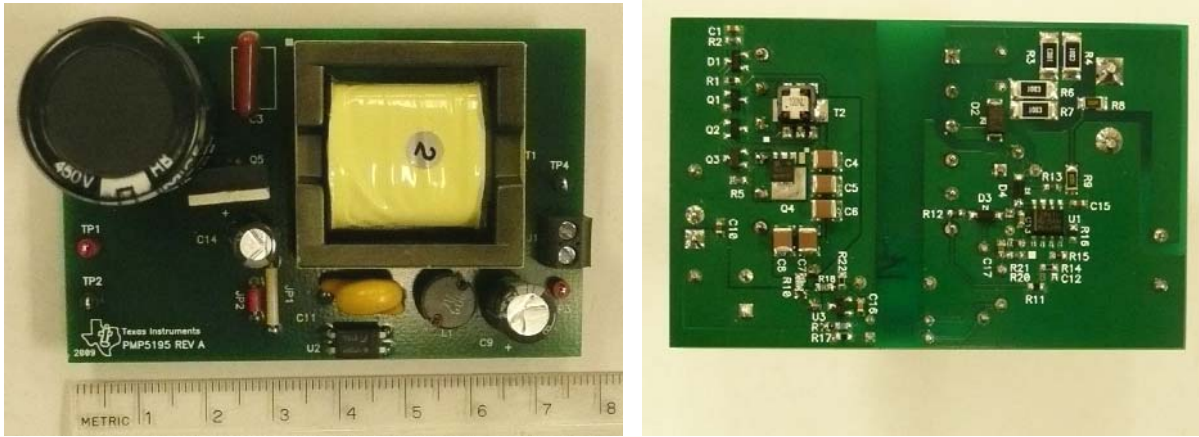


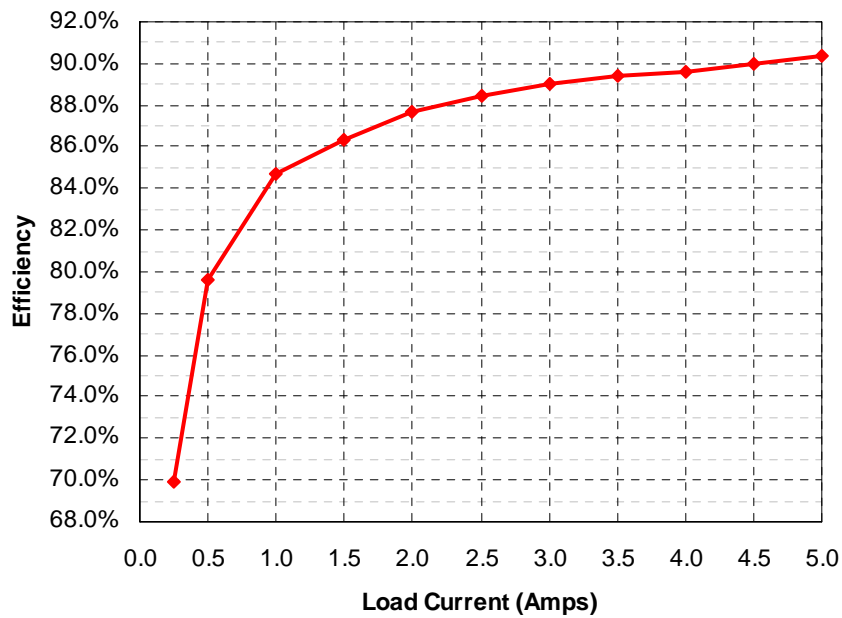
1 Photo

The photographs below show the top and bottom views of the PMP195 Rev A demo board.



2 Efficiency

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



Iout	Vout	Vin (Vdc)	Iin (mAdc)	Pin	Pout	Losses	Efficiency
0.250	12.01	402.6	10.67	4.30	3.00	1.29	69.9%
0.500	12.01	402.6	18.74	7.54	6.01	1.54	79.6%
1.003	12.01	402.6	35.33	14.22	12.05	2.18	84.7%
1.500	12.01	402.5	51.83	20.86	18.02	2.85	86.4%
2.001	12.01	402.5	68.1	27.41	24.03	3.38	87.7%
2.508	12.01	402.5	84.6	34.05	30.12	3.93	88.5%
3.000	12.01	402.4	100.6	40.48	36.03	4.45	89.0%
3.498	12.00	402.4	116.7	46.96	41.98	4.98	89.4%
3.998	12.00	402.4	133.0	53.52	47.98	5.54	89.6%
4.50	12.00	402.3	149.2	60.02	54.00	6.02	90.0%
5.00	12.00	402.3	165.1	66.42	60.00	6.42	90.3%

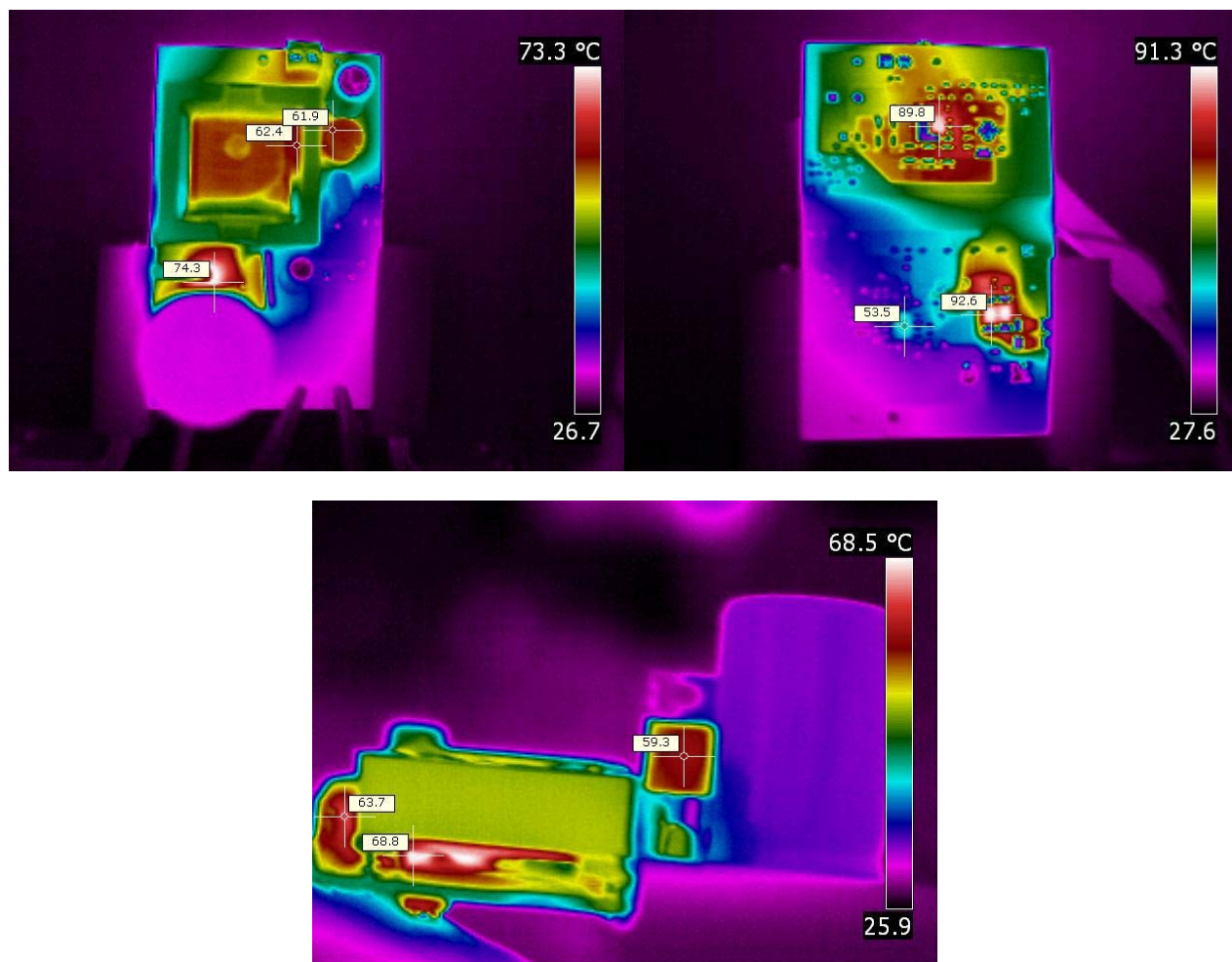
3 Standby Mode Power Consumption

The table below shows the input power and efficiency during light load operation.

Iout	Vout	Vin (Vdc)	Iin (mA)	Pin (mW)	Pout (mW)	Losses	Efficiency
0.000	12.02	402.7	0.49	197	0	197	0.0%
0.025	12.02	402.7	1.84	741	301	440	40.6%
0.049	12.02	402.7	3.12	1256	589	667	46.9%

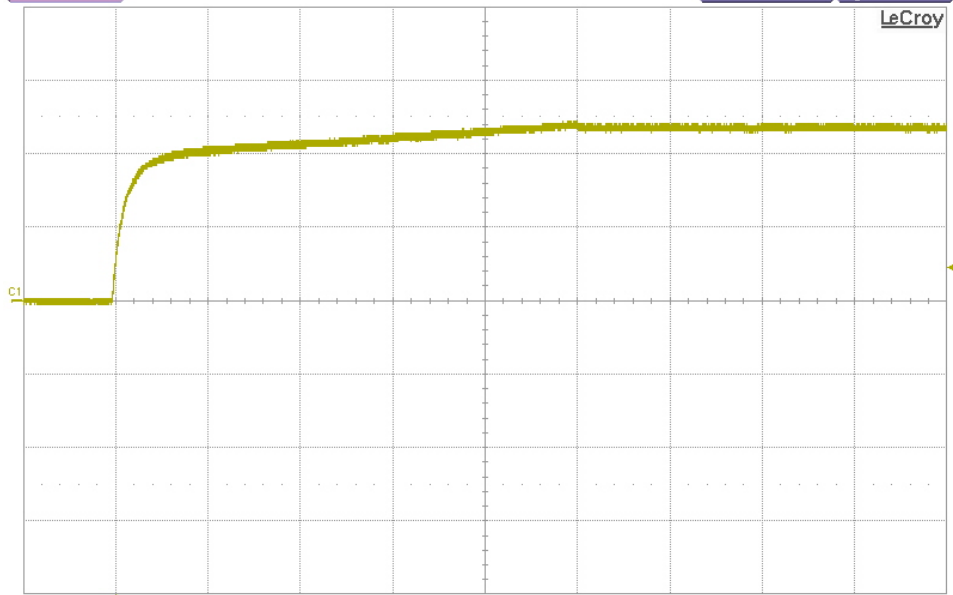
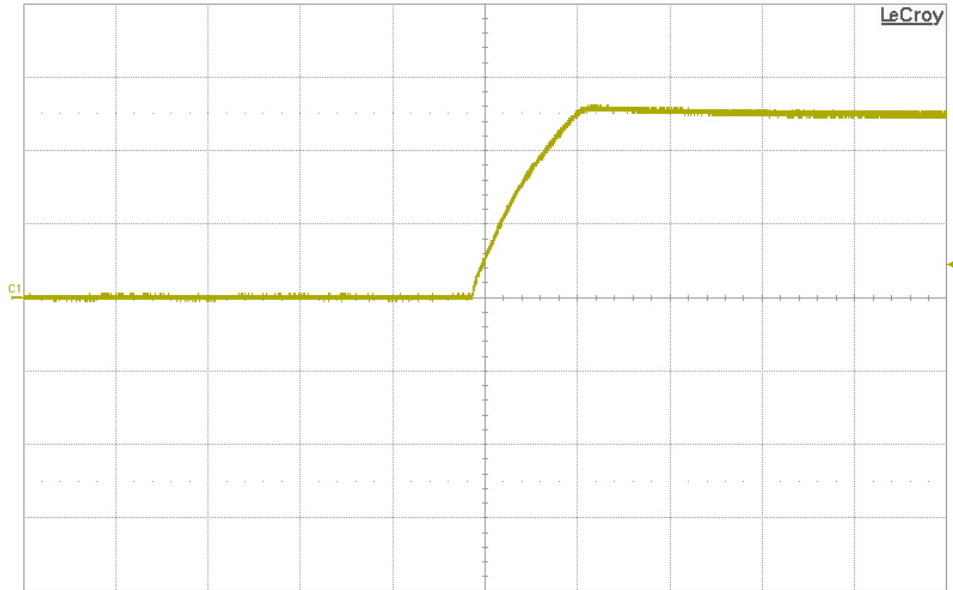
4 Thermal Images

The thermal images below show a top view (left), bottom view (right), and side view (below, center) of the board. The ambient temperature was 26°C with no forced air flow. The output was loaded with 5A.



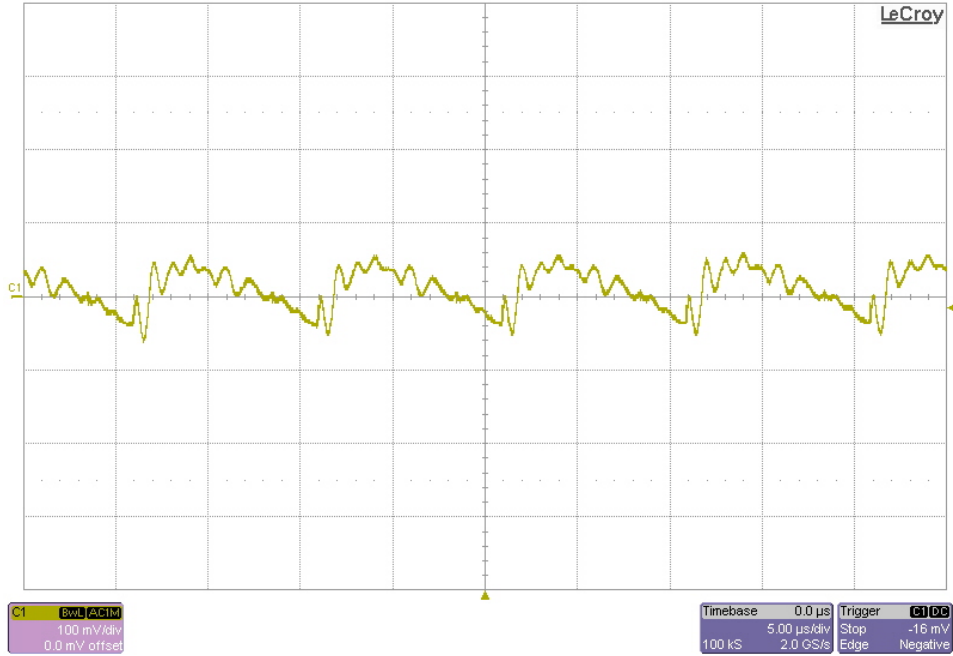
5 Startup

The output voltage at startup is shown in the images below. The input was 400VDC. For the top image, the output was unloaded. For the bottom image, the output was loaded with 5A.



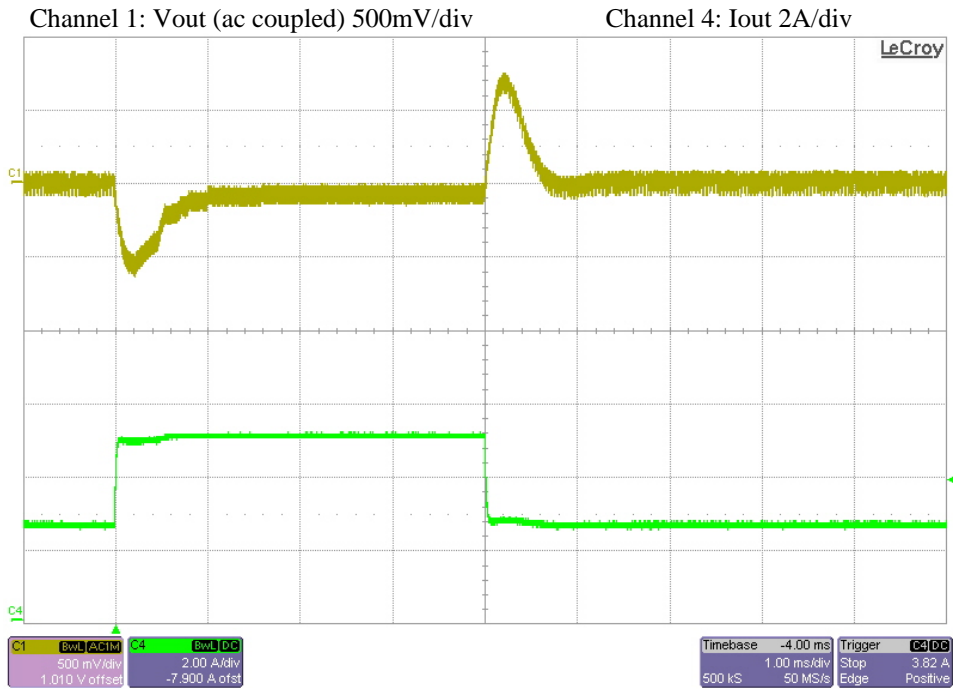
6 Output Ripple Voltage

The output ripple voltage during full load (5A) operation is shown in the plot below.



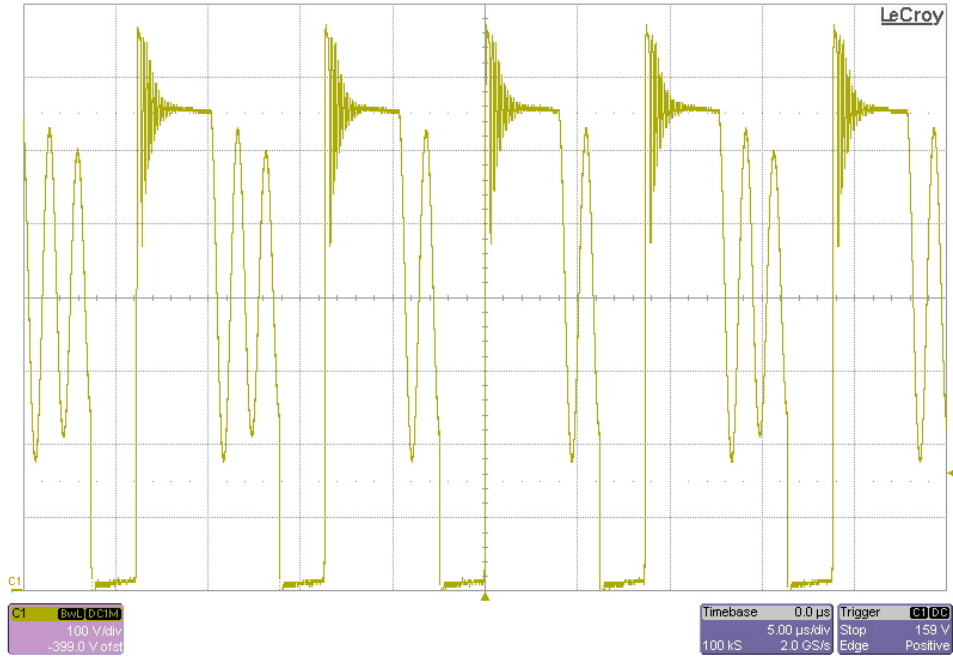
7 Load Transients

The image below shows the response to a 2.5A to 5A load transient. The input voltage was set to 400VDC.



8 Switching Waveforms

The image below shows the drain-to-source voltage waveform on the primary MOSFET (Q5). The load was 5A and the input was set to 400VDC.



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