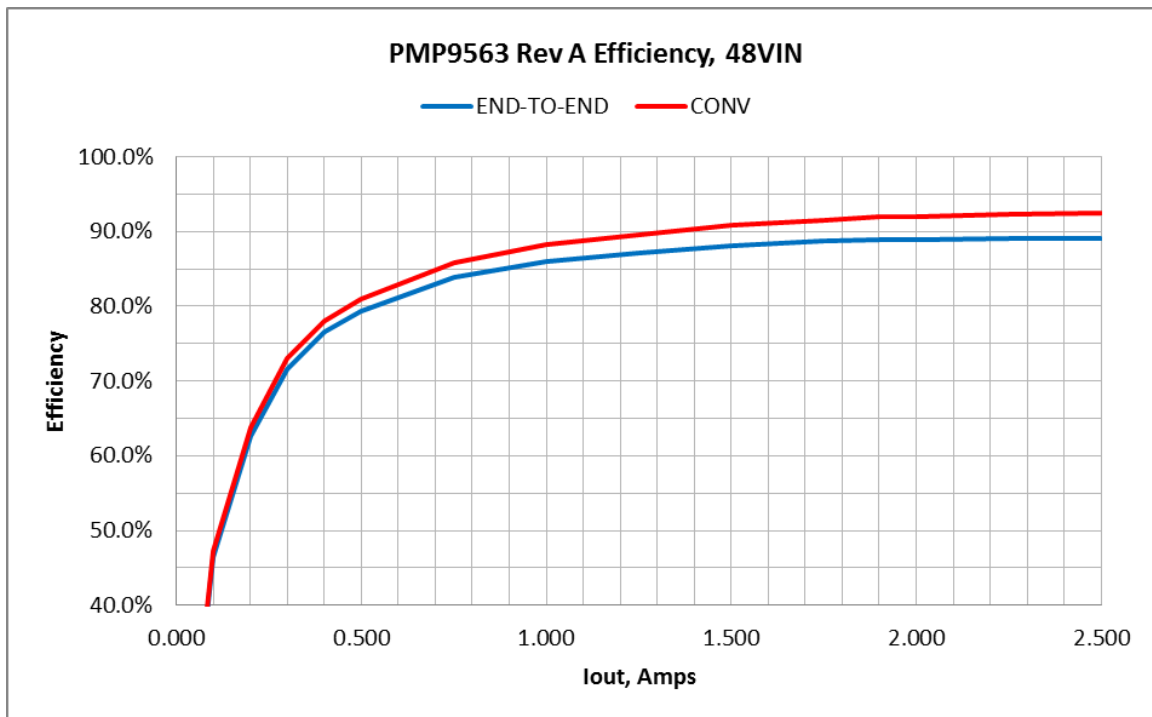


All testing performed with 48VIN, 1.9A load and 20MHz BW unless otherwise noted.

Efficiency

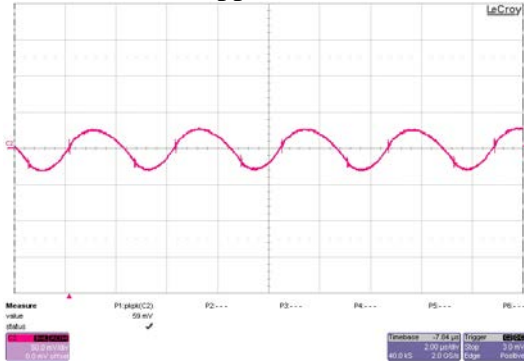
The efficiency is shown below:

J4	J4	J1	J1	J1	CONV	CONV
Iout	Vout	Iin	Vin	Eff	Vin	Eff
0.000	12.03	0.028	48.00	0.0%	47.29	0.0%
0.100	12.03	0.054	48.00	46.4%	47.22	47.2%
0.200	12.03	0.080	48.00	62.7%	47.16	63.8%
0.300	12.03	0.105	48.00	71.6%	47.11	73.0%
0.400	12.03	0.131	48.00	76.5%	47.07	78.0%
0.500	12.03	0.158	48.00	79.3%	47.02	81.0%
0.750	12.02	0.224	48.00	83.8%	46.91	85.8%
1.000	12.02	0.291	48.00	86.1%	46.81	88.2%
1.250	12.02	0.359	48.00	87.2%	46.70	89.6%
1.500	12.02	0.426	48.00	88.2%	46.60	90.8%
1.750	12.02	0.494	48.00	88.7%	46.50	91.6%
1.900	12.02	0.535	48.00	88.9%	46.43	91.9%
2.000	12.02	0.563	48.00	89.0%	46.38	92.1%
2.250	12.02	0.633	48.00	89.0%	46.30	92.3%
2.500	12.02	0.703	48.00	89.1%	46.22	92.5%

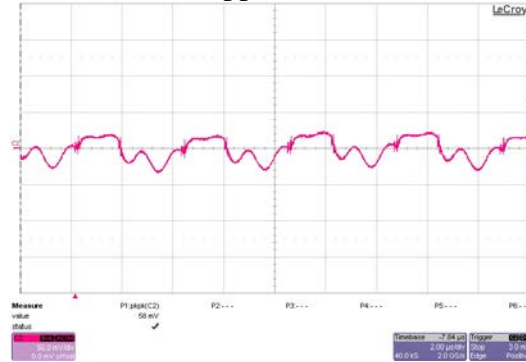


Ripple and Noise

Output Ripple (C20), 50mV/div
 Measured 59mVpp:

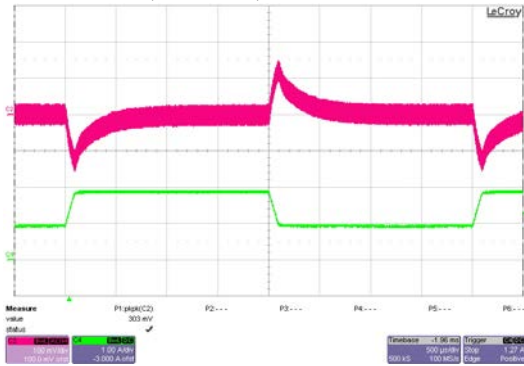


Input Ripple (C7), 50mV/div
 Measured 58mVpp:



Dynamic Loading

Output Load Step; 0.95A to 1.9A load step; Slew Rate = 10mA/usec
 100mV/div, 1A/div, 500usec/div: Measured 303mVpp across C20:

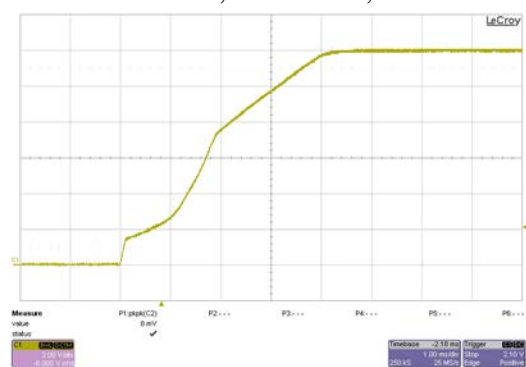


Turn On Response

1.9A Load, 1msec/div, 2V/div:

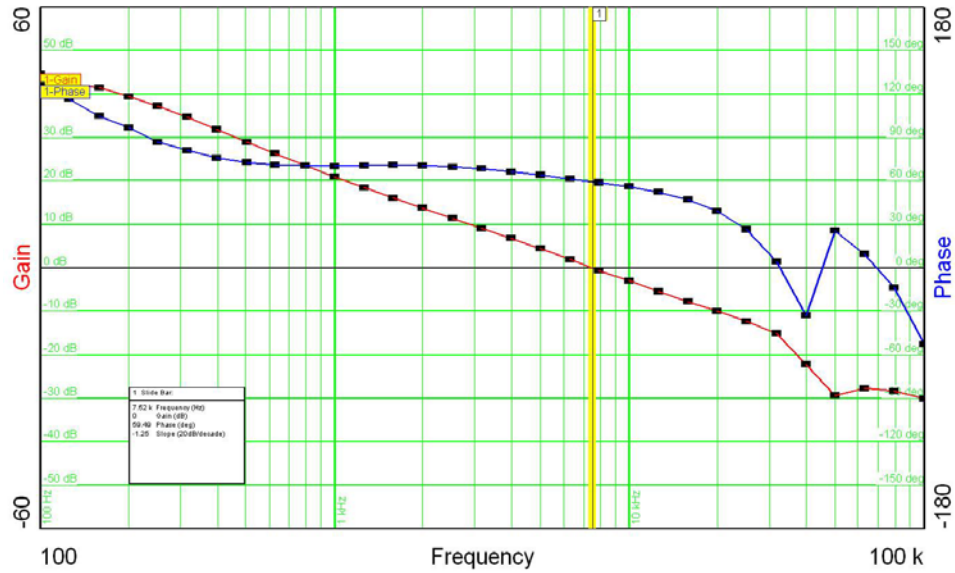


0A Load, 1msec.div, 2V/div:



Loop Stability

The measured Bode plot of the converter is shown below:

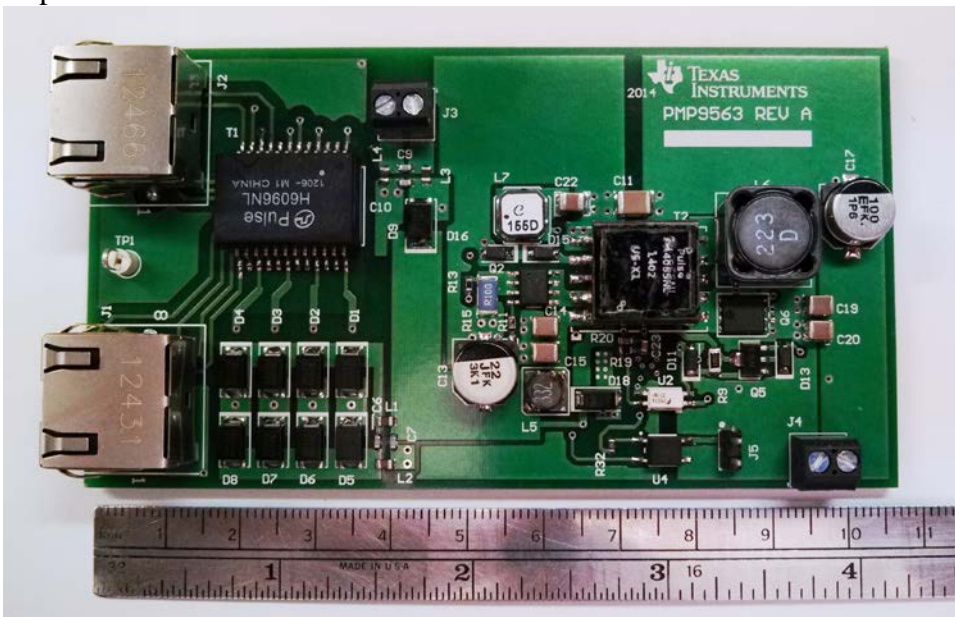


BW: 7.5KHz PM: 59 deg GM: 15dB

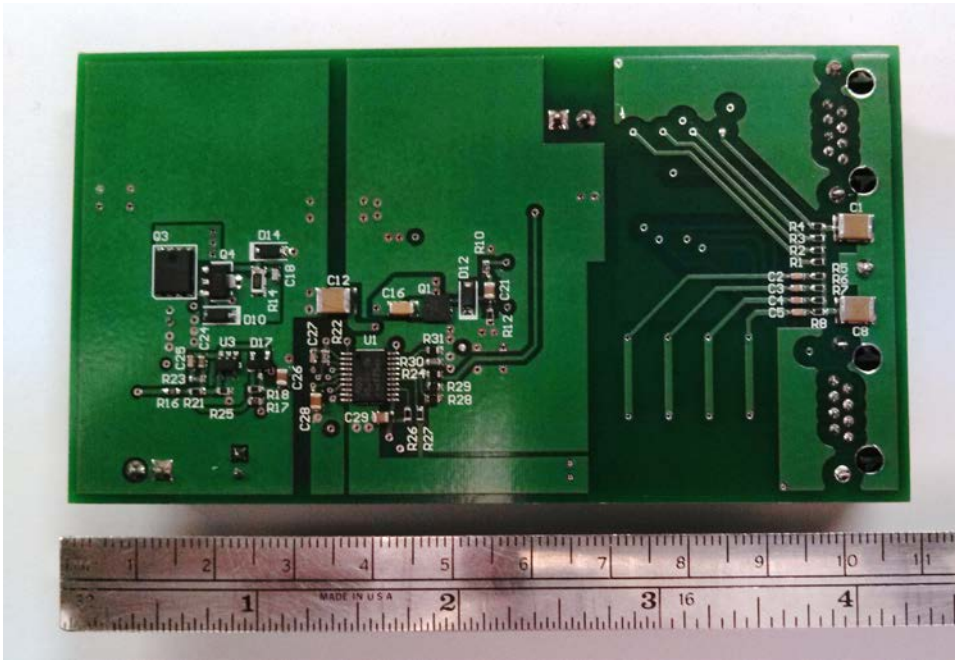
Photo

(Converter fits in 60x30mm area)

Top:



Bottom:



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