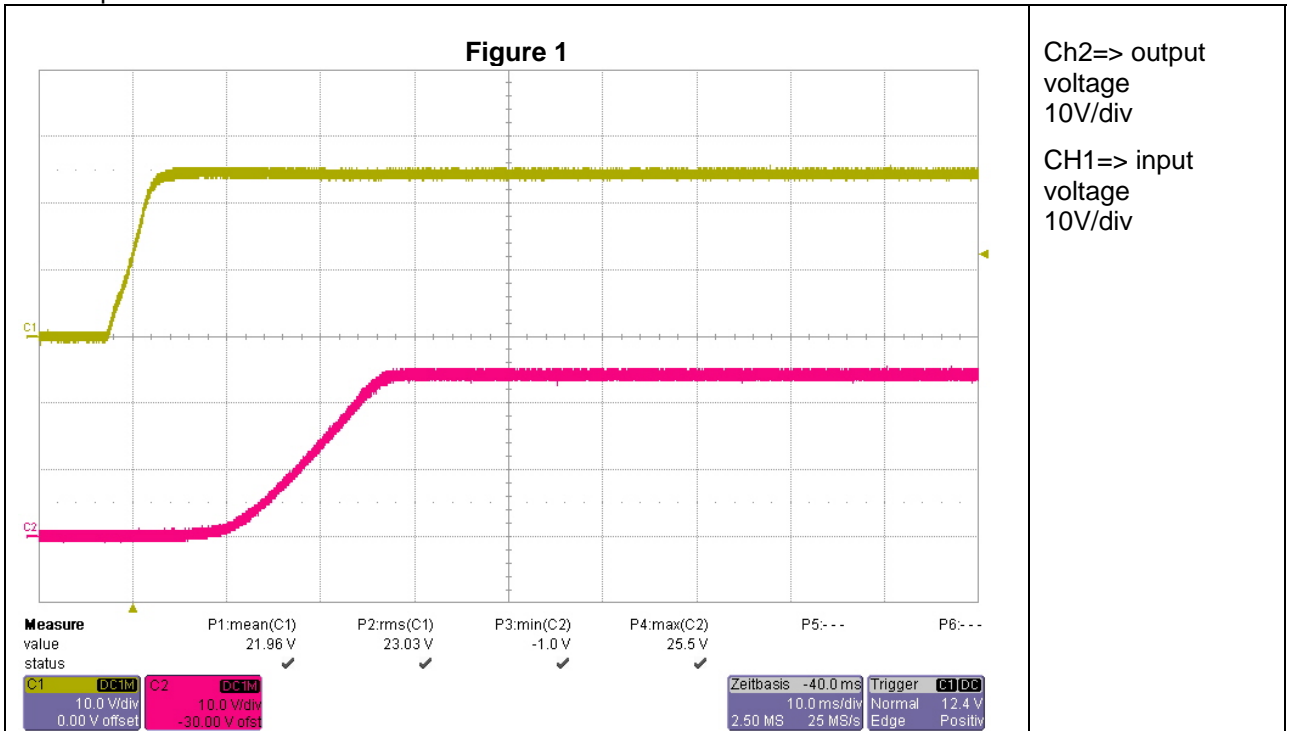
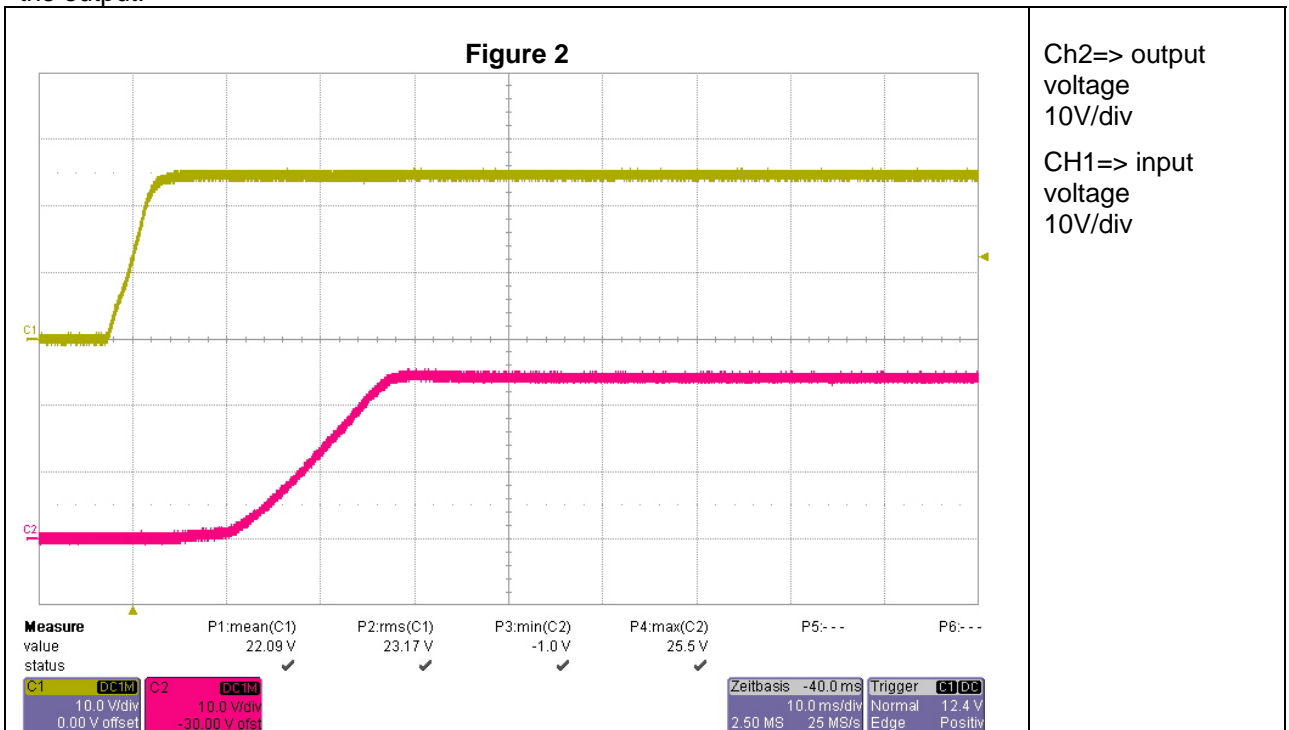


1 Startup

The startup waveform is shown in the Figure 1. The input voltage was set at 24V, with 3A load on the output.

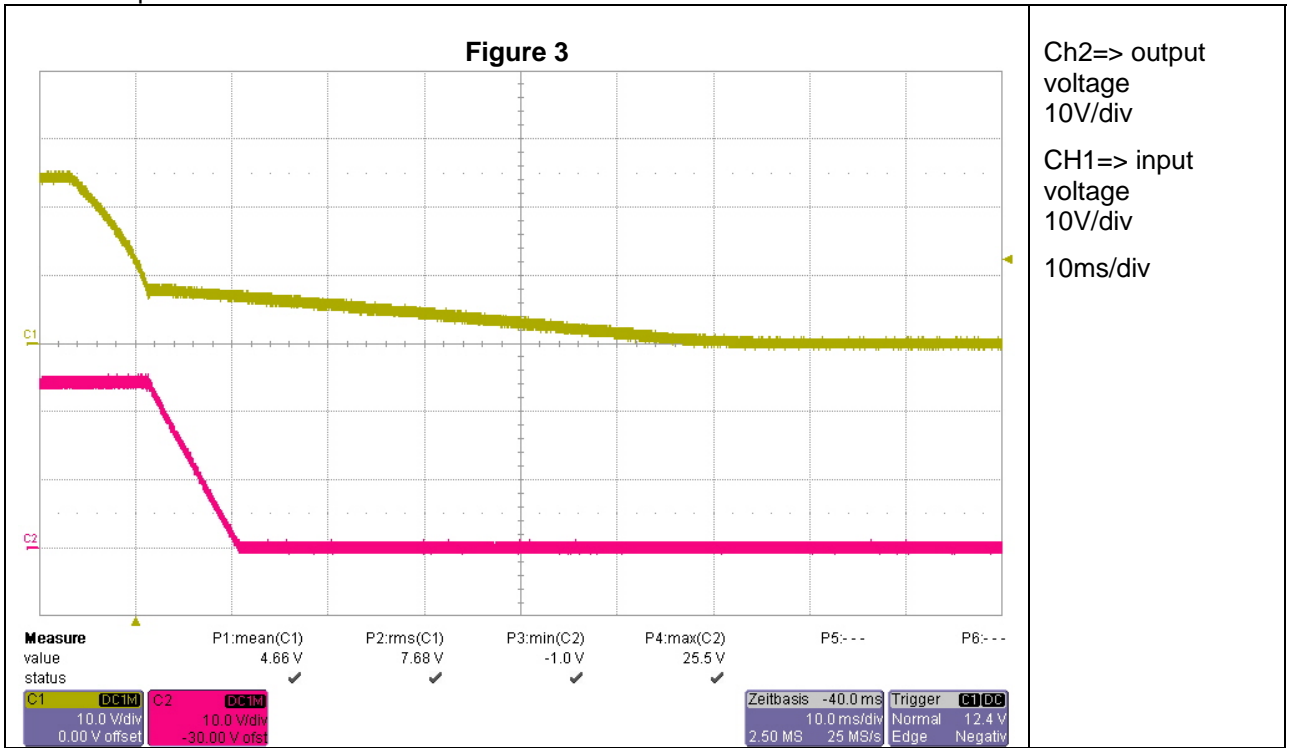


The startup waveform is shown in the Figure 2. The input voltage was set at 24V, with 0A load on the output.

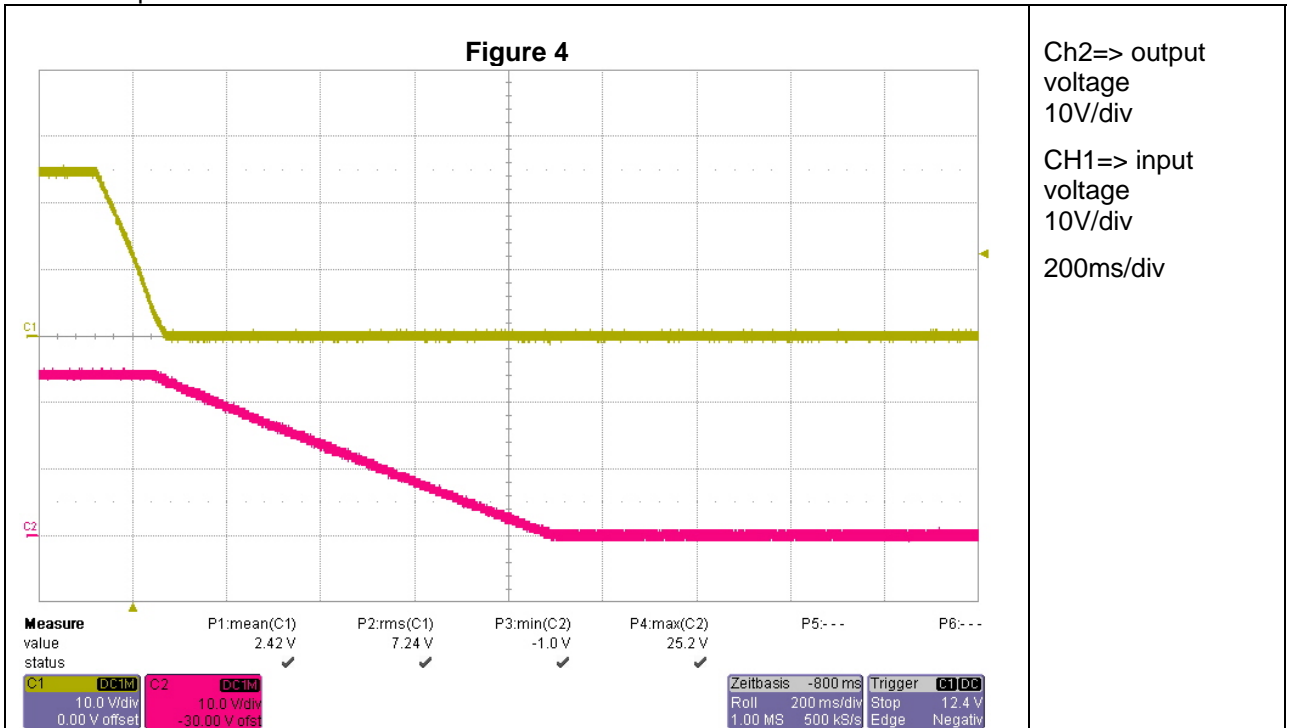


2 Shutdown

The shutdown waveform is shown in the Figure 3. The input voltage was set at 24V, with 3A load on the output.



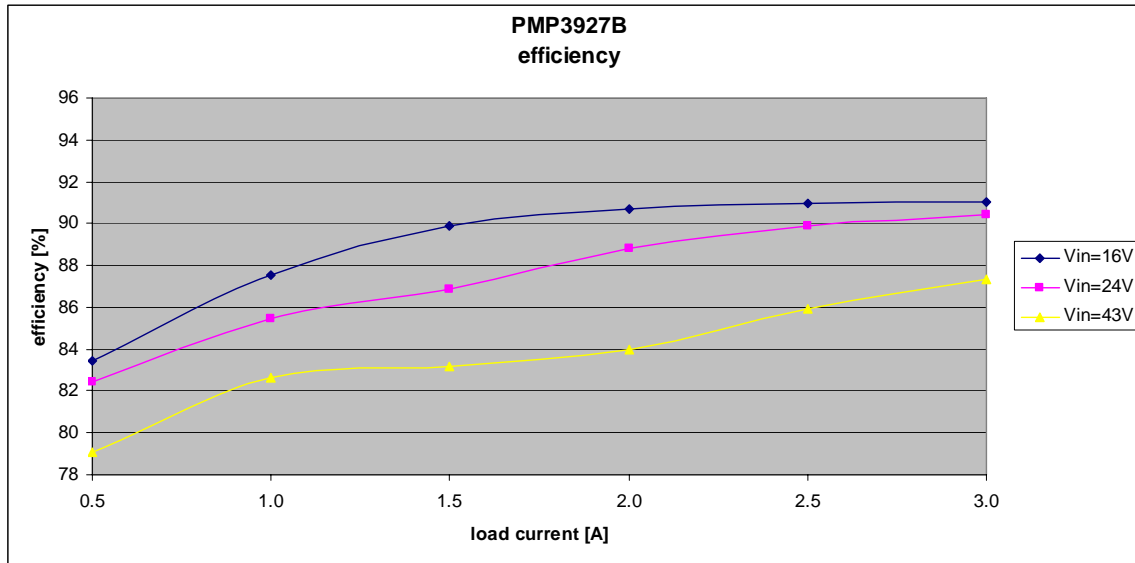
The shutdown waveform is shown in the Figure 4. The input voltage was set at 24V, with 0A load on the output.



3 Efficiency

The efficiency is shown in the Figure 5 below.

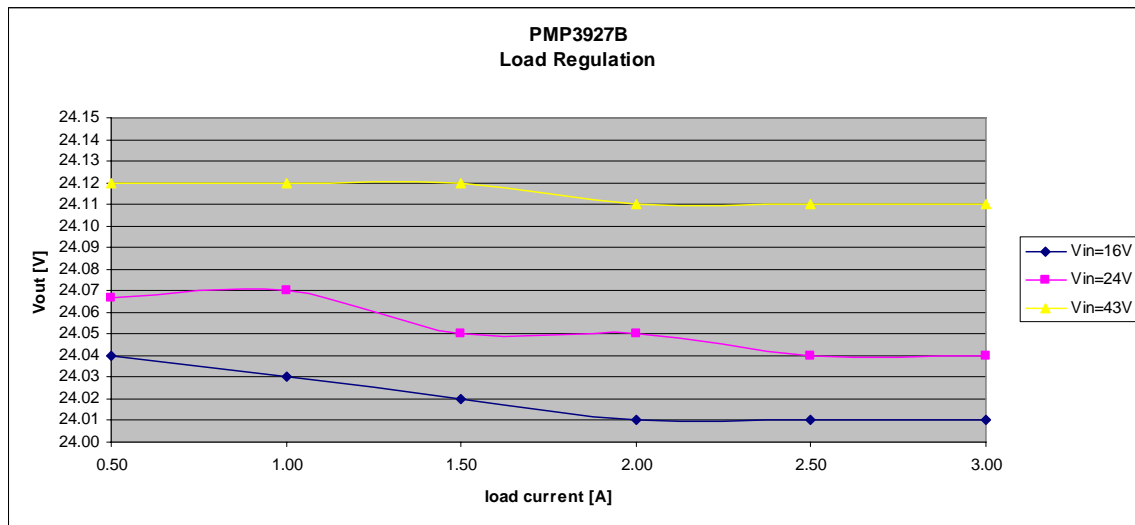
Figure 5



4 Load Regulation

The load regulation of the output is shown in the Figure 6 below.

Figure 6

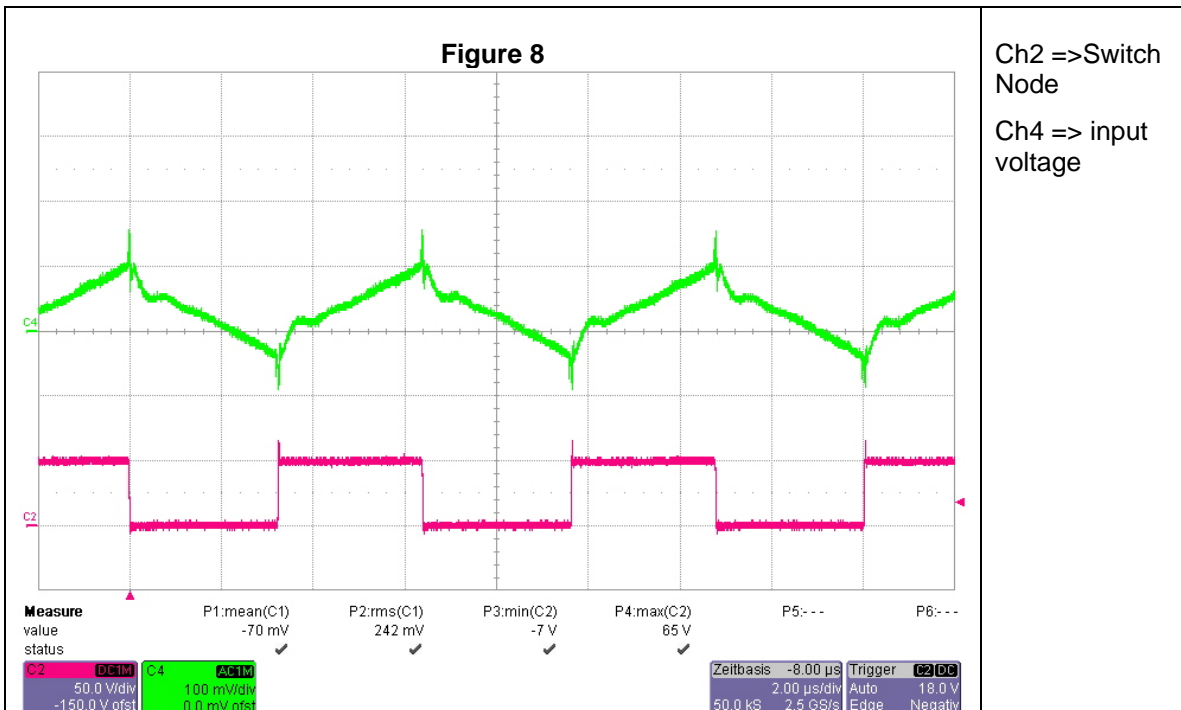


5 Ripple Voltage

The output ripple voltage is shown in Figure 7. The image was taken with a 3A load and 24V at the input.



The input ripple voltage is shown in Figure 8. The image was taken with a 3A load and 24V at the input.



6 Control Loop Frequency Response

Figure 9 shows the loop response.

Input voltages: 16V, 24V and 43V
Load current: 3A

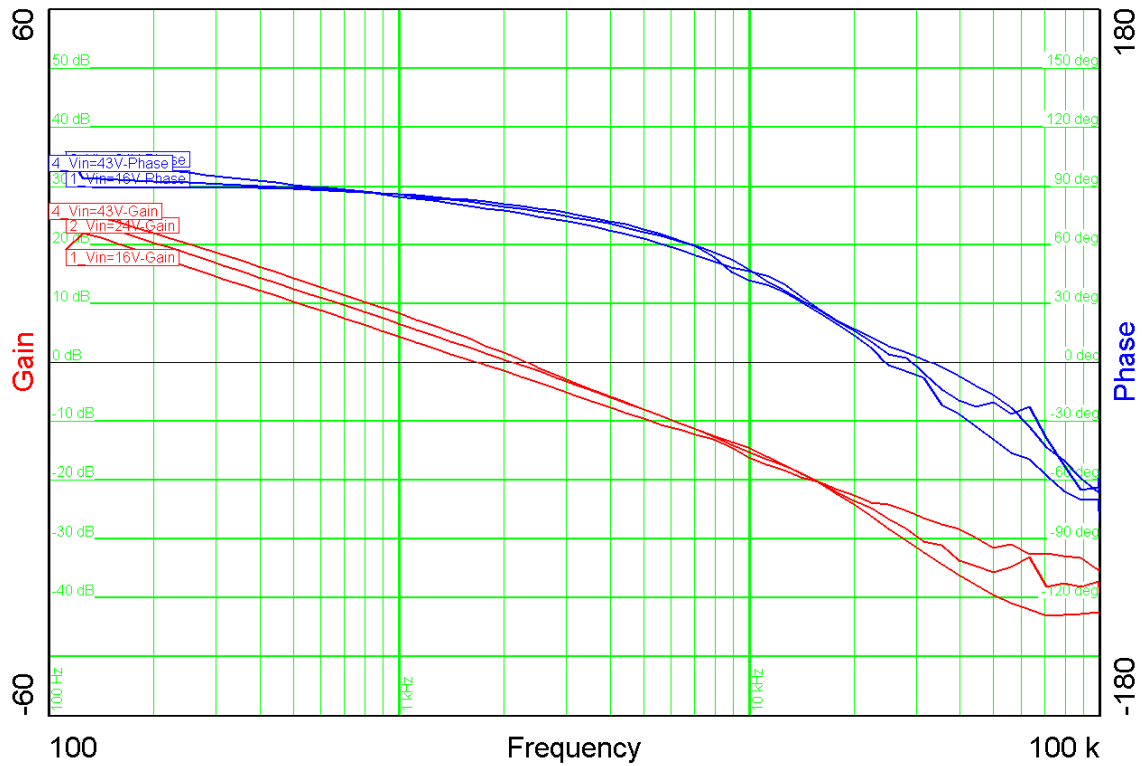
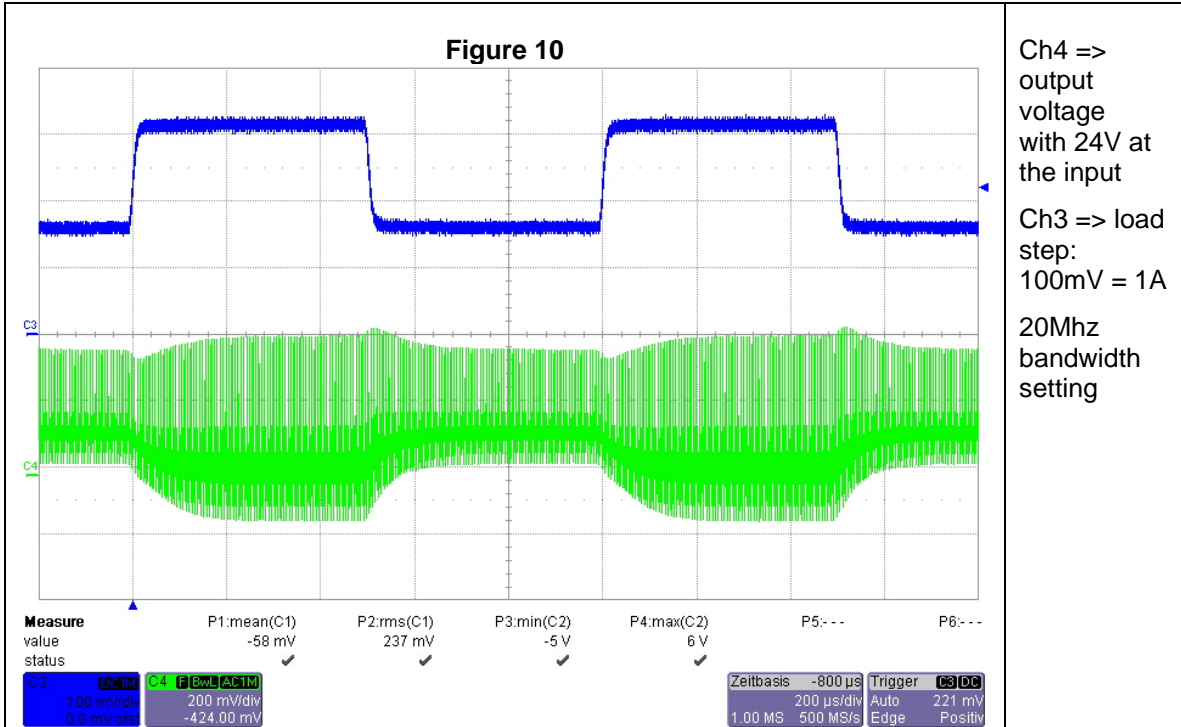


Figure 9

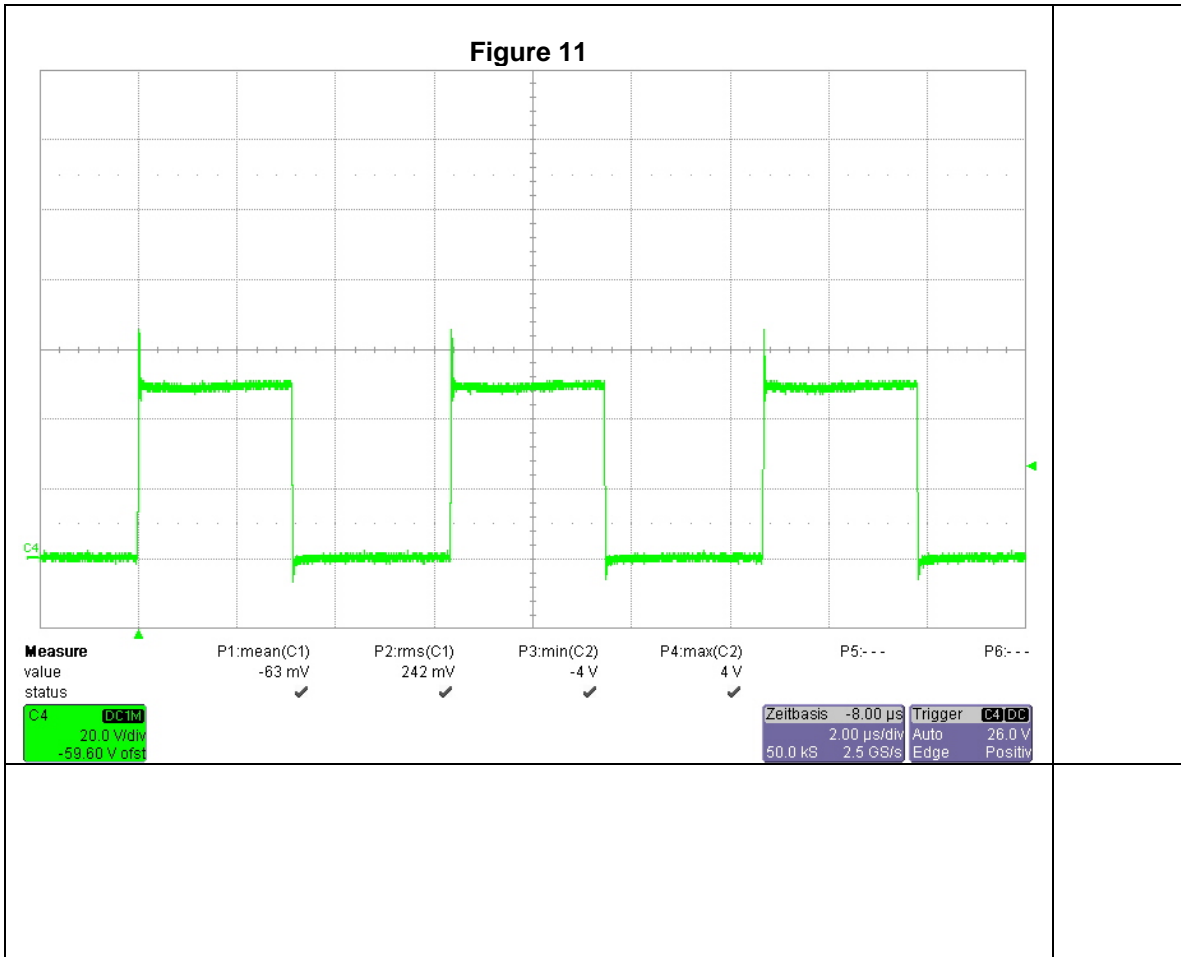
7 Load Transients

The Figure 10 shows the response to load transients. The load is switching from 1.5A to 3A.

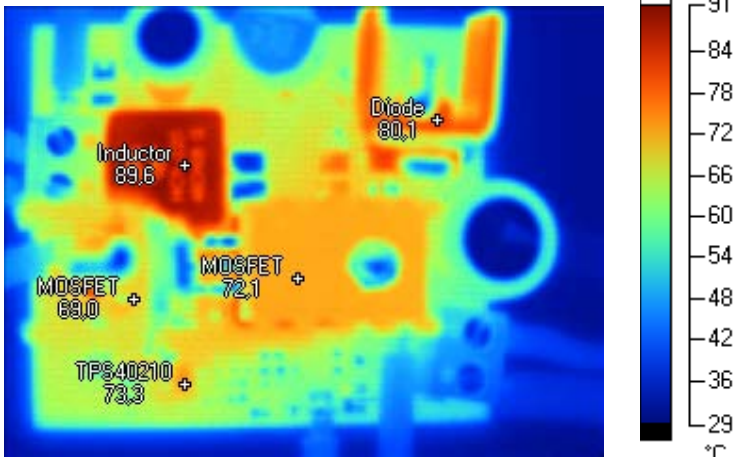


8 Switch Node Waveform

With input voltage set to 24V result in the waveform shown in Figure 11. Output current was set to 3A.



9 Thermal Picture



Inductor	89,6 °C
MOSFET	69,0 °C
MOSFET	72,1 °C
Diode	80,1 °C
TPS40210	73,3 °C

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