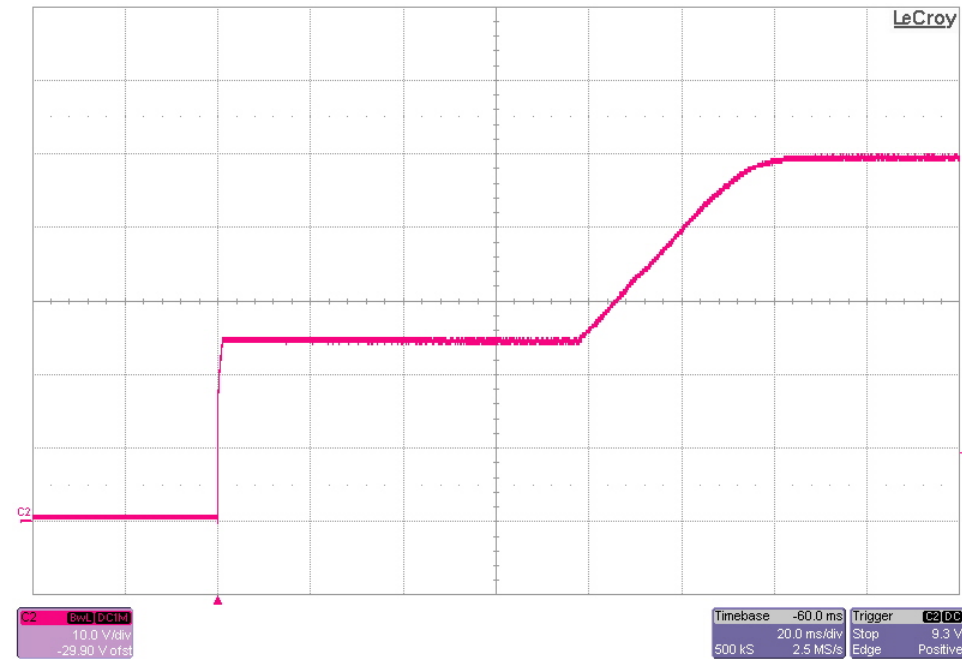
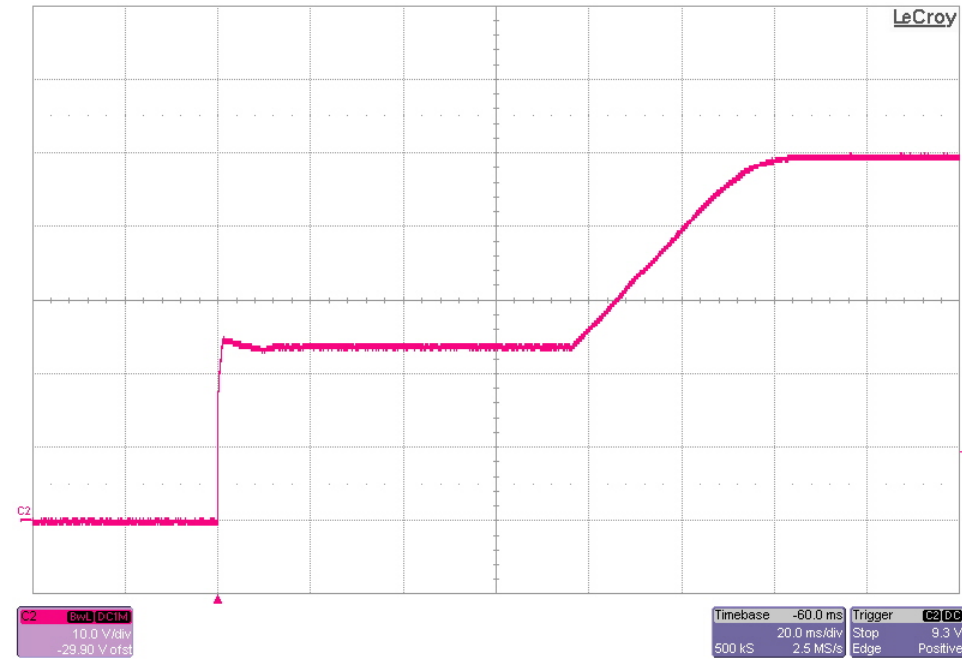


1 Startup

The photo below shows the 50V output voltage startup waveforms after the application of 24Vdc in. The output was loaded to 0A. (10V/DIV, 20mS/DIV)

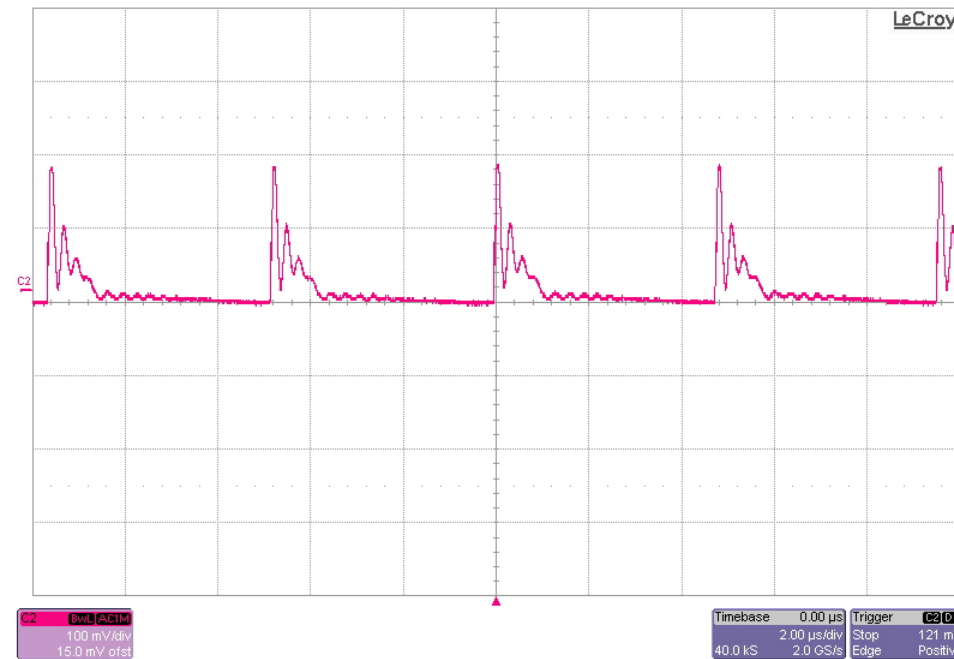


The photo below shows the 50V output voltage startup waveforms after the application of 24Vdc in. The output was loaded to 500mA. (10V/DIV, 20mS/DIV)

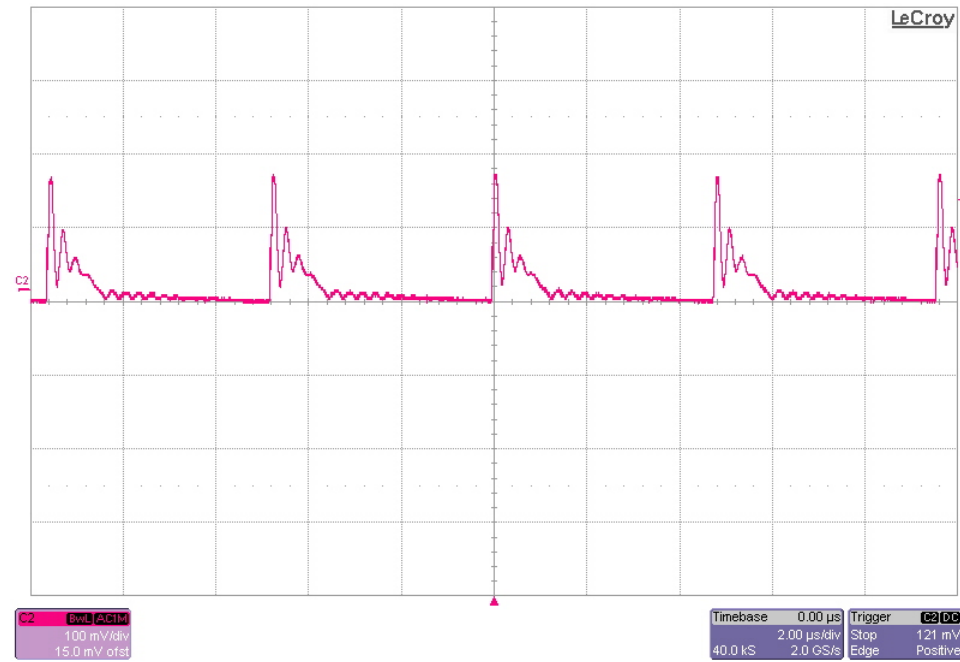


2 Output Ripple Voltage

The 50V output ripple voltage is shown in the figure below. The image was taken with the output loaded to 500mA and the input voltage set to 18Vdc. (100mV/DIV, 2uS/DIV)

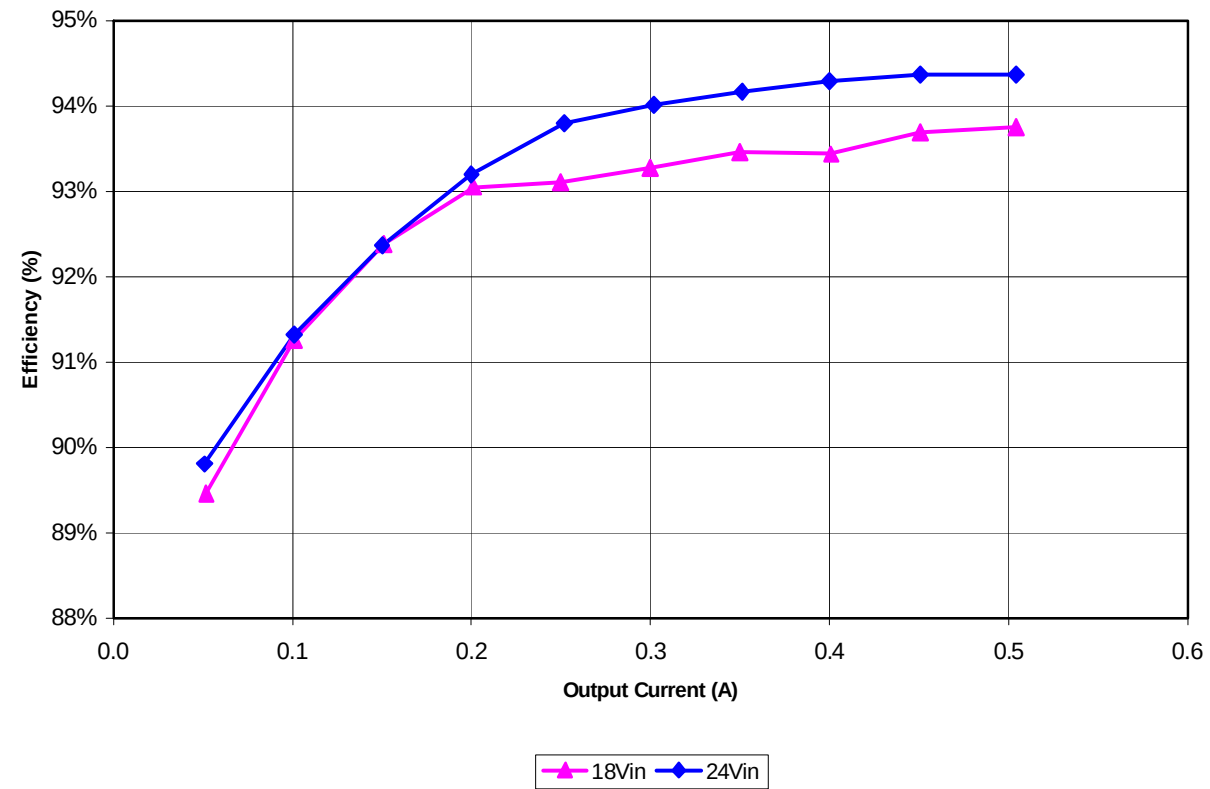


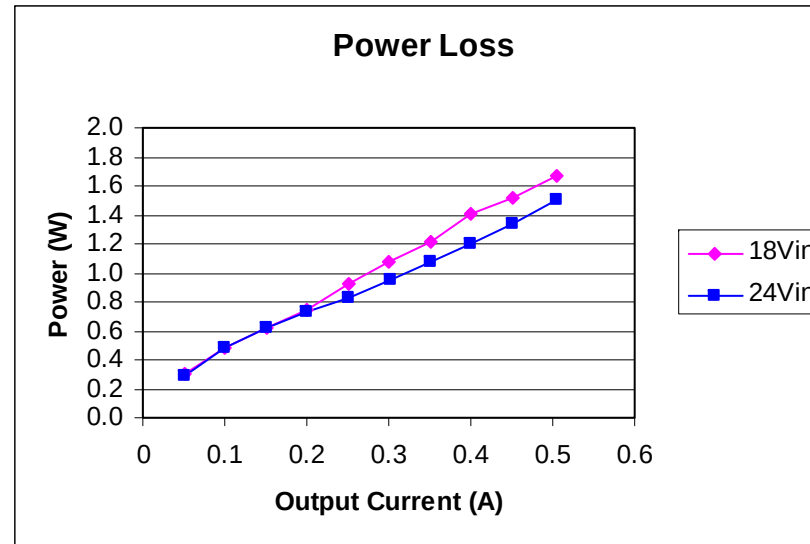
The 50V output ripple voltage is shown in the figure below. The image was taken with the output loaded to 500mA and the input voltage set to 24Vdc. (100mV/DIV, 2uS/DIV)



3 Efficiency

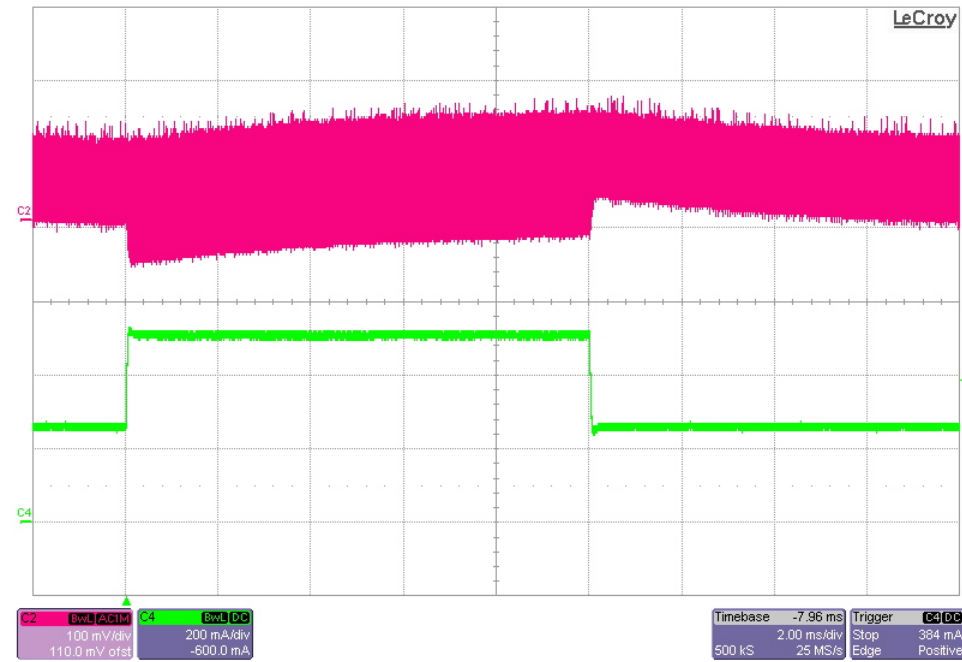
The converter efficiency is shown in the figure below.



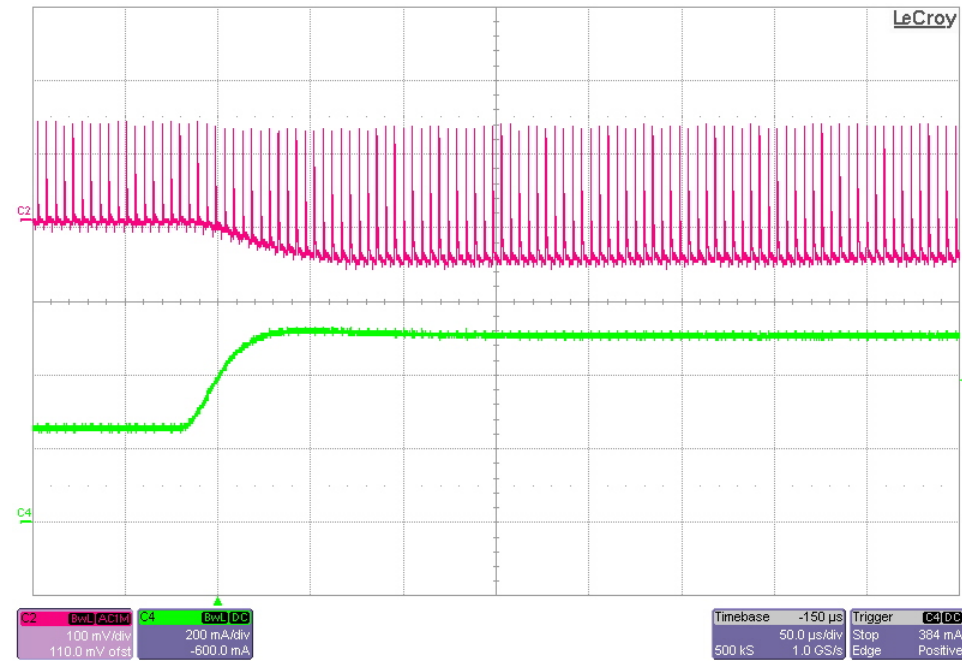


4 Load Transients

The photo below shows the 50V output voltage when the load current is pulsed between 250mA and 500mA. $V_{in} = 18V_{dc}$. (100mV/DIV, 200mA/DIV, 2mS/DIV)

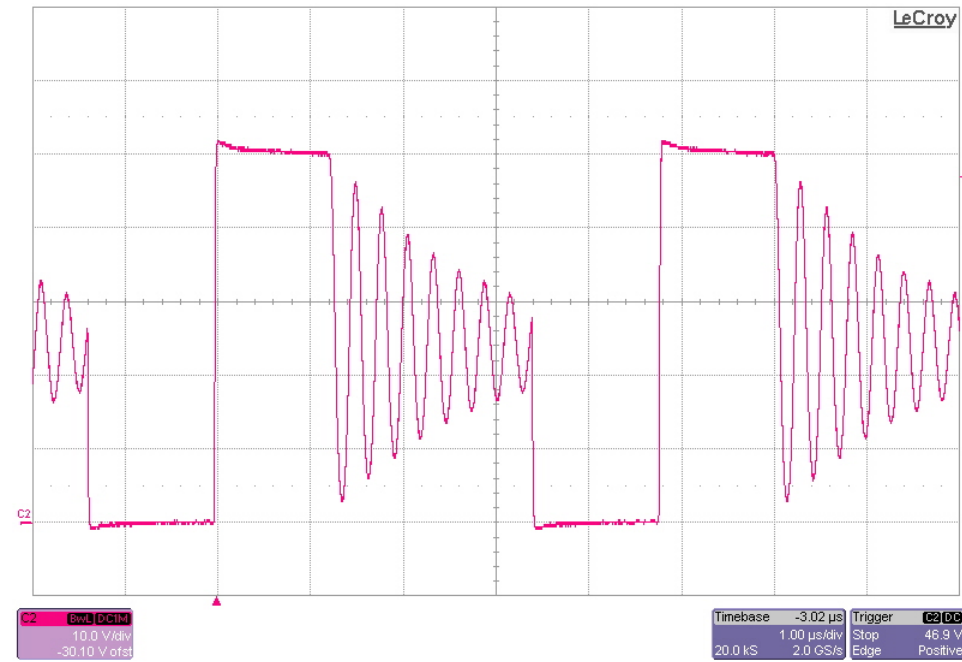


The photo below shows the 50V output voltage when the load current is pulsed between 250mA and 500mA. $V_{in} = 18V_{dc}$. This is zoomed in from above photo. (100mV/DIV, 200mA/DIV, 2mS/DIV)

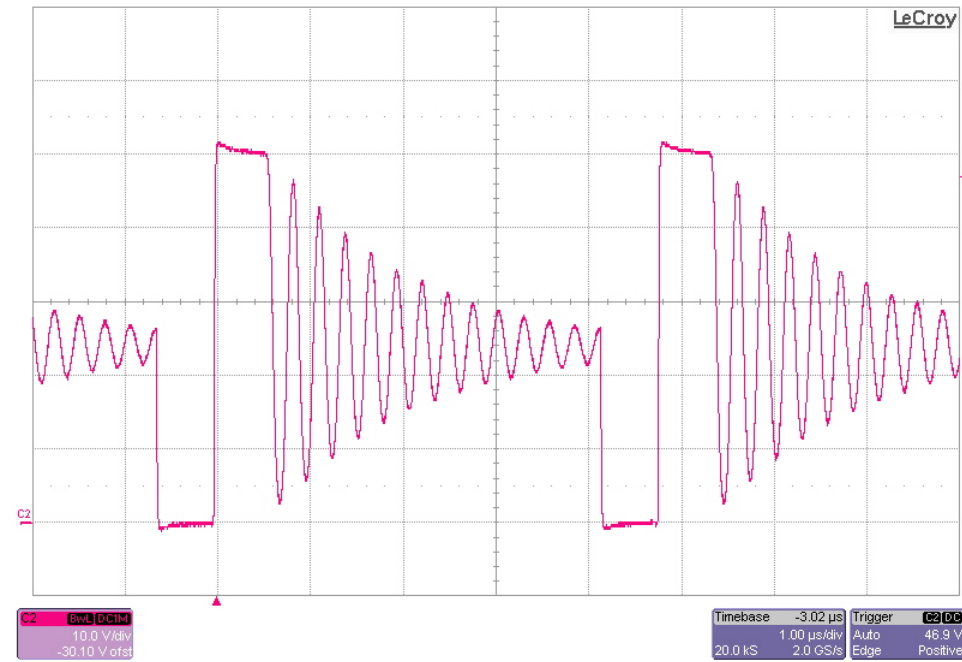


5 Waveforms

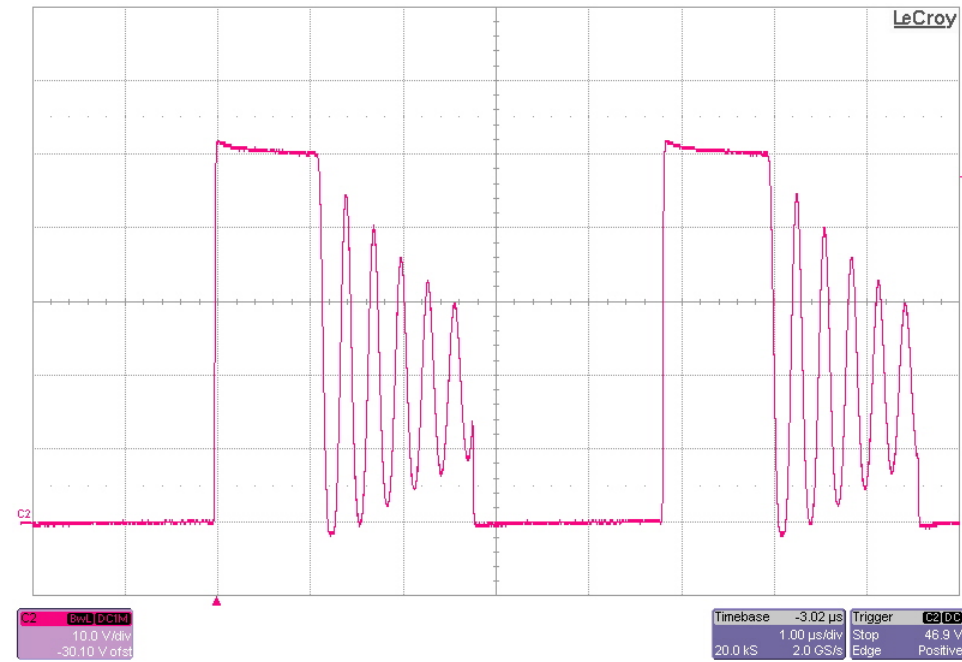
The photo below is of the N-ch FET drain waveform (TP7). The input voltage is 24V and the output is loaded to 500mA. (10V/DIV, 1 μ S/DIV)



The photo below is of the N-ch FET drain waveform (TP7). The input voltage is 24V and the output is loaded to 100mA. (10V/DIV, 1 μ S/DIV)



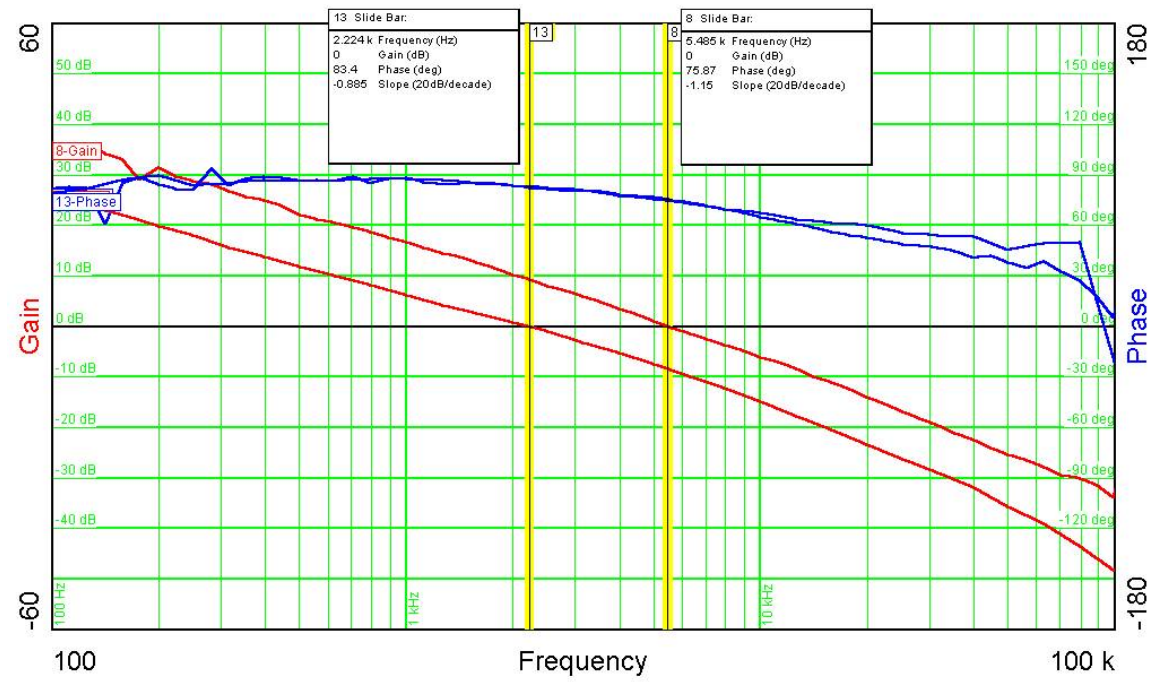
The photo below is of the N-ch FET drain waveform (TP7). The input voltage is 18V and the output is loaded to 500mA. (10V/DIV, 1µS/DIV)



6 Loop Gain

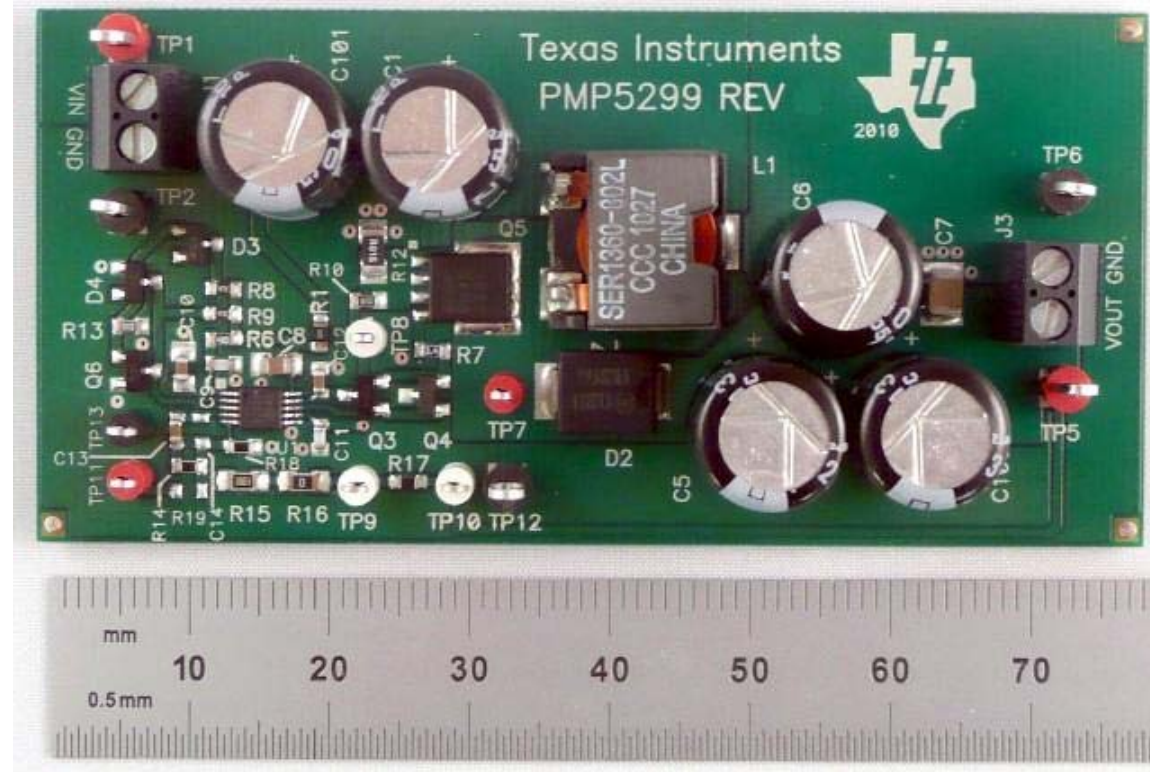
The plot below shows the loop gain with 24V input voltage and output loads of 100mA and 500mA.

Loop Gain (100mA)	BW: 2.2KHz	PM: 83 degrees
Loop Gain (500mA)	BW: 5.5KHz	PM: 76 degrees



7 Photo

The photo below shows the PMP5299 REVB assembly, built on the REVA PWB.



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