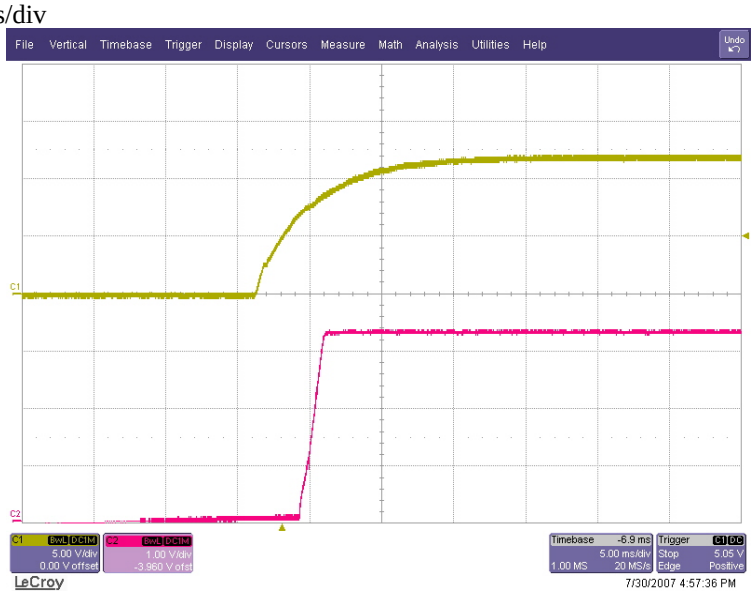
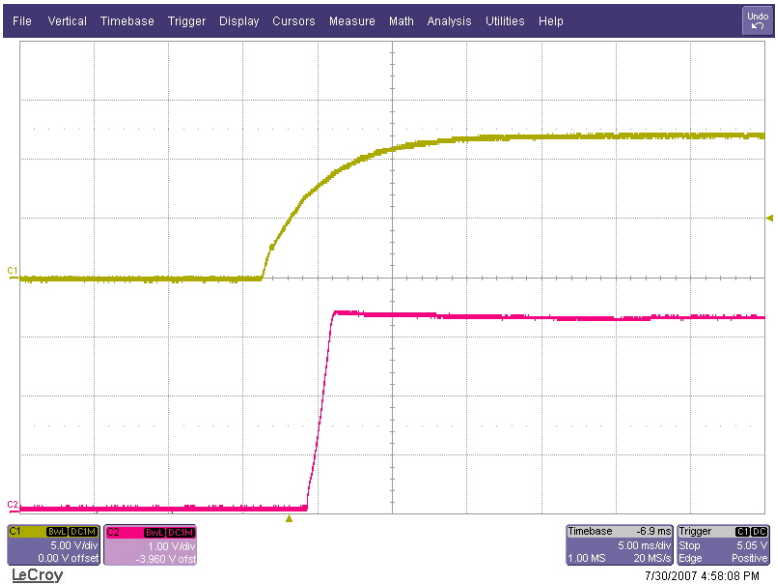
1 Startup

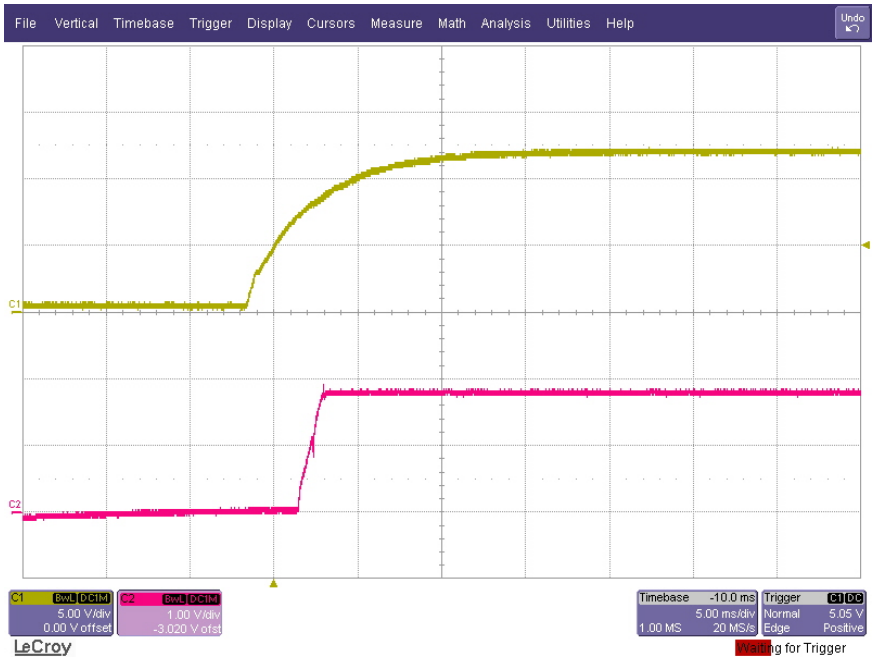
The startup waveform for the 3.3 V rail is shown in the figure below. The input voltage is set at 12V, with a 2A load on the output.
Channel 1 : Vin- 5V/div
Channel 2 : Vout- 1 V/div
Timebase: 5.00 ms/div



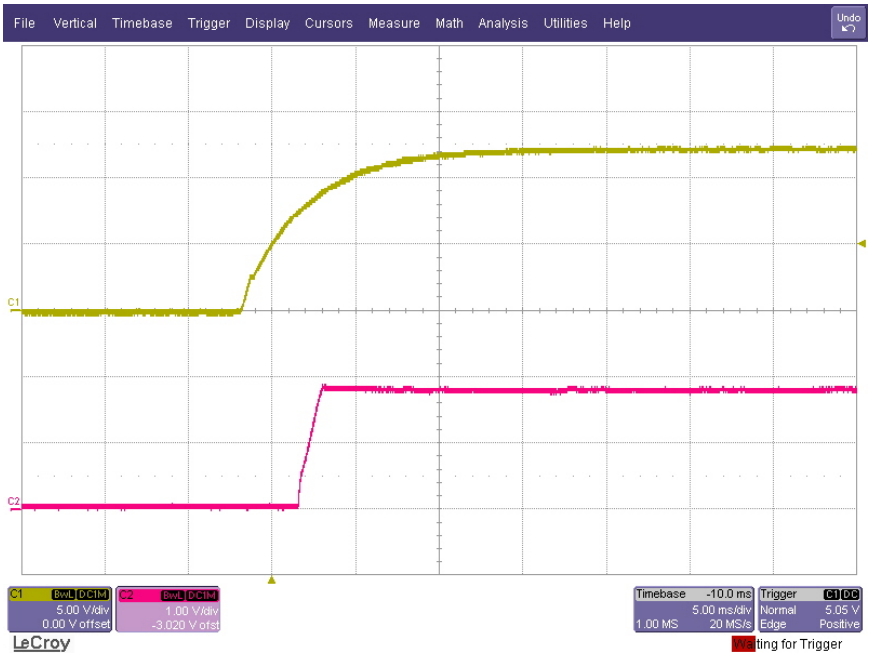
The startup waveform for the 3.3 V rail is shown in the figure below. The input voltage is set at 12V, with no load on the output.
Channel 1 : Vin- 5V/div
Channel 2 : Vout- 1 V/div
Timebase: 5.00 ms/div



The startup waveform for the 1.8 V rail is shown in the figure below. The input voltage is set at 12V, with a 2 A load on the output.
Channel 1 : Vin- 1V/div
Channel 2 : Vout- 1 V/div
Timebase: 5.00 ms/div

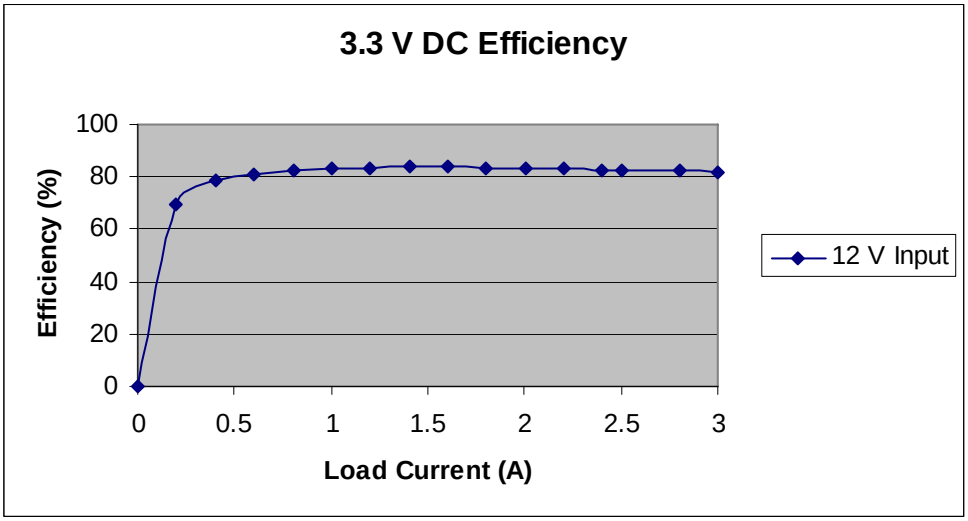


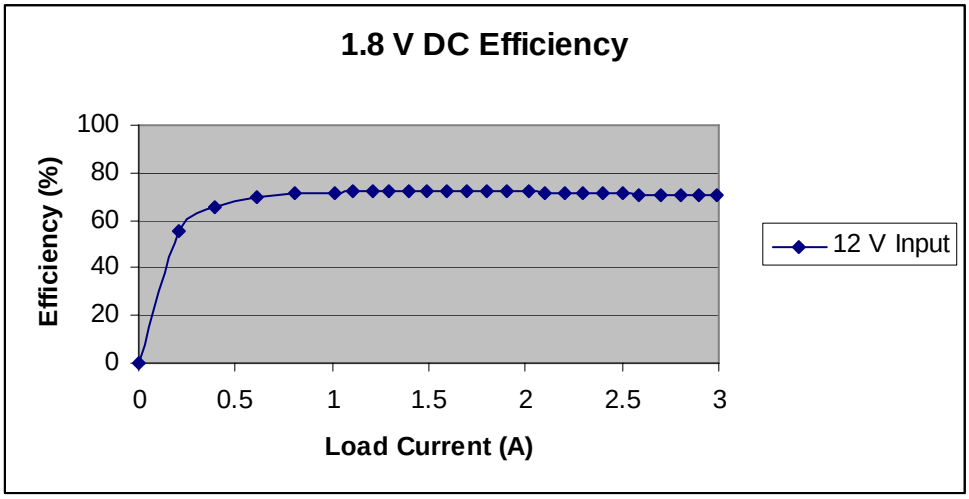
The startup waveform for the V rail is shown in the figure below. The input voltage is set at 12V, with no load on the output.
Channel 1 : Vin- 1V/div
Channel 2 : Vout- 1 V/div
Timebase: 5.00 ms/div



2 Efficiency

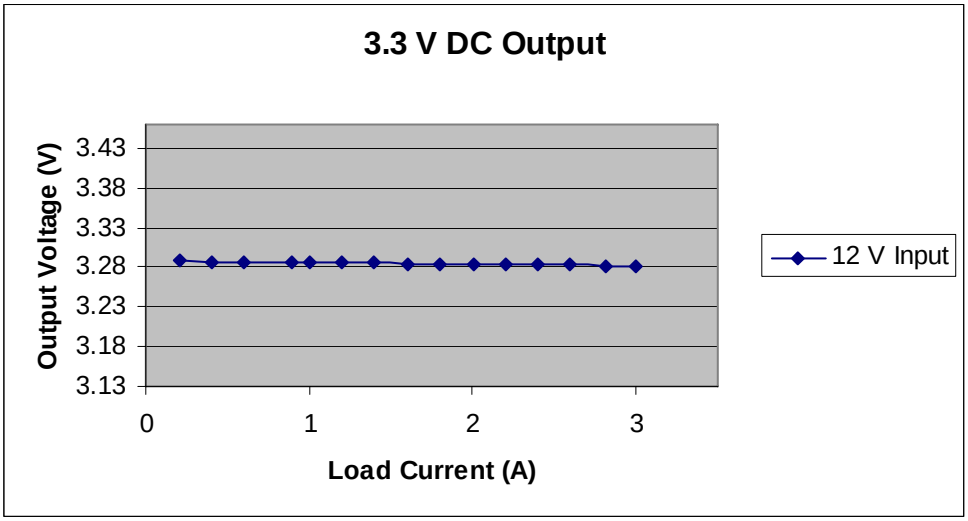
The efficiency is shown in the figure below.



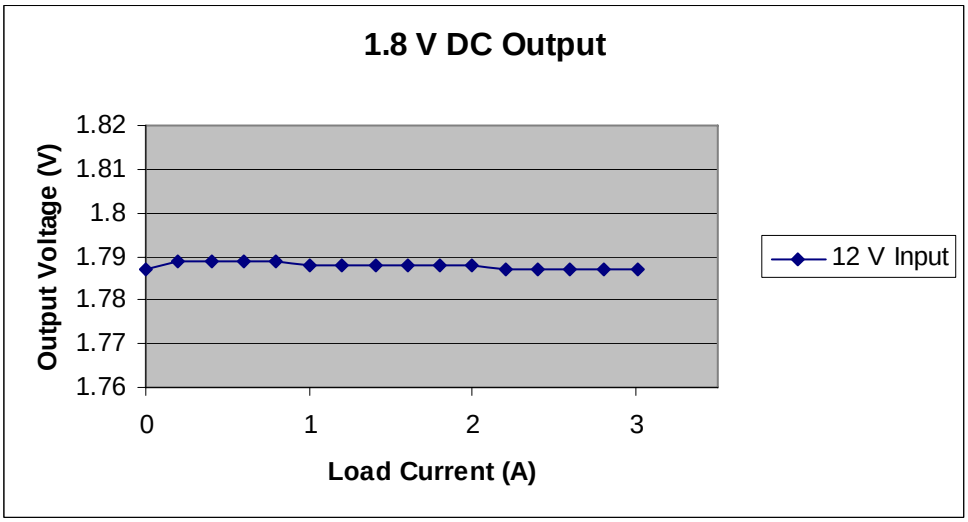


3 Load Regulation

The load regulation of the 3.3V output is shown in the graph below.

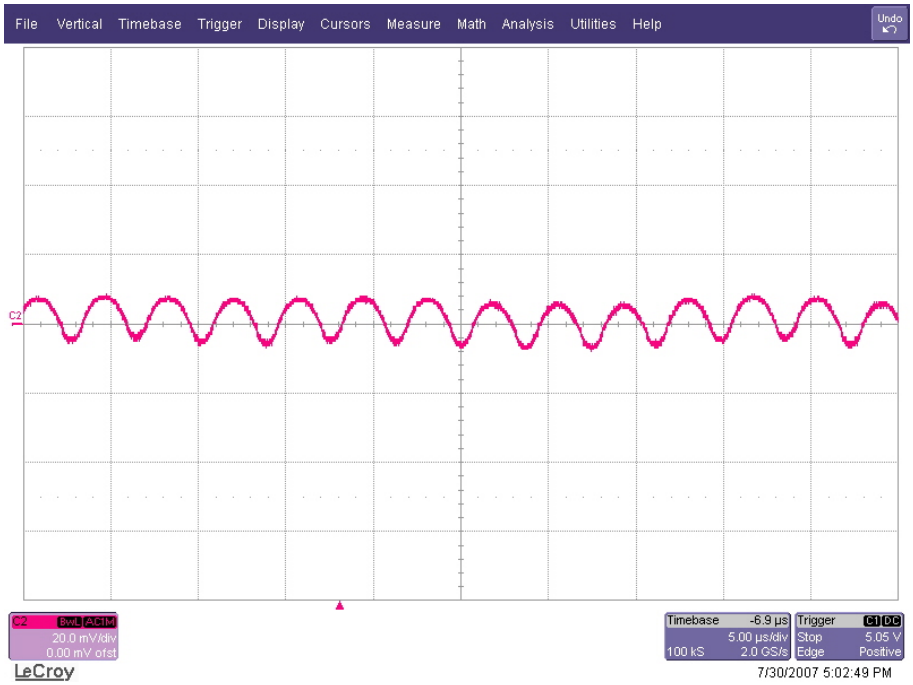


The load regulation of the 1.8V output is shown in the graph below.

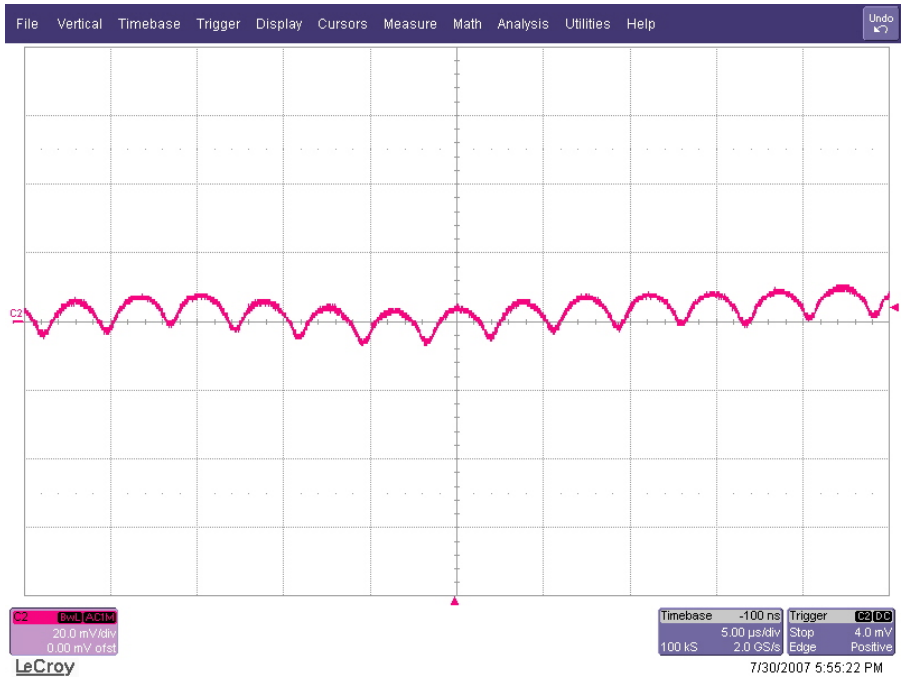


4 Output Ripple Voltage

The output ripple voltage of the 3.3V output is shown in the figure below. The image was taken with a 2A load.



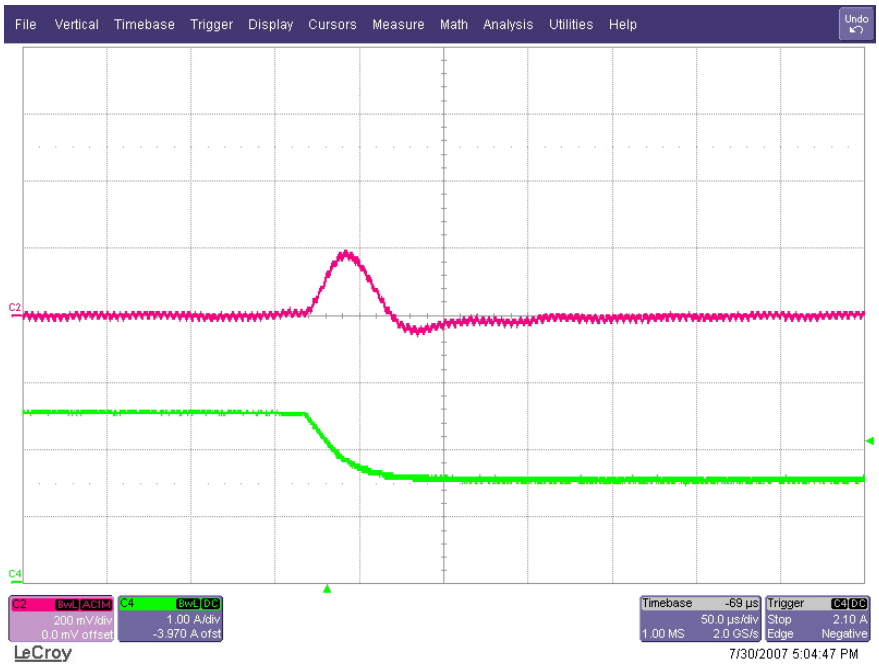
The output ripple voltage of the 1.8V output is shown in the figure below. The image was taken with a 2A load.



5 Load Transients

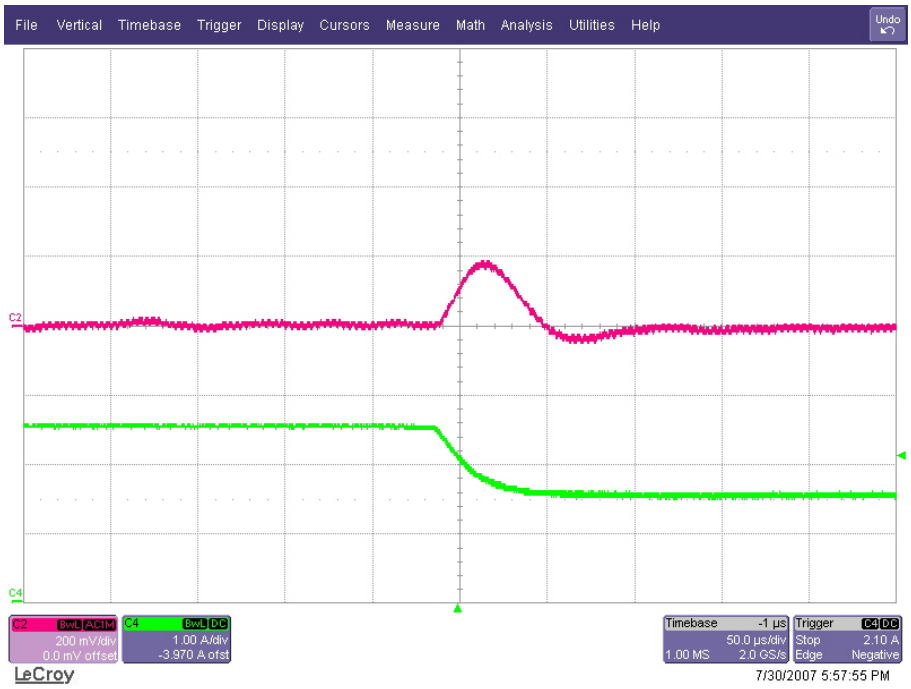
The figures below show the response of the 3.3V output to a load transient step from 1.5 to 2.5A. The input voltage was set to 12V.

Channel 2 : Vout (AC coupled)
Channel 4 : Load current



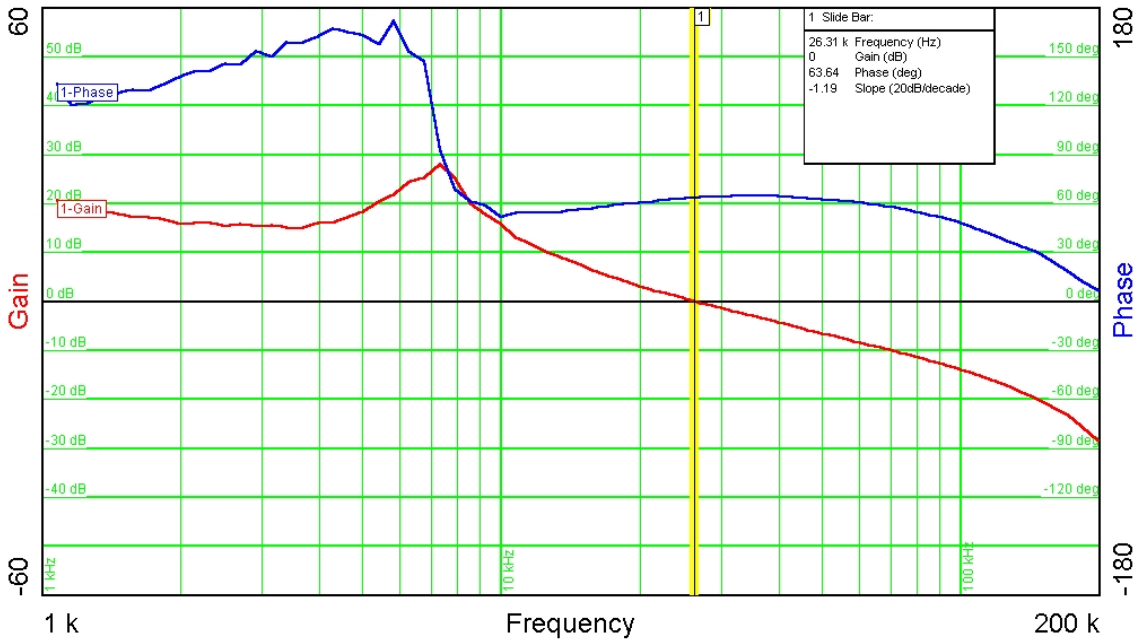
The figures below show the response of the 1.8V output to a load transient step from1.5 to 2.5A. The input voltage was set to 12V.

Channel 3 : Vout (AC coupled)
Channel 4 : Load current

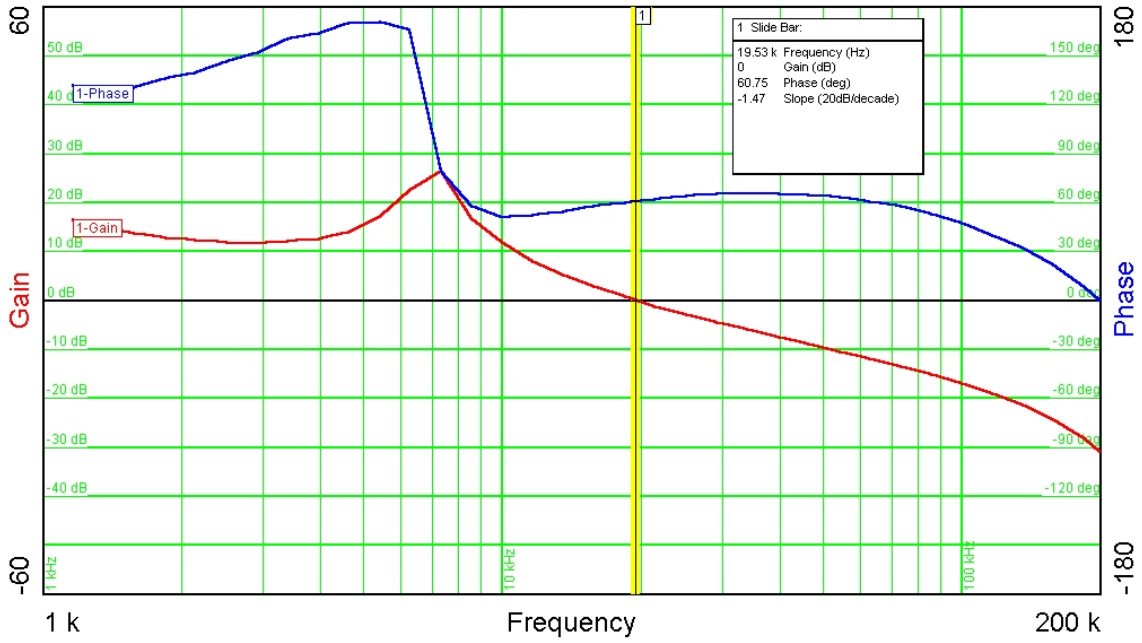


6 Frequency Response

The figure below shows the loop response of the 3.3V output with a 12V input and a 2A load.



The figure below shows the loop response of the 1.8V output with a 12V input and a 2A load.



7 Miscellaneous Waveforms

The figure below shows the voltage waveform on the switch node of the 3.3Voutput. This image was captured with a 12 V input and a 2.5A load.

The figure below shows the voltage waveform on the switch node of the 1.8Voutput. This image was captured with a 12V input and a 2A load.

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