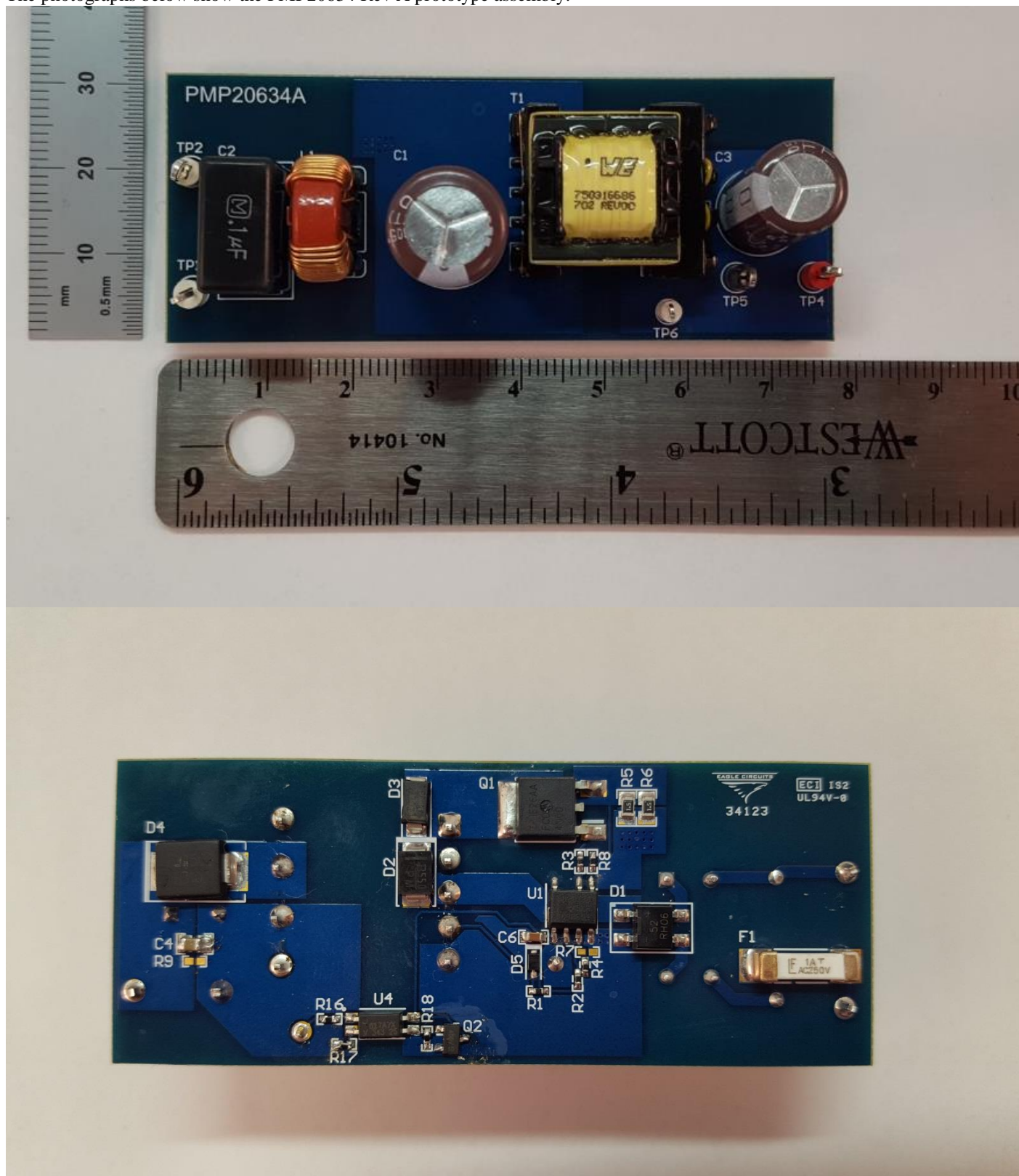


1 Photos

The photographs below show the PMP20634 Rev A prototype assembly.



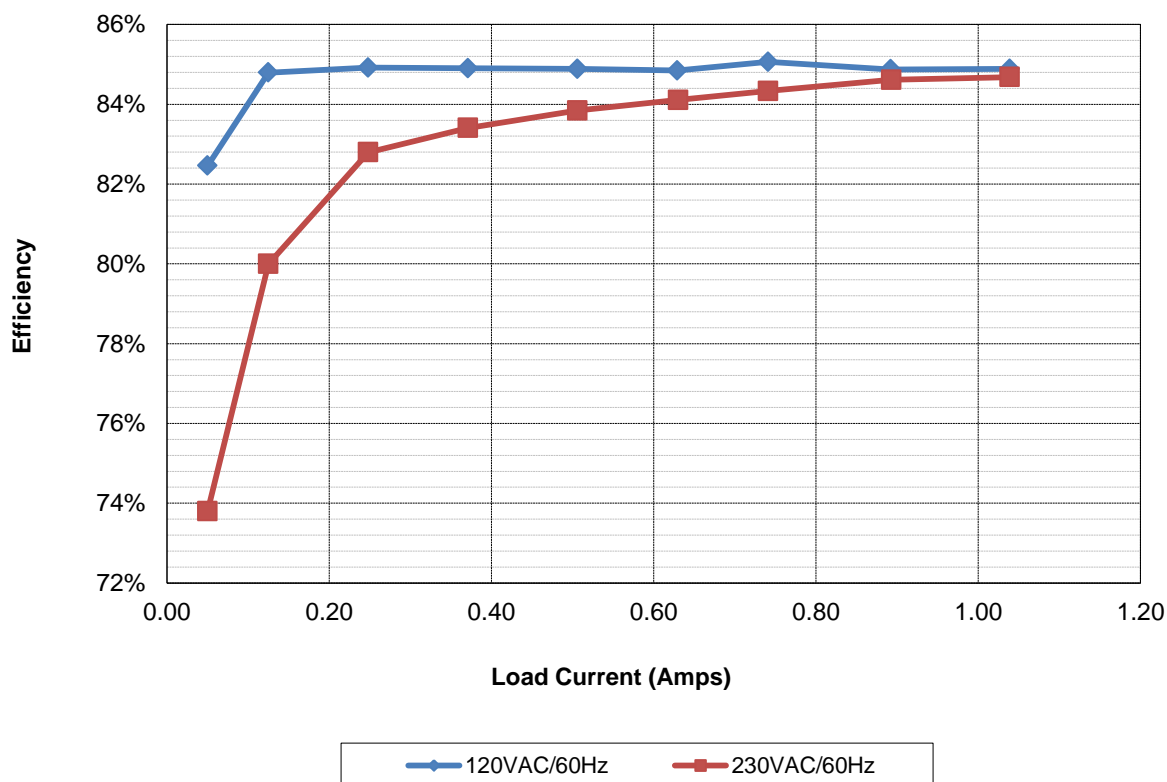
2 Standby Power

Measured with 0A load on the 12V output

No Load	Pin AC (W)
120VAC/60Hz	0.003
230VAC/50Hz	0.004

3 Efficiency

3.1 Efficiency 12Vout



120VAC/60Hz**Sweep Load on 12V**

Iout (12V)	Vout (12V)	Vin (V)	Iin (A)	Pin (W)	PF	Pout (W)	Losses (W)	Efficiency
0.000		120.2		0.003		0.00	0.00	0.0%
0.050	12.600	120.2	0.030	0.764	0.303	0.63	0.13	82.5%
0.125	12.570	120.2	0.043	1.853	0.357	1.57	0.28	84.8%
0.248	12.560	120.2	0.075	3.668	0.407	3.11	0.55	84.9%
0.371	12.550	120.2	0.104	5.484	0.438	4.66	0.83	84.9%
0.506	12.550	120.2	0.133	7.481	0.470	6.35	1.13	84.9%
0.629	12.560	120.2	0.159	9.311	0.491	7.90	1.41	84.8%
0.741	12.570	120.2	0.181	10.950	0.507	9.31	1.64	85.1%
0.892	12.580	120.2	0.210	13.221	0.525	11.22	2.00	84.9%
1.039	12.590	120.2	0.238	15.410	0.539	13.08	2.33	84.9%

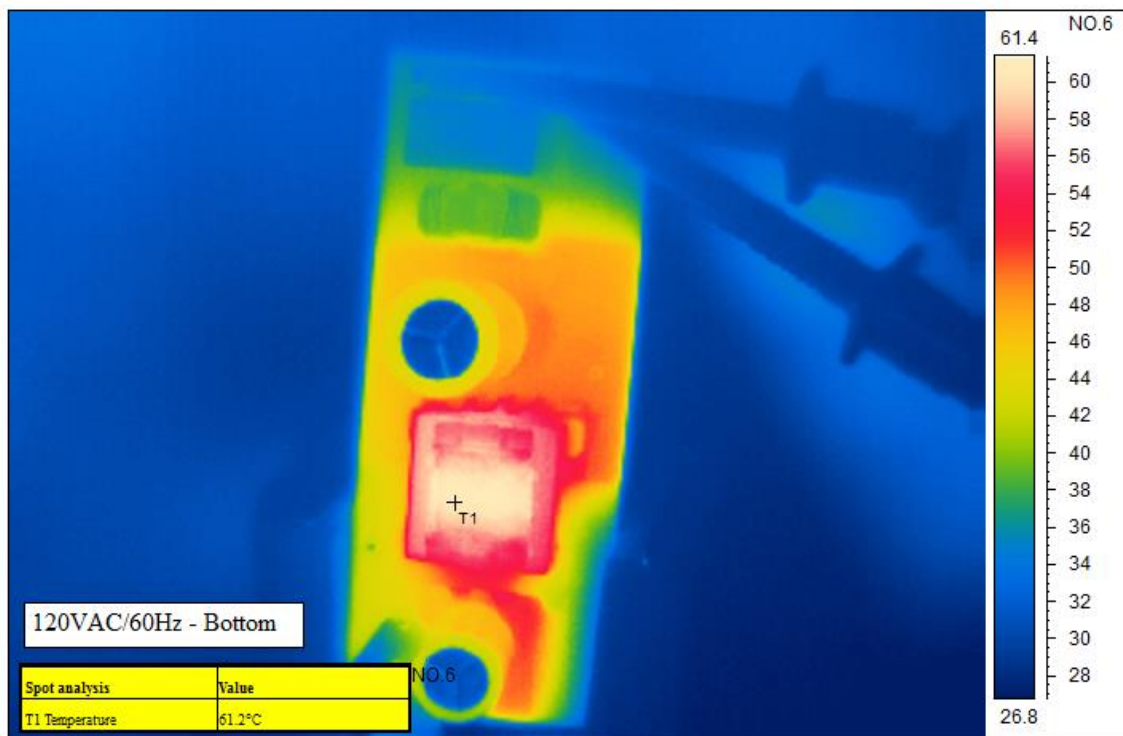
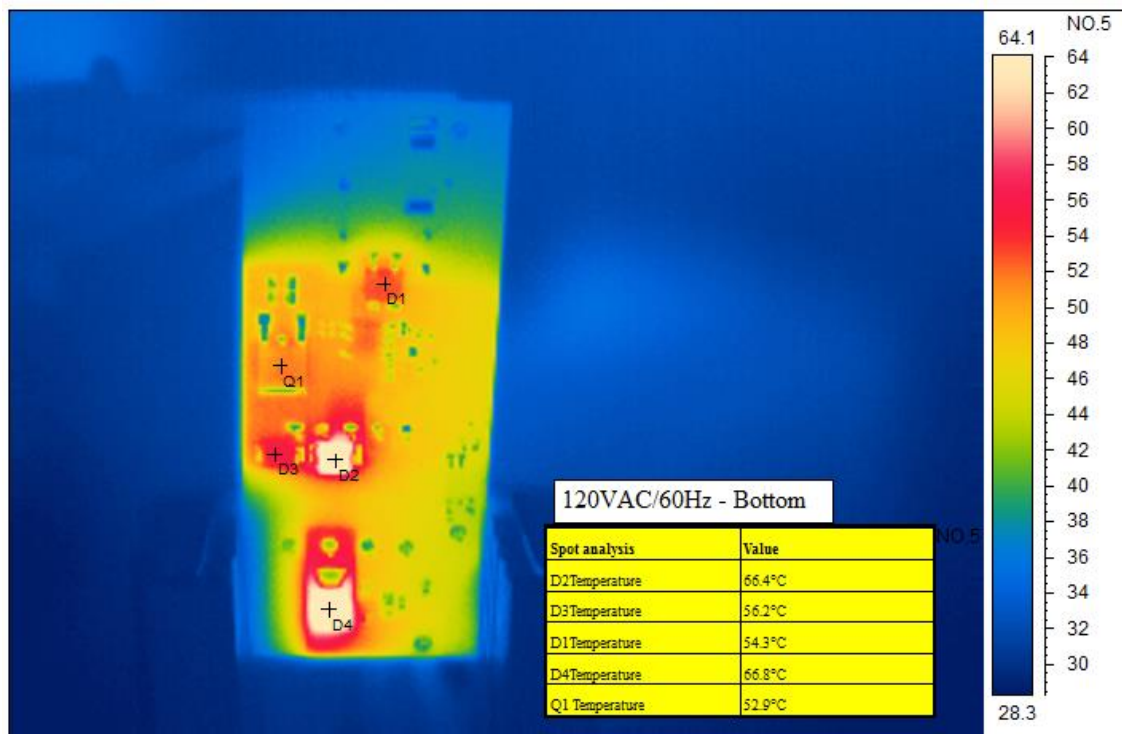
230VAC/50Hz**Sweep Load on 12V**

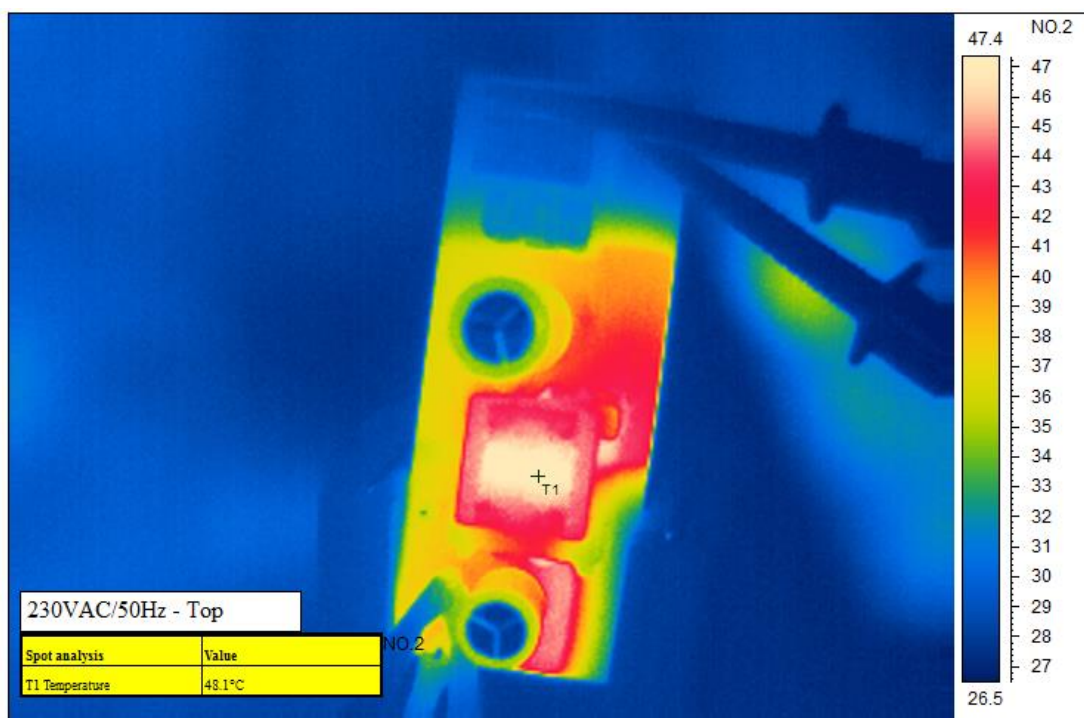
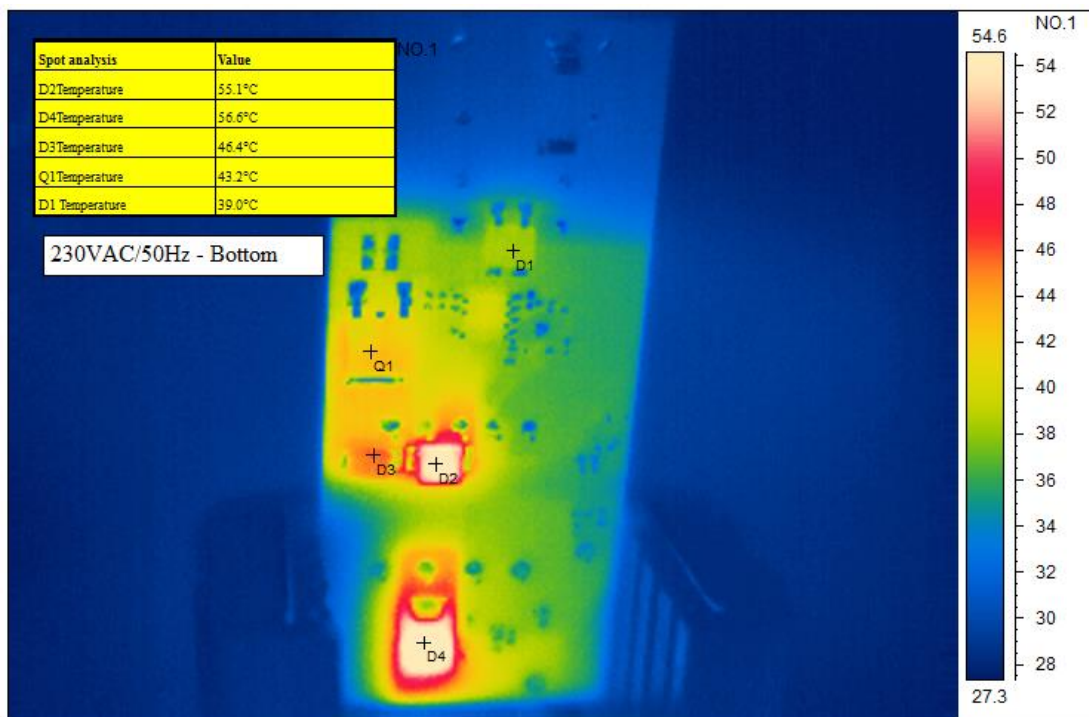
Iout (12V)	Vout (12V)	Vin (V)	Iin (A)	Pin (W)	PF	Pout (W)	Losses (W)	Efficiency
0.000		230.2		0.004		0.00	0.00	0.0%
0.050	12.590	230.2	0.019	0.853	0.195	0.63	0.22	73.8%
0.125	12.550	230.2	0.033	1.961	0.259	1.57	0.39	80.0%
0.248	12.540	230.2	0.054	3.756	0.300	3.11	0.65	82.8%
0.371	12.540	230.2	0.074	5.578	0.329	4.65	0.93	83.4%
0.506	12.550	230.2	0.093	7.574	0.353	6.35	1.22	83.8%
0.630	12.560	230.2	0.110	9.408	0.371	7.91	1.50	84.1%
0.741	12.570	230.2	0.125	11.045	0.385	9.31	1.73	84.3%
0.893	12.580	230.2	0.144	13.277	0.402	11.23	2.04	84.6%
1.039	12.590	230.2	0.162	15.447	0.415	13.08	2.37	84.7%

4 Thermal Images

The thermal images below show the 12V output fully loaded at 12W. The ambient temperature was 25°C, with no airflow.

4.1 120VAC/60Hz

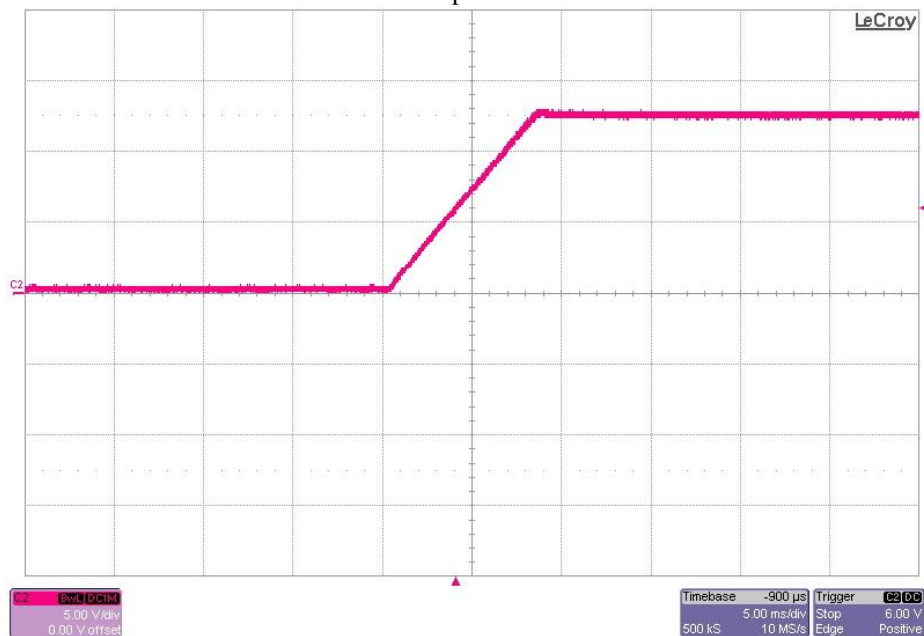


4.2 230VAC/50Hz

5 Startup & Disable

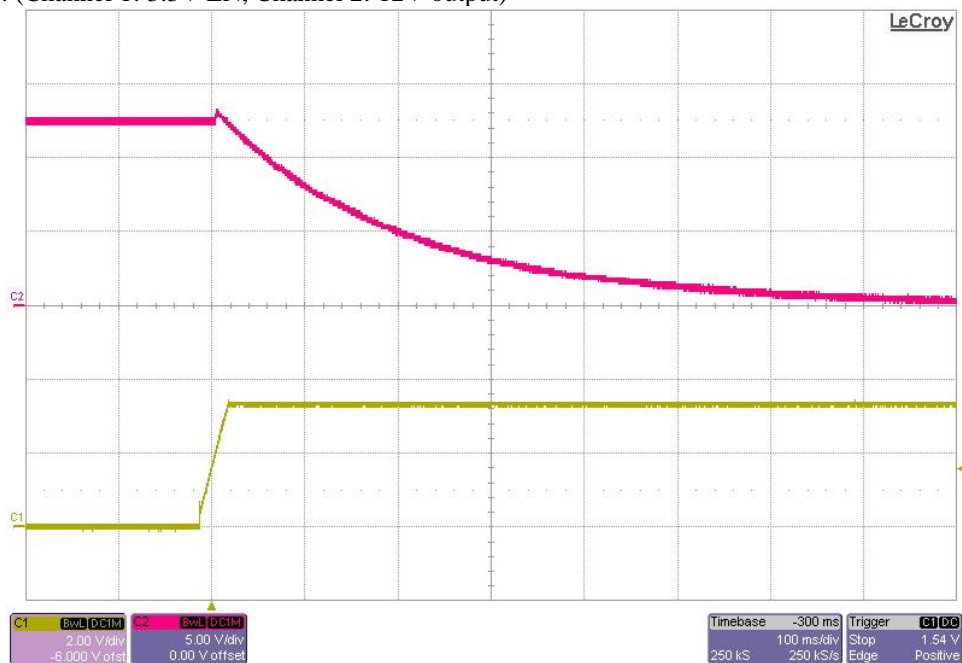
5.1 Startup 12V

The following waveform was taken with no load on the 12V output.



5.2 Shutdown 12V (Disable)

The following waveform was taken by applying a 3.3V signal on the secondary side of the optocoupler while the 12V output was loaded to 250 Ohms. (Channel 1: 3.3V EN, Channel 2: 12V output)



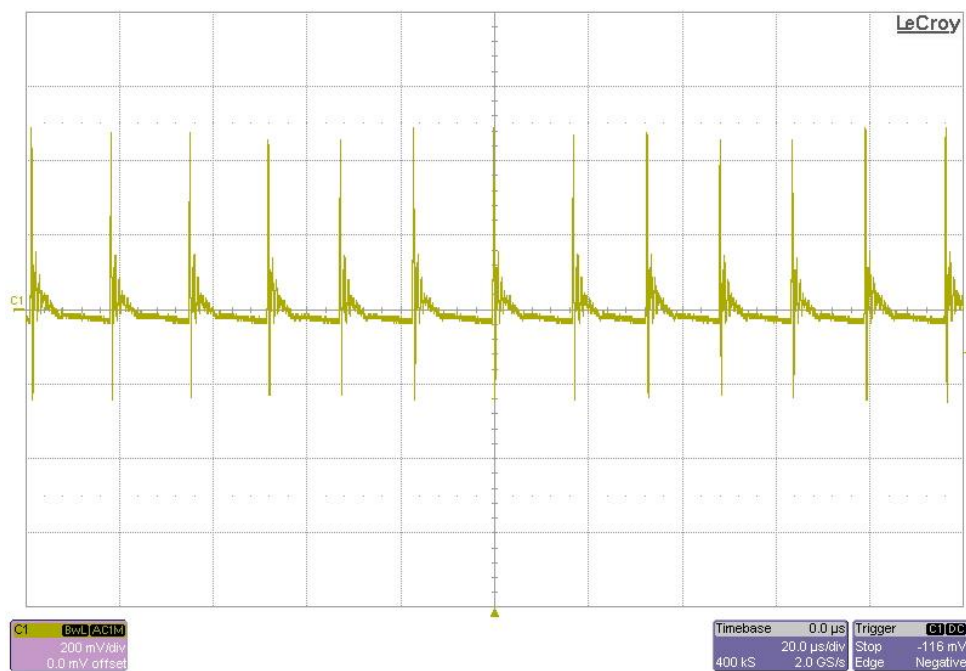
5.3 Re-Enable 12V

The following waveform shows the 12V output restarting after the 3.3V enable signal was toggled off. (Channel 1: 3.3V EN, Channel 2: 12V output)



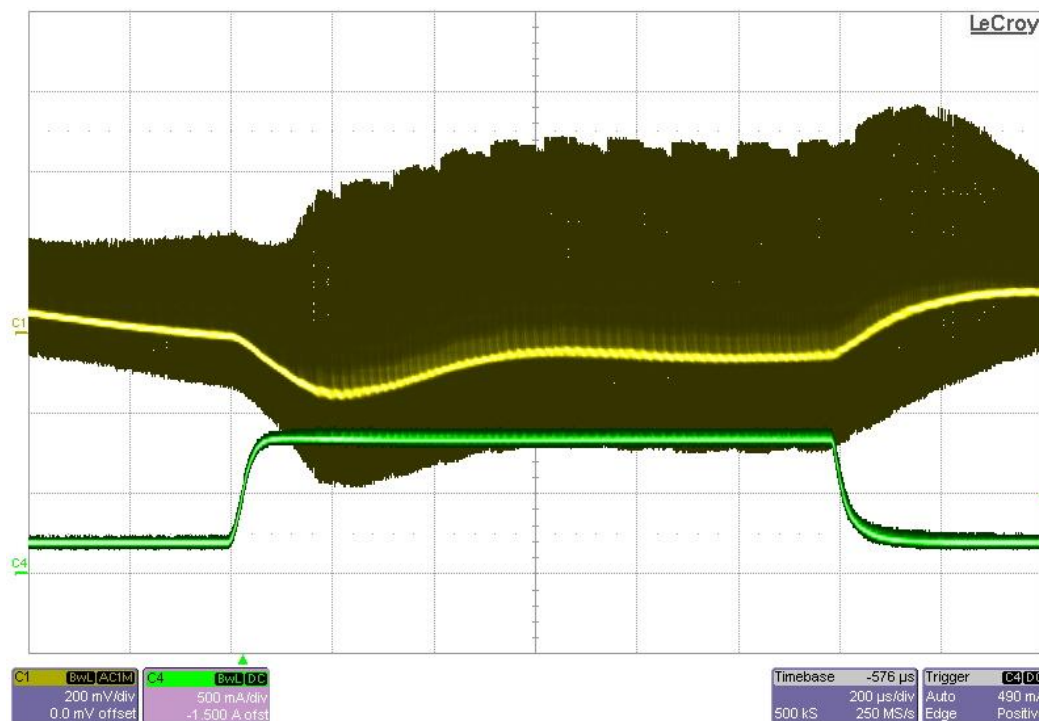
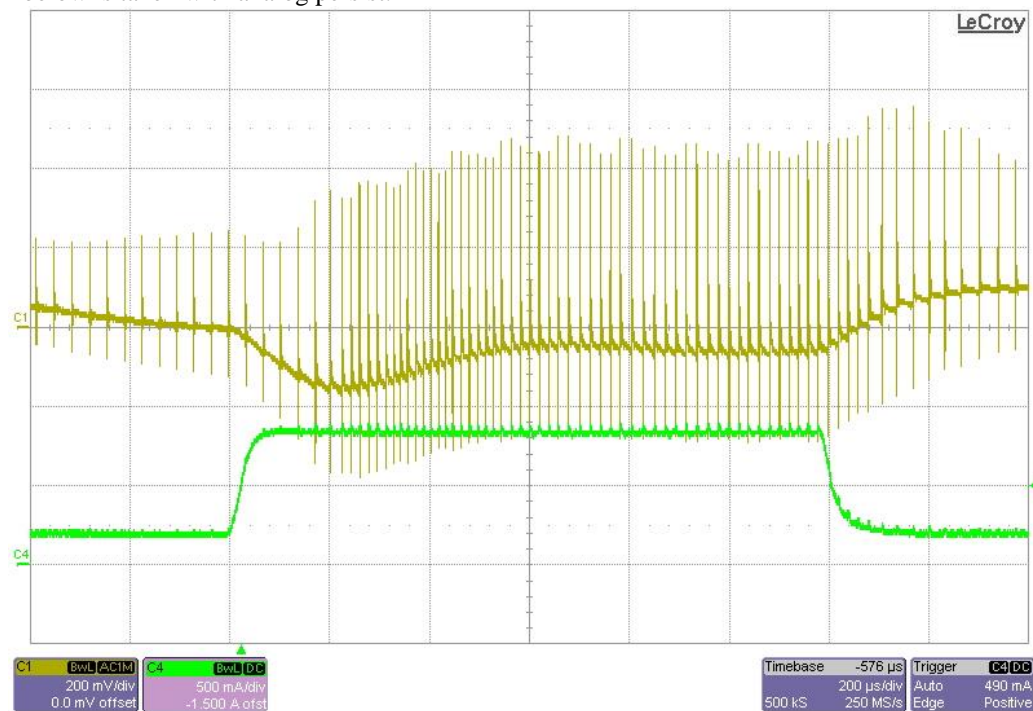
6 Output Ripple Voltage

6.1 12Vout



7 Load Transient

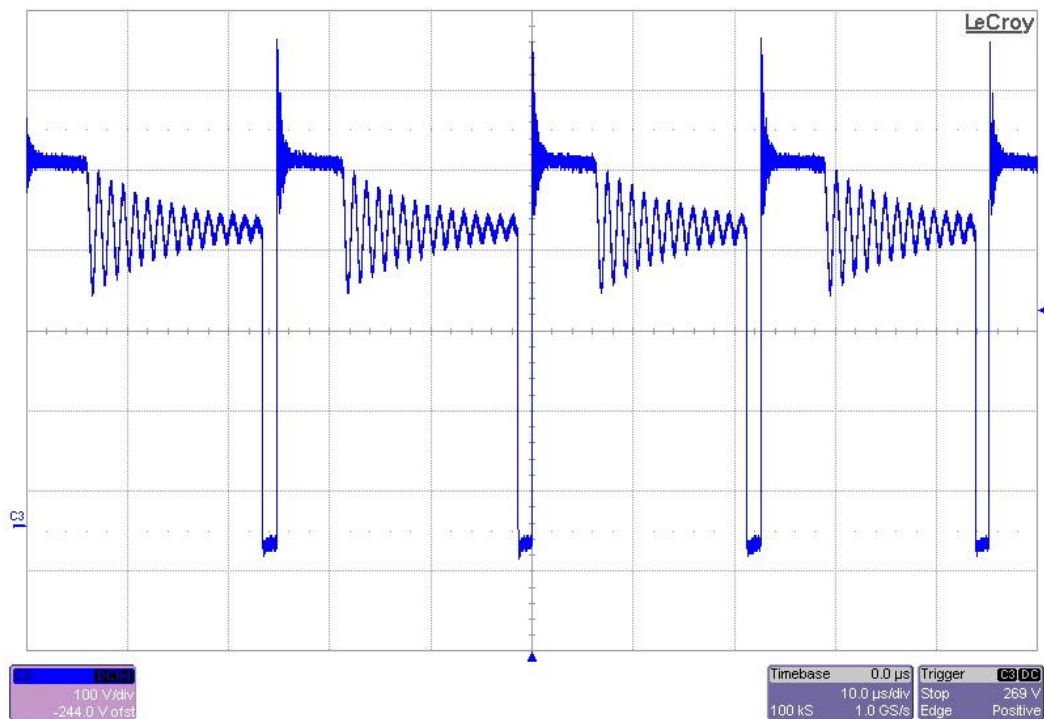
The Waveforms below show the transient response to a 20%-80% load step. The waveform on top is taken without analog persist, and the waveform below is taken with analog persist.



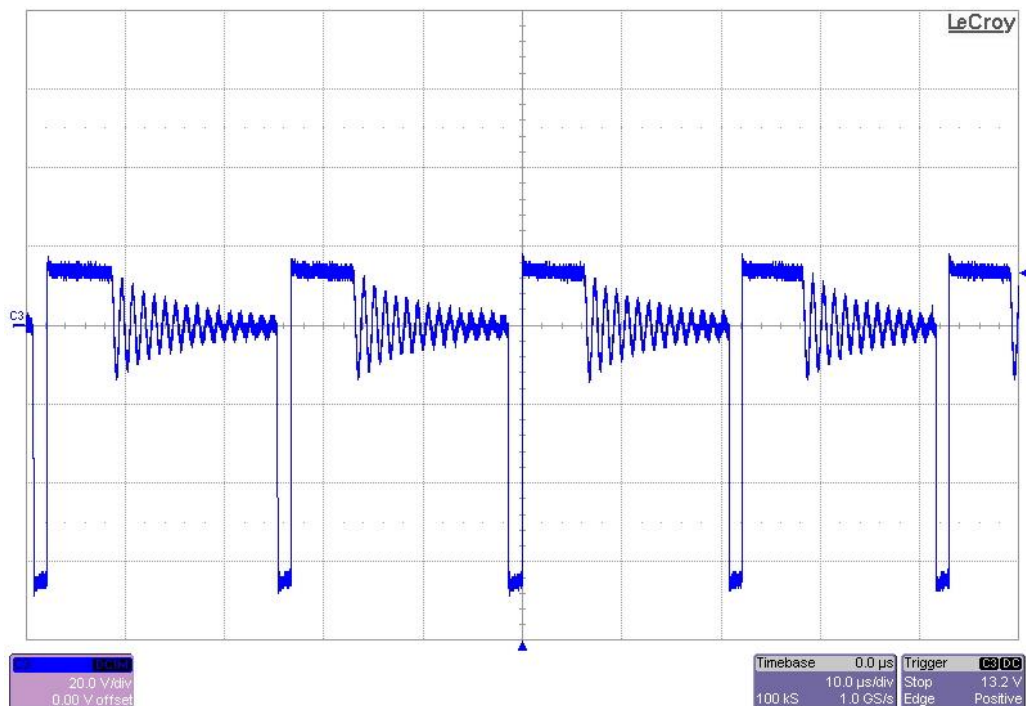
8 Switching Waveforms

The input was 265VAC/50Hz, and the output was fully loaded to 1A.

8.1 Drain of Primary FET Q1



8.2 Anode of Rectifier D4



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