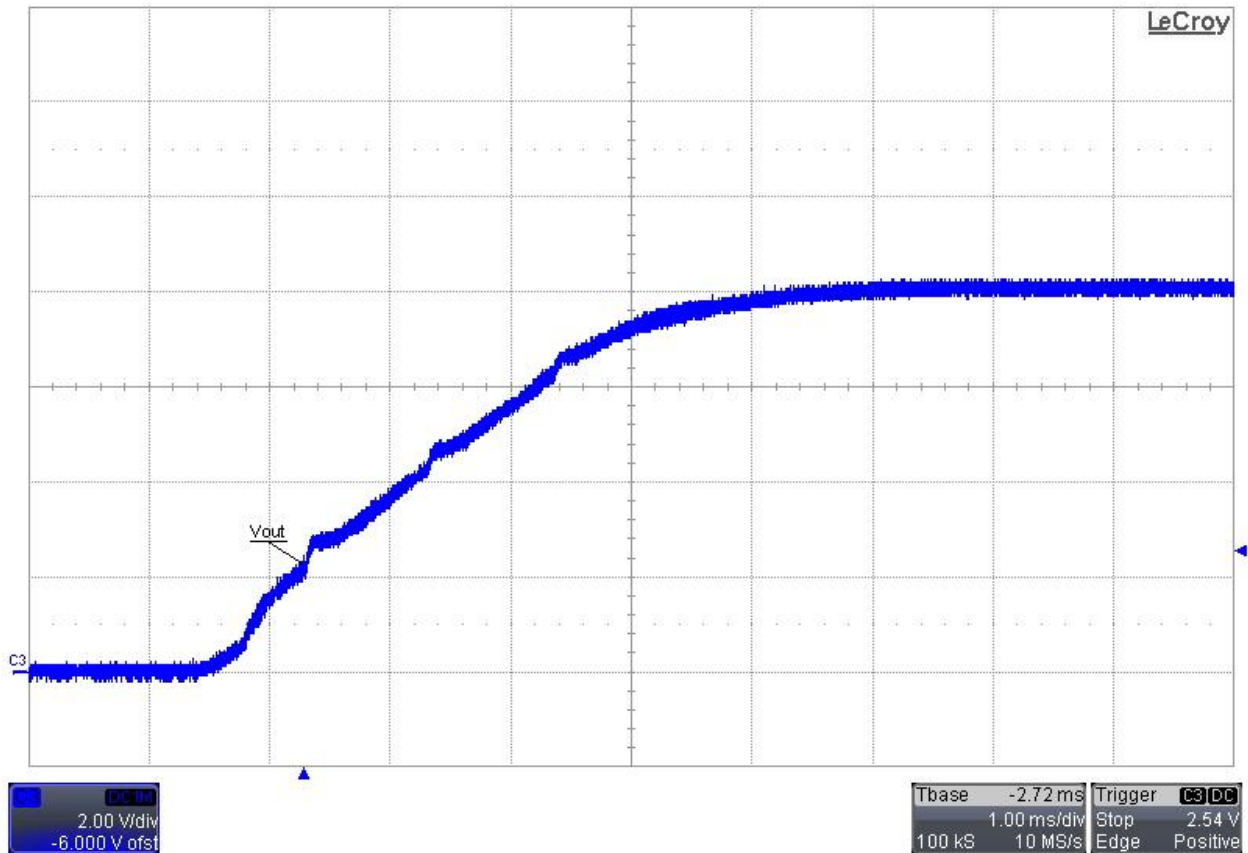


TPS54140: 8.0V@1.0A

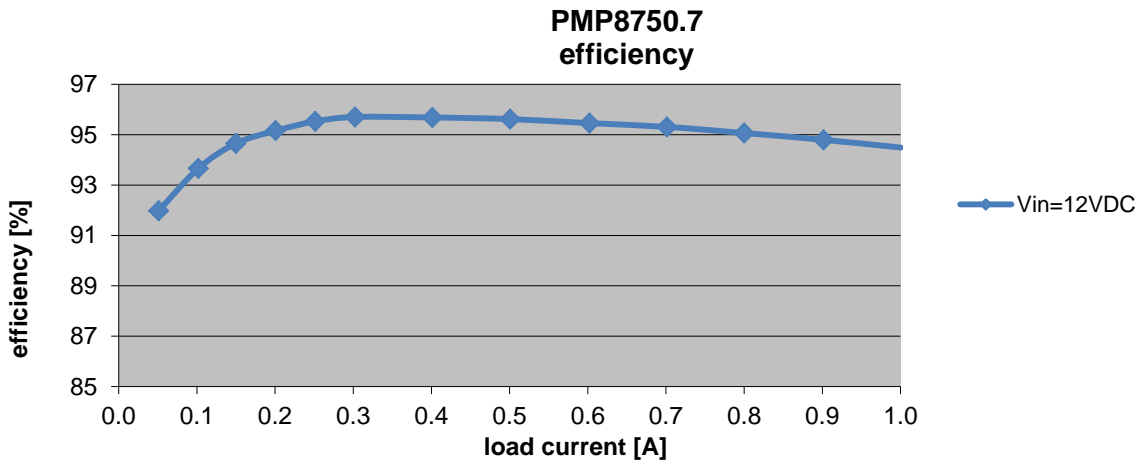
1 Startup

Input voltage = 12VDC

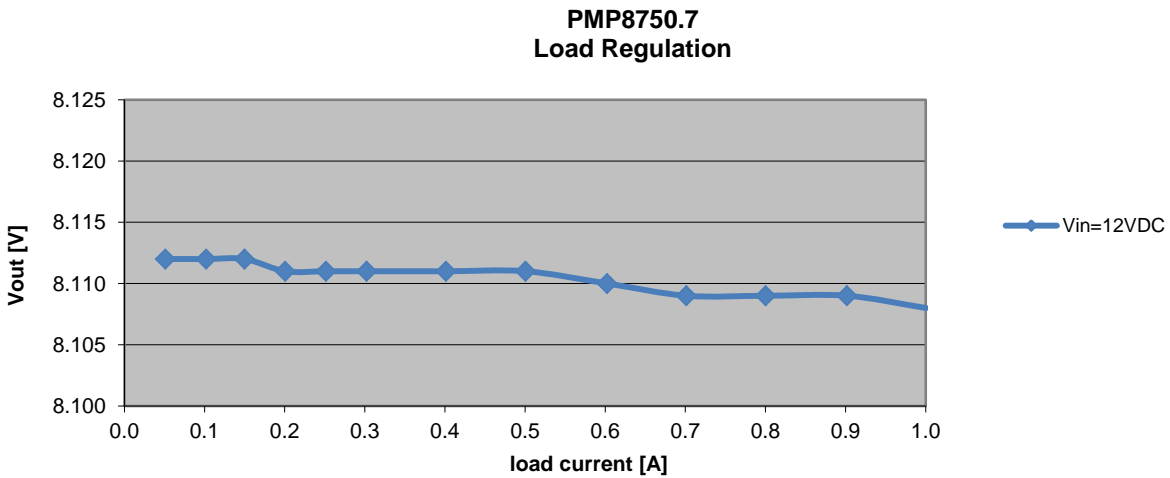
Load current = full load (1.0A)



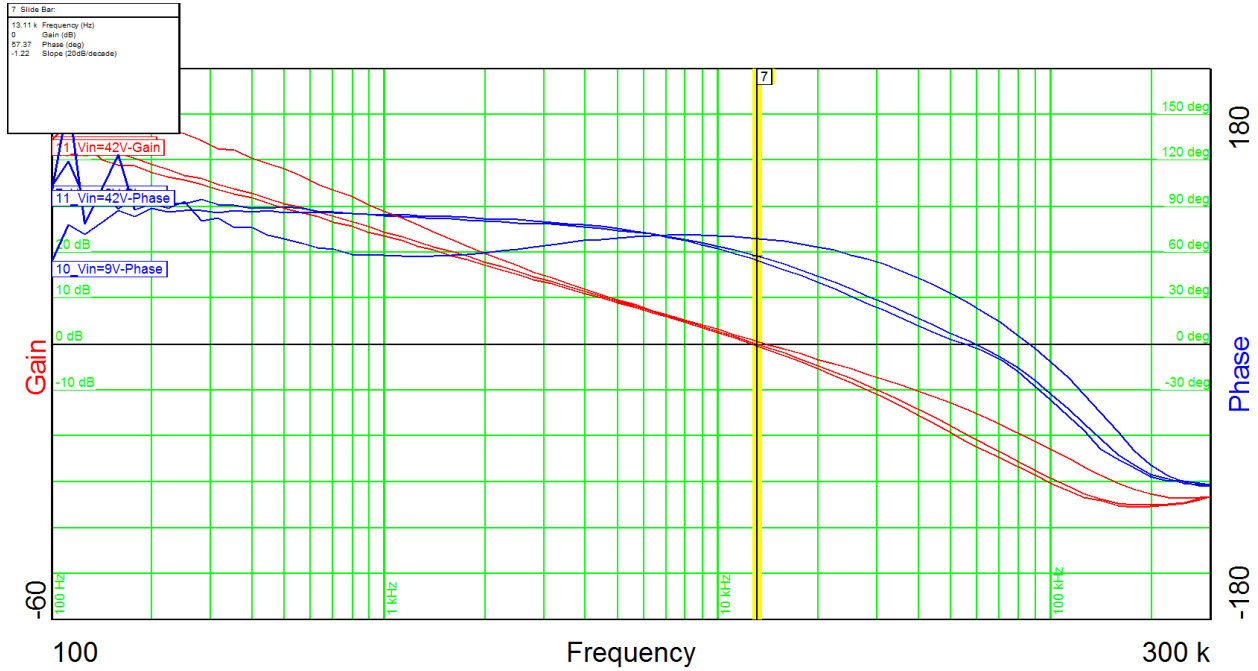
2 Efficiency



3 Load regulation



4 Control Loop Frequency Response



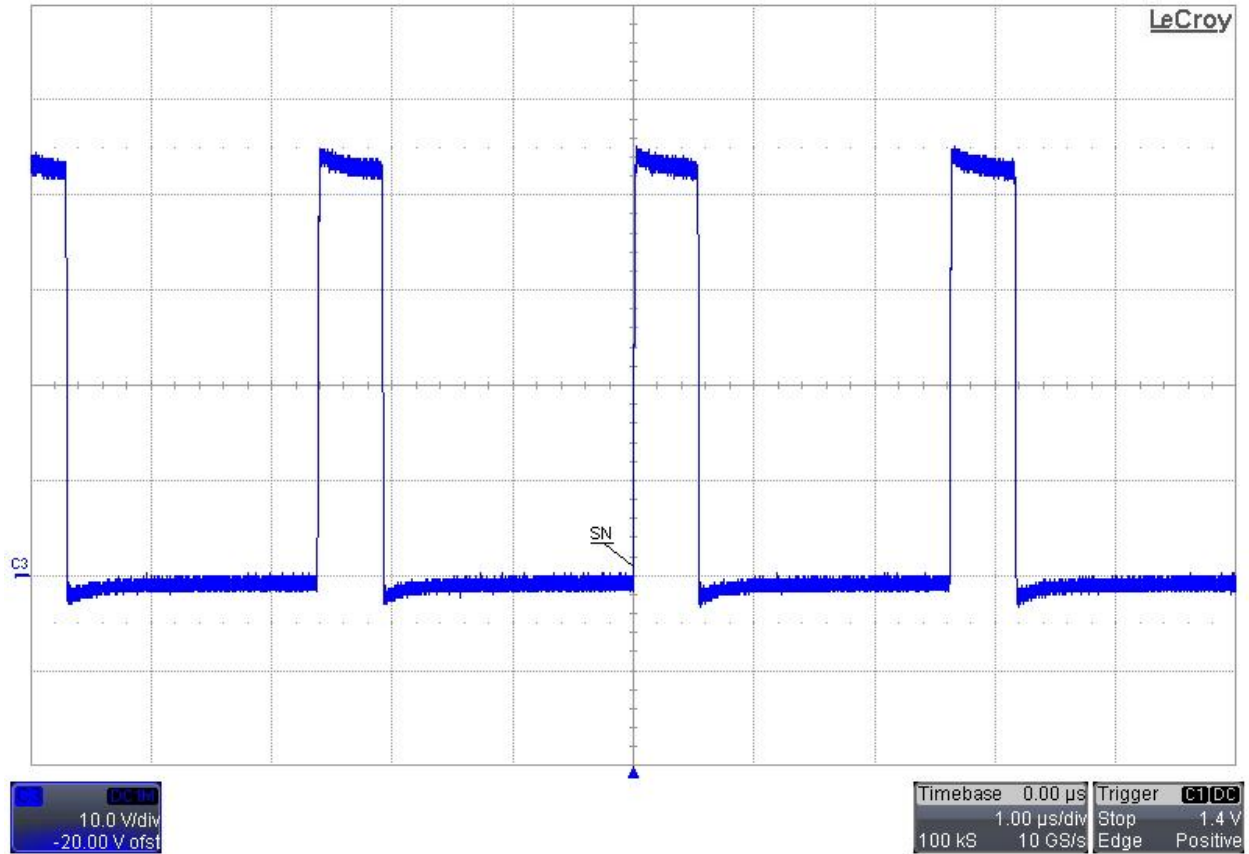
Output power = 8.0V@1.0A
 Input voltage = 9VDC
 Phase margin = 56°
 Bandwidth = 13kHz

Output power = 8.0V@1.0A
 Input voltage = 12VDC
 Phase margin = 57°
 Bandwidth = 13kHz

Output power = 8.0V@1.0A
 Input voltage = 42VDC
 Phase margin = 68°
 Bandwidth = 14kHz

5 Switch Node

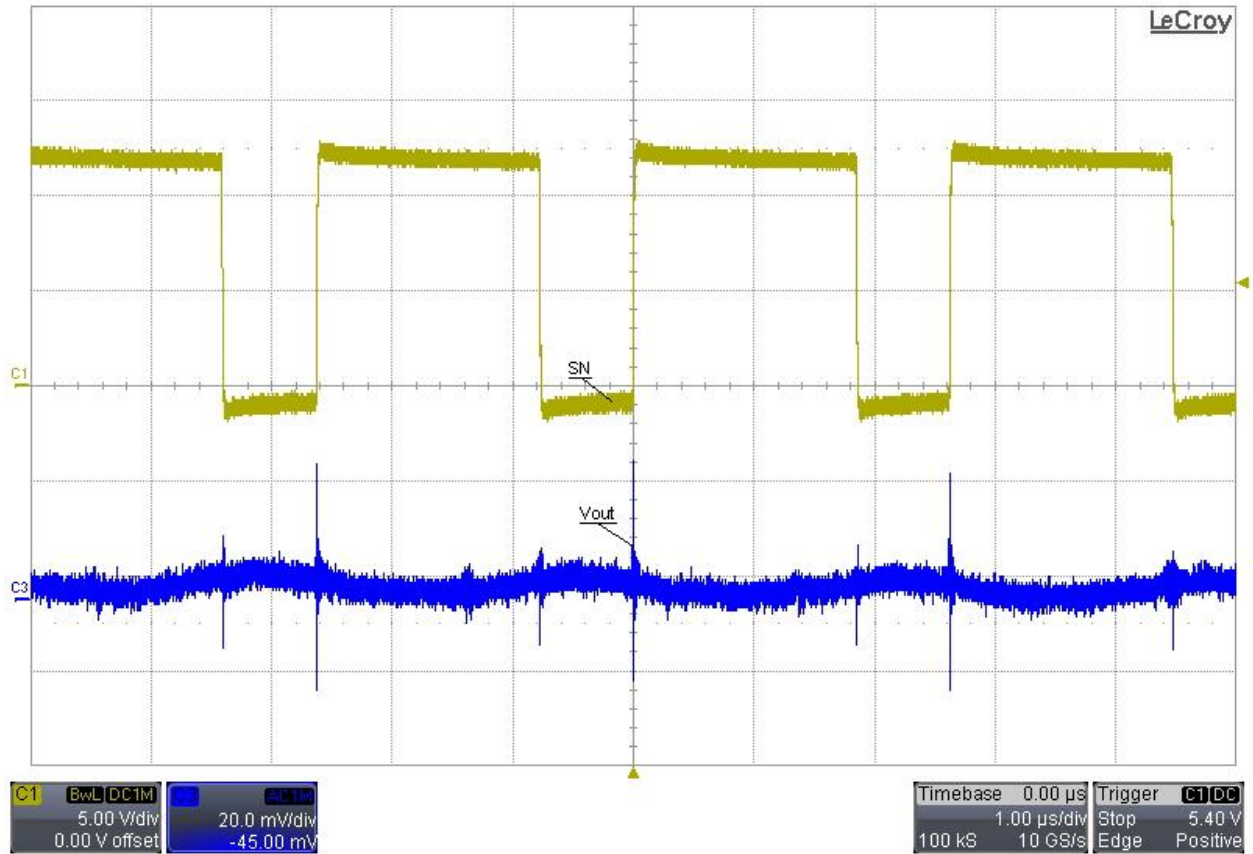
Input voltage = 12VDC
Load current = full load (1.0A)



6 Output ripple voltage

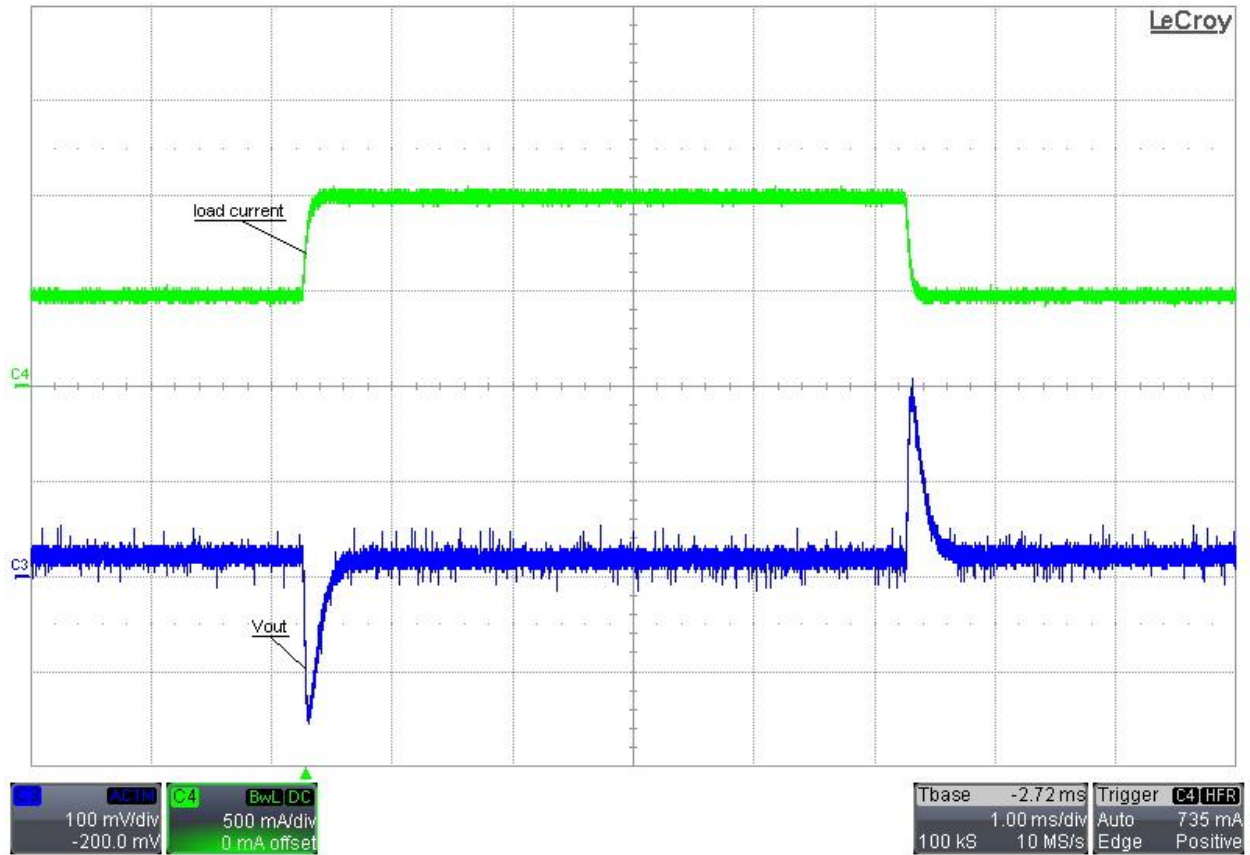
Input voltage = 12VDC

Load current = full load (1.0A)



7 Load Transients

Input voltage = 12VDC
Load current = 0.5A – 1.0A



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