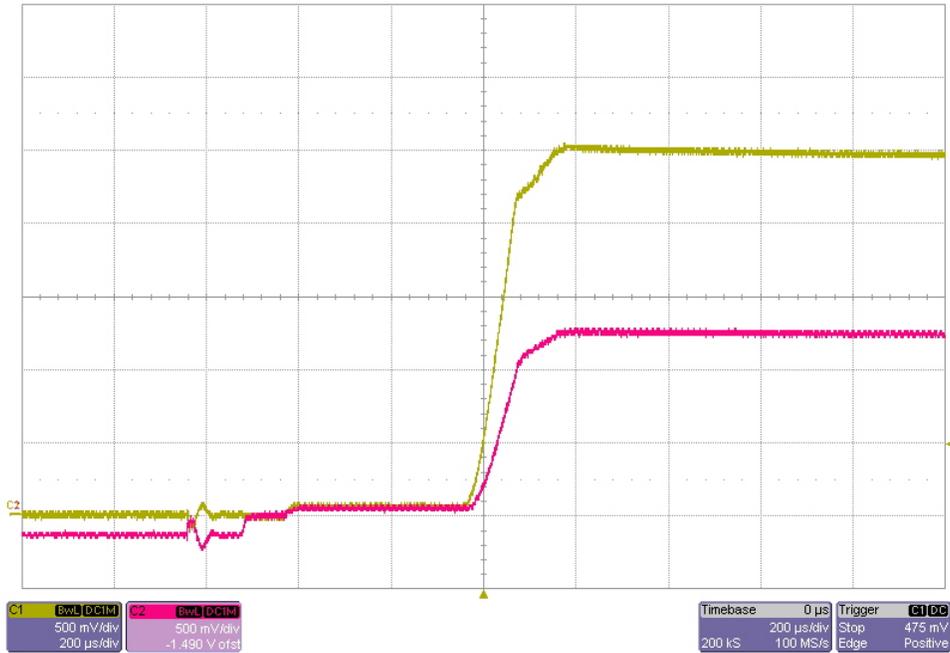


## 1 Startup

The photo below shows the 2.5V and 1.25V output voltage startup waveforms after the application of 12Vdc in. The outputs were loaded to 2.5V @ 4A and 1.25V @ 1A. (500mV/DIV, 200uS/DIV)



The photo below shows the 2.5V and 1.25V output voltage startup waveforms after the application of 12Vdc in. The outputs was unloaded. (500mV/DIV, 200uS/DIV)



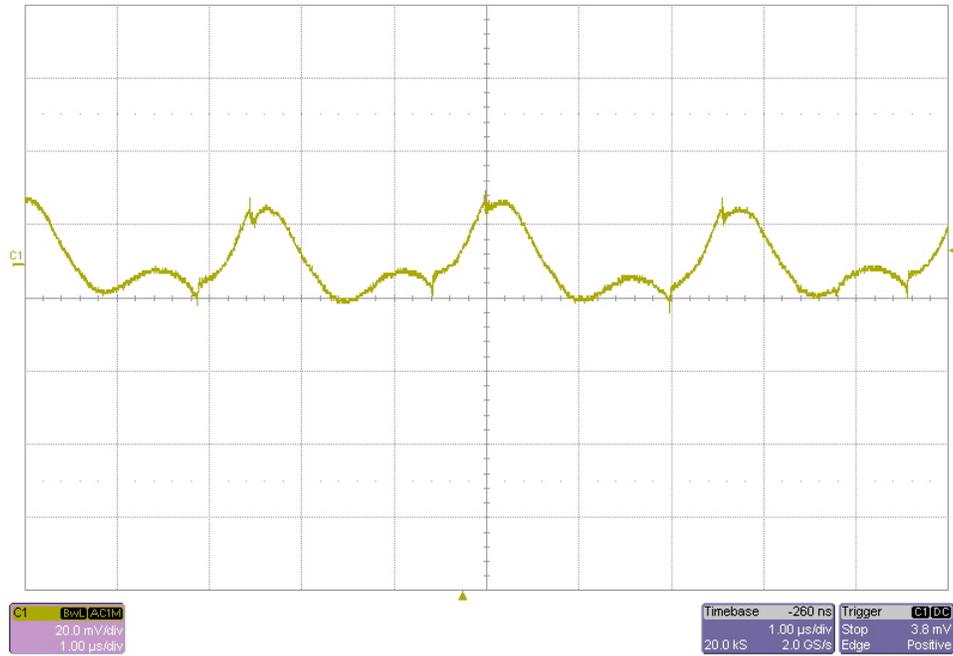
## 2 Efficiency

The converter efficiency is shown in the figure below.



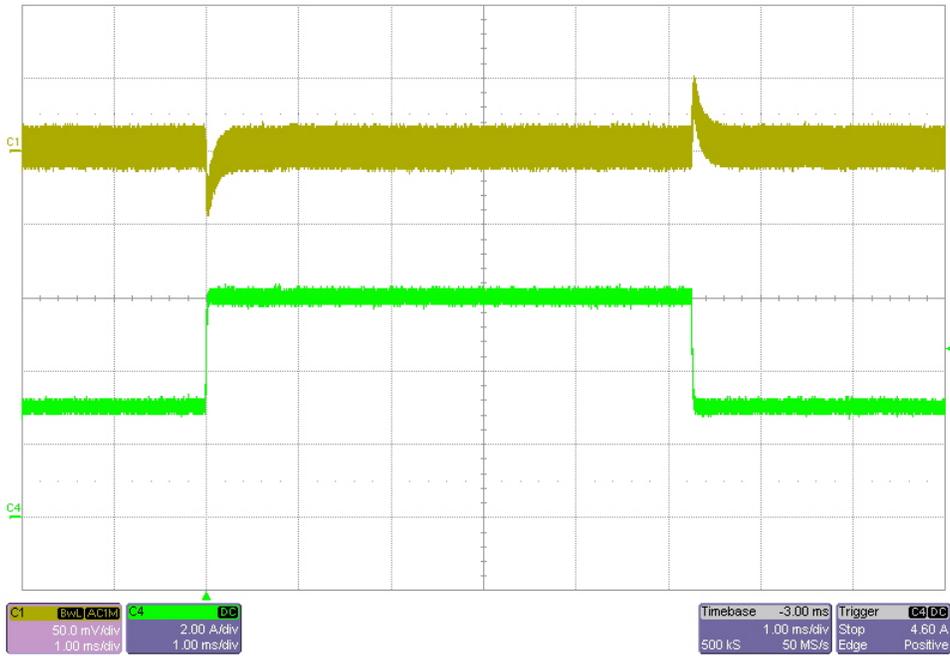
## 3 Output Ripple Voltage

The 2.5V output ripple voltage is shown in the figure below. The image was taken with the output loaded to 9A (1.25V @ 0A) and the input voltage set to 12Vdc. (20mV/DIV, 1uS/DIV)

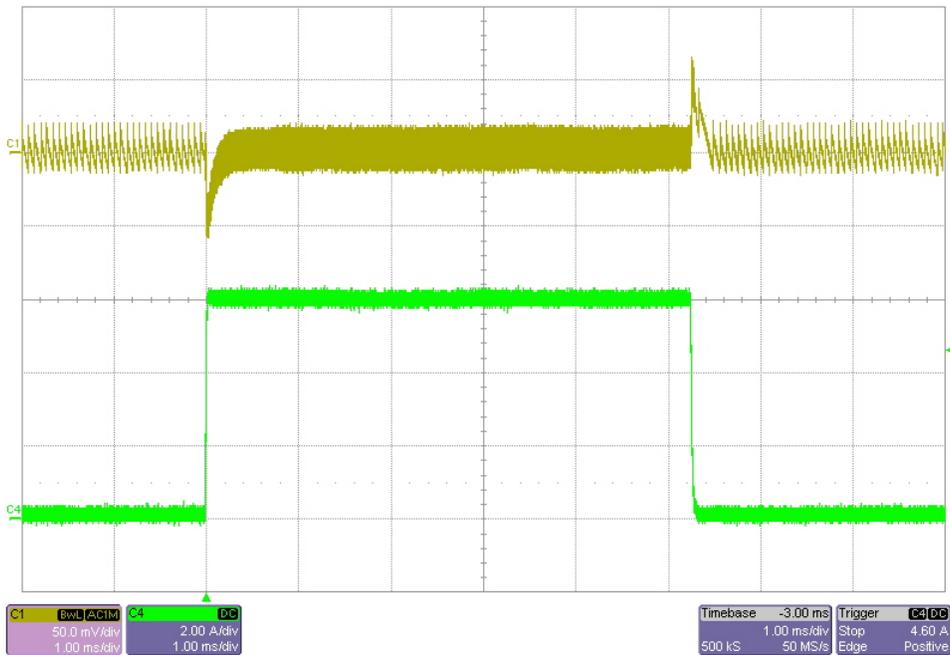


## 4 Load Transients

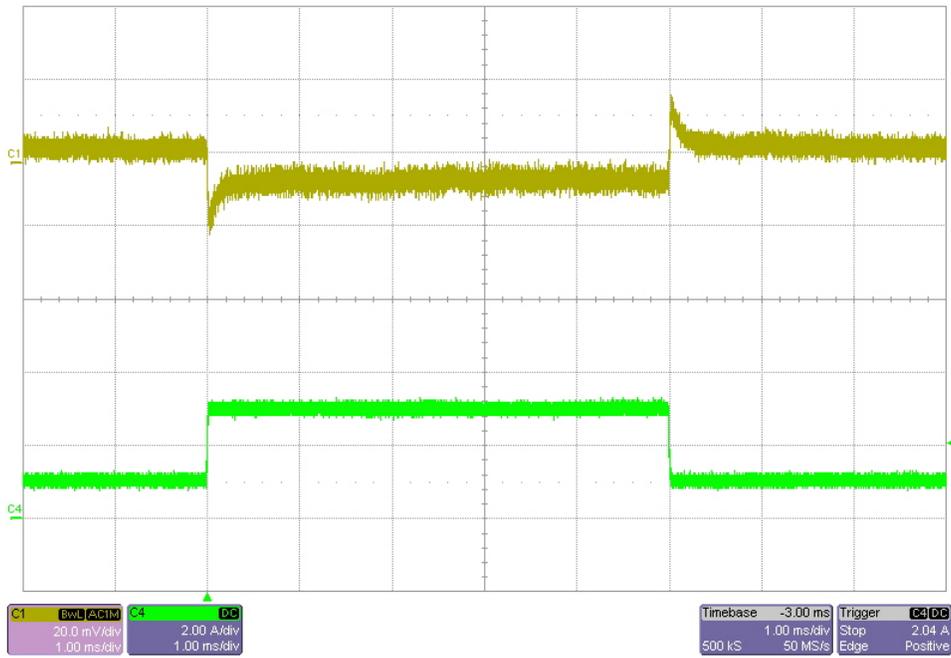
The photo below shows the 2.5V output voltage when the load current is stepped between 3A and 6A.  $V_{in} = 12V_{dc}$ . (50mV/DIV, 2A/DIV, 1mS/DIV)



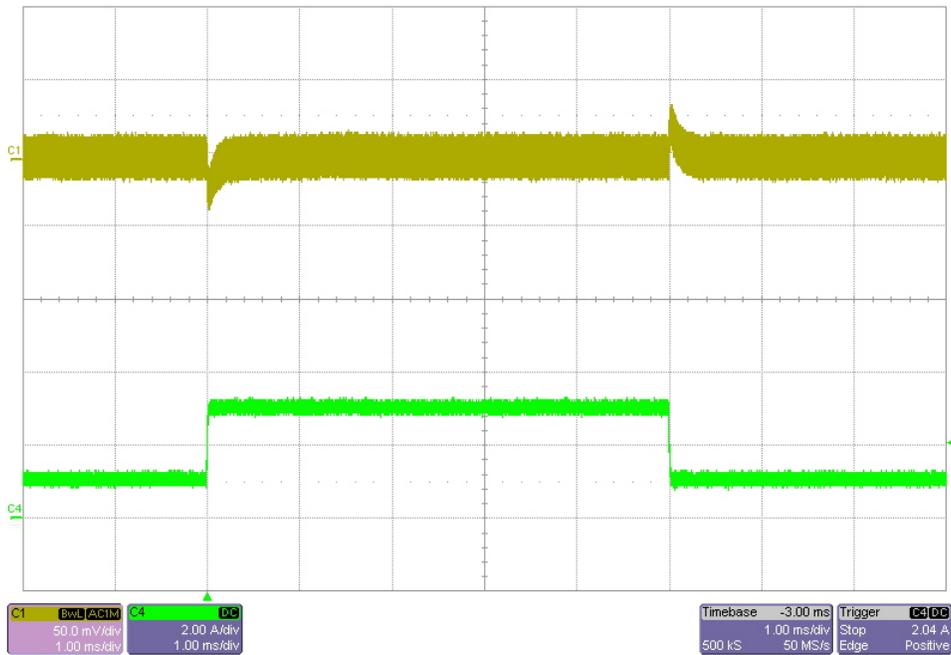
The photo below shows the 2.5V output voltage when the load current is stepped between 0.1A and 6A.  $V_{in} = 12V_{dc}$ . (50mV/DIV, 2A/DIV, 1mS/DIV)



The photo below shows the 1.25V output voltage when the load current is stepped between 1A and 3A.  $V_{in} = 12V_{dc}$ . (20mV/DIV, 2A/DIV, 1mS/DIV)

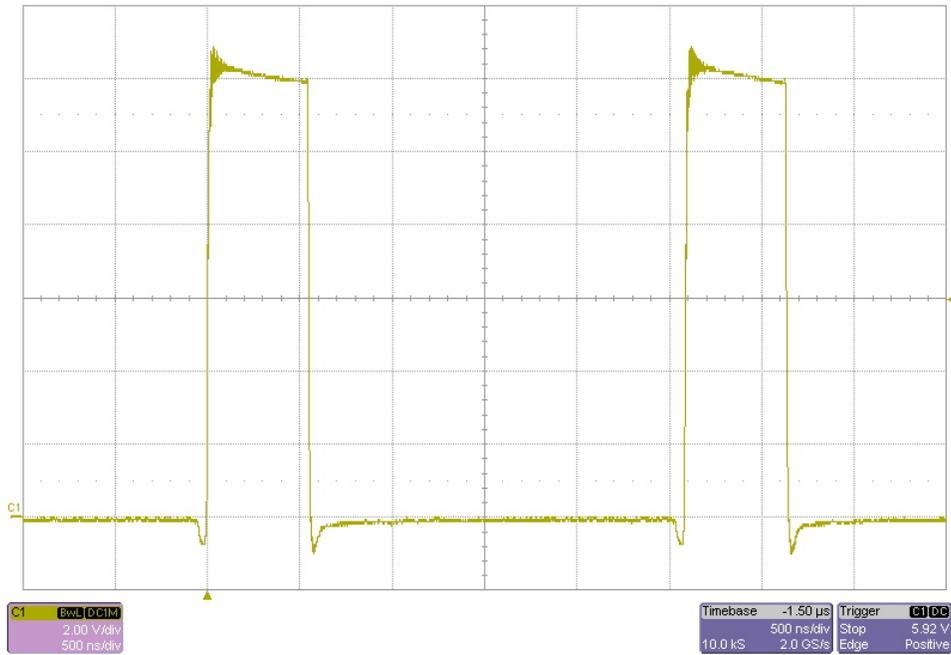


The photo below shows the 2.5V output voltage when the 1.25V load current is stepped between 1A and 3A.  $V_{in} = 12V_{dc}$ . (50mV/DIV, 2A/DIV, 1mS/DIV)



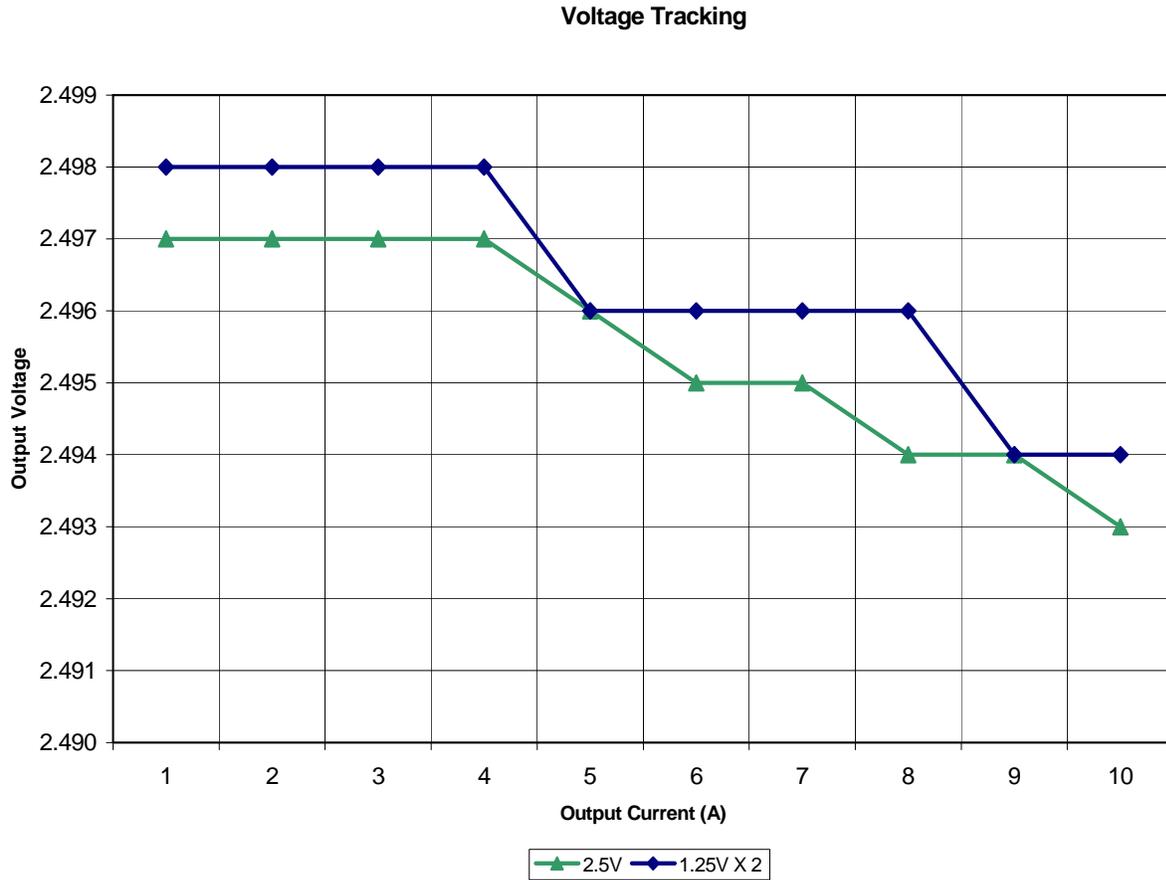
## 5 Switch Node Waveforms

The photo below is of switch node waveform (TP6). The input voltage is 12V and the output is loaded to 9A (1.25V @ 0A). (2V/DIV, 500nS/DIV)



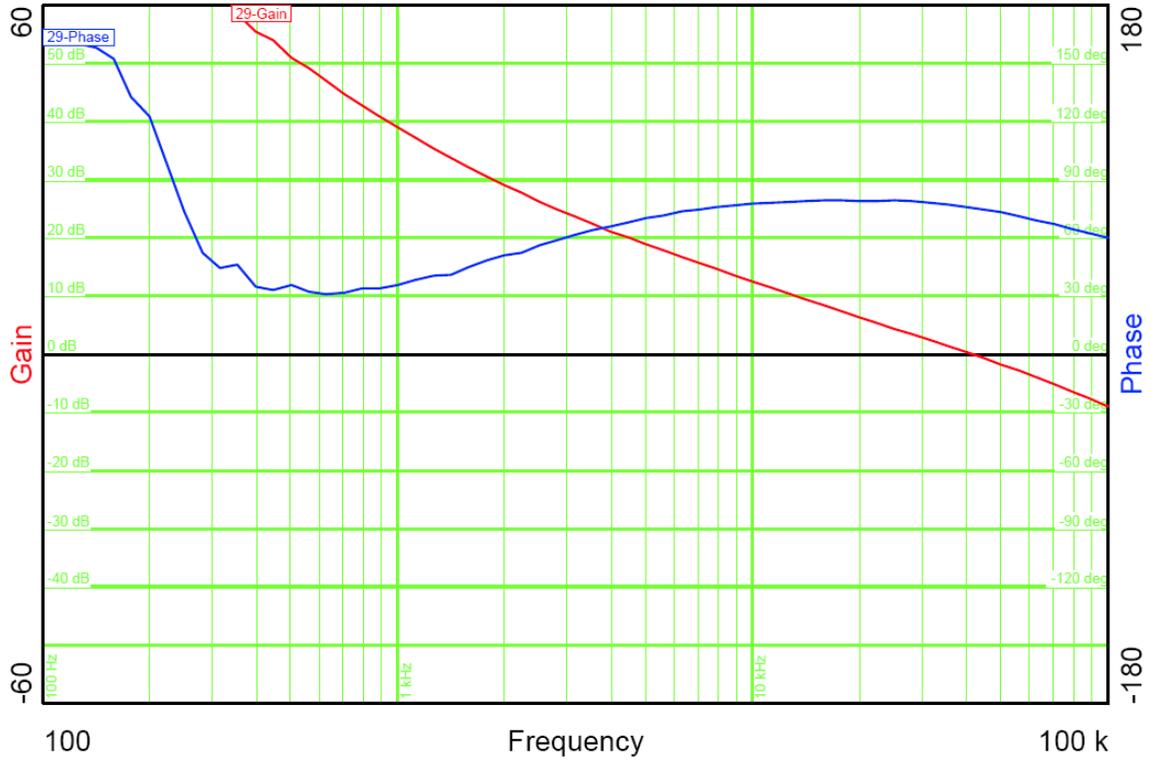
## 6 Voltage Tracking

The graph below shows the voltage tracking measured between the 2.5V and the 1.25V outputs. The 1.25V output was unloaded while the 2.5V was loaded as shown on the horizontal axis.



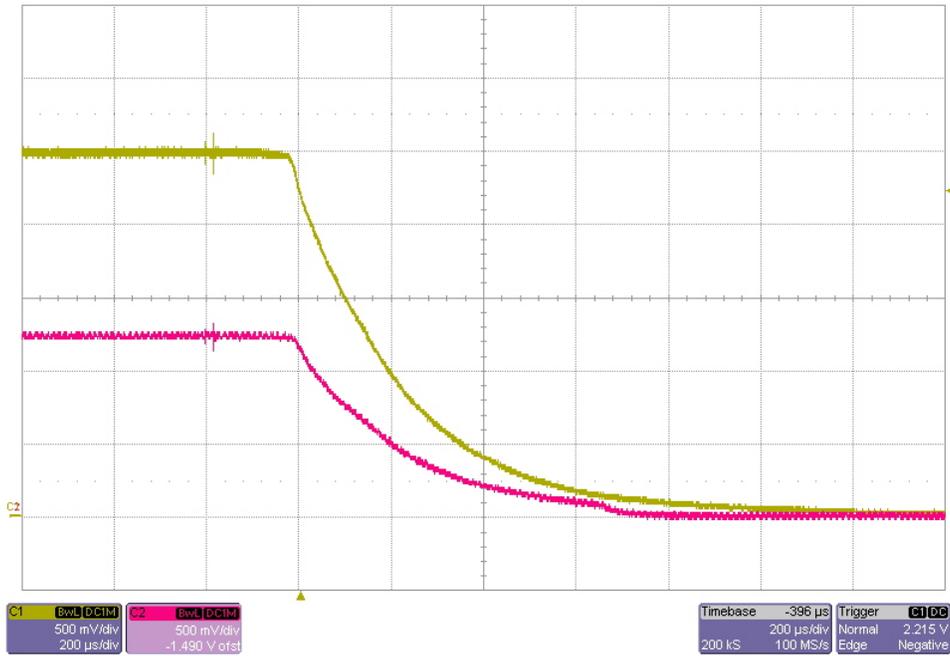
## 7 Control Loop Gain / Stability

The plot below shows the loop gain and phase margin with the input voltage set to 12V and the output loaded to 4A. Band Width = 42KHz, Phase Margin = 75 degrees



## 8 Turn Off

The photo below shows the 2.5V and 1.25V output voltages after the removal of 12Vdc in. The outputs were loaded with 1 ohms resistors. (500mV/DIV, 200uS/DIV)



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