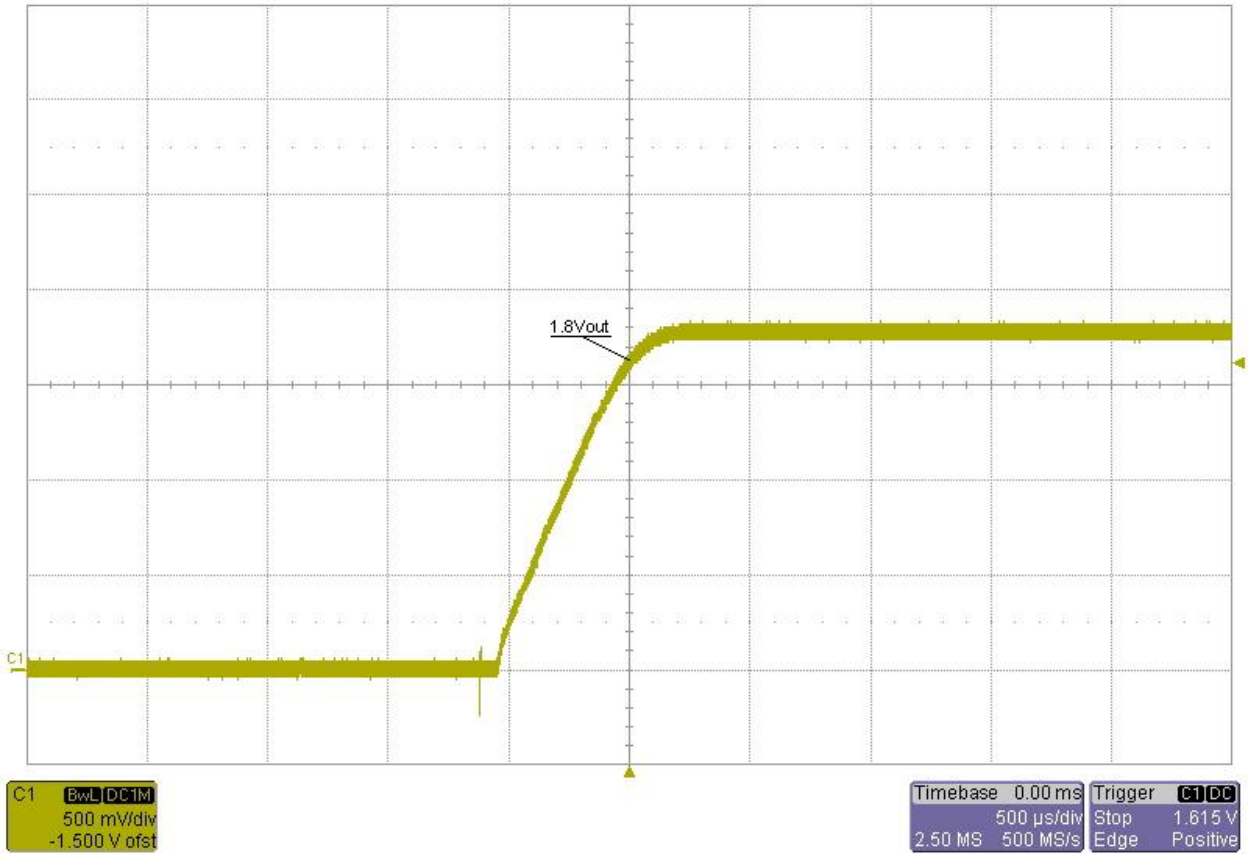
1 Startup

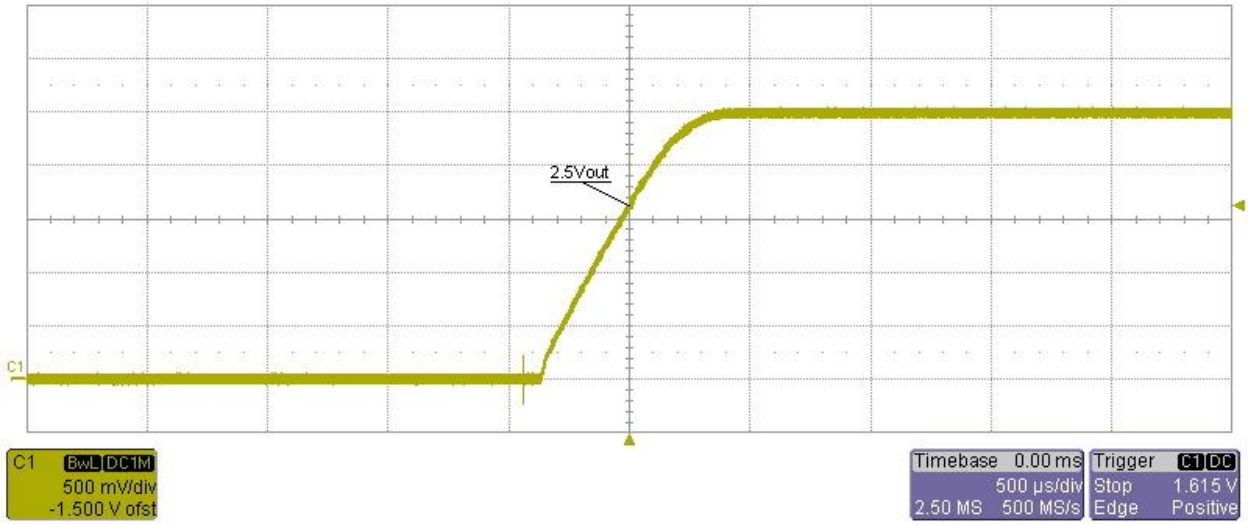
1.1 1.8Vout:

Input voltage = 5VDC
Load current = full load (1.0A)

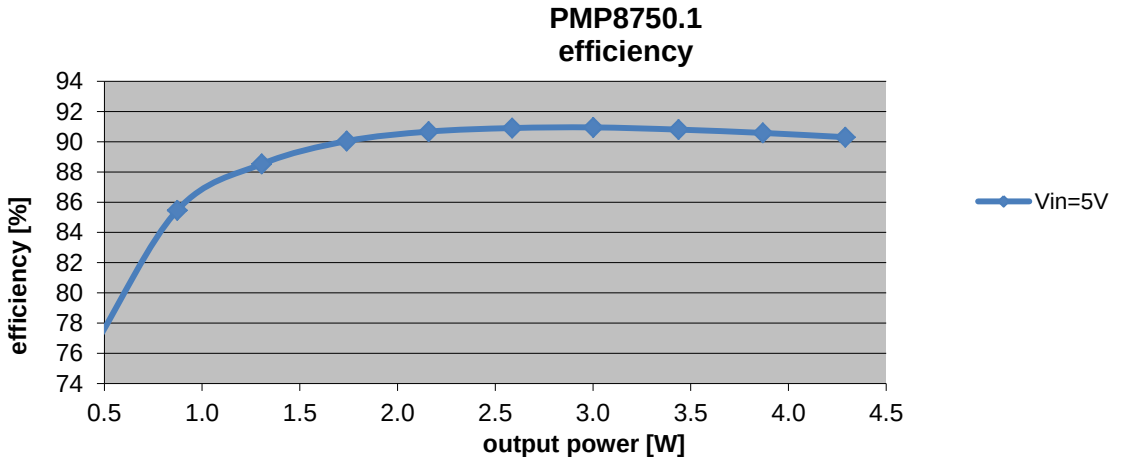


1.2 2.5Vout:

Input voltage = 5VDC
Load current = full load (1.0A)

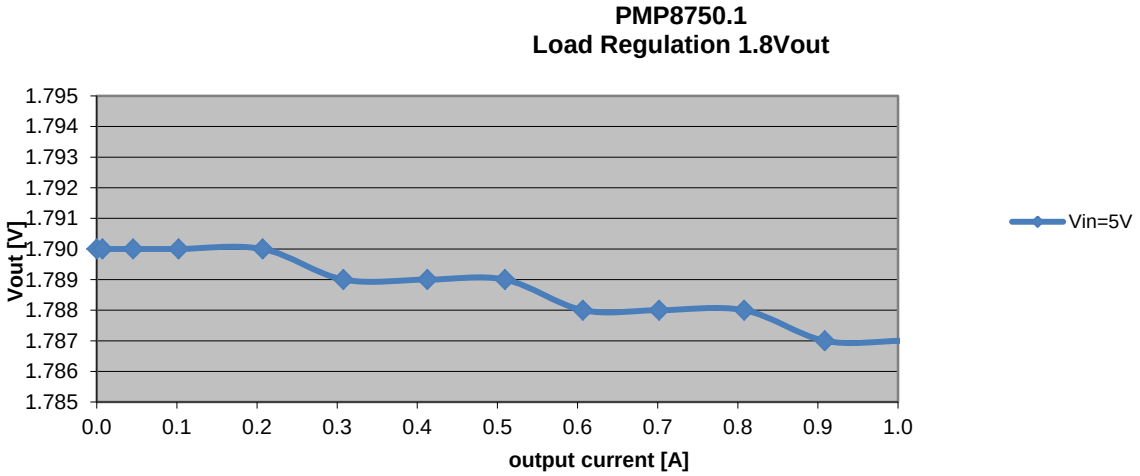


2 Efficiency

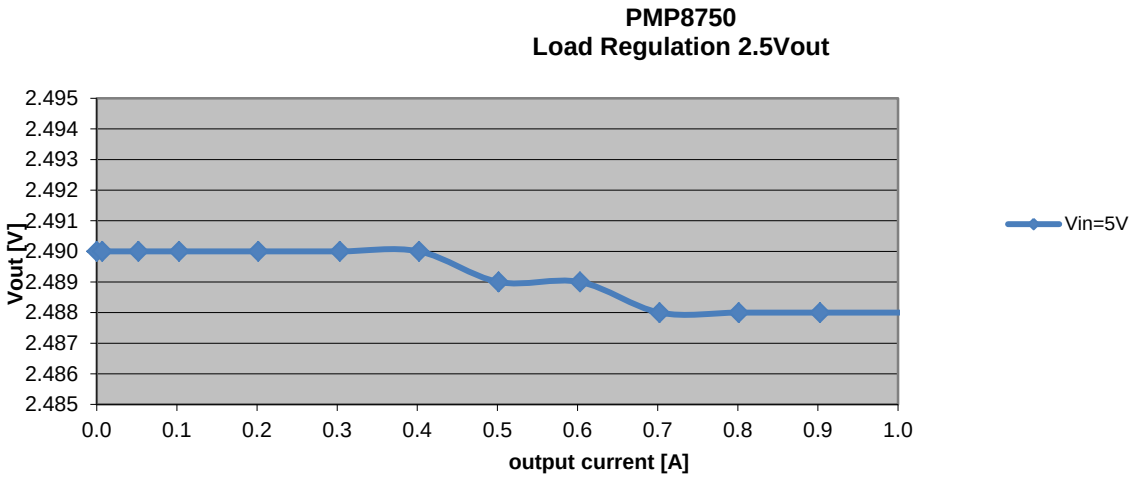


3 Load regulation

3.1 1.8Vout:

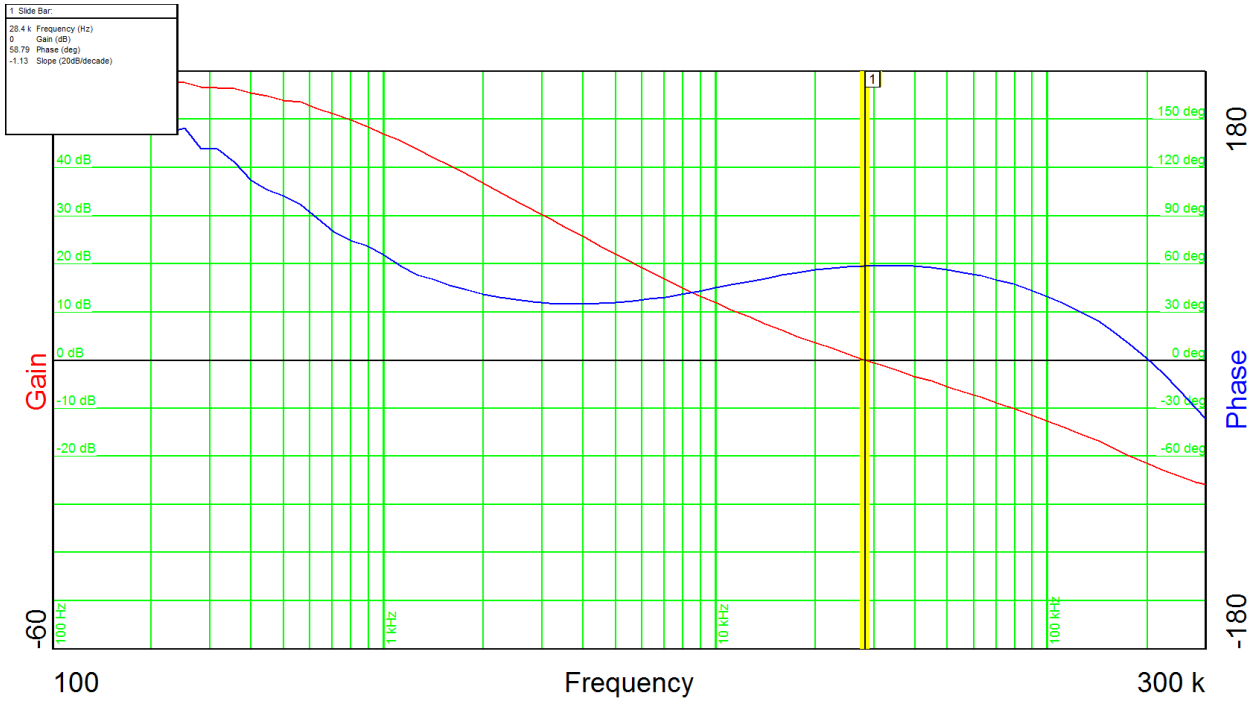


3.2 2.5Vout:


PMP8750
Load Regulation 2.5Vout
2.495
2.494
2.493
2.492
2.491
2.490
2.489
2.488
2.487
2.486
2.485
Vout [V]
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
output current [A]
Vin=5V

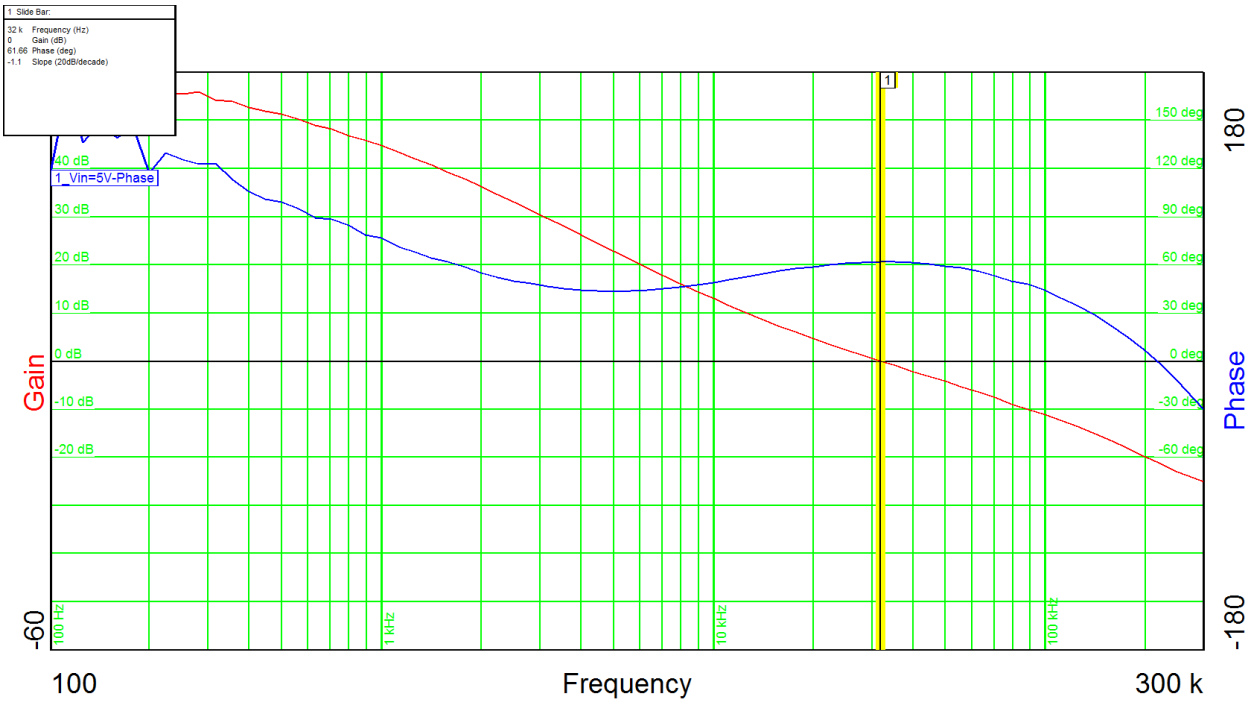
4 Control Loop Frequency Response

4.1 1.8Vout:



Output power = 1.8V@1.0A
Input voltage = 5VDC
Phase margin = 59°
Bandwidth = 28.4kHz

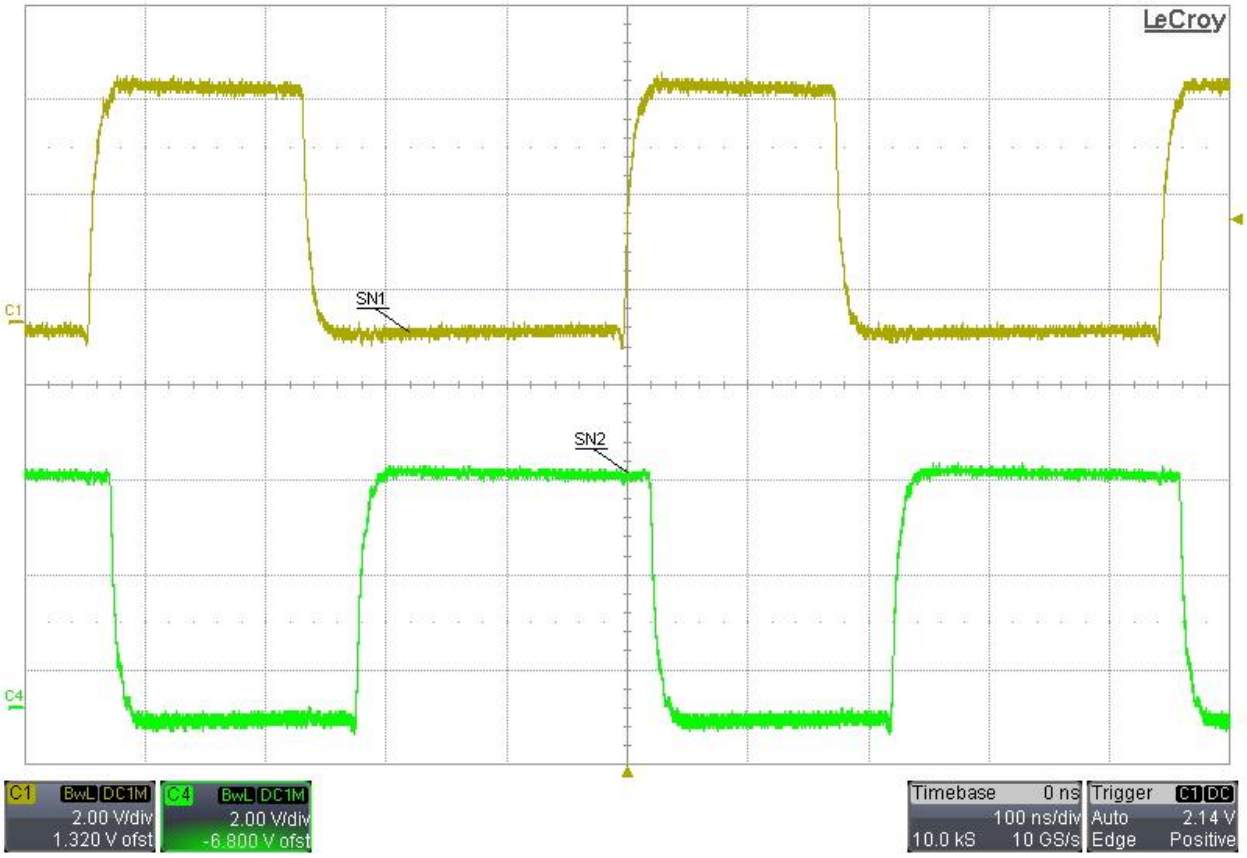
4.2 2.5Vout:



Output power = 2.5V@1.0A
Input voltage = 5VDC
Phase margin = 62°
Bandwidth = 32.0kHz

5 Switch Nodes

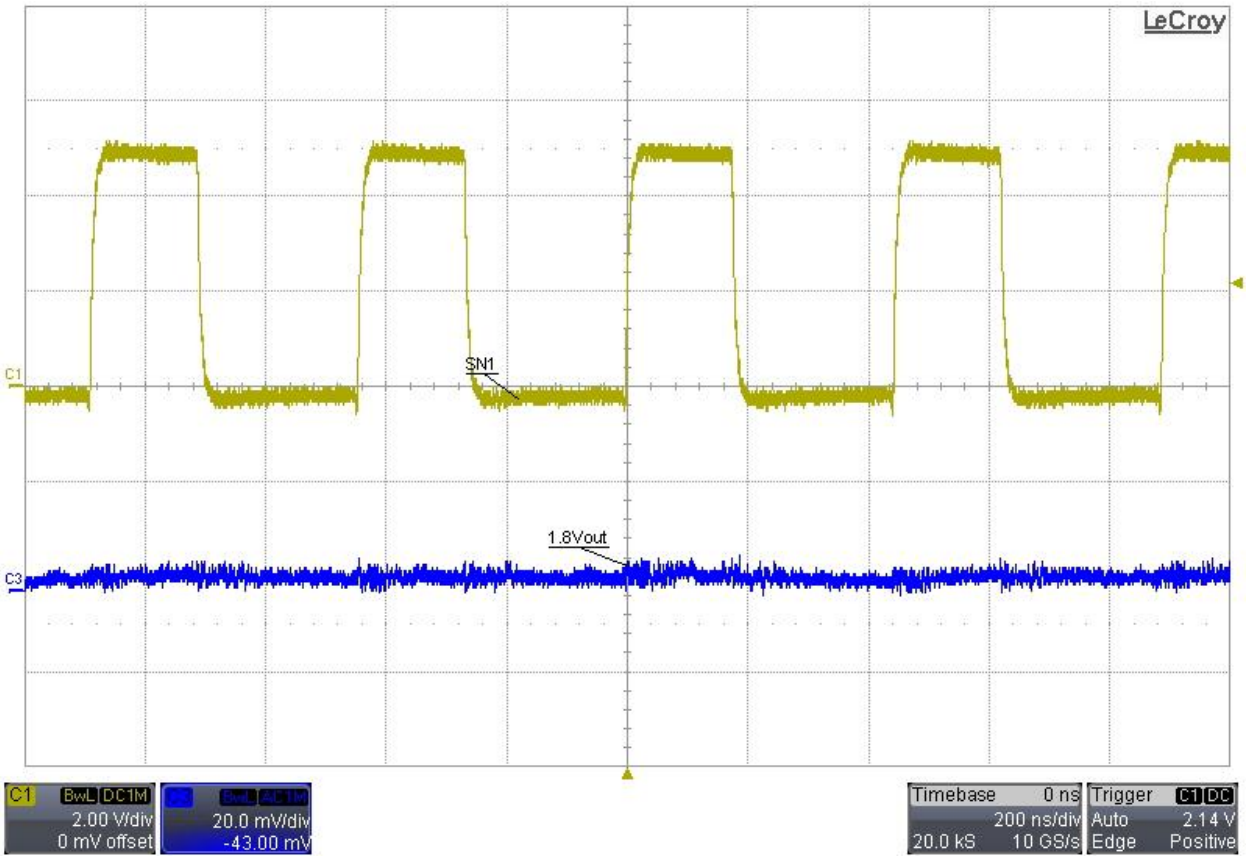
Input voltage = 5VDC
Load current = full load (1.8V@1.0A / 2.5V@1.0A)



6 Output ripple voltage

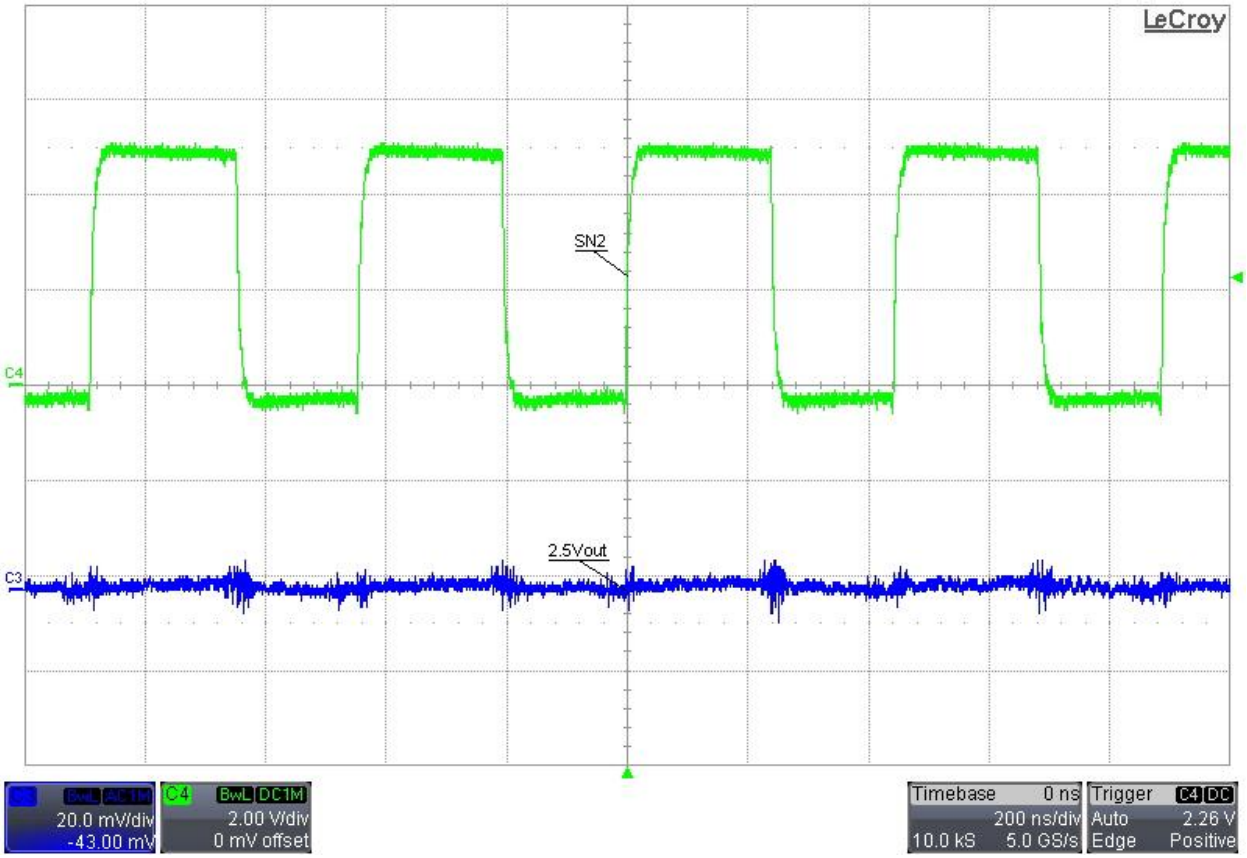
6.1 1.8Vout:

Input voltage = 5VDC
Load current = full load (1.0A)



6.2 2.5Vout:

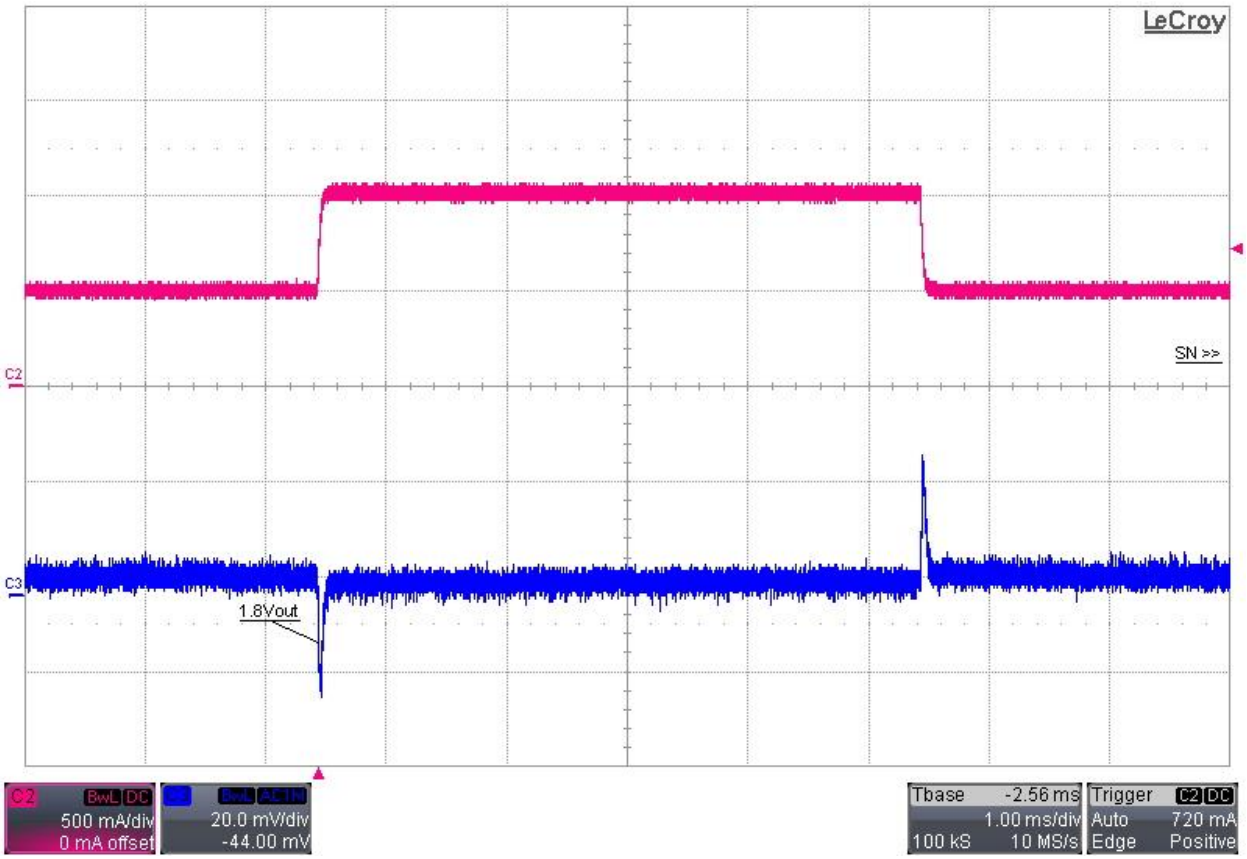
Input voltage = 5VDC
Load current = full load (1.0A)



7 Load Transients

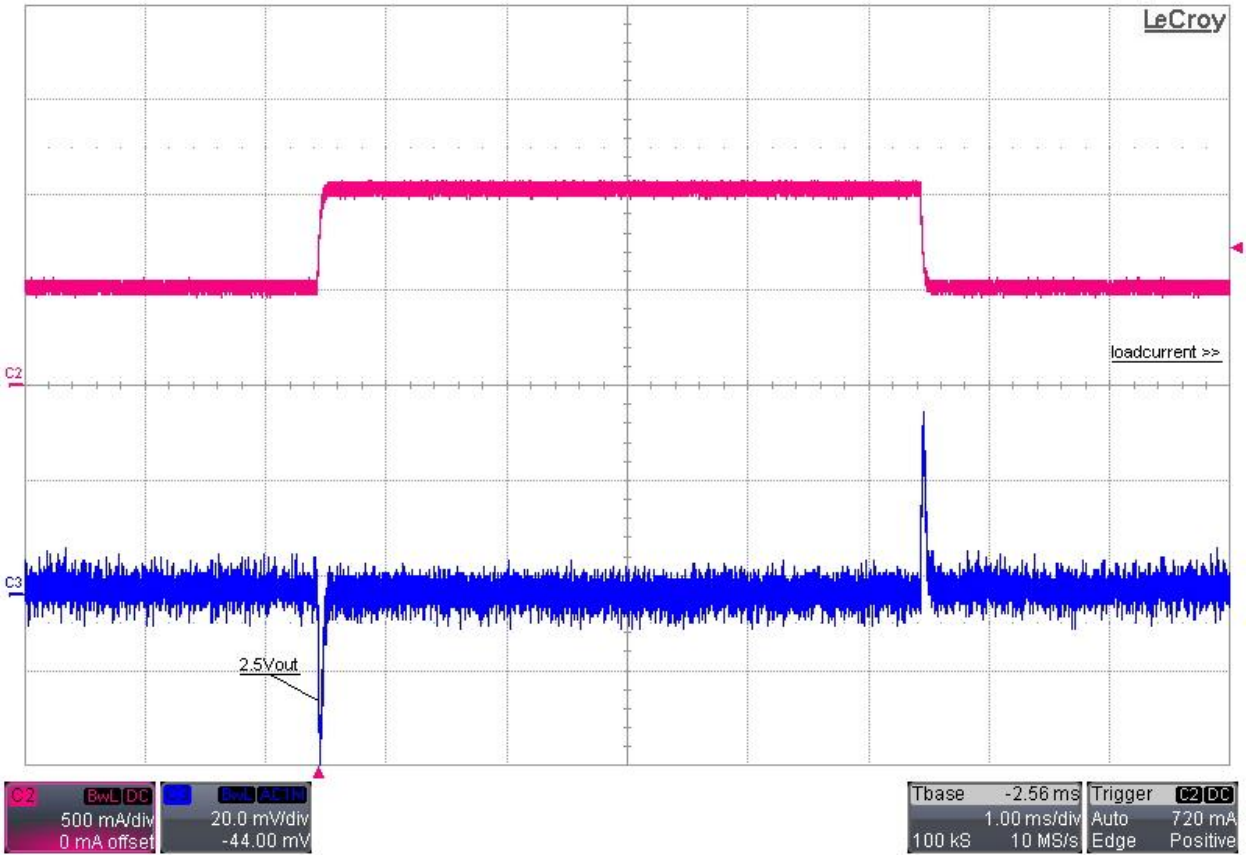
7.1 1.8Vout:

Input voltage = 5VDC
Load current = 0.5A to 1.0A



7.2 2.5Vout:

Input voltage = 5VDC
Load current = 0.5A to 1.0A



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