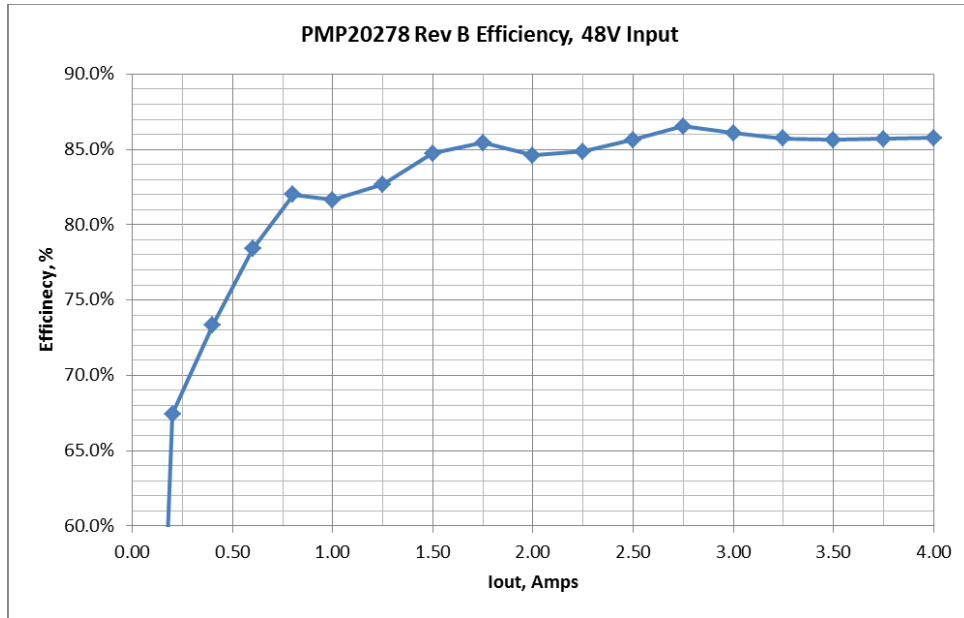
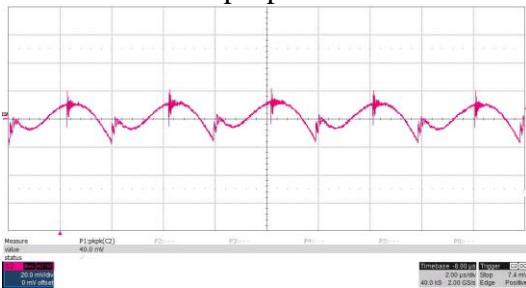


Efficiency

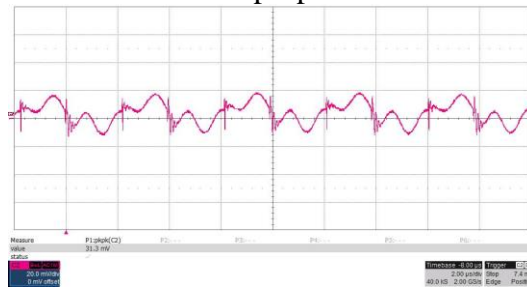


Ripple and Noise

Output Ripple (C11)
20mV/div, 2usec/div
Measured 40mV pk-pk:

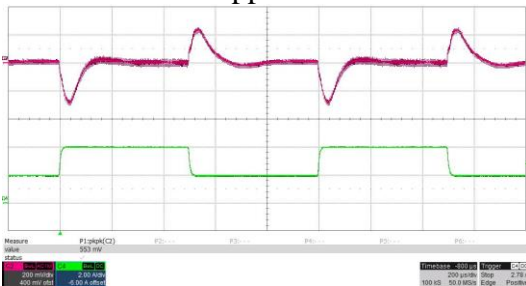


Input Ripple (C11)
20mV/div, 2usec/div
Measured 31.3mV pk-pk:



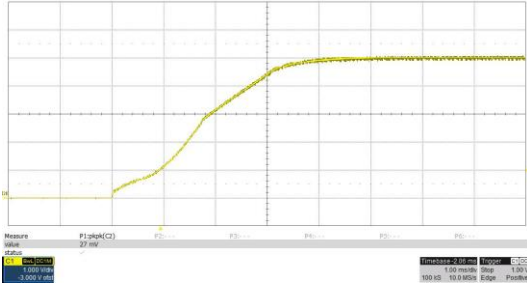
Dynamic Loading

Load Step
2A to 4A step load, 400mA/usec slew rate, 2A/div, 200mV/div, 200usec/div
Measured 553mVpp:

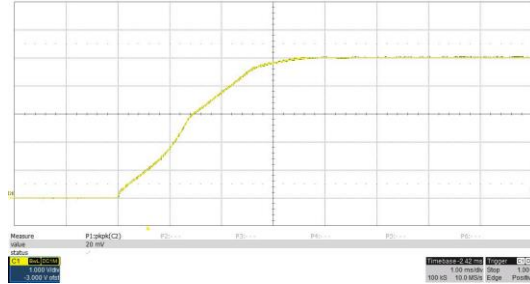


Turn On Response

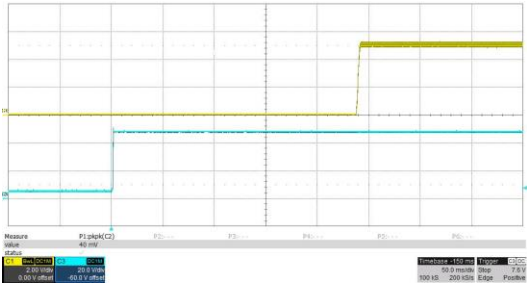
5V output, 4A load
 1V/div, 1msec/div:



5V output, 0A load
 1V/div, 1msec/div:

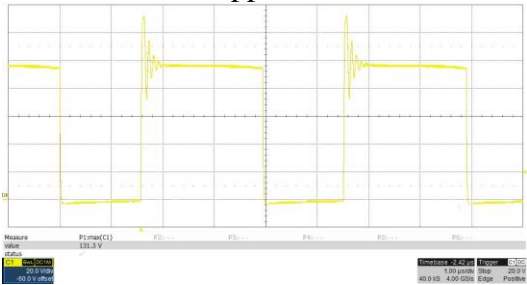


Turn on delay, 4A load
 Top: 5V output, 2V/div
 Bottom: Vin, 20V/div
 50msec/div:

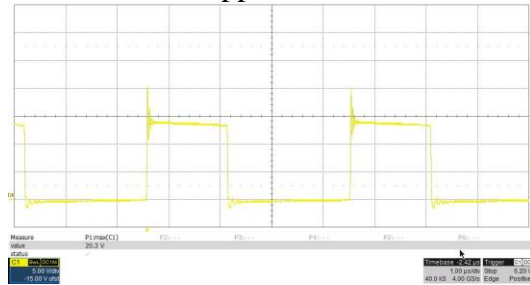


Waveforms

VDS Q1, 57V Input, 4A Load
 20V/div, 1usec/div
 Measured 131.3Vpp:

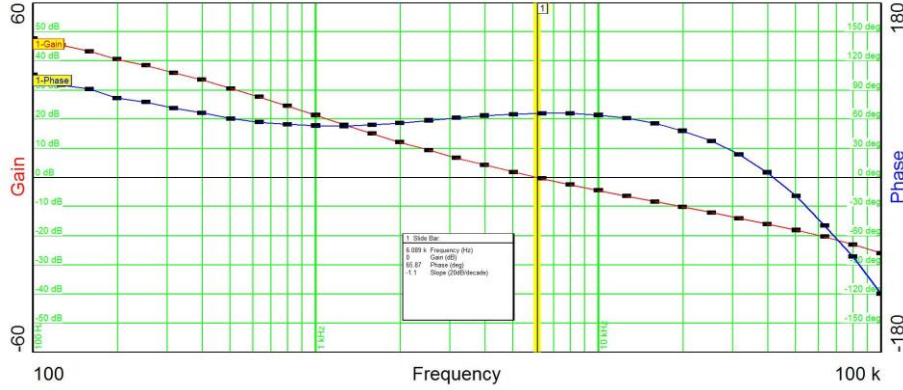


VAK D3, 57V Input, 4A Load
 5V/div, 1usec/div
 Measured 20.3Vpp

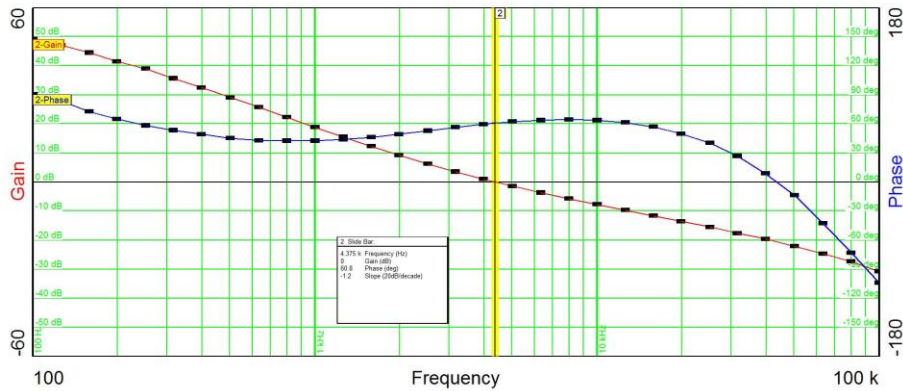


Stability

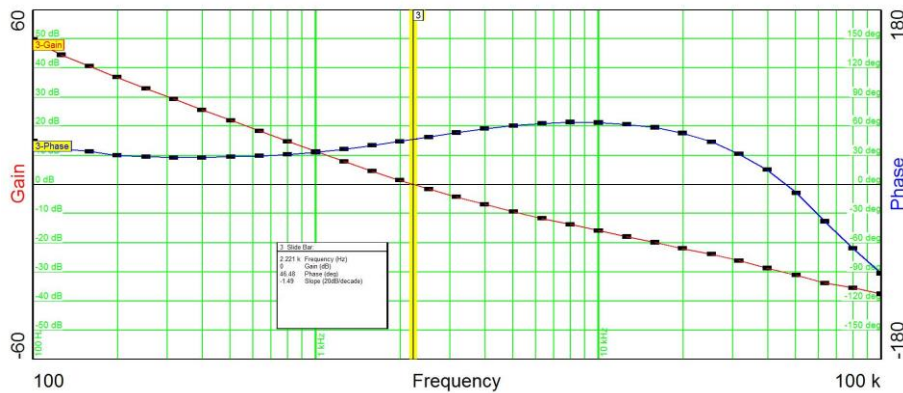
Loop response of the converter with a 48V input and 4A load
 BW=6Khz PM=65 degrees GM=16dB



Loop response of the converter with a 48V input and 2A load
 BW=4.3Khz PM=60 degrees GM=22dB



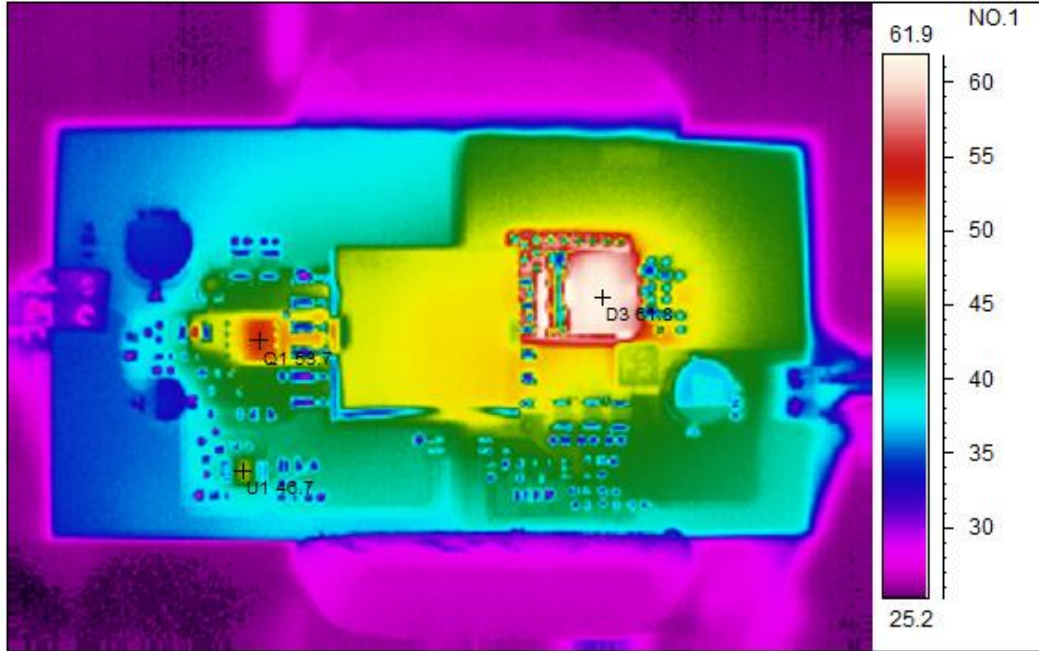
Loop response of the converter with a 48V input and 400mA load
 BW=2.2Khz PM=46 degrees GM=30dB



Thermal:

Thermal measurements taken with 48V input and 4A load, no air flow.

Top:



Bottom:

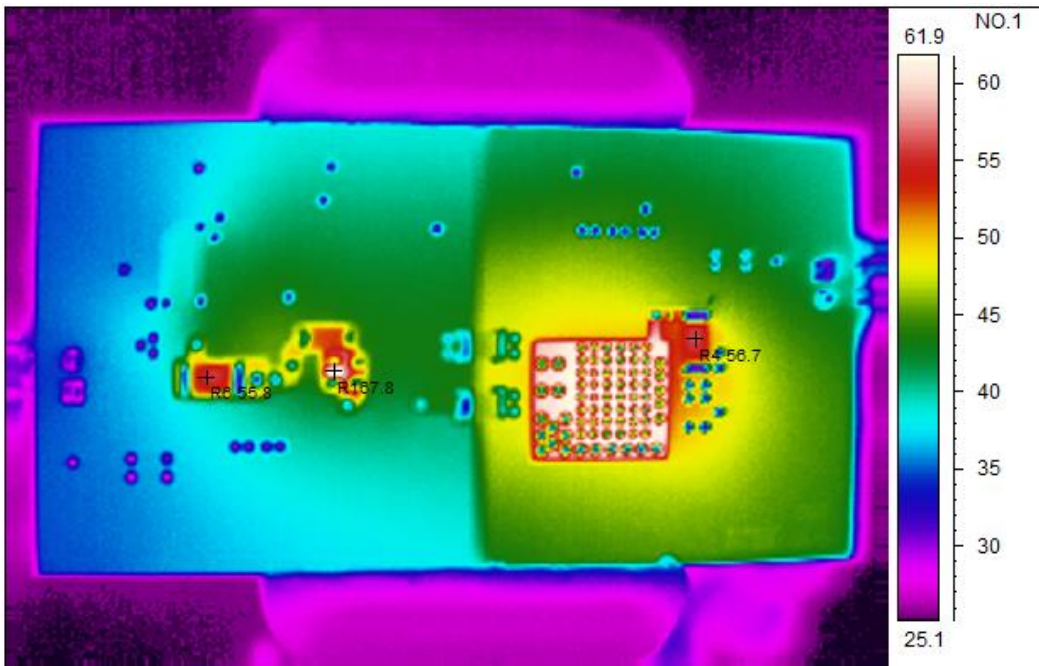
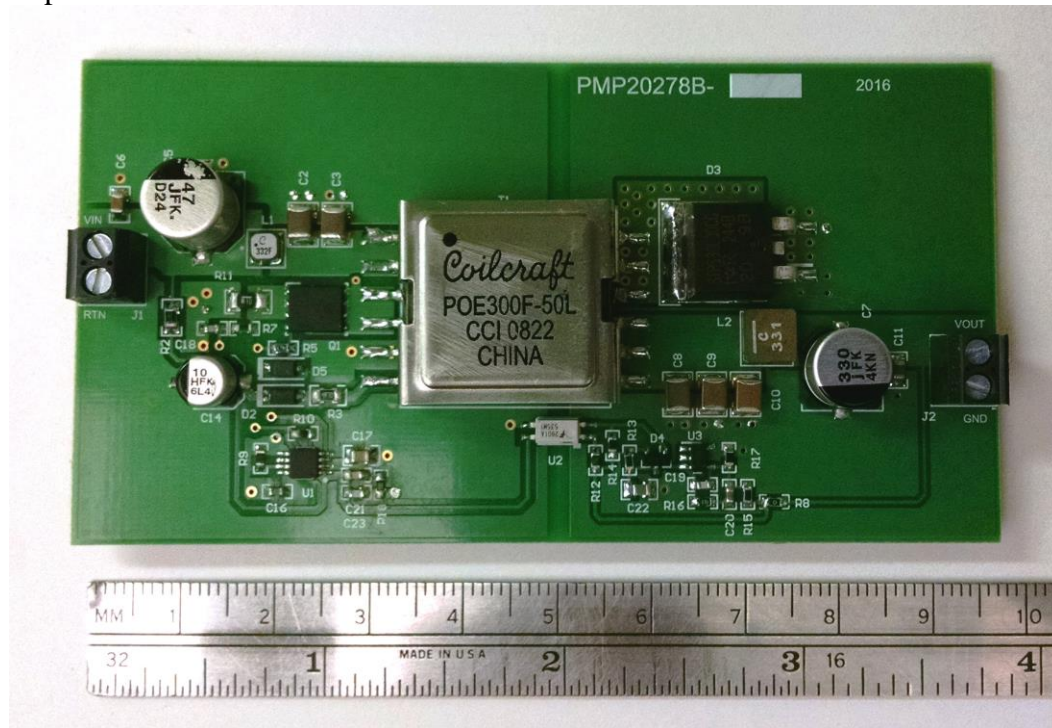
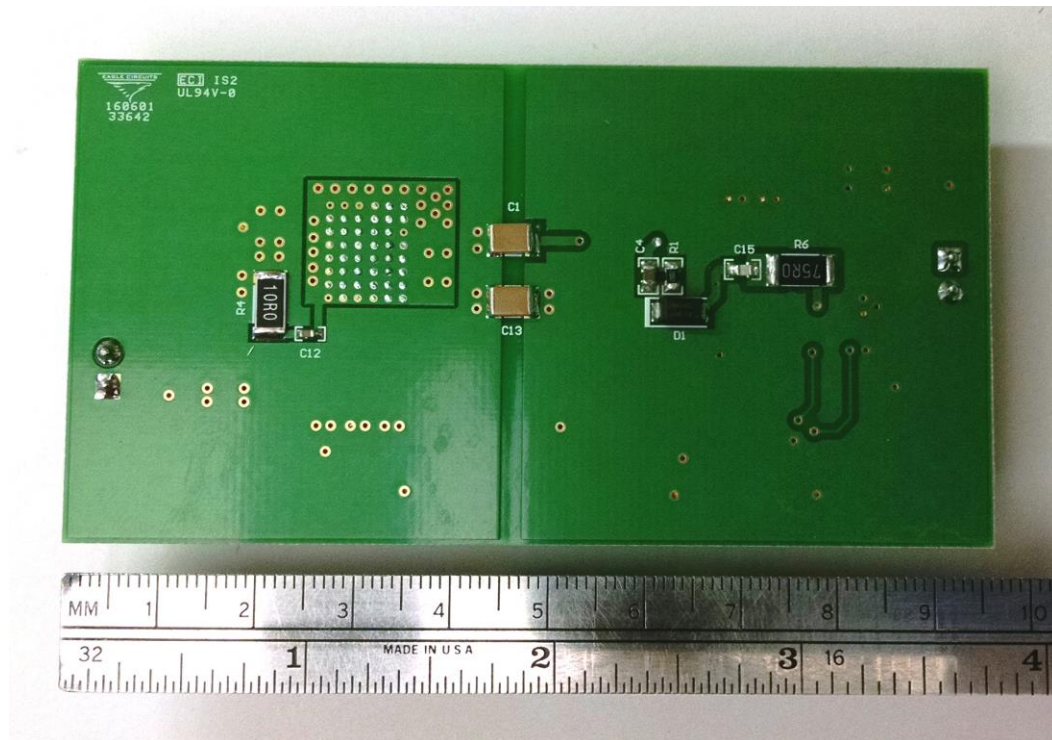


Photo:

Top:



Bottom:



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