

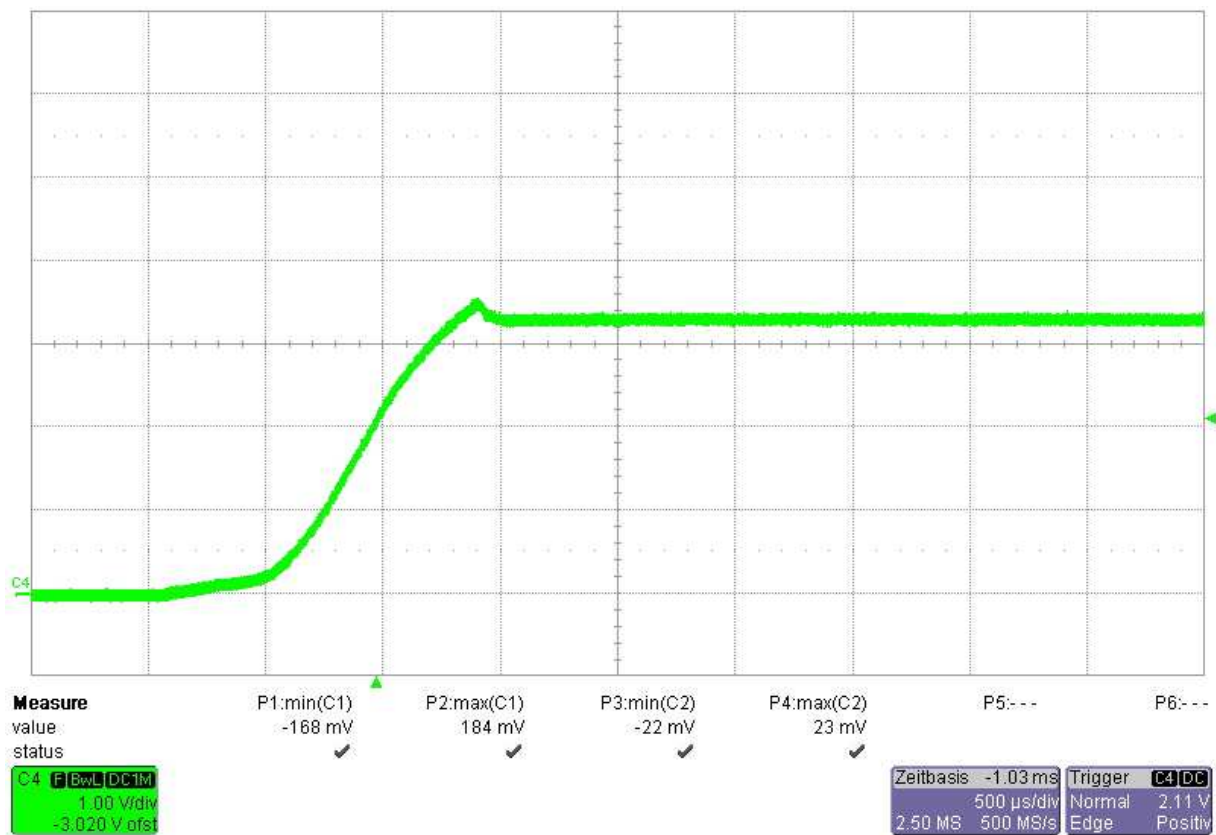
1 Startup

The output voltage at startup is shown in the image below.

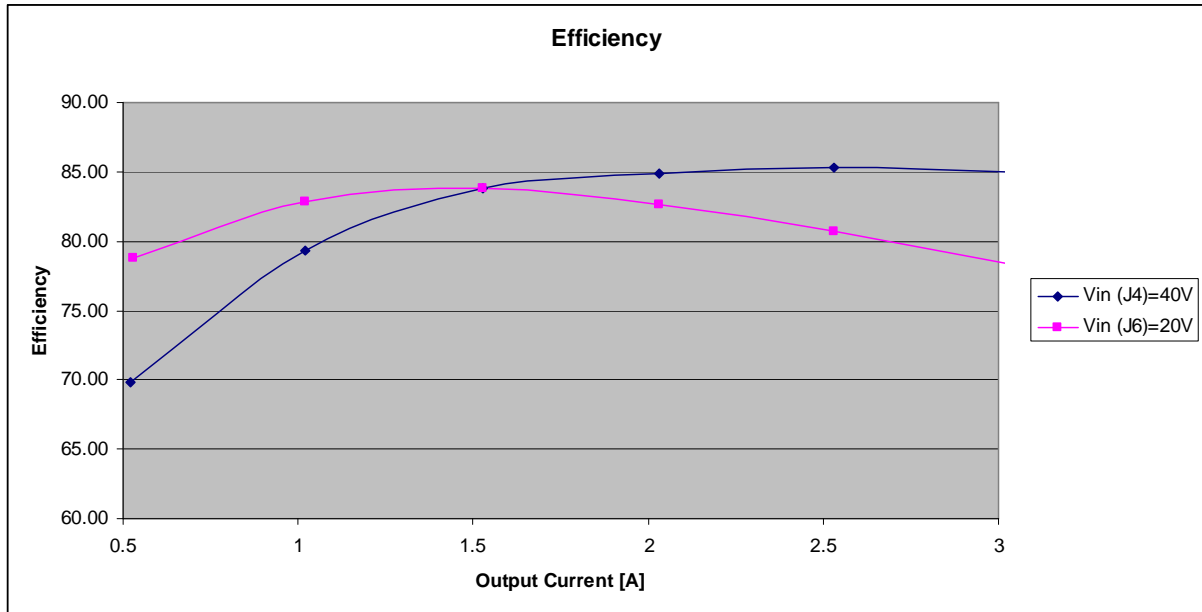
Input Voltage: 40V

Output current: 3A

Channel 4 shows the 3.3V output (1 V/div, 0.5ms/div).

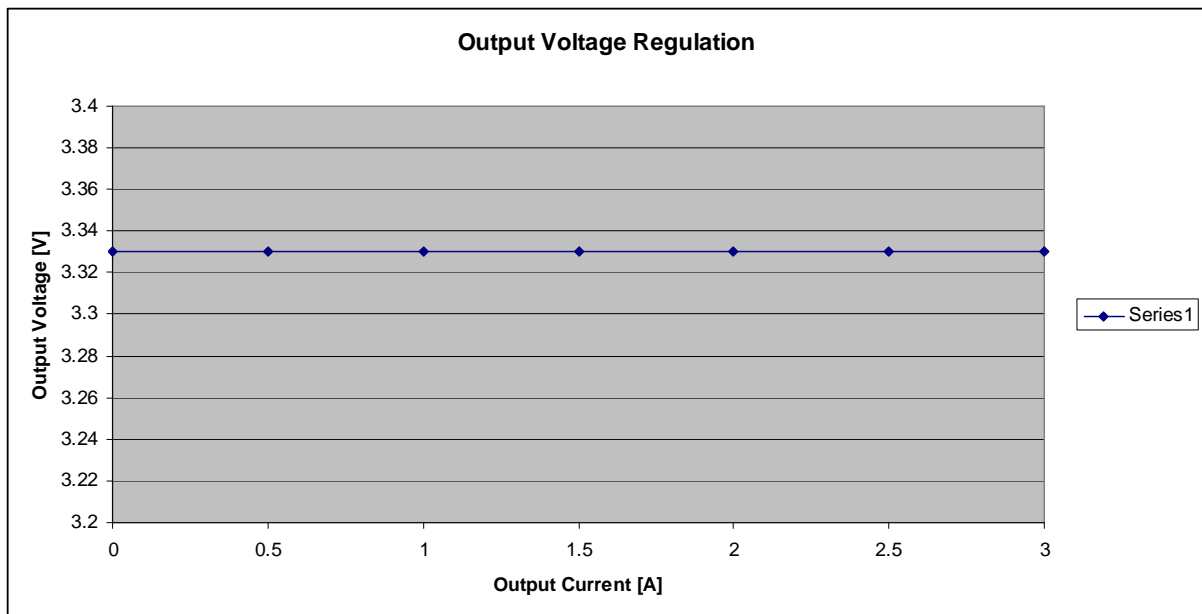


2 Efficiency



3 Output Voltage Regulation

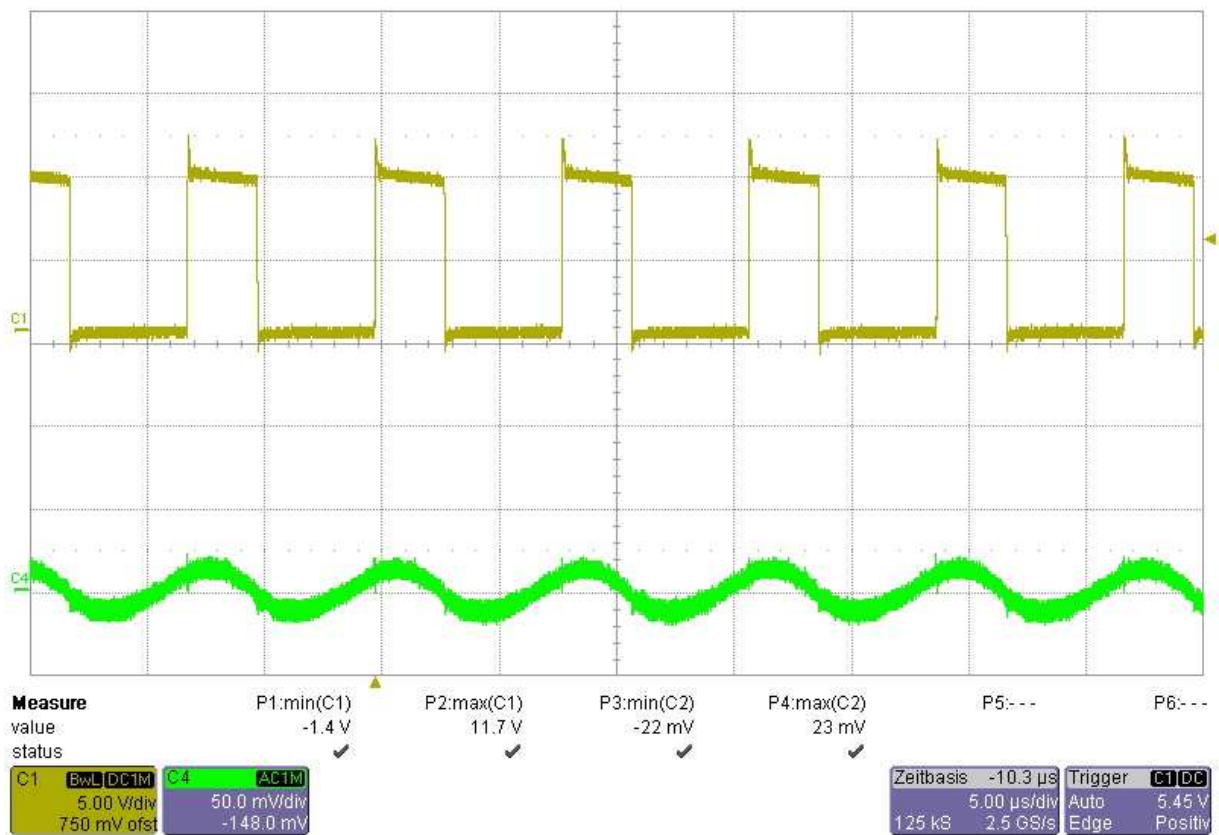
The output voltage versus load current is plotted below.
Input Voltage: 40V



4 Output Ripple Voltage

The output ripple voltage (C4) is shown in the plots below.
The C1 is the drain to source voltage at Q1.

Input Voltage: 40V
Output current: 3A

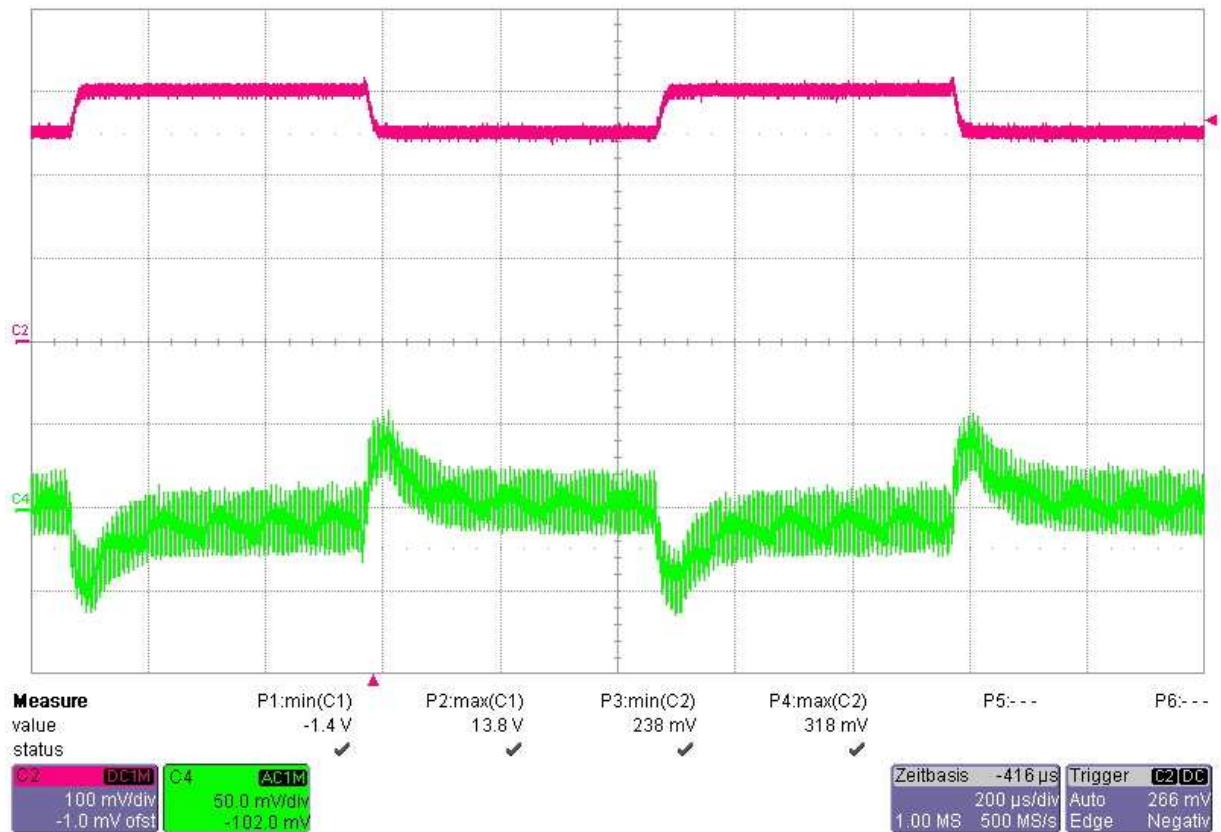


5 Load Transient

The image below shows the response to 2.5A to 3A load transient on the output voltage. The input voltage was set to the 40Vdc.

C2: Output Current [1A = 100mV]

C4: Output Voltage

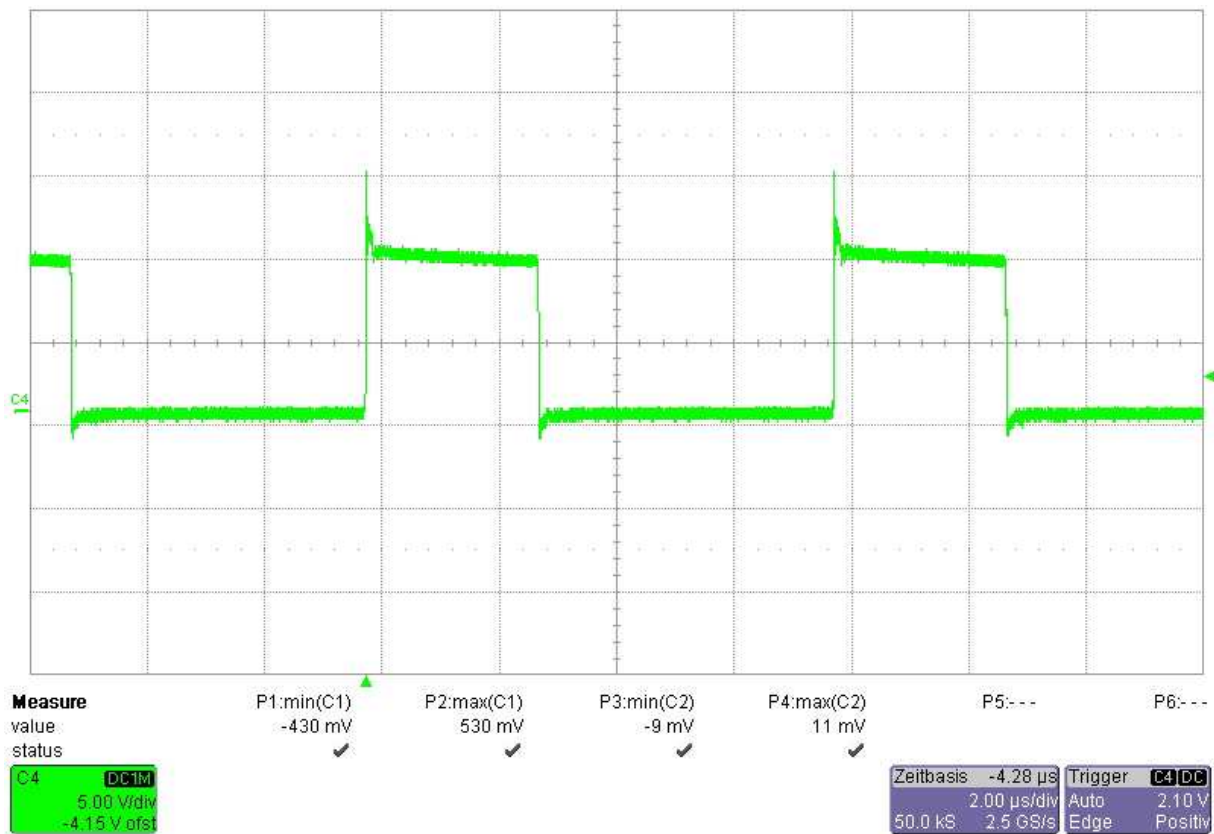


6 Drain Waveforms

The images below show the drain to source voltage on Q1.

Input Voltage: 40V

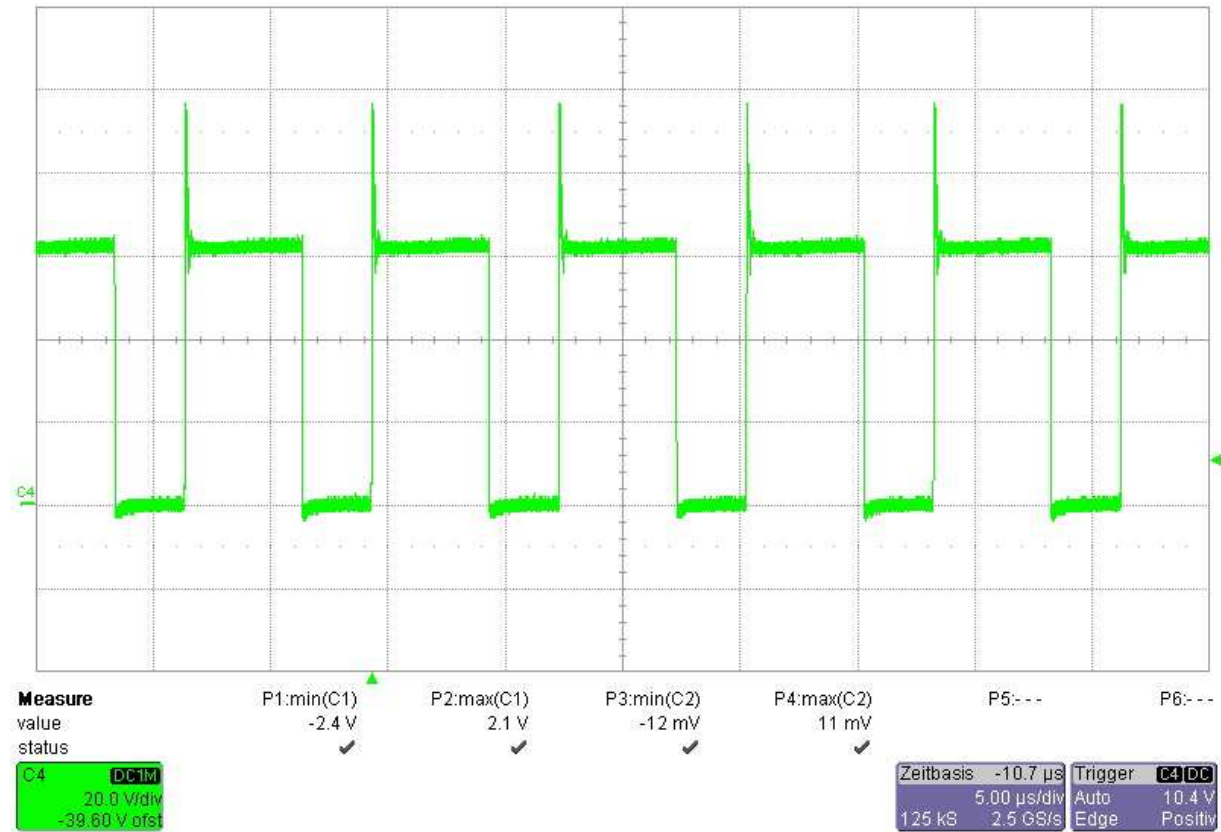
Output current: 3A



The images below show the drain to source voltage on Q2.

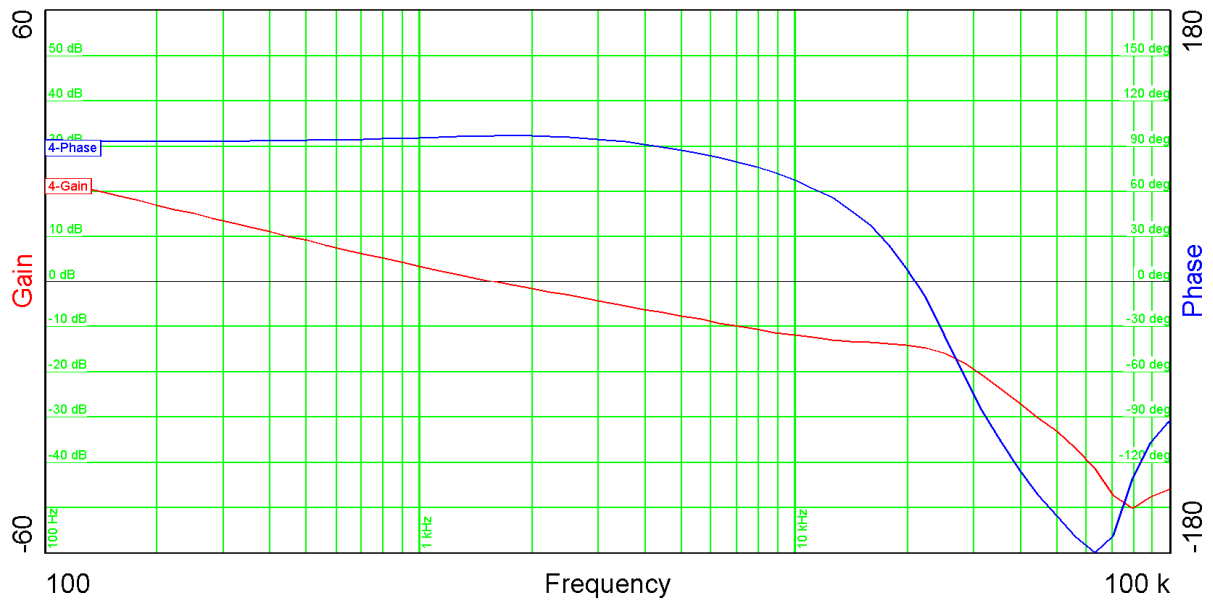
Input Voltage: 40V

Output current: 3A



7 Loop Response

The image below shows the loop response of the converter measured with a 40Vdc input, and a 3A load.



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