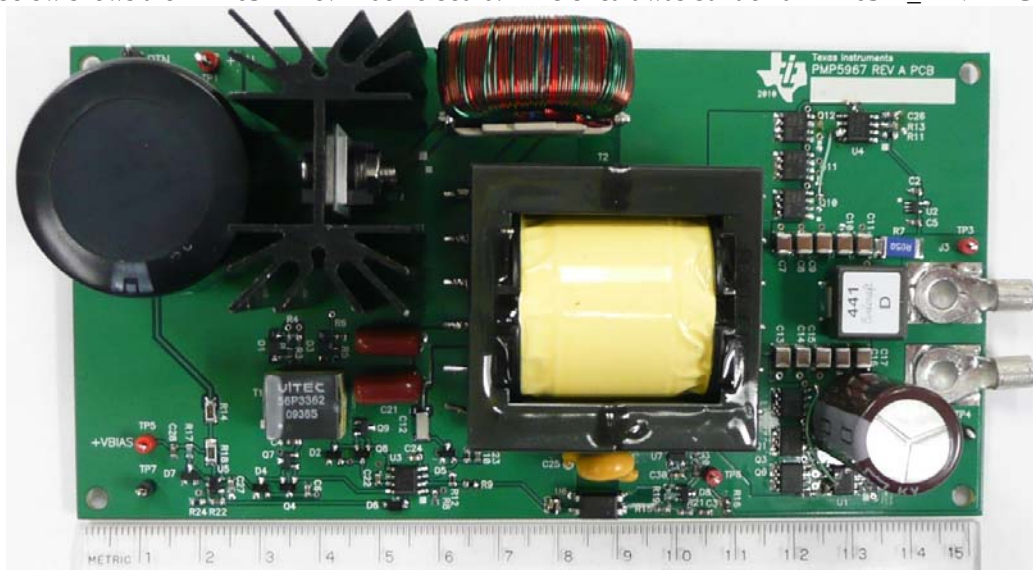


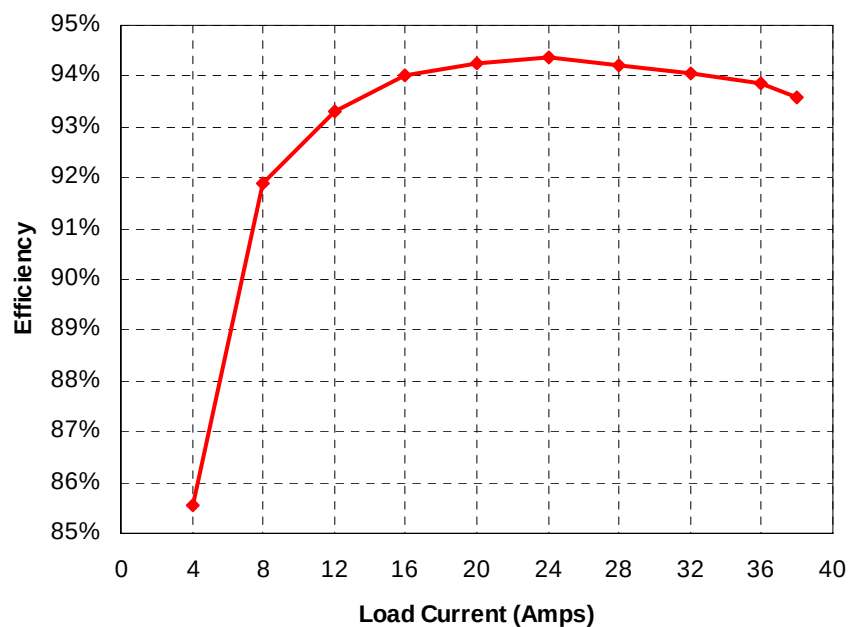
1 Photo

The photo below shows the PMP6547 Rev B demo board. This circuit was built on a PMP6547_REVA PCB.



2 Efficiency

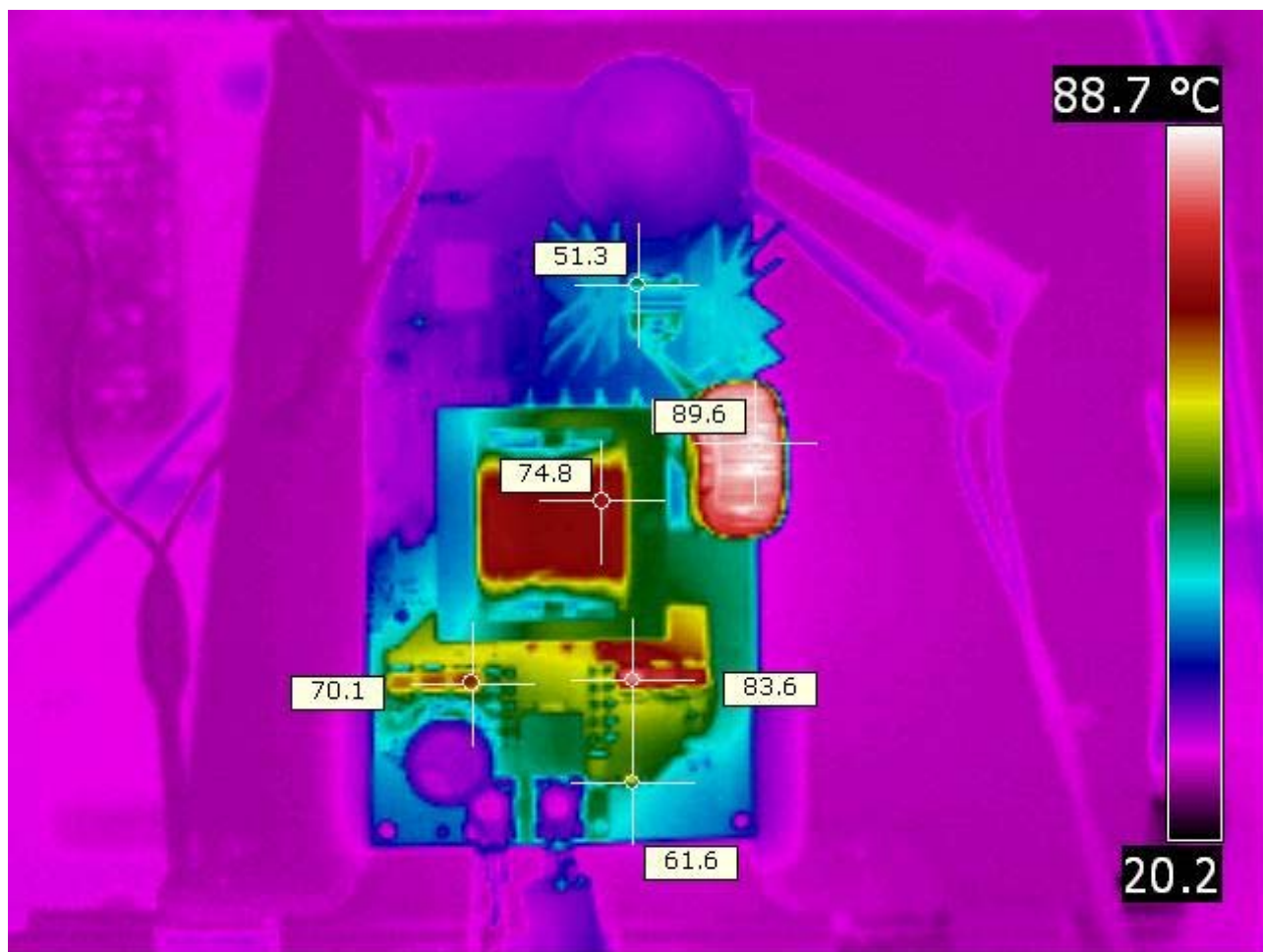
The efficiency data is shown in the table and graph below.



Vin	Iin	Iout	Vout	Pout	Losses	Efficiency
380.6	0.001	0.000	12.05	0.00	0.381	0.0%
380.6	0.148	4.010	12.02	48.20	8.129	85.6%
380.5	0.275	8.00	12.02	96.16	8.478	91.9%
380.5	0.406	11.99	12.02	144.12	10.363	93.3%
380.5	0.538	16.0	12.03	192.48	12.229	94.0%
380.5	0.671	20.0	12.03	240.60	14.716	94.2%
380.5	0.804	24.0	12.03	288.72	17.202	94.4%
380.4	0.940	28.0	12.03	336.84	20.736	94.2%
380.4	1.076	32.0	12.03	384.96	24.350	94.1%
380.4	1.213	36.0	12.03	433.08	28.345	93.9%
380.4	1.284	38.0	12.03	457.14	31.294	93.6%

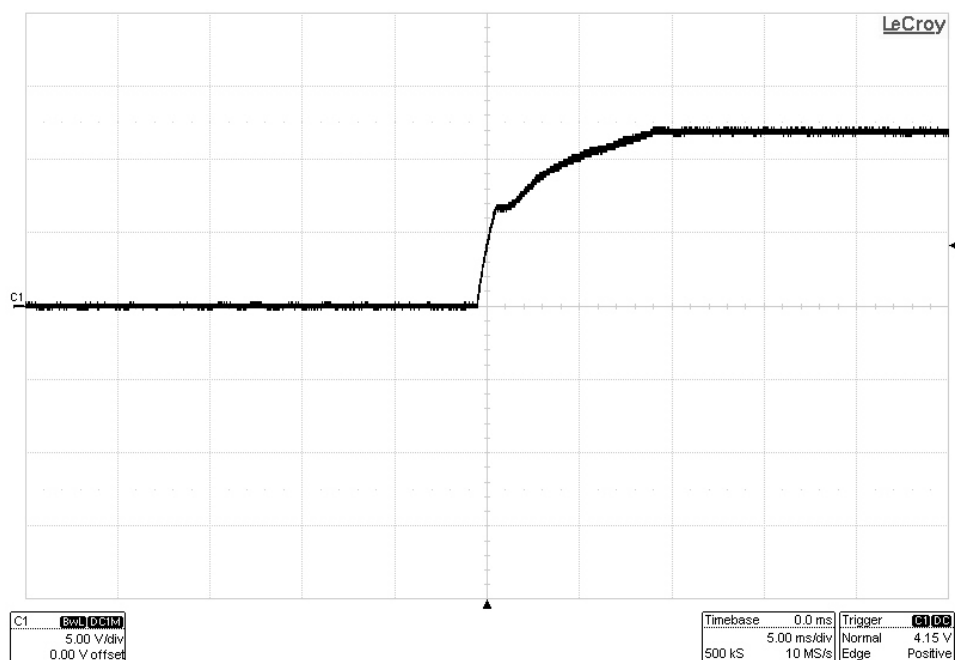
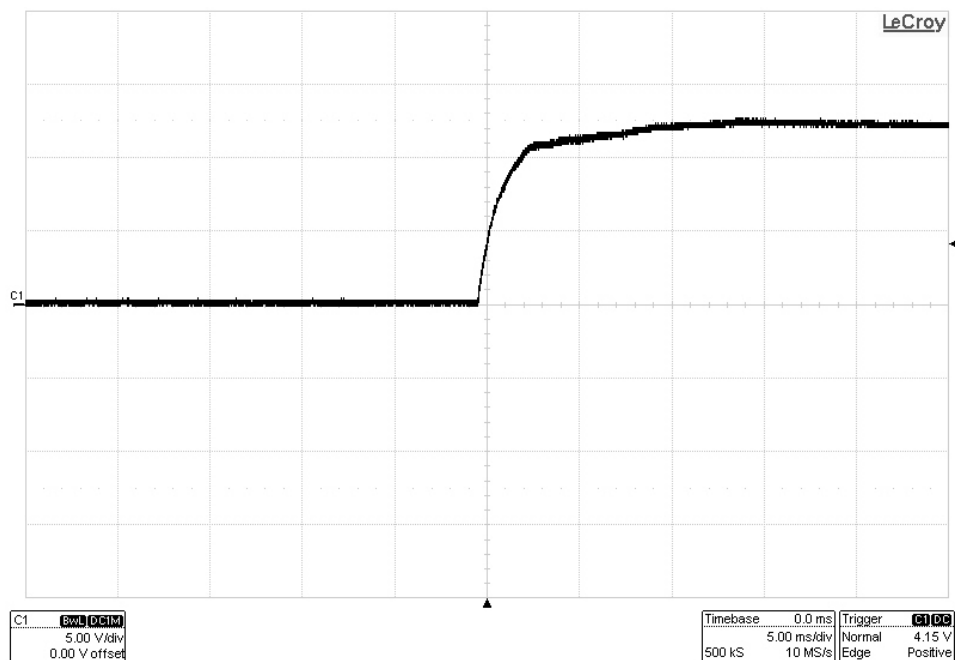
3 Thermal Image

The thermal image below shows the top view of the board with a 38A load and 400LFM of forced air flow. The ambient temperature was 26°C. The input was 380VDC.



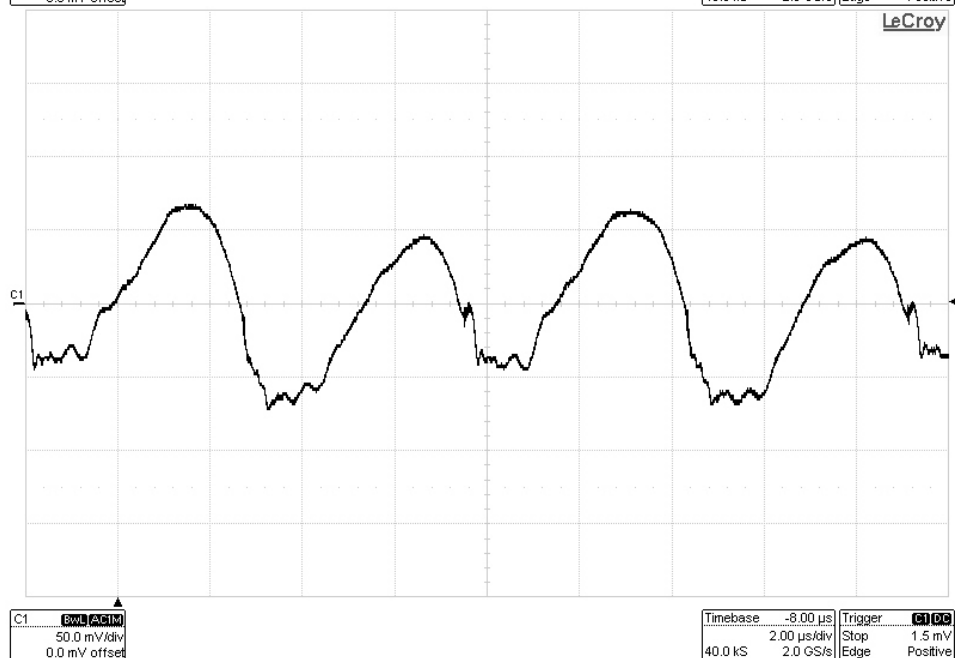
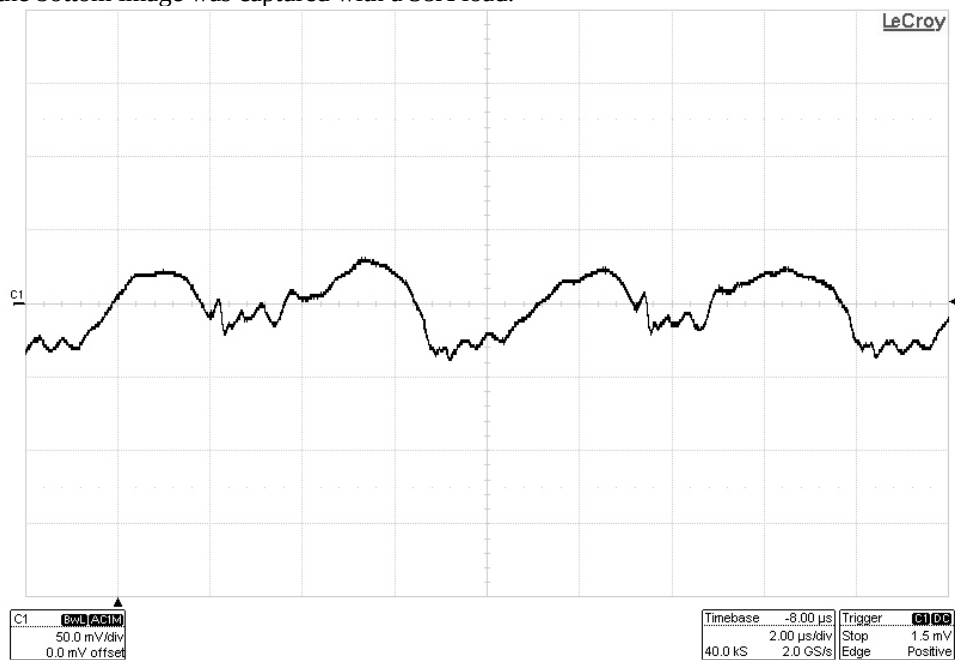
4 Startup

The output voltage at startup is shown in the images below. The input was 380VDC, and the converter was enabled by applying a 12V bias. The top image was captured with no load, and the bottom image was captured with a 38A load.



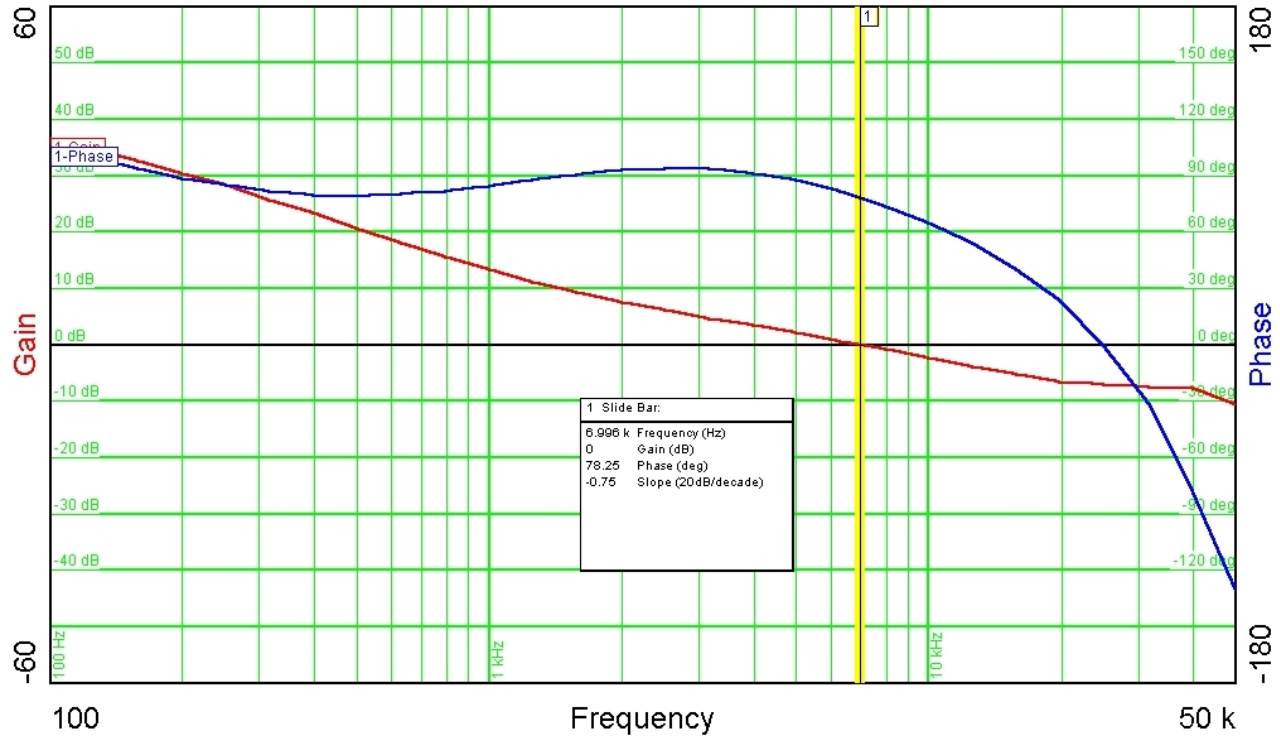
5 Output Ripple Voltage

The output ripple voltage is shown in the images below. The input was 380VDC. The top image was captured with an 19A load, and the bottom image was captured with a 38A load.



6 Loop Response

The image below shows the loop response of the converter. The input was 360VDC and the load was 38A.

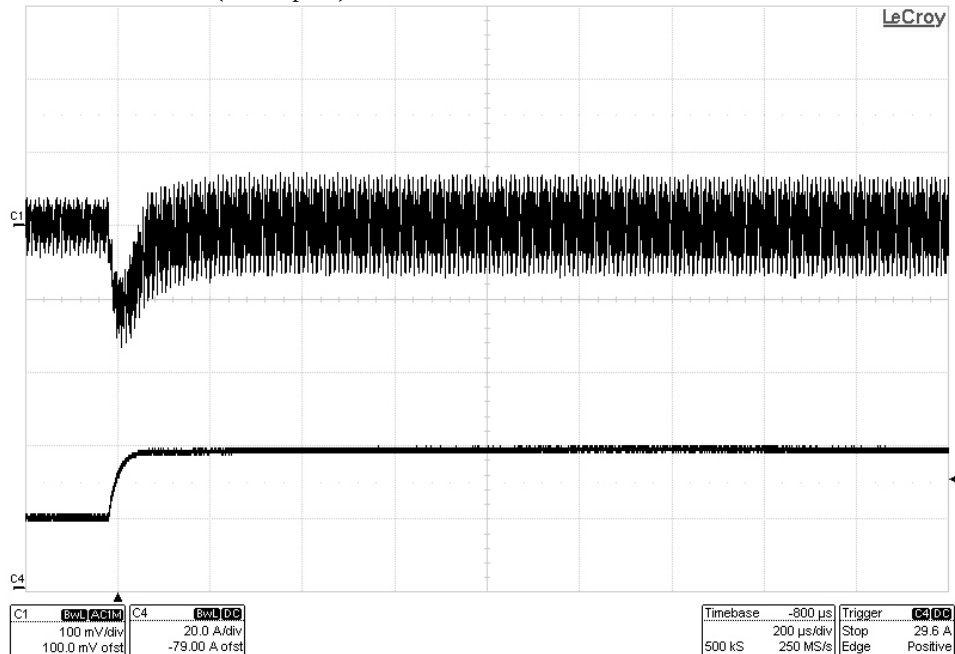


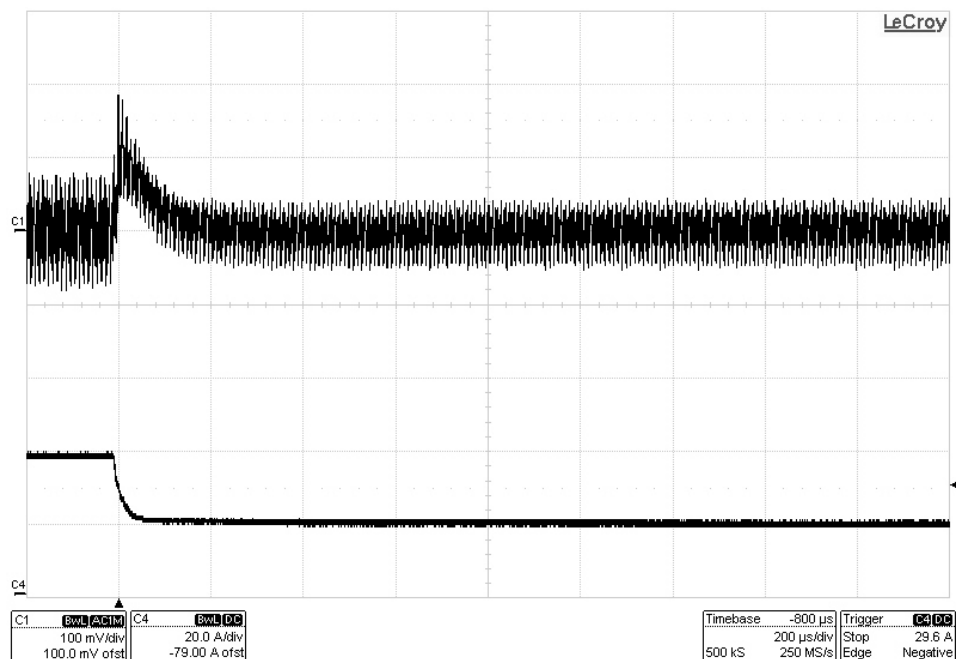
7 Load Transients

The images below show the response to a 19A to 38A load transient. The input was 380VDC.

Channel 1: Vout (ac coupled) 100mV/div

Channel 4: Iout 20A/div

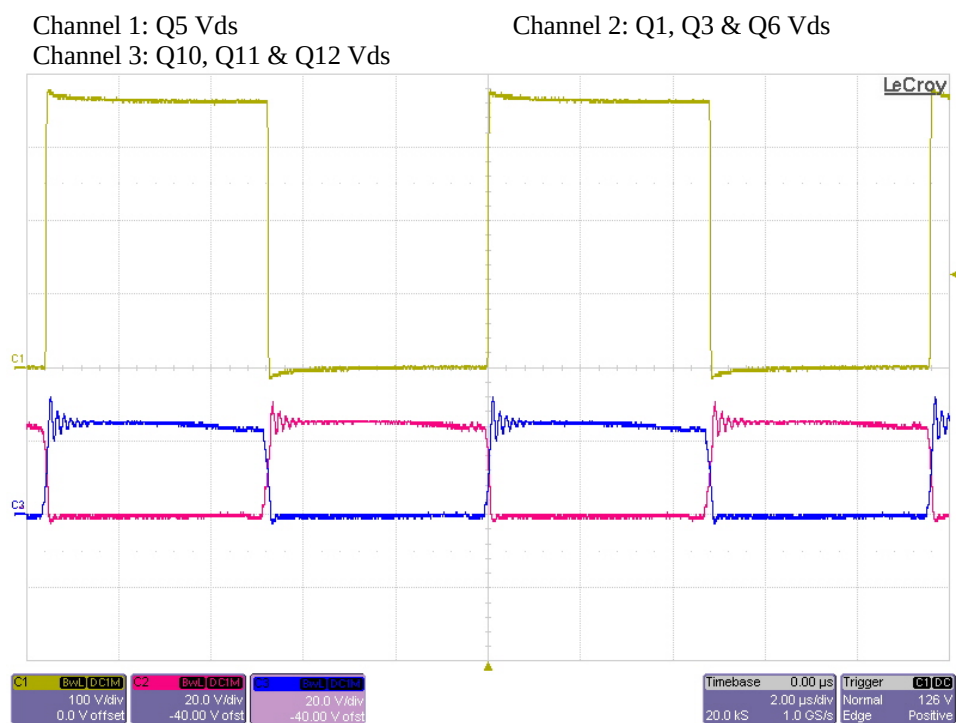




8 Switching Waveforms

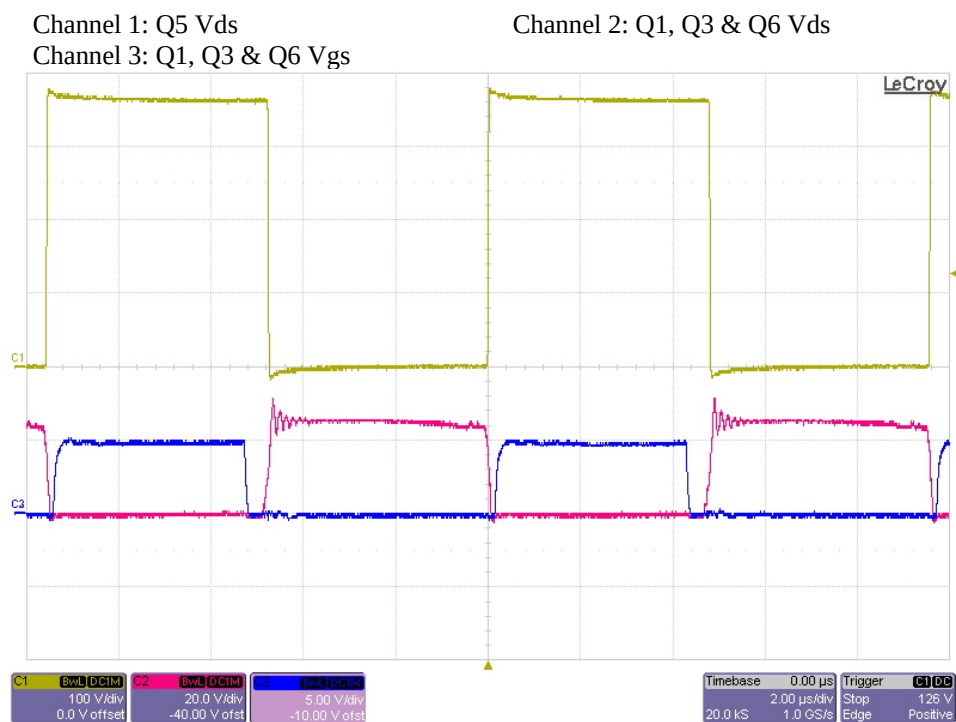
8.1 Drain-Source Waveforms

The image below shows the drain-to-source voltage waveforms on the switching MOSFETs. The output was loaded with 38A, and the input was 380VDC.



8.2 Sync FET Drive

The image below shows the waveforms associated with the gate drive of the synchronous MOSFETs. The output was loaded with 38A, and the input was 380VDC.



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