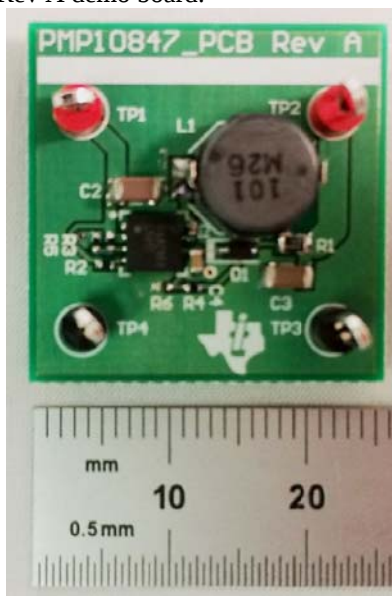
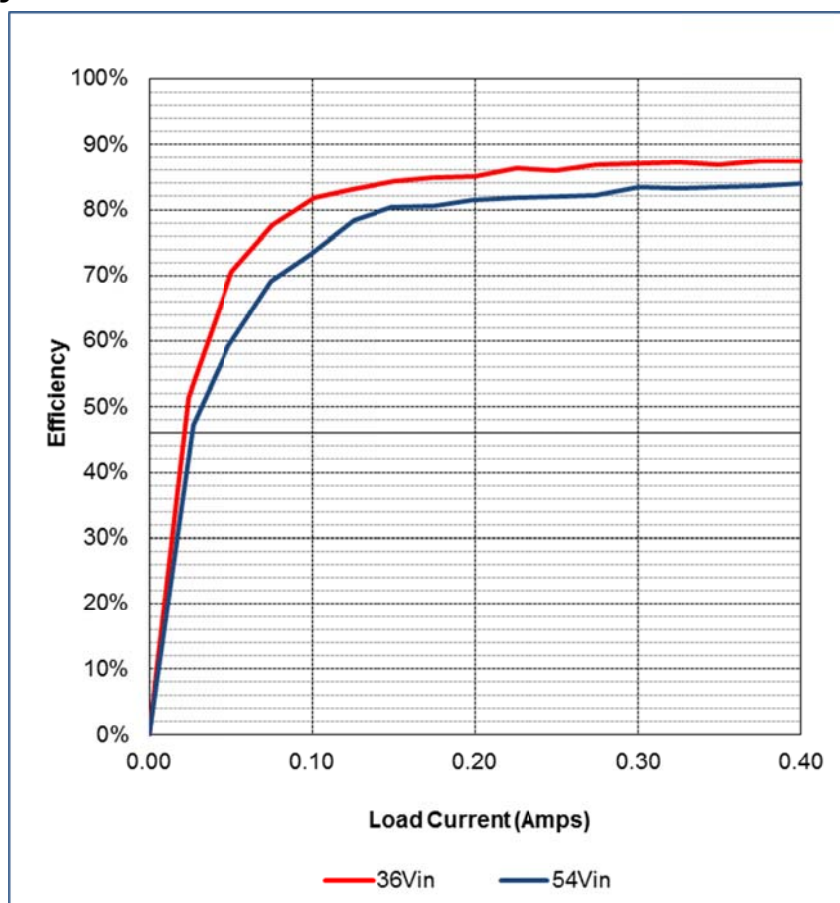


1 Photos

Below is a photo of the PMP10847 Rev A demo board.



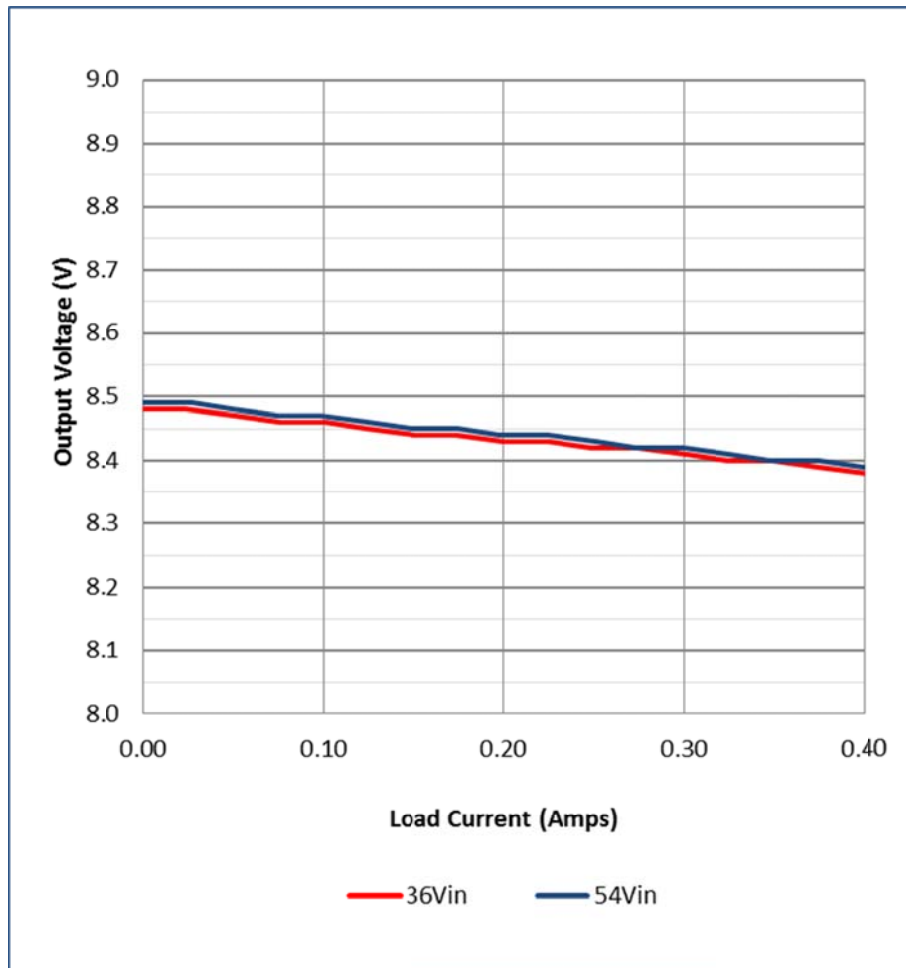
2 Efficiency



Vin	Iin	Iout	Vout	Pout	Losses	Efficiency
36.00	0.005	0.000	8.480	0.00	0.180	0.0%
36.00	0.011	0.024	8.480	0.20	0.192	51.4%
36.00	0.017	0.051	8.470	0.43	0.180	70.6%
36.02	0.023	0.076	8.460	0.64	0.186	77.6%
36.02	0.029	0.101	8.460	0.85	0.190	81.8%
36.02	0.035	0.124	8.450	1.05	0.213	83.1%
36.01	0.042	0.151	8.440	1.27	0.238	84.3%
36.01	0.048	0.174	8.440	1.47	0.260	85.0%
36.01	0.055	0.200	8.430	1.69	0.295	85.1%
36.01	0.061	0.225	8.430	1.90	0.300	86.3%
36.01	0.068	0.250	8.420	2.11	0.344	86.0%
36.01	0.074	0.275	8.420	2.32	0.349	86.9%
36.00	0.081	0.302	8.410	2.54	0.376	87.1%
36.00	0.087	0.325	8.400	2.73	0.402	87.2%
36.00	0.094	0.350	8.400	2.94	0.444	86.9%
36.00	0.100	0.375	8.390	3.15	0.454	87.4%
36.00	0.107	0.402	8.380	3.37	0.483	87.5%

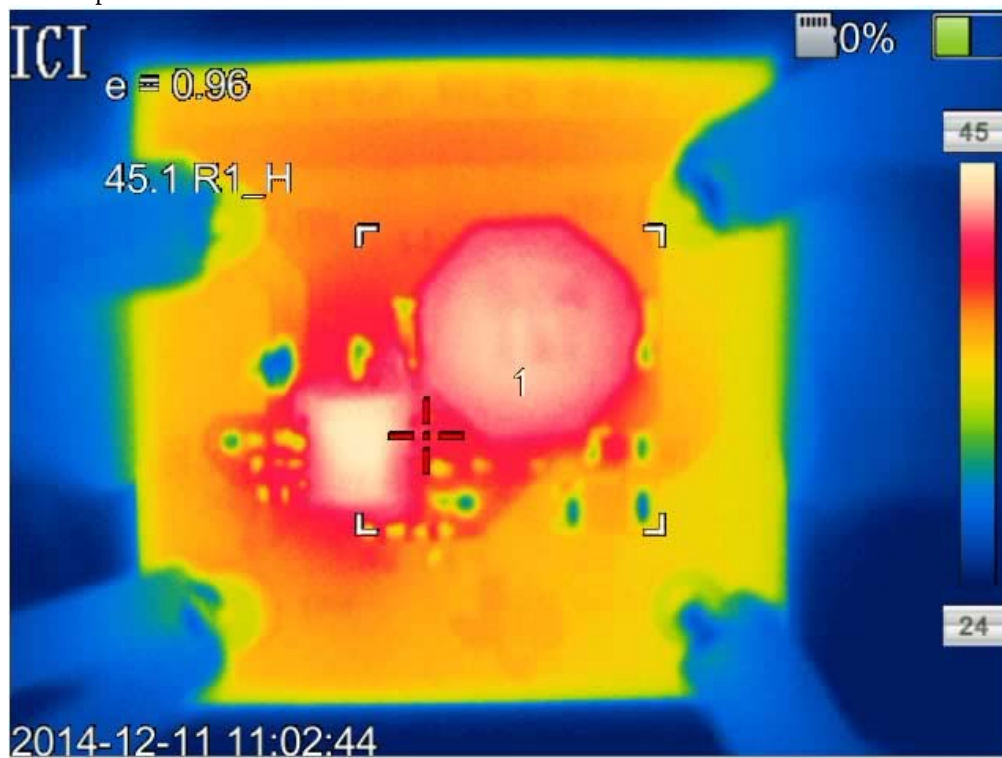
Vin	Iin	Iout	Vout	Pout	Losses	Efficiency
54.00	0.005	0.000	8.490	0.00	0.270	0.0%
54.00	0.009	0.027	8.490	0.23	0.257	47.2%
54.00	0.013	0.049	8.480	0.42	0.286	59.2%
54.00	0.017	0.075	8.470	0.64	0.283	69.2%
54.00	0.021	0.098	8.470	0.83	0.304	73.2%
54.00	0.025	0.125	8.460	1.06	0.293	78.3%
54.00	0.029	0.149	8.450	1.26	0.307	80.4%
54.00	0.034	0.175	8.450	1.48	0.357	80.5%
54.00	0.038	0.198	8.440	1.67	0.381	81.4%
54.00	0.043	0.225	8.440	1.90	0.423	81.8%
54.00	0.048	0.252	8.430	2.12	0.468	82.0%
54.00	0.052	0.274	8.420	2.31	0.501	82.2%
54.00	0.056	0.300	8.420	2.53	0.498	83.5%
54.00	0.061	0.326	8.410	2.74	0.552	83.2%
54.00	0.065	0.349	8.400	2.93	0.578	83.5%
54.00	0.070	0.376	8.400	3.16	0.622	83.6%
54.00	0.074	0.400	8.390	3.36	0.640	84.0%

3 Regulation



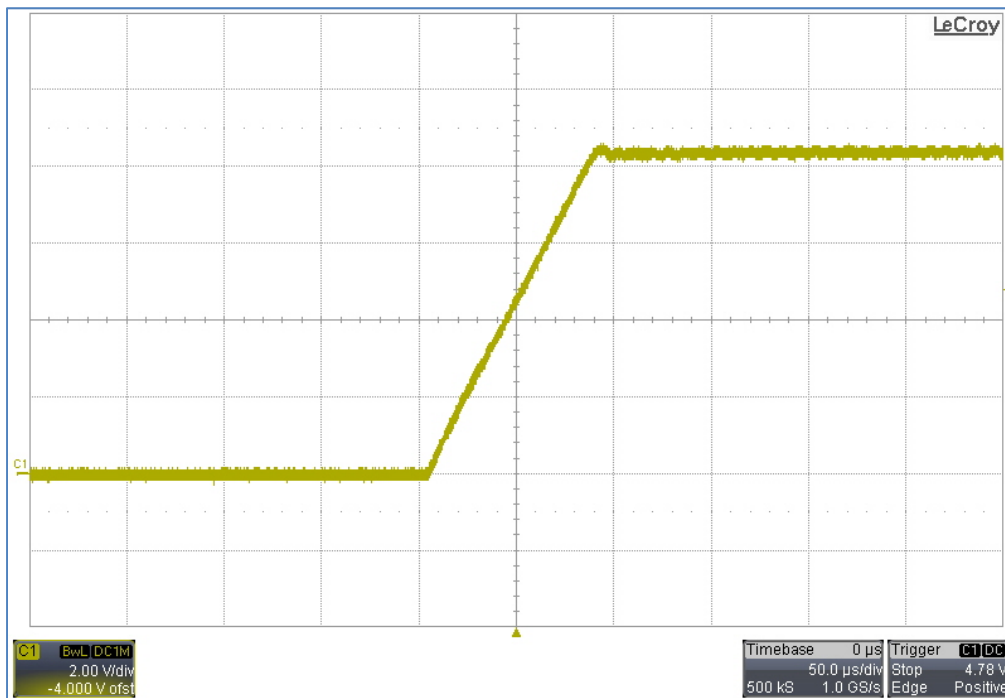
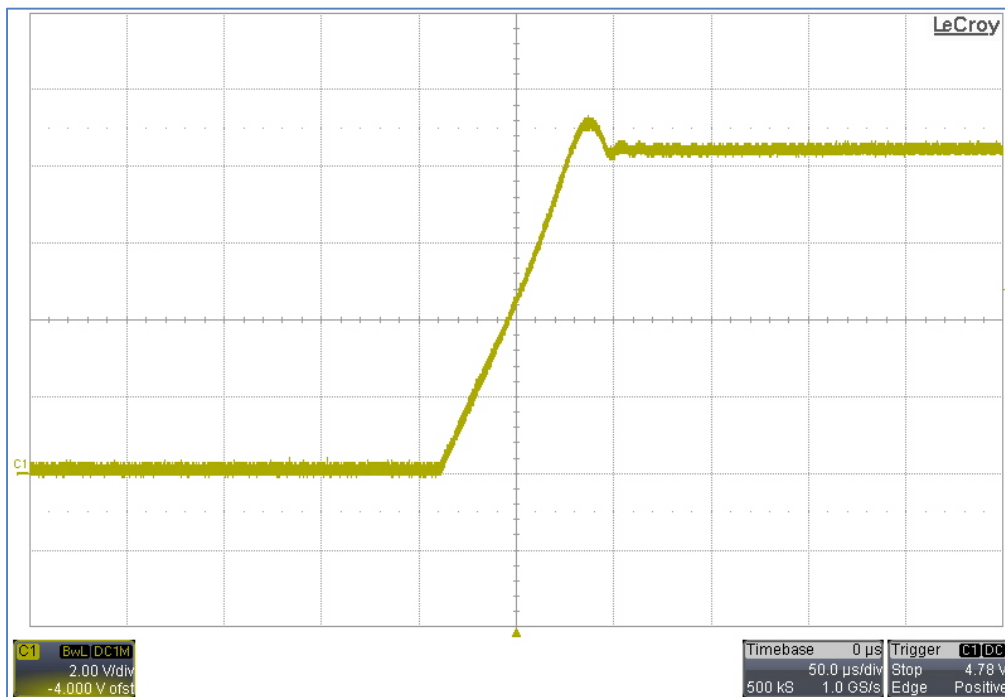
4 Thermal Image

The thermal image below shows the top of the board with $V_{in} = 54V$, $I_{out} = 400mA$, and no forced airflow. Note that the ambient temperature was 25°C.



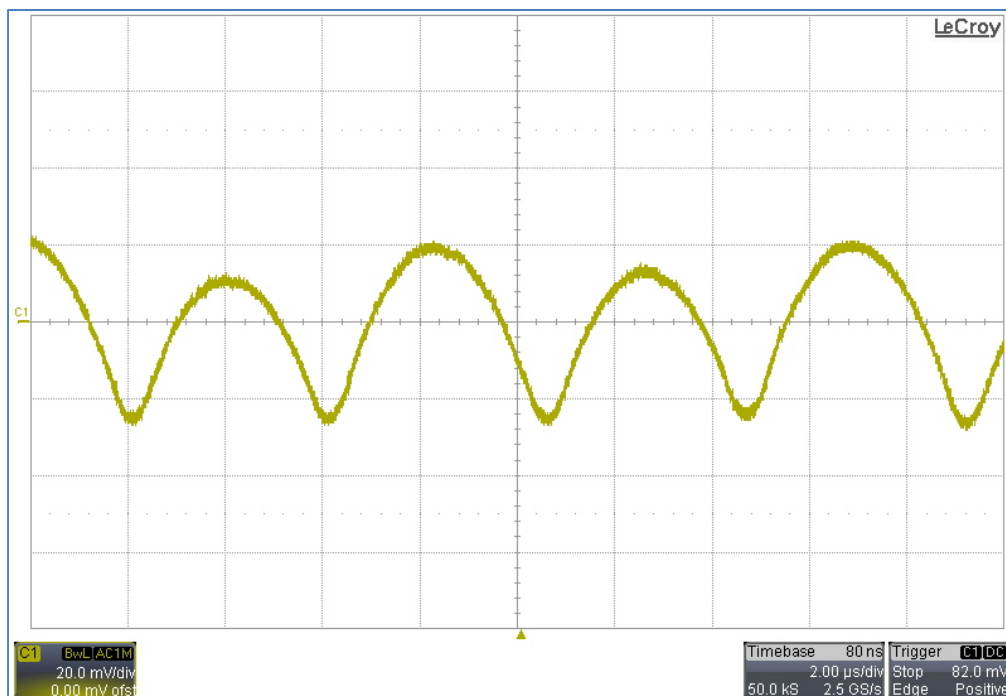
5 Startup

The output voltage at startup is shown in the images below. (Top image = 0A load, bottom image = 400mA load)



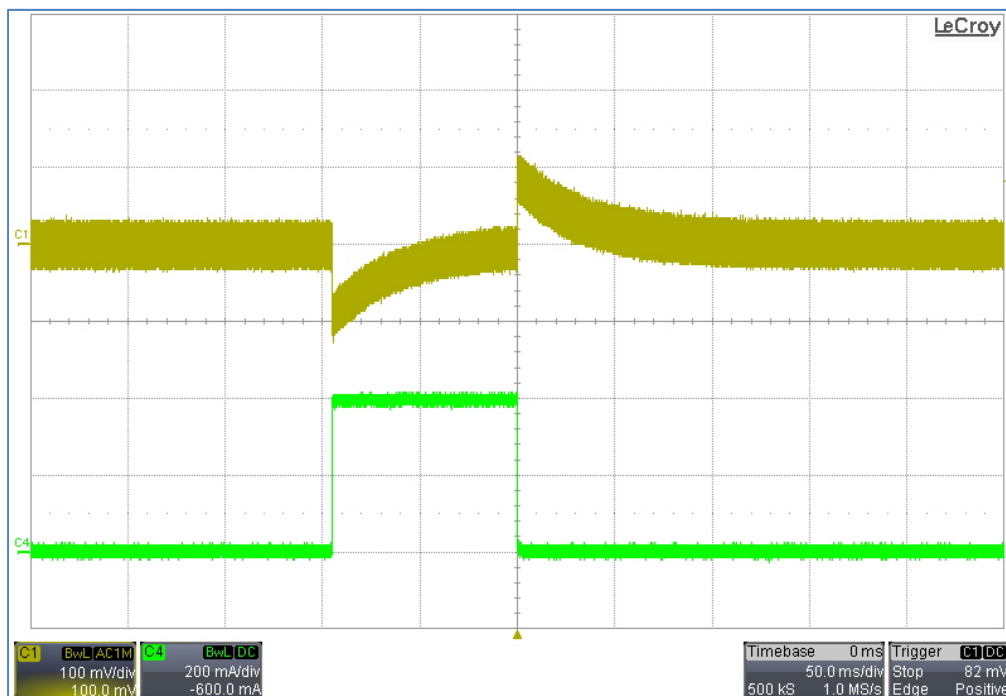
6 Output Ripple Voltage

The output ripple voltage during full load operation (400mA load) is shown in the image below, $V_{in} = 54V$.



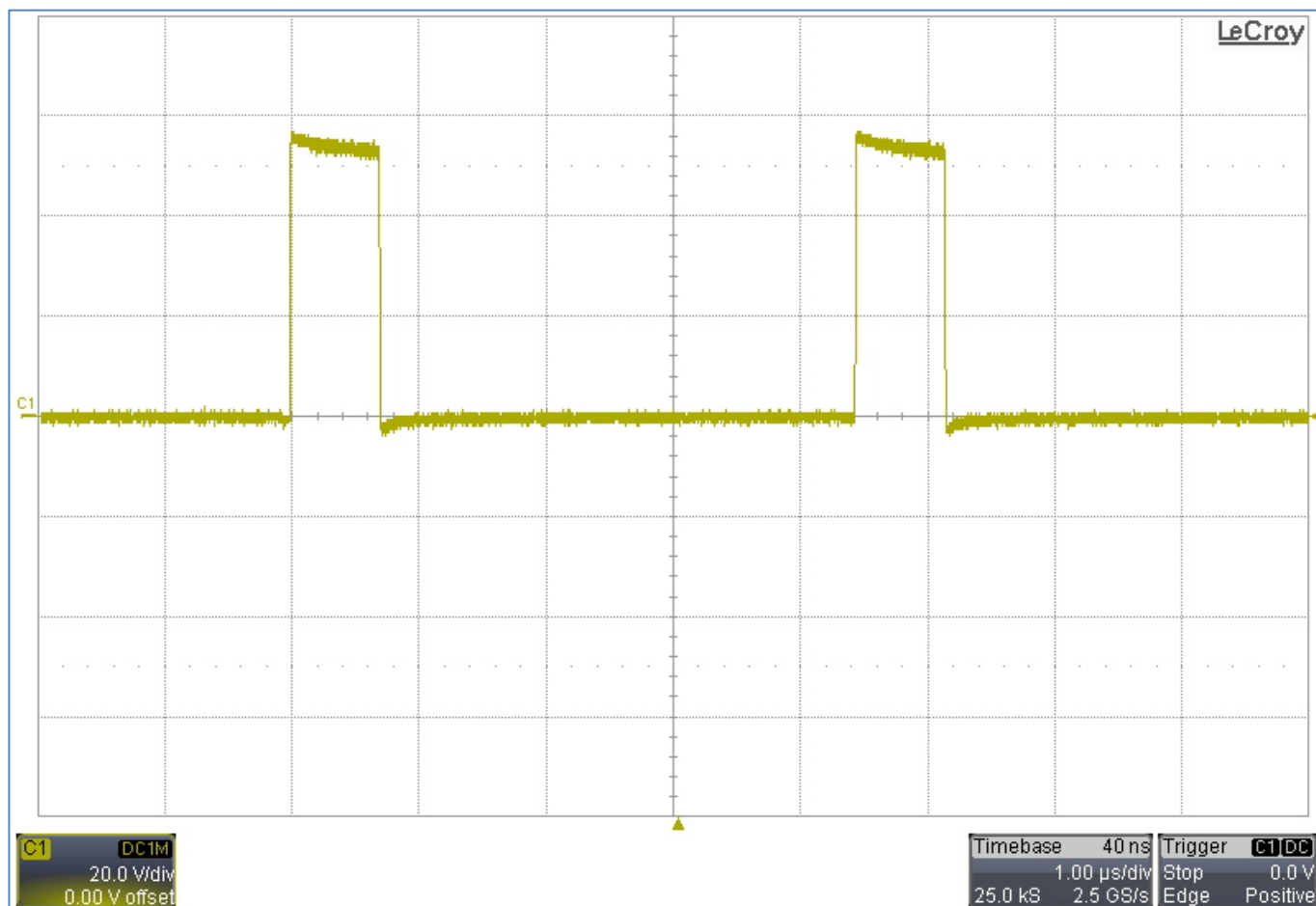
7 Load Transients

The image below shows the response to a 0A to 400mA load transient. (Channel 1 = V_{out} , Channel 4 = I_{out})



8 Switching Waveforms

The image below shows the voltage waveform on the SW pin (pin 8) of the controller (U1). The output was loaded with 400mA and the input voltage was 54V.



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