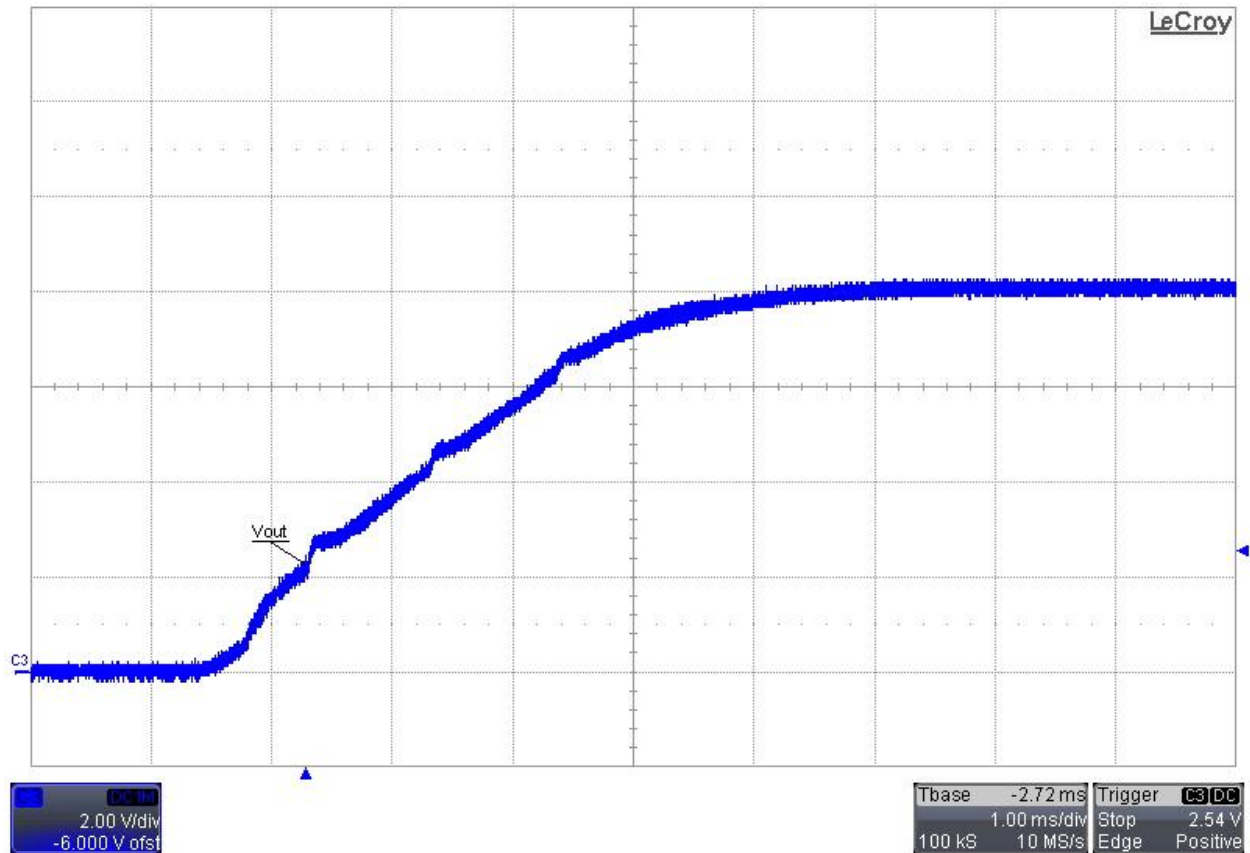


## TPS54140: 8.0V@1.0A

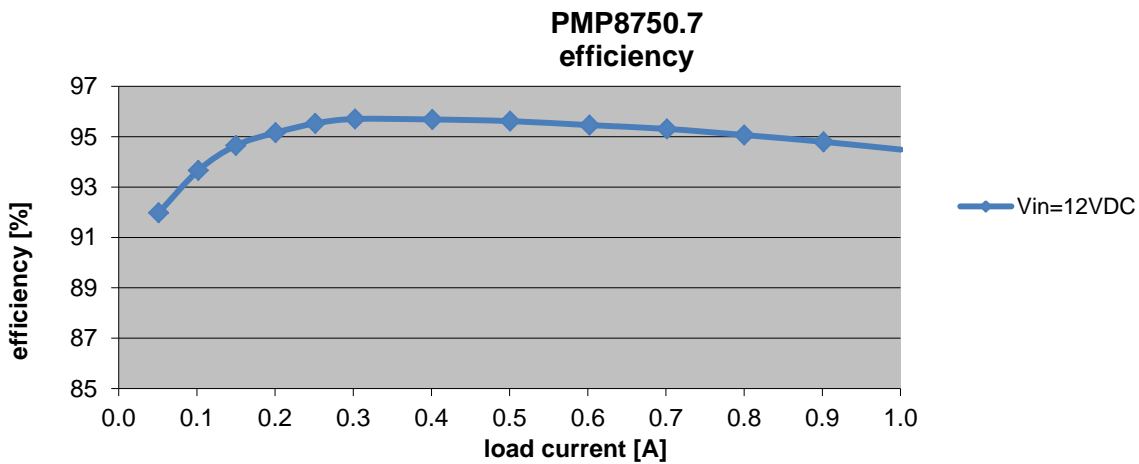
### 1 Startup

Input voltage = 12VDC

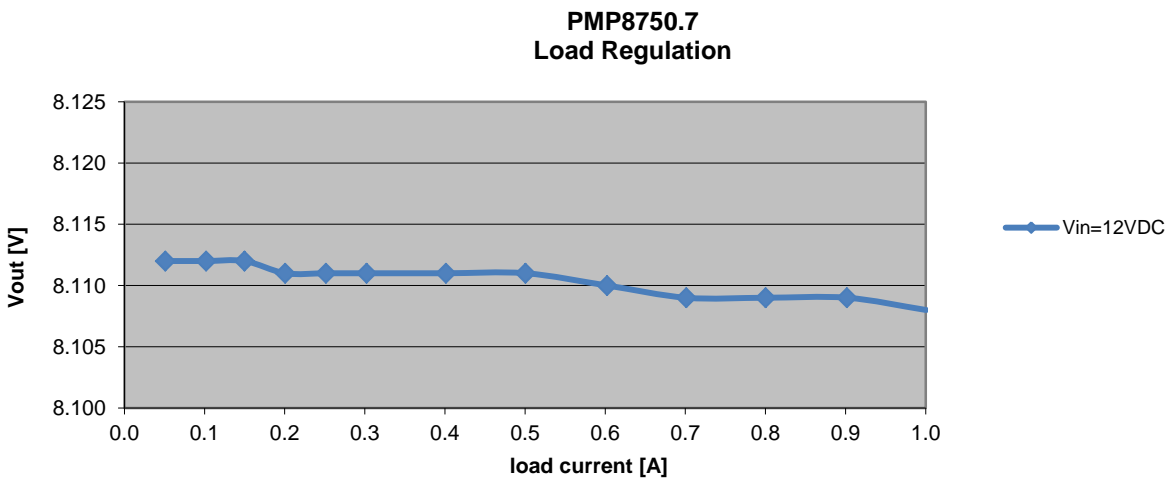
Load current = full load (1.0A)



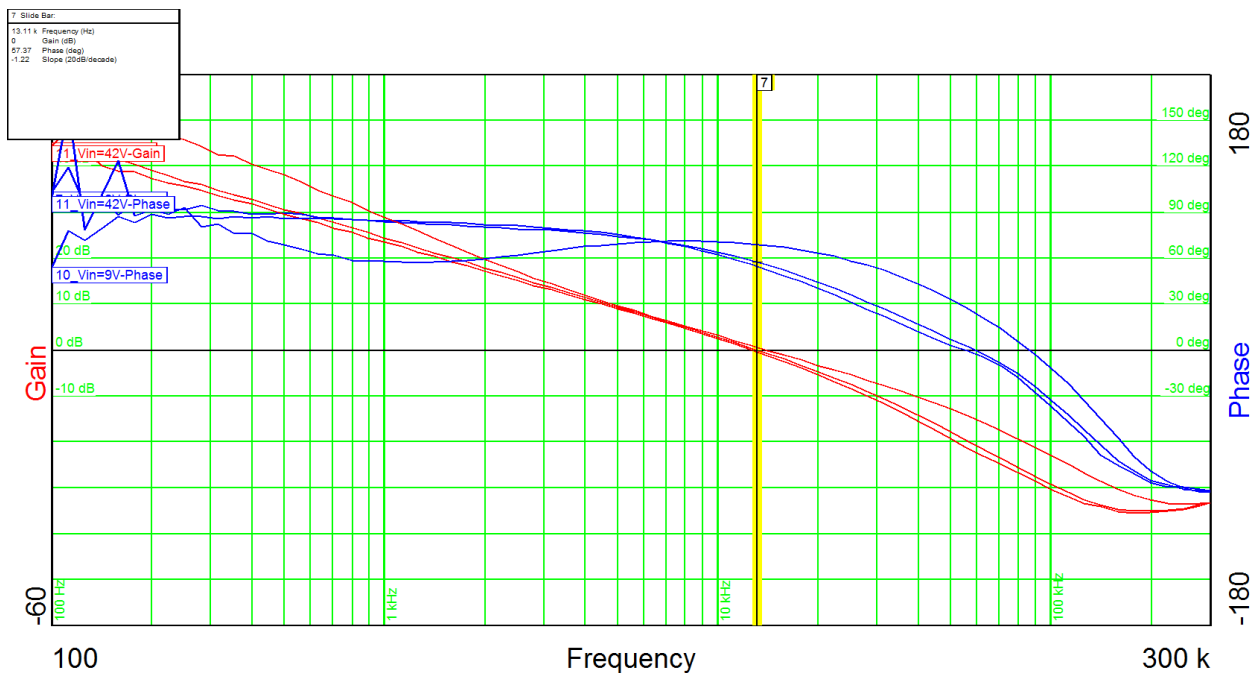
## 2 Efficiency



## 3 Load regulation



## 4 Control Loop Frequency Response



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

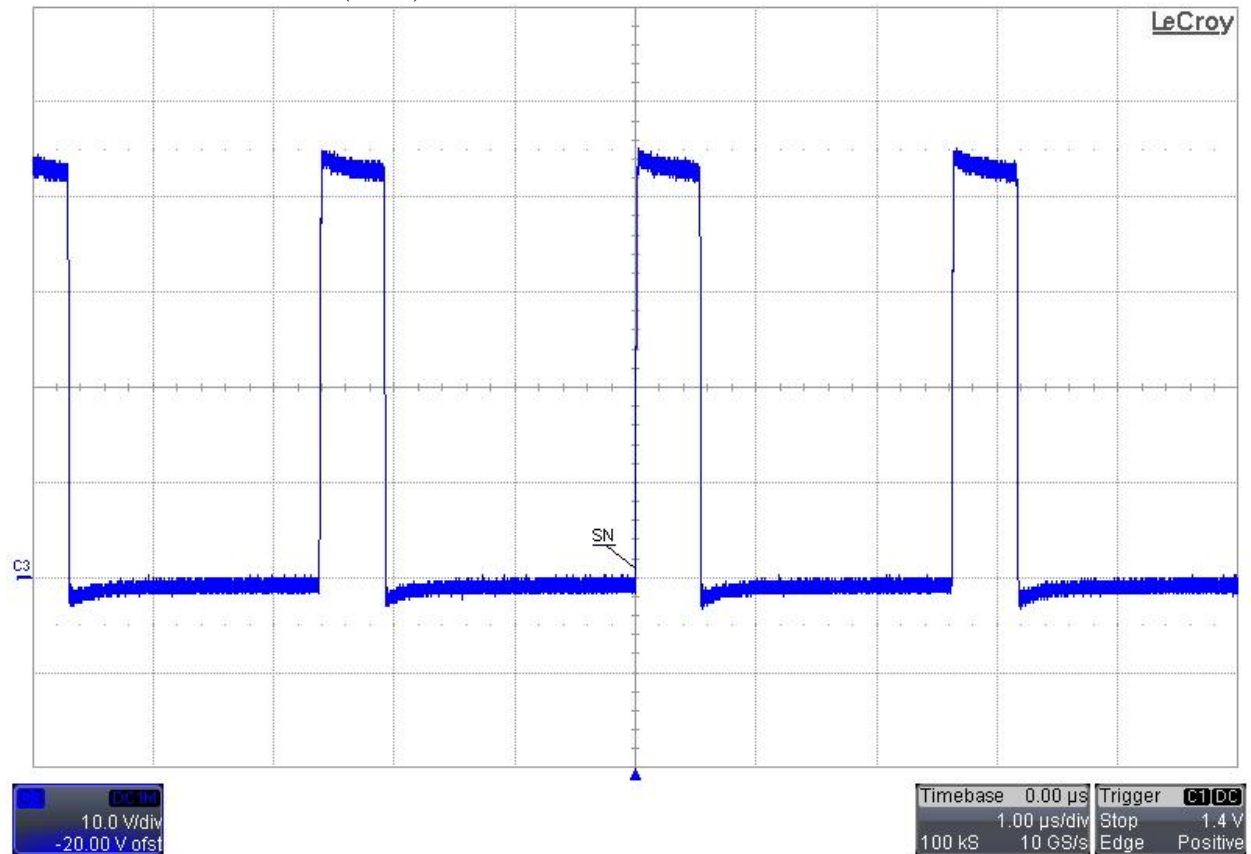
Output power = 8.0V@1.0A  
Input voltage = 12VDC  
Phase margin = 57°  
Bandwidth = 13kHz

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

## 5 Switch Node

Input voltage = 12VDC

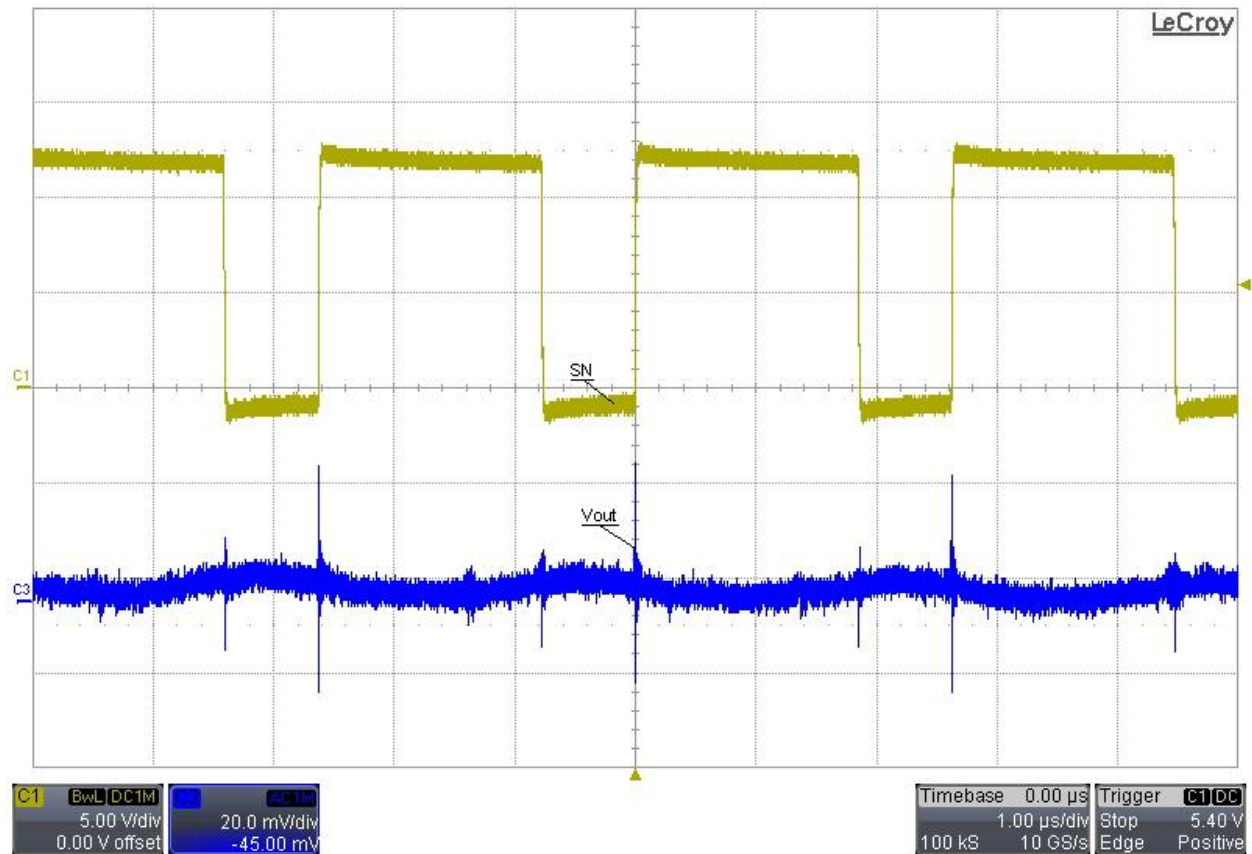
Load current = full load (1.0A)



## 6 Output ripple voltage

Input voltage = 12VDC

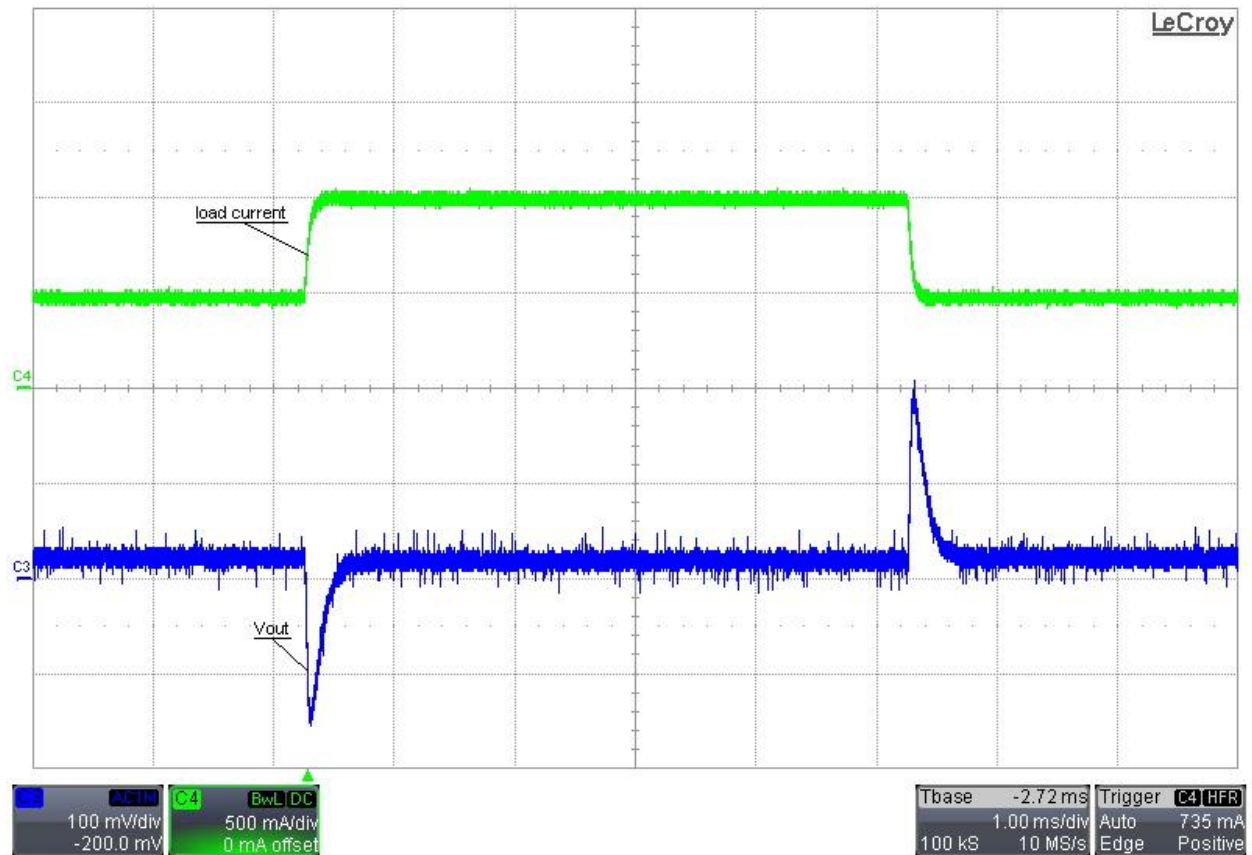
Load current = full load (1.0A)



## 7 Load Transients

Input voltage = 12VDC

Load current = 0.5A – 1.0A



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