div:



Stability (Loop Gain)

The figure below is the loop gain of the converter with a 48V input and 2A load. The bandwidth is 6.5 KHz, the phase margin is 51 degrees, and the gain margin is 16 dB.



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