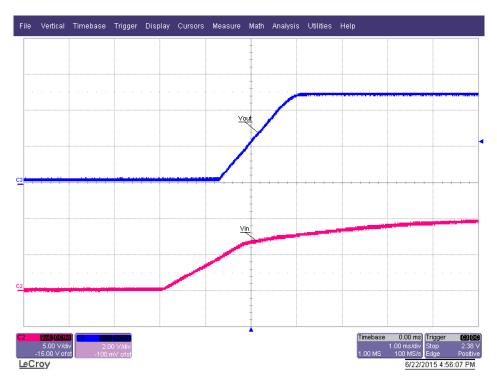


1 Startup

The photo below shows the output voltage startup waveform after the application of 10.8V in with the 5V output loaded to 0A. (Vout: 5V/DIV, 1mS/DIV), (Vin: 2V/DIV)

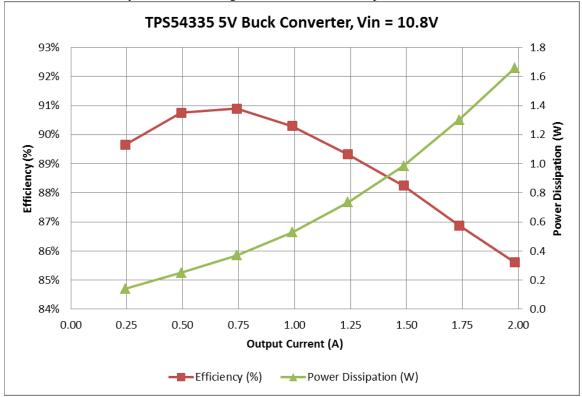


The photo below shows the output voltage startup waveform after the application of 10.8V in with the 5V output loaded to 2A. (Vout: 5V/DIV, 1mS/DIV), (Vin: 2V/DIV)





2 Efficiency

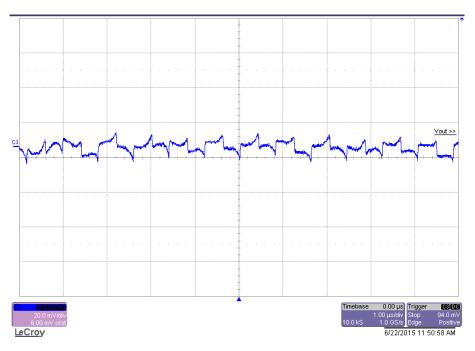


The converter efficiency is shown in the figures below for a 10.8V input.



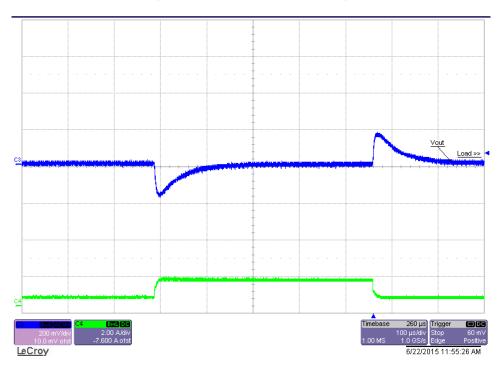
3 Output Ripple Voltage

The output ripple voltage is shown in the figure below. The image was taken with the 5V output loaded to 2A and the input voltage set to 10.8V. (20mV/DIV, 1uS/DIV)



4 Load Transients

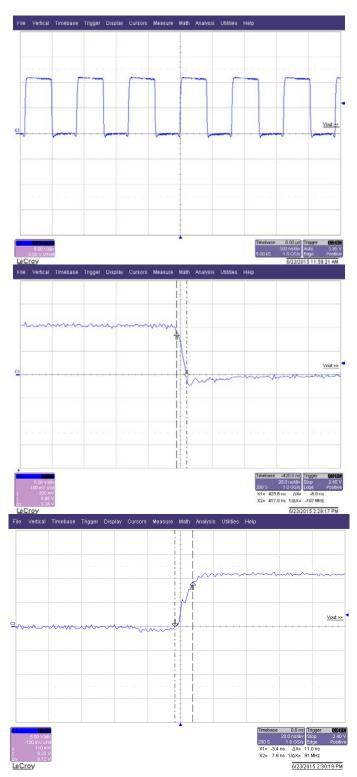
The photo below shows the 5V output voltage (ac coupled) when the load current is stepped between 0.5A and 1.5A. Vin = 10.8V. (200mV/DIV, 2A/DIV, 100uS/DIV)





5 Switch Node Waveforms

The photo below shows the switch node voltage. The input voltage is 10.8V and the 5V output is loaded to 2A. (5V/DIV, 500nS/DIV)





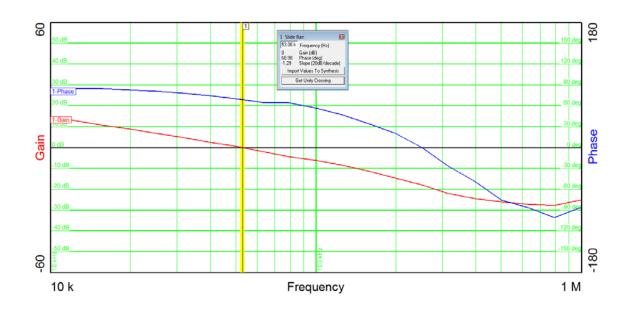
6 Control Loop Gain / Stability

The plot below shows the converter's loop gain and phase margin when loaded to 5V @ 2A.

Vin = 10.8V

Band Width = 53.06KHz

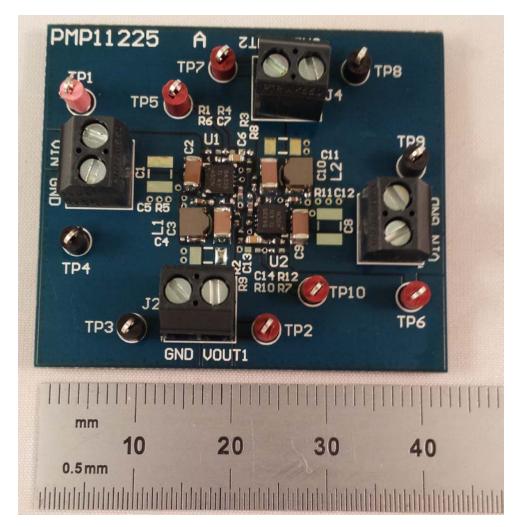
Phase Margin = 69 degrees





7 Photo

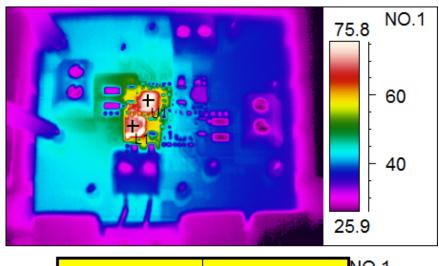
The photo below shows the PMP11225.





8 Thermal Image

The thermal image below shows operation at 10.8V input and 5V@2A output, with no airflow, dual output loading.



Spot analysis	Value	NO.1
U1Temperature	77.9°C	
L1 Temperature	72.2°C	

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