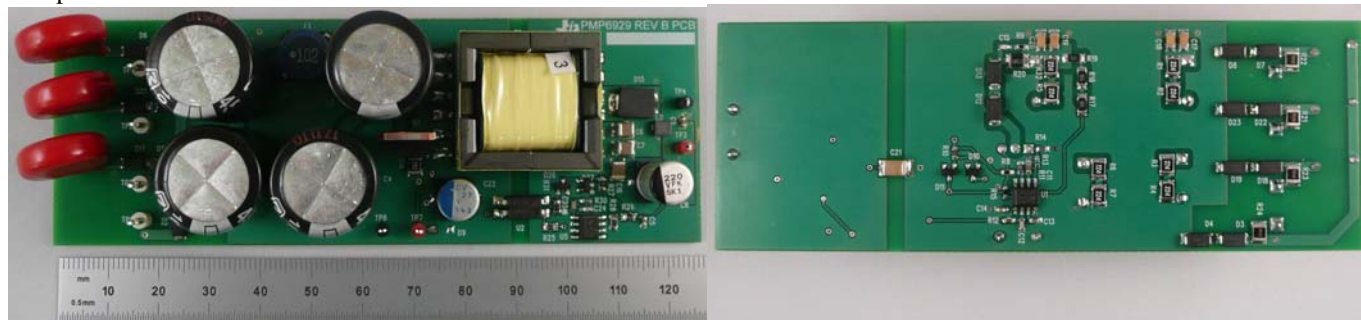


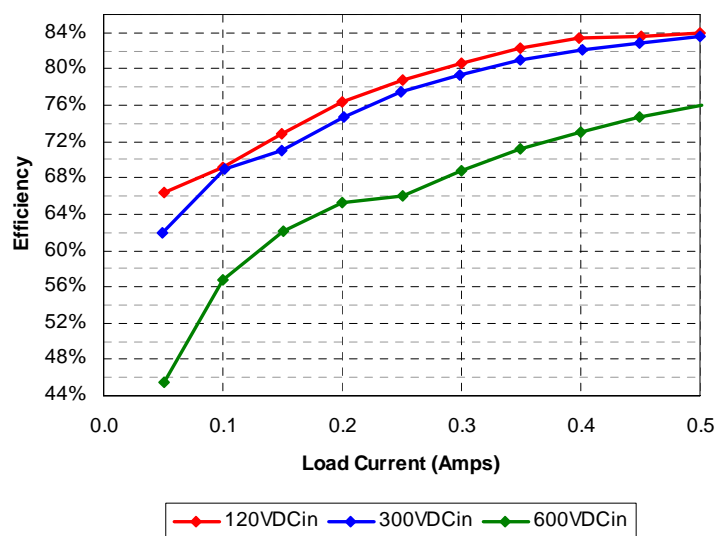
1 Photo

The photos below show the PMP6929 Rev B demo board.



2 Efficiency

The efficiency data is shown in the tables and graph below.



Vin	Iin (mA)	Iout	Vout	Pout	Losses	Efficiency
121.7	1.37	0.000	24.05	0.00	0.167	0.0%
121.7	14.87	0.050	24.05	1.20	0.607	66.4%
121.7	28.55	0.100	24.04	2.40	1.071	69.2%
121.6	40.42	0.149	24.04	3.58	1.333	72.9%
121.6	51.8	0.200	24.04	4.81	1.486	76.4%
121.6	62.7	0.250	24.04	6.01	1.614	78.8%
121.6	73.5	0.300	24.04	7.21	1.726	80.7%
121.6	84.0	0.350	24.04	8.41	1.800	82.4%
121.5	94.7	0.399	24.04	9.59	1.914	83.4%
121.5	106.5	0.450	24.04	10.82	2.122	83.6%
121.5	117.9	0.500	24.04	12.02	2.305	83.9%

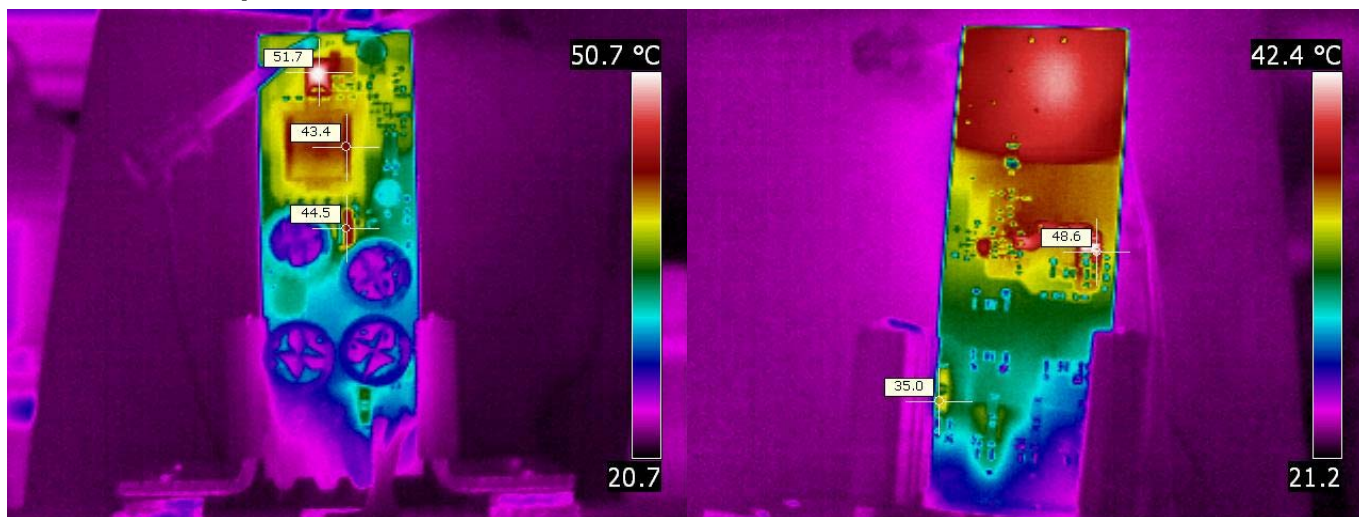
Vin	Iin	Iout	Vout	Pout	Losses	Efficiency
302.3	1.21	0.000	24.05	0.00	0.366	0.0%
302.3	6.30	0.049	24.05	1.18	0.726	61.9%
302.3	11.66	0.101	24.05	2.43	1.096	68.9%
302.3	16.69	0.149	24.05	3.58	1.462	71.0%
302.3	21.38	0.201	24.04	4.83	1.631	74.8%
302.3	25.55	0.249	24.04	5.99	1.738	77.5%
302.2	29.95	0.299	24.04	7.19	1.863	79.4%
302.2	34.30	0.349	24.04	8.39	1.976	80.9%
302.2	38.83	0.401	24.04	9.64	2.094	82.2%
302.2	43.11	0.449	24.04	10.79	2.234	82.9%
302.2	47.61	0.500	24.04	12.02	2.368	83.5%

Vin	Iin	Iout	Vout	Pout	Losses	Efficiency
599.9	1.84	0.000	24.06	0.00	1.104	0.0%
600.1	4.41	0.050	24.06	1.20	1.443	45.5%
600.0	7.05	0.100	24.05	2.41	1.825	56.9%
600.0	9.67	0.150	24.05	3.61	2.195	62.2%
600.0	12.29	0.200	24.05	4.81	2.564	65.2%
600.0	15.18	0.250	24.05	6.01	3.096	66.0%
600.0	17.46	0.300	24.05	7.22	3.261	68.9%
600.0	19.70	0.350	24.05	8.42	3.403	71.2%
600.0	21.96	0.400	24.05	9.62	3.556	73.0%
600.0	24.07	0.449	24.04	10.79	3.648	74.7%
600.0	26.38	0.501	24.04	12.04	3.784	76.1%

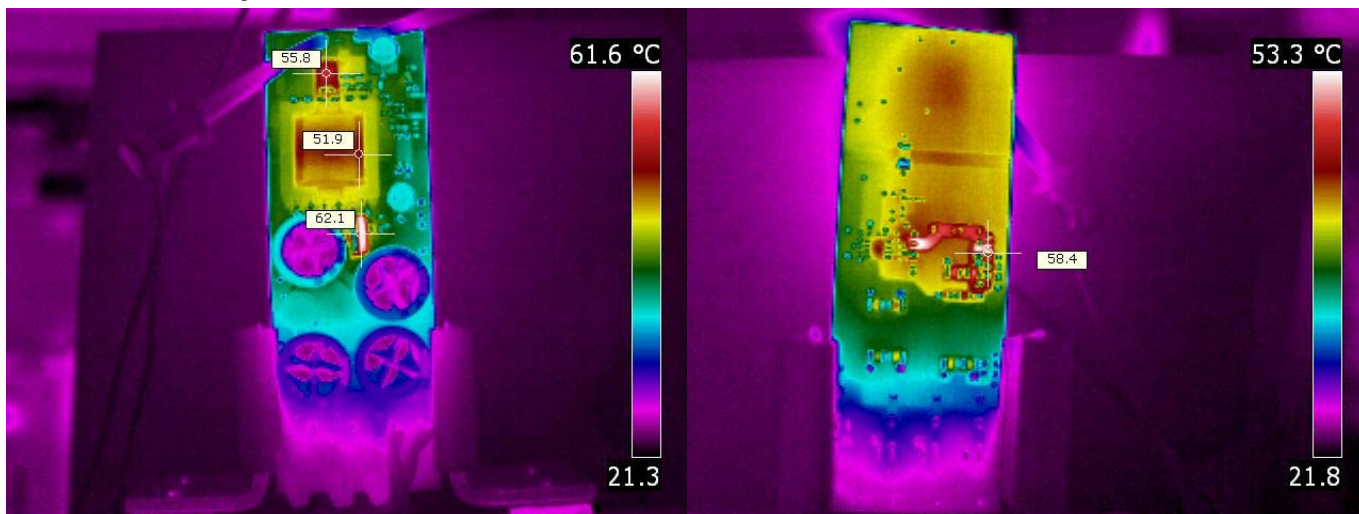
3 Thermal Images

The thermal images below show the top and bottom of the board with a 500mA load and no forced air flow. The ambient temperature was 25°C.

3.1 120VDC Input



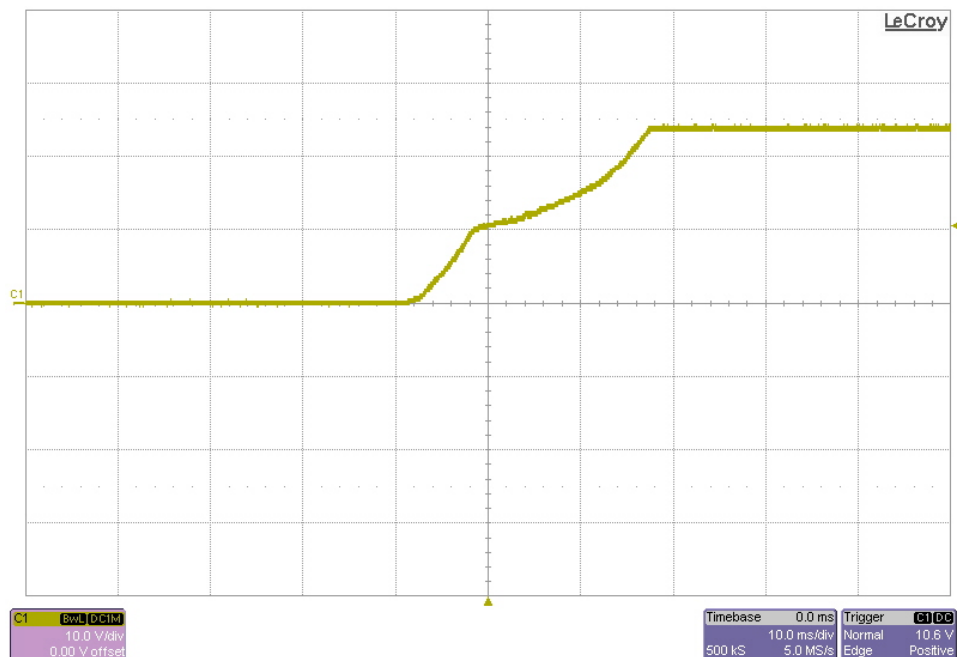
3.2 600VDC Input



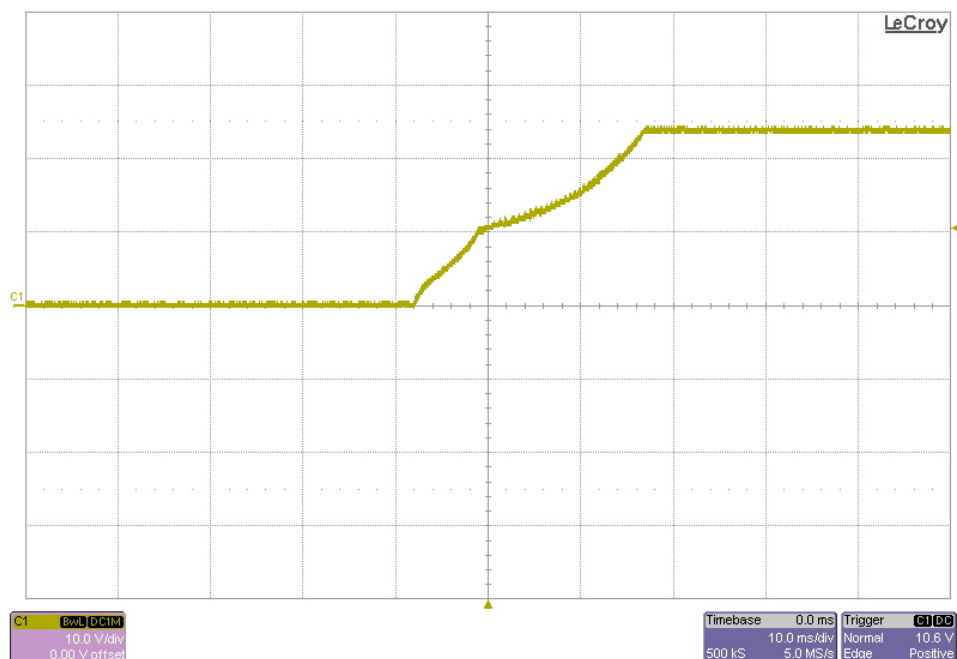
4 Startup

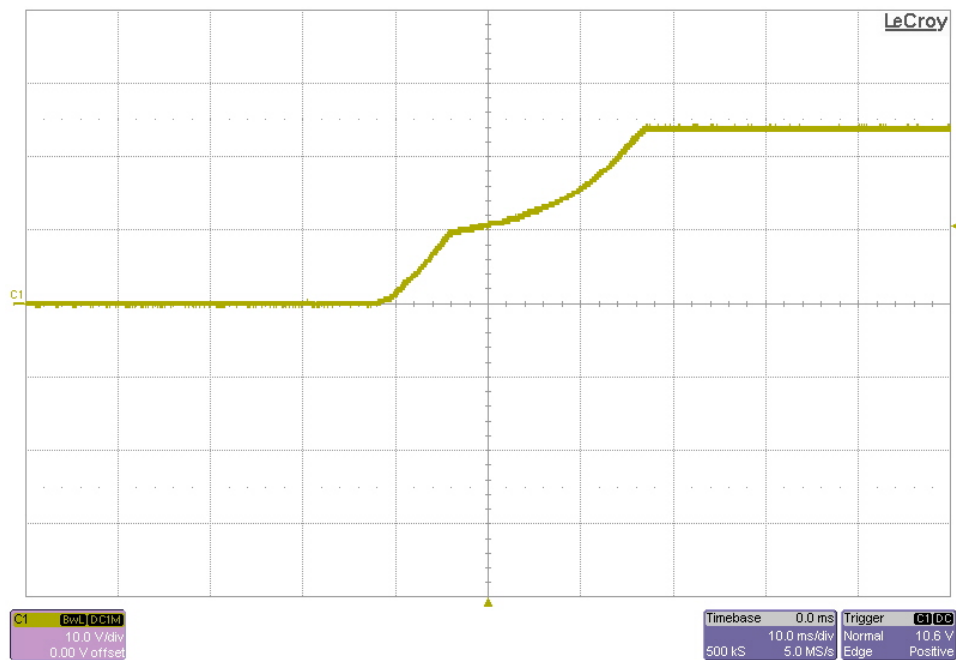
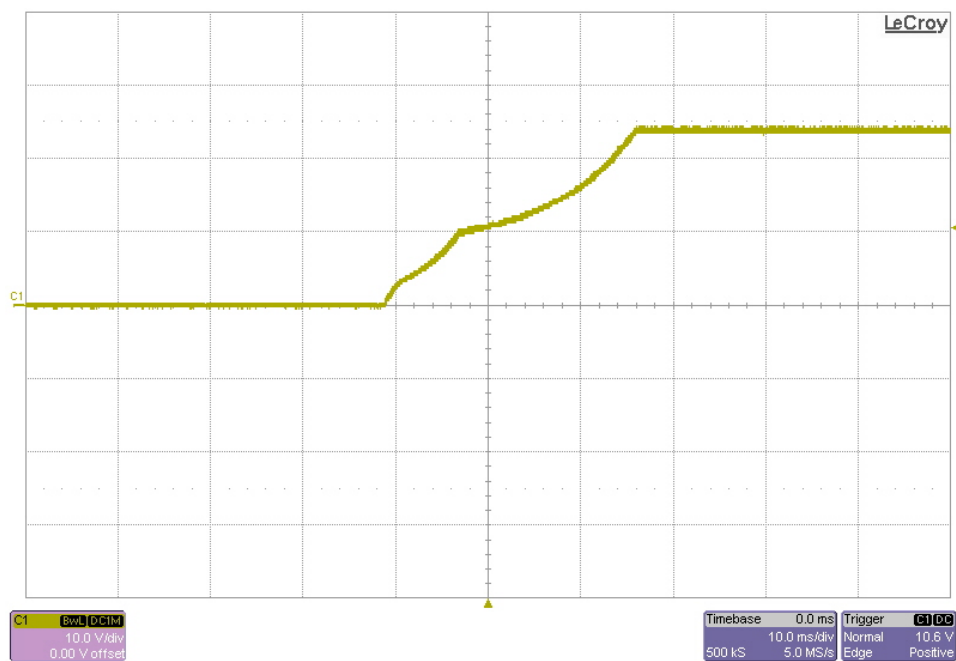
The output voltage at startup is shown in the images below.

4.1 120VDCin, 0A Load



4.2 600VDCin, 0A Load

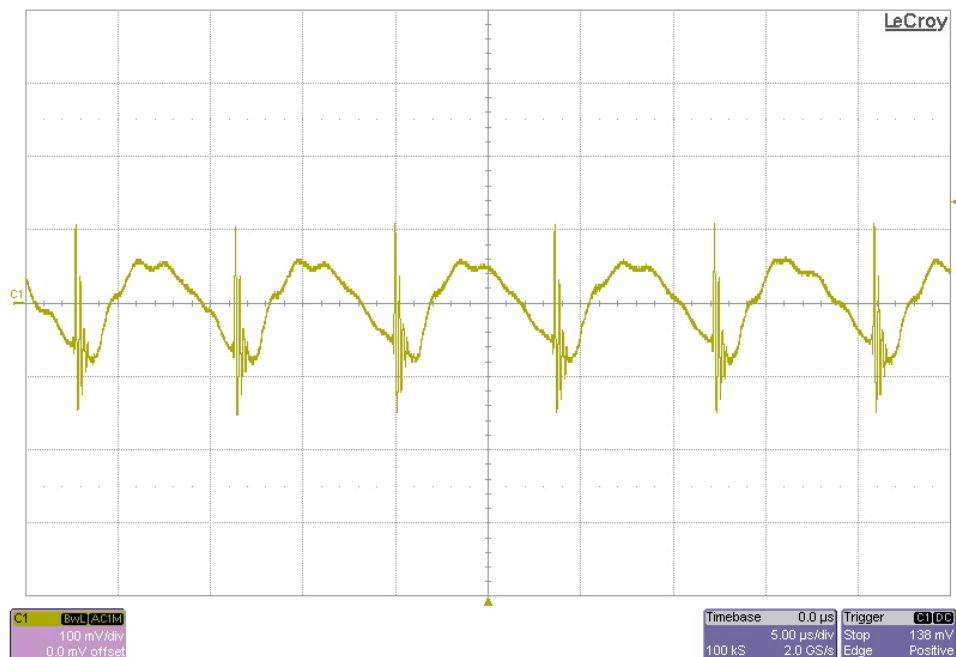


4.3 120VDCin, 0.5A Load**4.4 600VDCin, 0.5A**

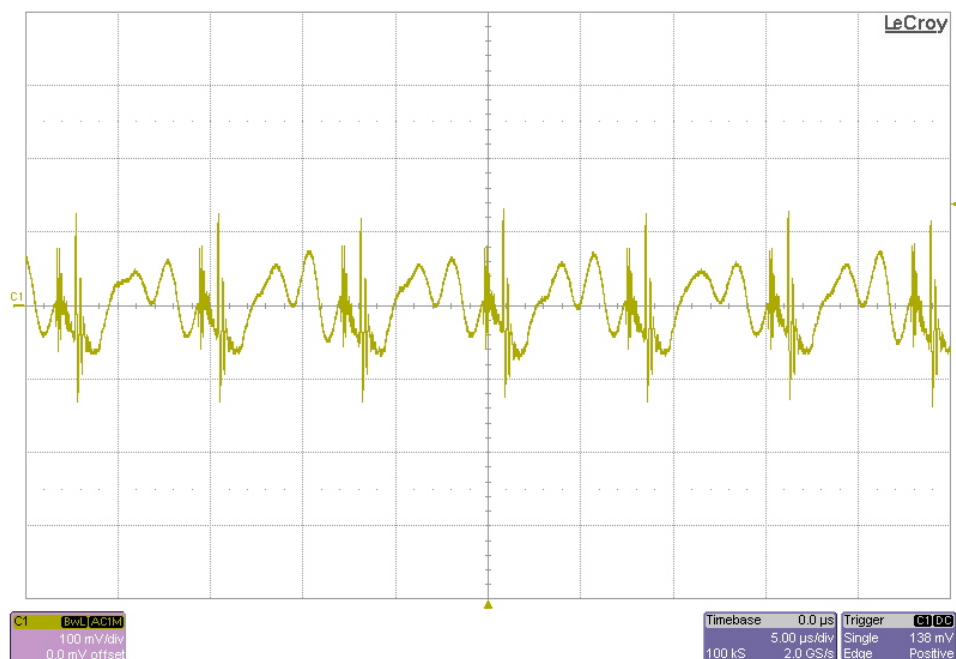
5 Output Ripple Voltage

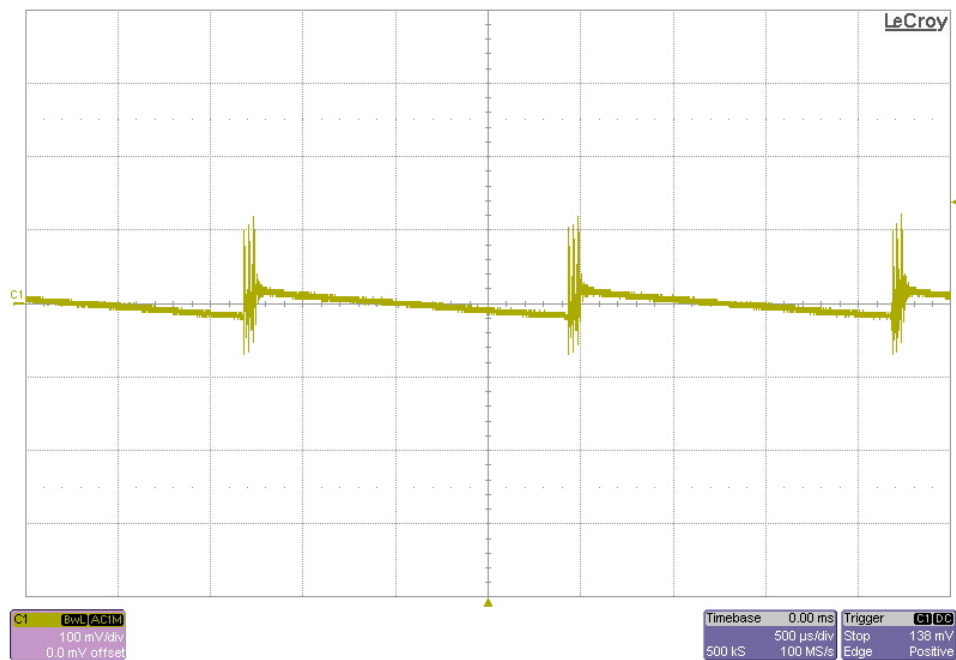
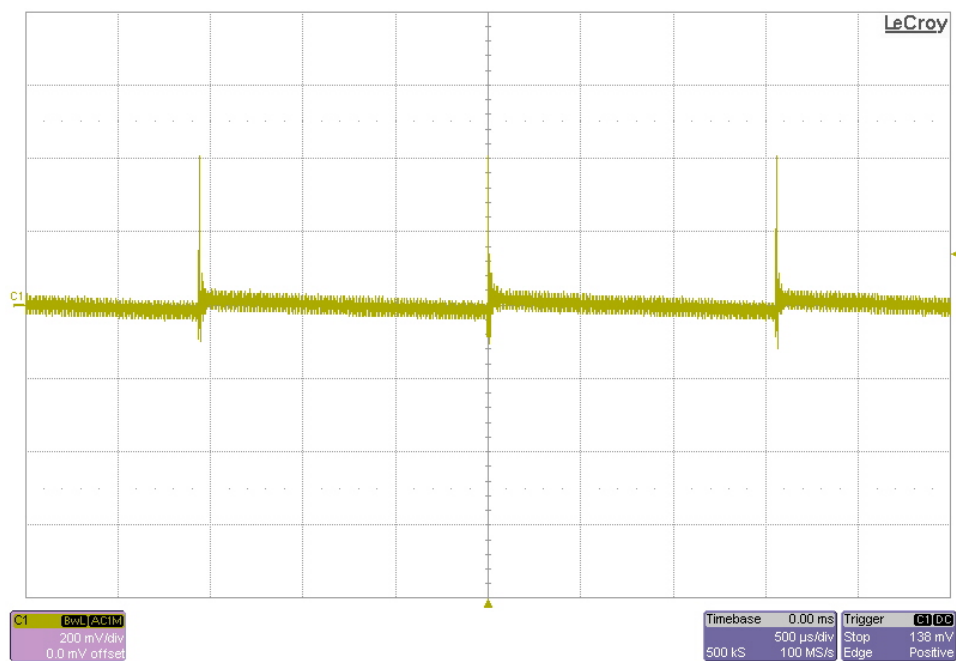
The output ripple voltage during full load operation (500mA load) is shown in the images below.

5.1 120VDCin, 0.5A Load



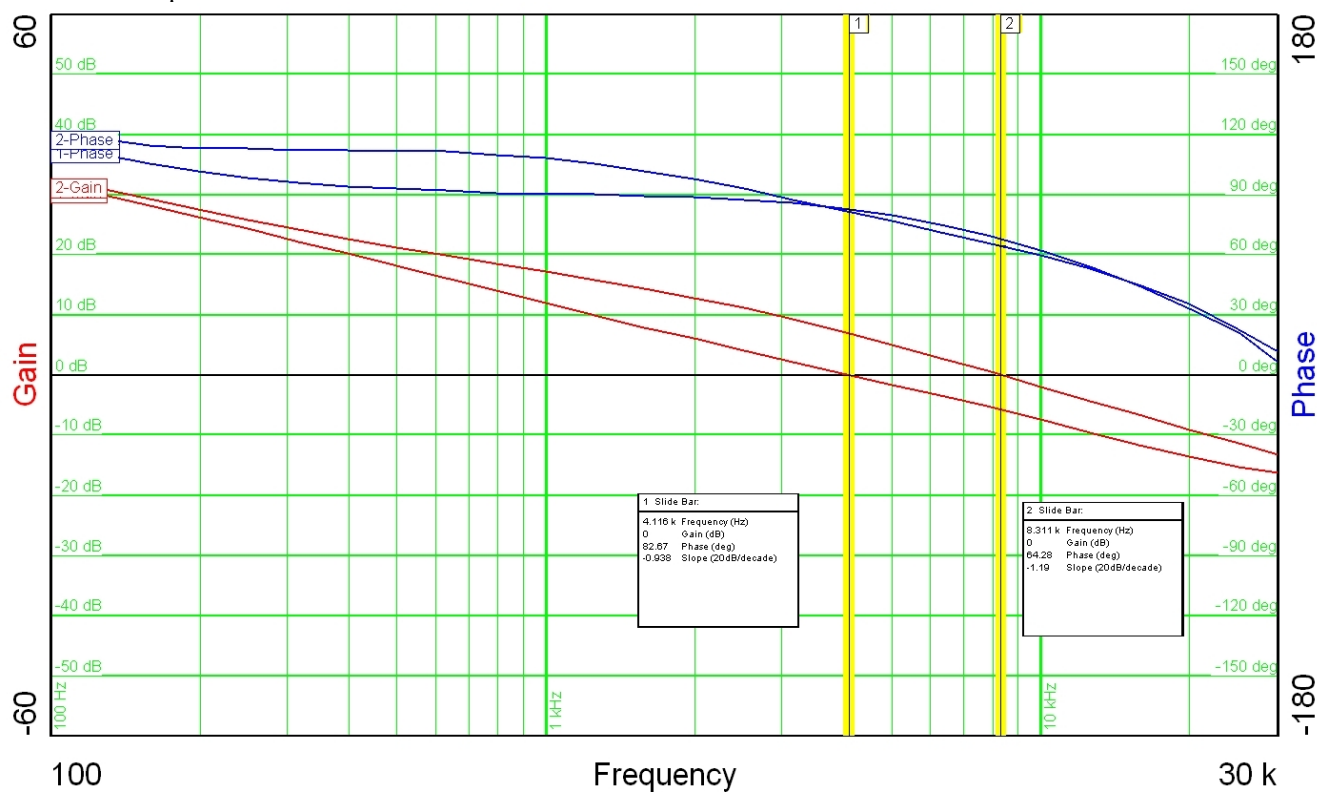
5.2 600VDCin, 0.5A Load



5.3 120VDCin, 0A Load**5.4 600VDCin, 0A Load**

6 Loop Response

The image below shows the loop response of the converter. For plot #1, the input was 120Vdc. For plot #2, the input was 600Vdc. The output was loaded with 500mA.

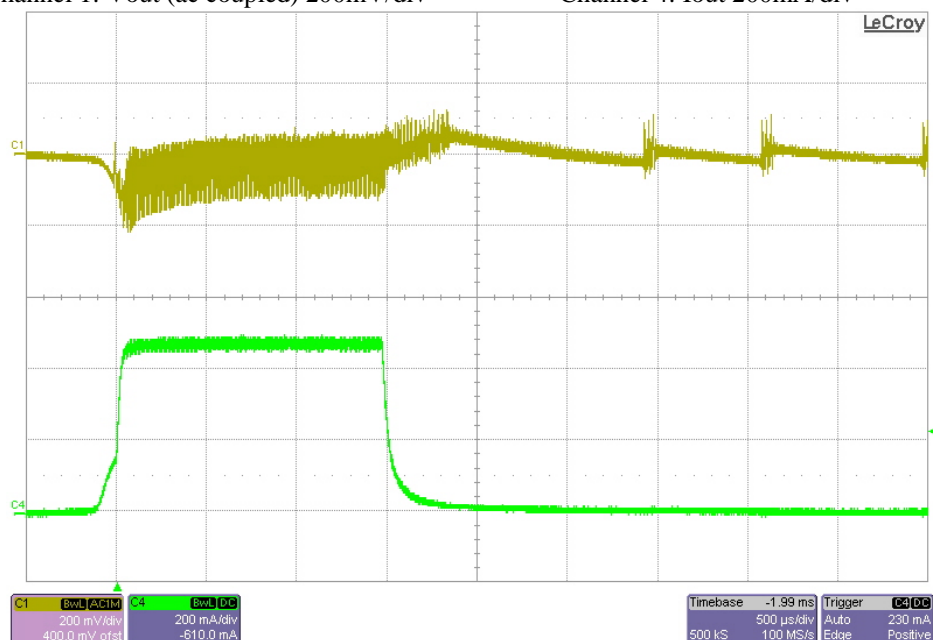


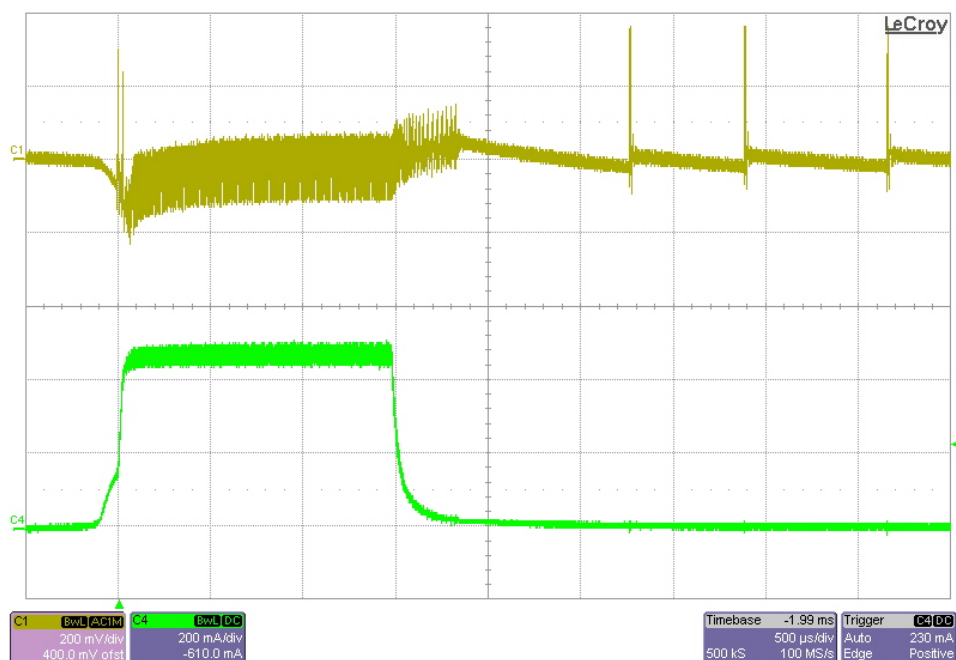
7 Load Transients

The images below show the response to a 0A to 500mA load transient. For the top image, the input voltage was set to 120VDC. For the bottom image, the input voltage was set to 600VDC.

Channel 1: Vout (ac coupled) 200mV/div

Channel 4: Iout 200mA/div

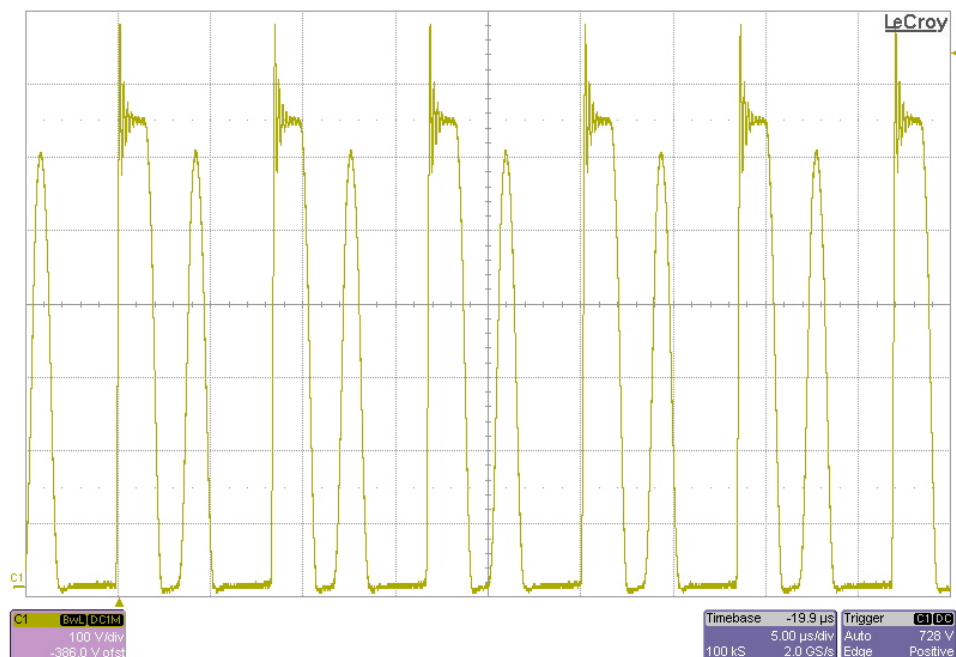




8 Switching Waveforms

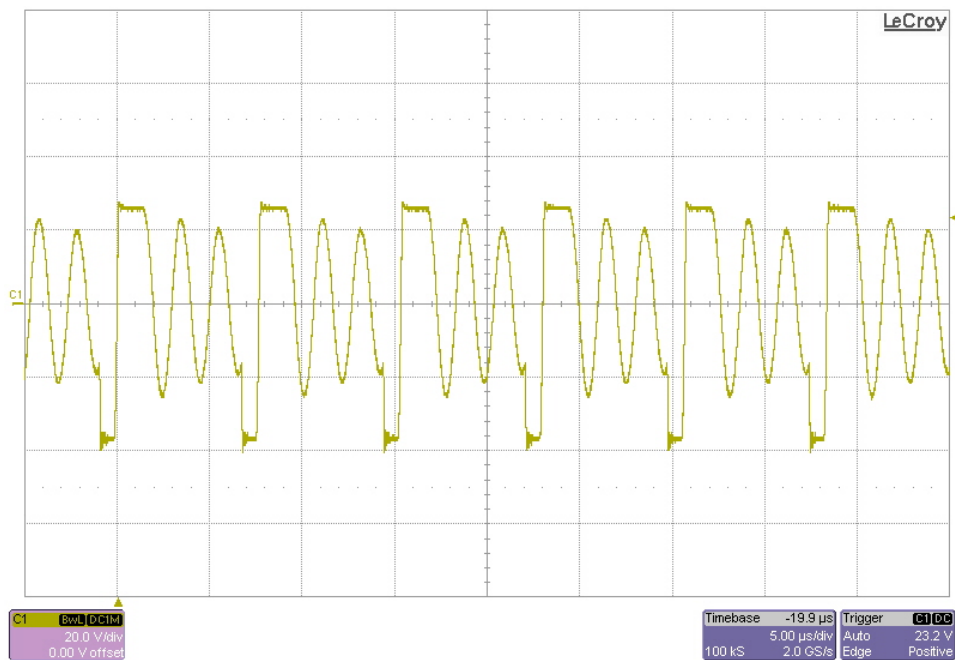
8.1 Primary Side Waveform

The image below shows the voltage waveform on the collector of Q1. The output was loaded with 500mA, and the input was set to 220VDC.



8.2 Secondary Side Waveform

The image below shows the voltage on the anode of the output diode D15. The input was 600VDC and the output was loaded with 0.5A.



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