Efficiency
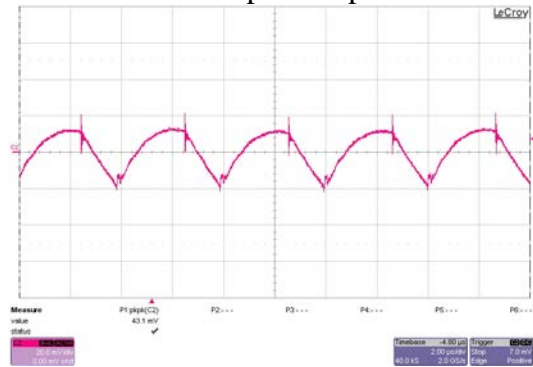
All testing done with a 48V input, 900mA load, and 20MHz BW unless otherwise noted.
The efficiency is shown below:

| | | J1 | J1 | J1 | Converter Only | |
| | | | | | C1 | C1 |
Iout	**Vout**	**Iin**	**Vin**	**Eff**	**Vin**	**Eff**
0.000	3.299	0.0046	48.00	0.0%	47.41	0.0%
0.100	3.299	0.0114	48.00	60.3%	47.33	61.1%
0.200	3.299	0.0184	48.00	74.7%	47.28	75.8%
0.300	3.299	0.0256	48.00	80.5%	47.24	81.8%
0.400	3.299	0.0328	48.00	83.8%	47.20	85.2%
0.500	3.299	0.0402	48.00	85.5%	47.18	87.0%
0.600	3.299	0.0476	48.00	86.6%	47.13	88.2%
0.700	3.299	0.0552	48.00	87.2%	47.10	88.8%
0.800	3.299	0.0629	48.00	87.4%	47.07	89.1%
0.900	3.299	0.0708	48.00	87.4%	47.05	89.1%

PMP9068 Rev B Opto Feedback Efficiency
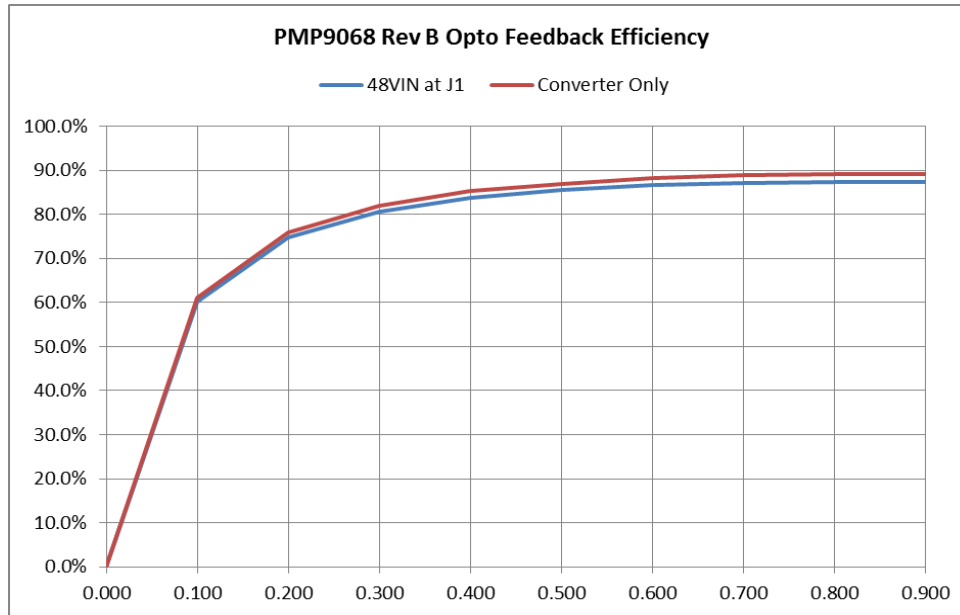
Ripple and Noise

3.3V Output Ripple (C5), 20mV/div   Input Ripple (C1), 50mV/div
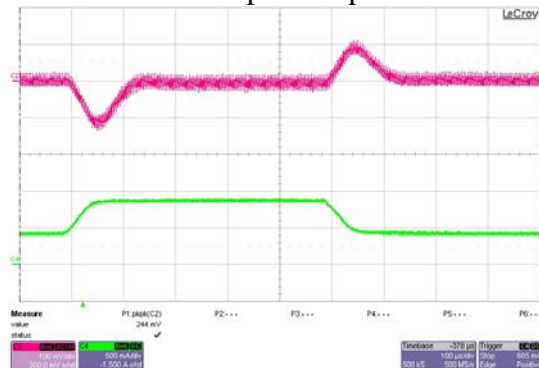Measured 43.1mVpeak to peak: Measured 89mVpeak to peak:
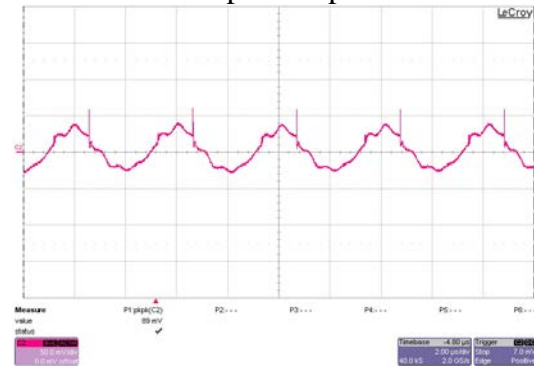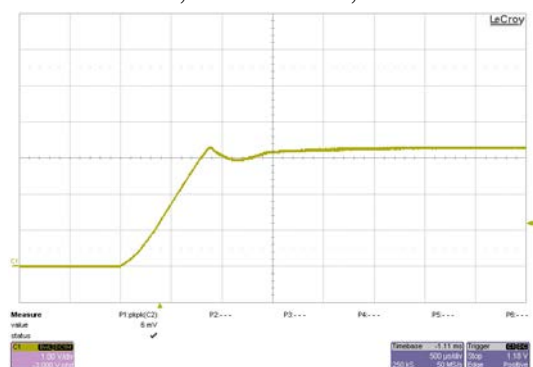
Dynamic Loading

3.3V Load Step, 450mA to 900mA load step; 9mA/usec, 100mV/div, 100usec/div
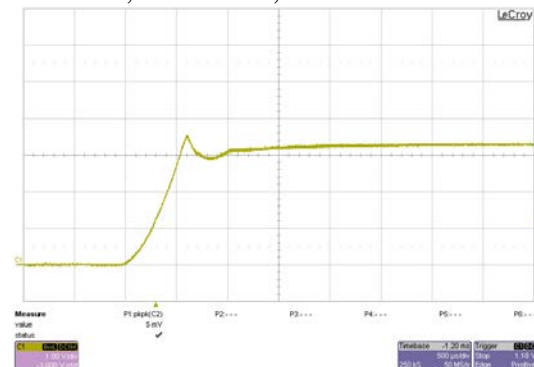Measured 244mV peak to peak:
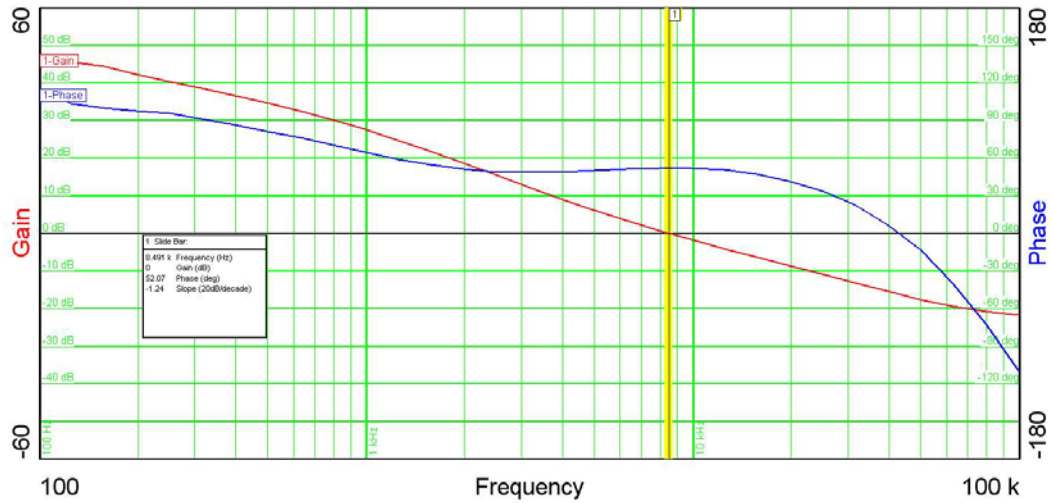
Turn On Response

900mA Load, 500usec/div, 1V/div: 0A Load, 1msec.div, 1V/div:

Loop Stability
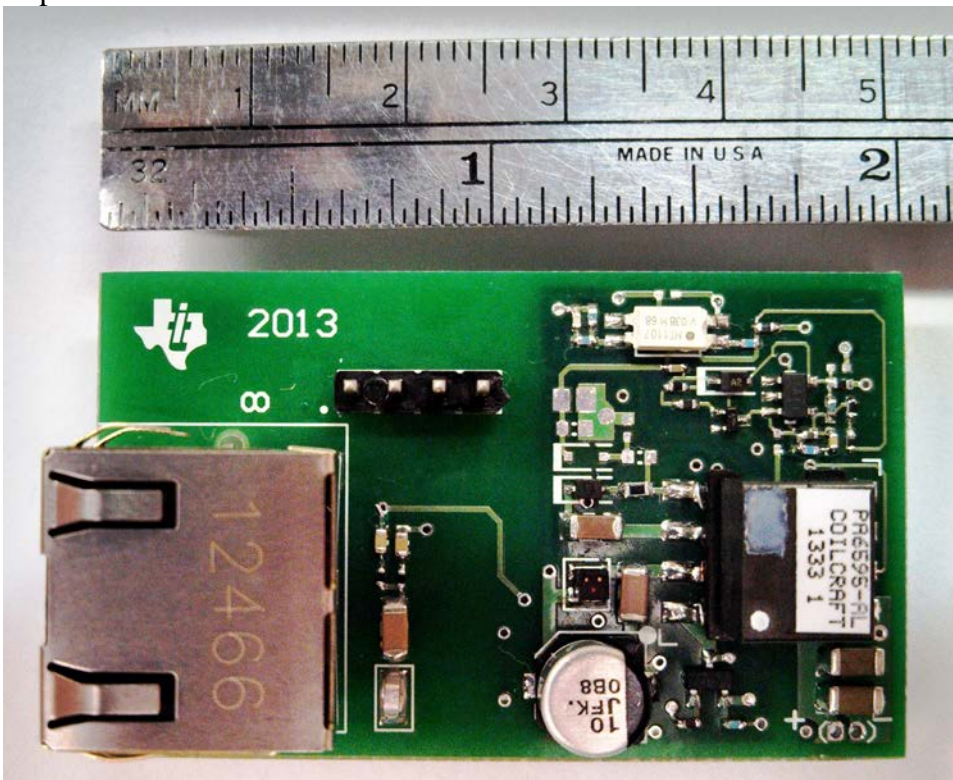
The measured Bode plot of the converter shown below:
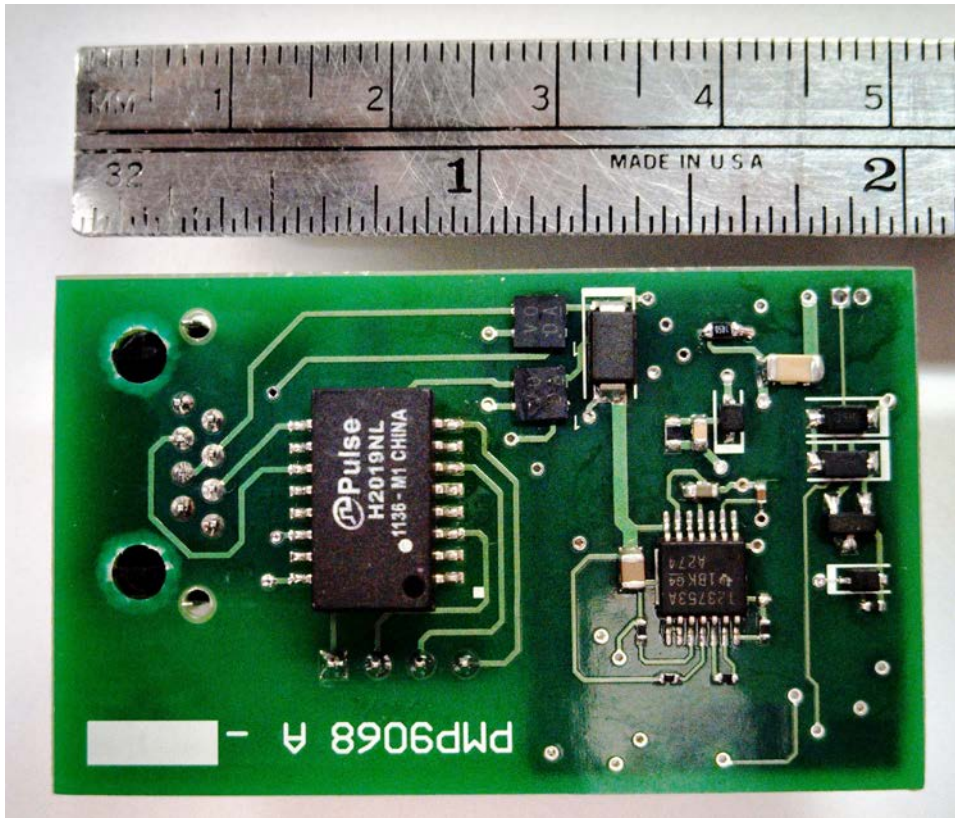

BW = 8.4KHz   PM = 52 Degrees   GM = 16dB

Photo

Top:

Bottom:

IMPORTANT NOTICE AND DISCLAIMER