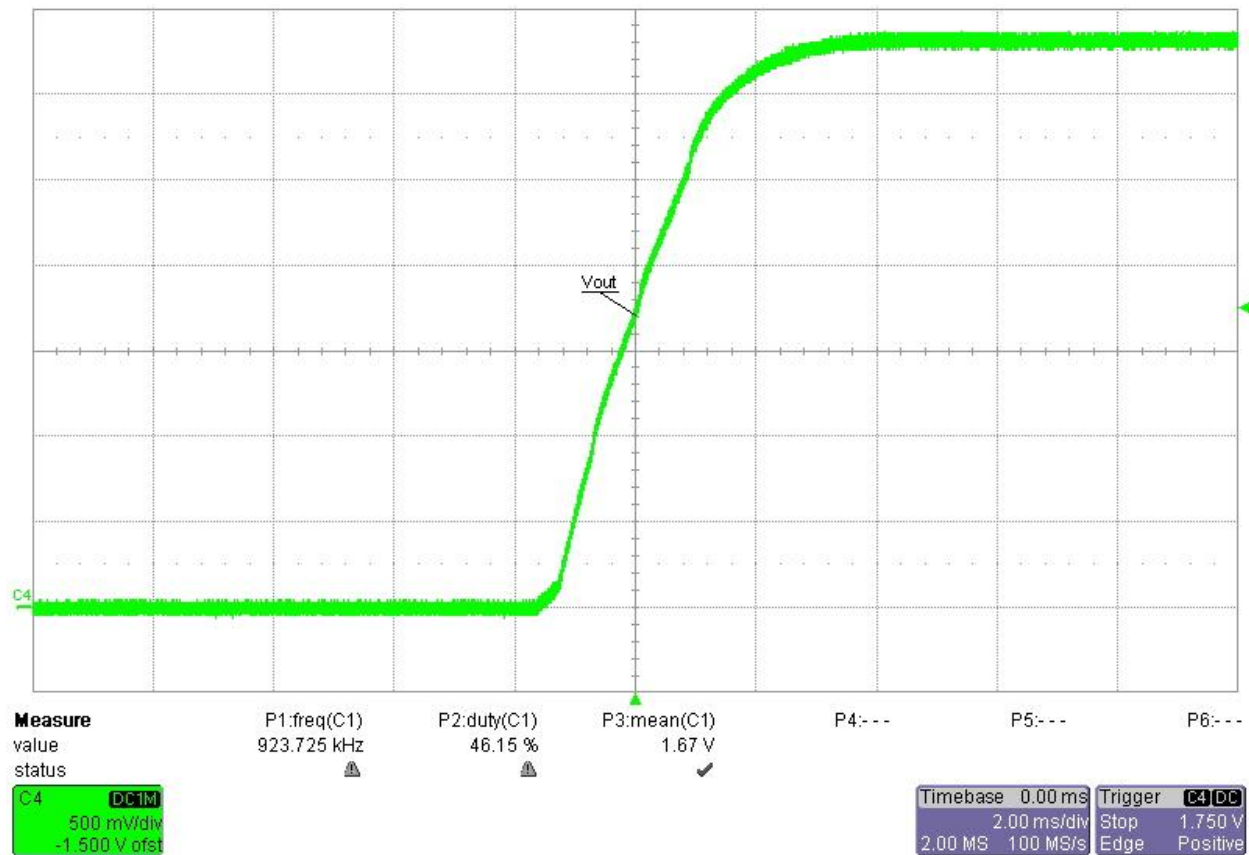


## 1 Startup

Input voltage = 8.0VDC

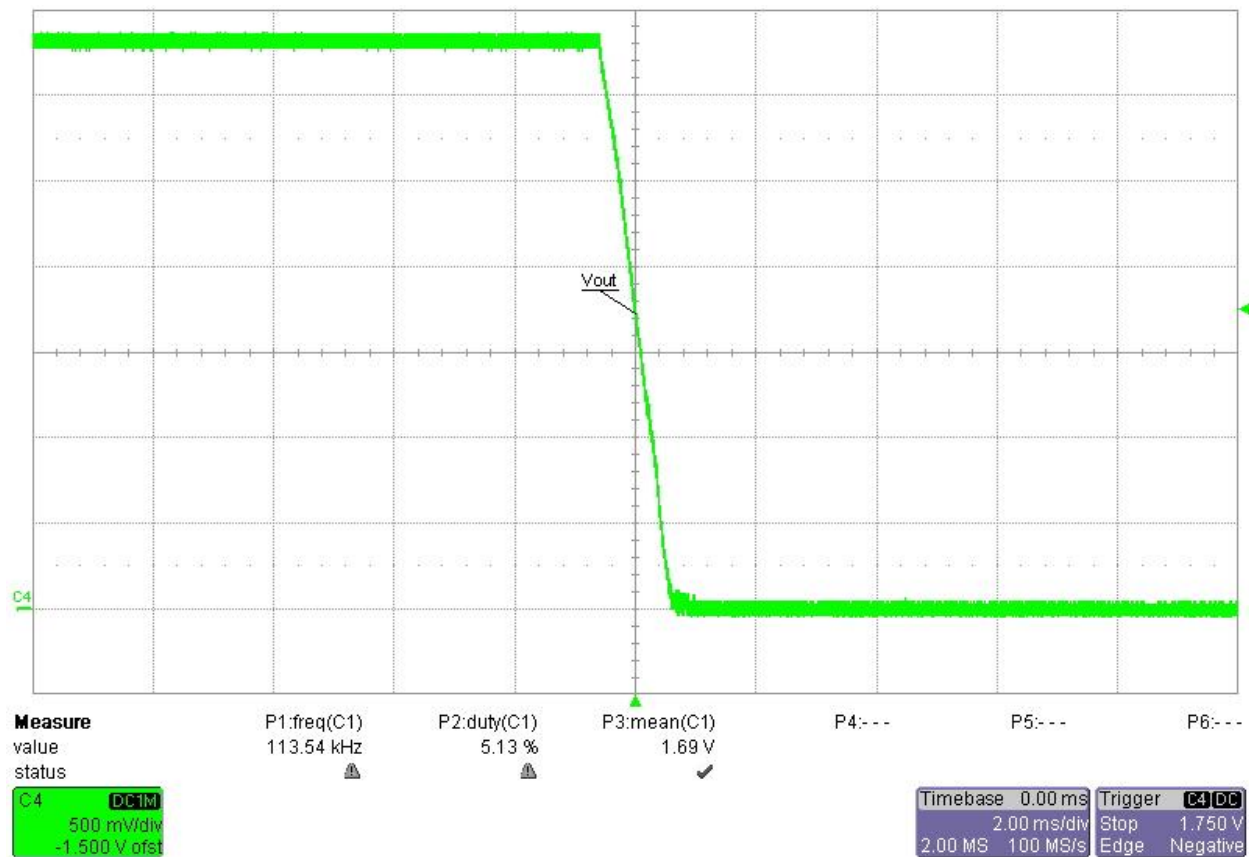
Load current = full load (0.42A)



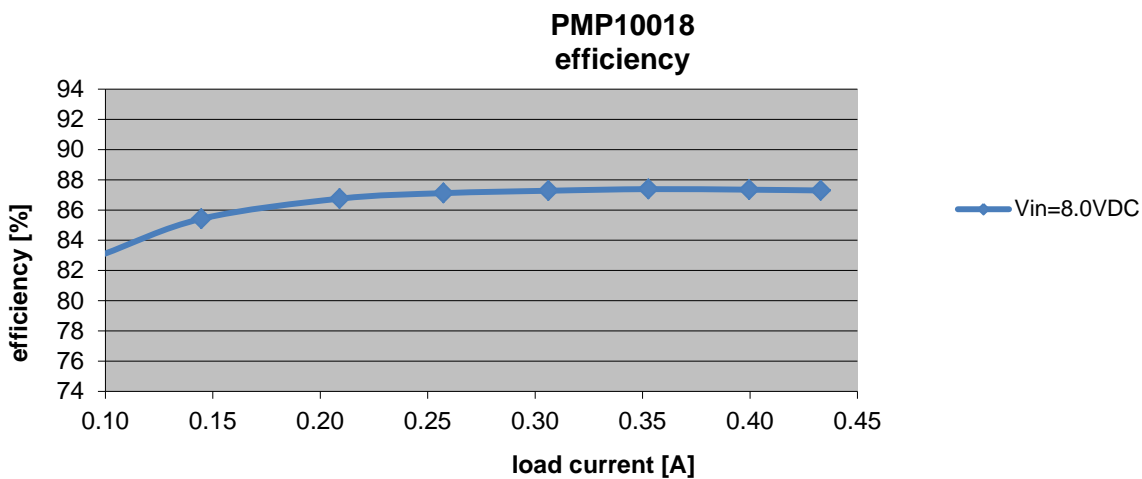
## 2 Shutdown

Input voltage = 8.0VDC

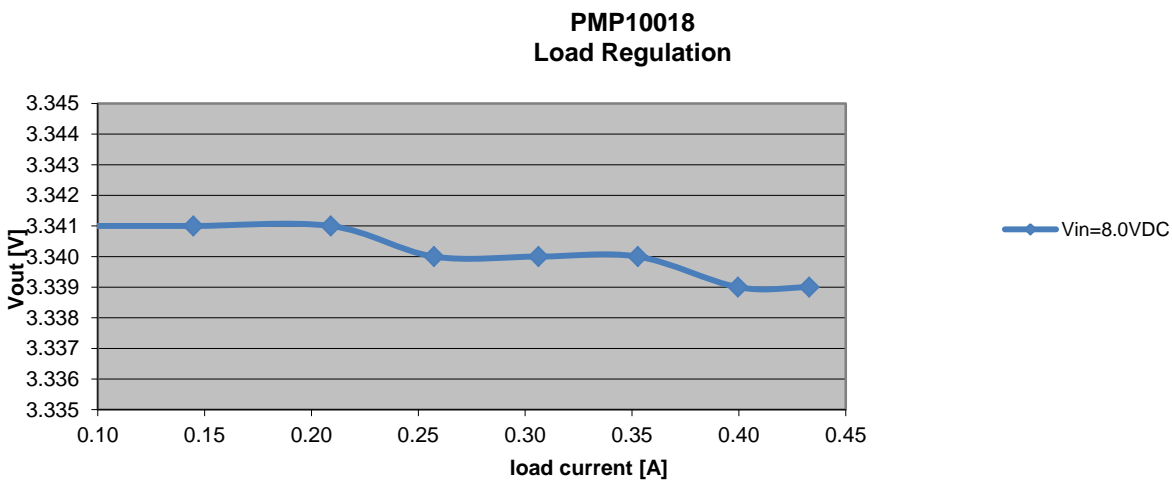
Load current = full load (0.42A)



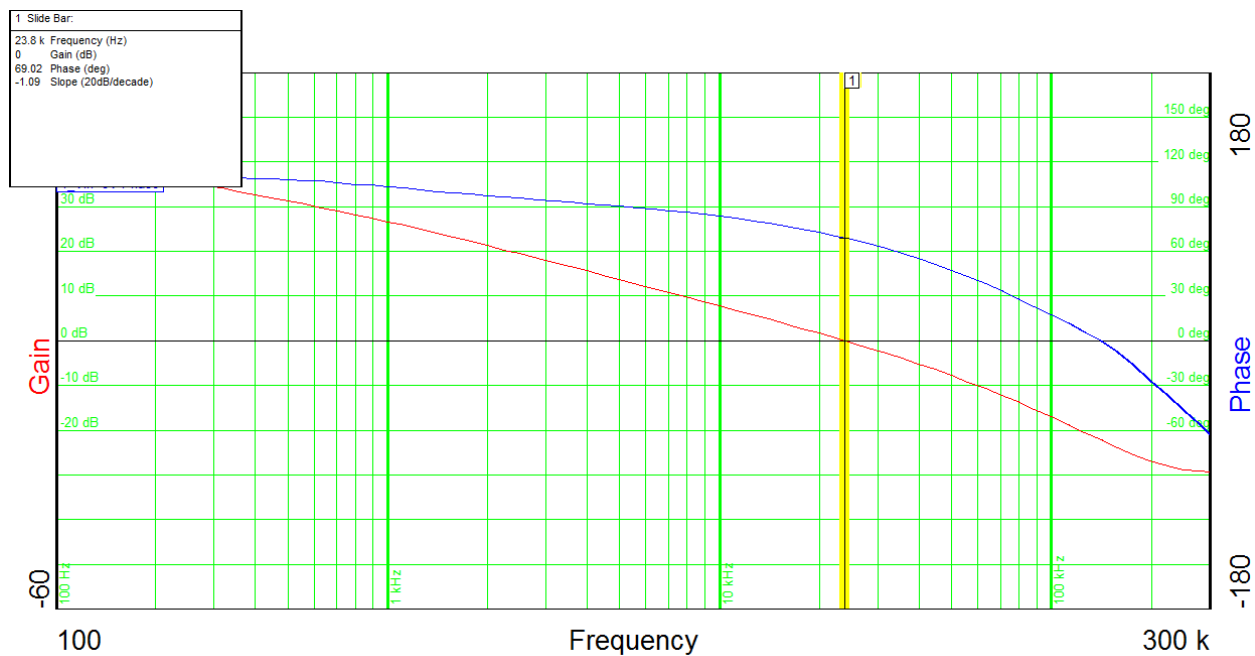
### 3 Efficiency



### 4 Load regulation



## 5 Control Loop Frequency Response

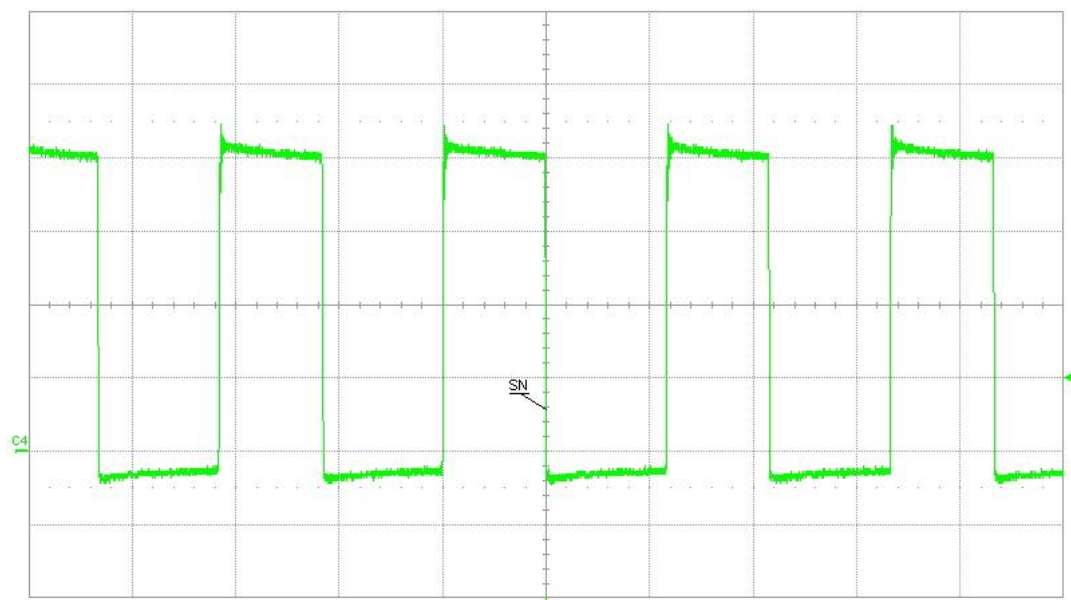


Output power = 3.3V@0.42A  
Input voltage = 8.0VDC  
Phase margin = 69°  
Bandwidth = 23.8kHz

## 6 Switch Node

Input voltage = 8.0VDC

Load current = full load (0.42A)



Measure	P1:freq(C1)	P2:duty(C1)	P3:mean(C1)	P4:---	P5:---	P6:---
value	924.926 kHz	45.70 %	3.45 V			
status	✓	⚠	✓			

C4

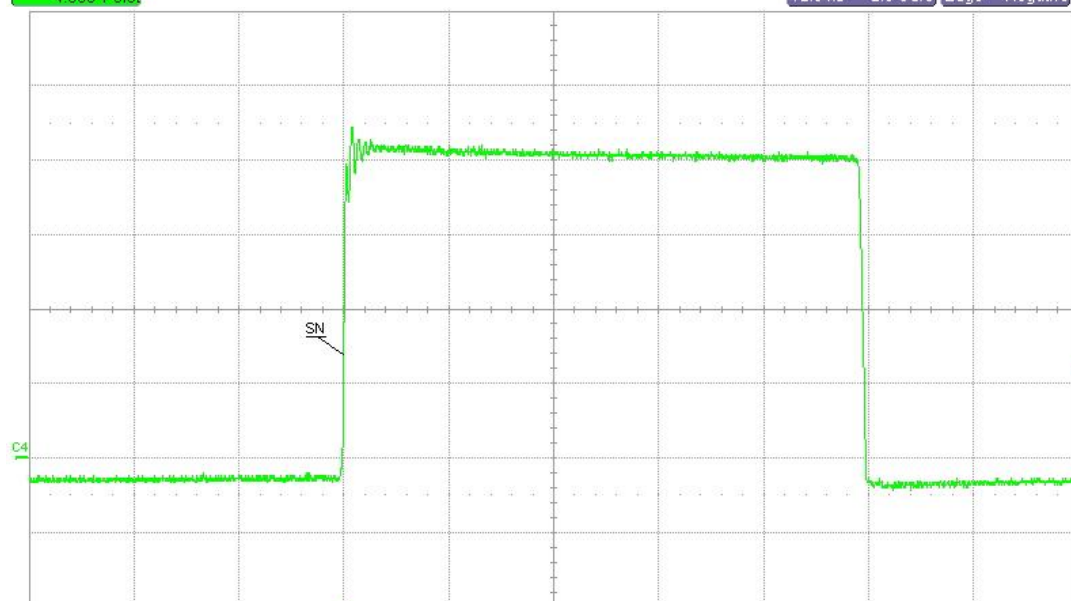
DC1M

2.00 V/div

-4.000 V ofst

Timebase 0.00 μs500 ns/div12.5 kS

Trigger C4 DCAuto2.00 VEdge Negative



Measure	P1:freq(C1)	P2:duty(C1)	P3:mean(C1)	P4:---	P5:---	P6:---
value	---	---	3.71 V			
status	⚠	⚠	✓			

C4

DC1M

2.00 V/div

-4.000 V ofst

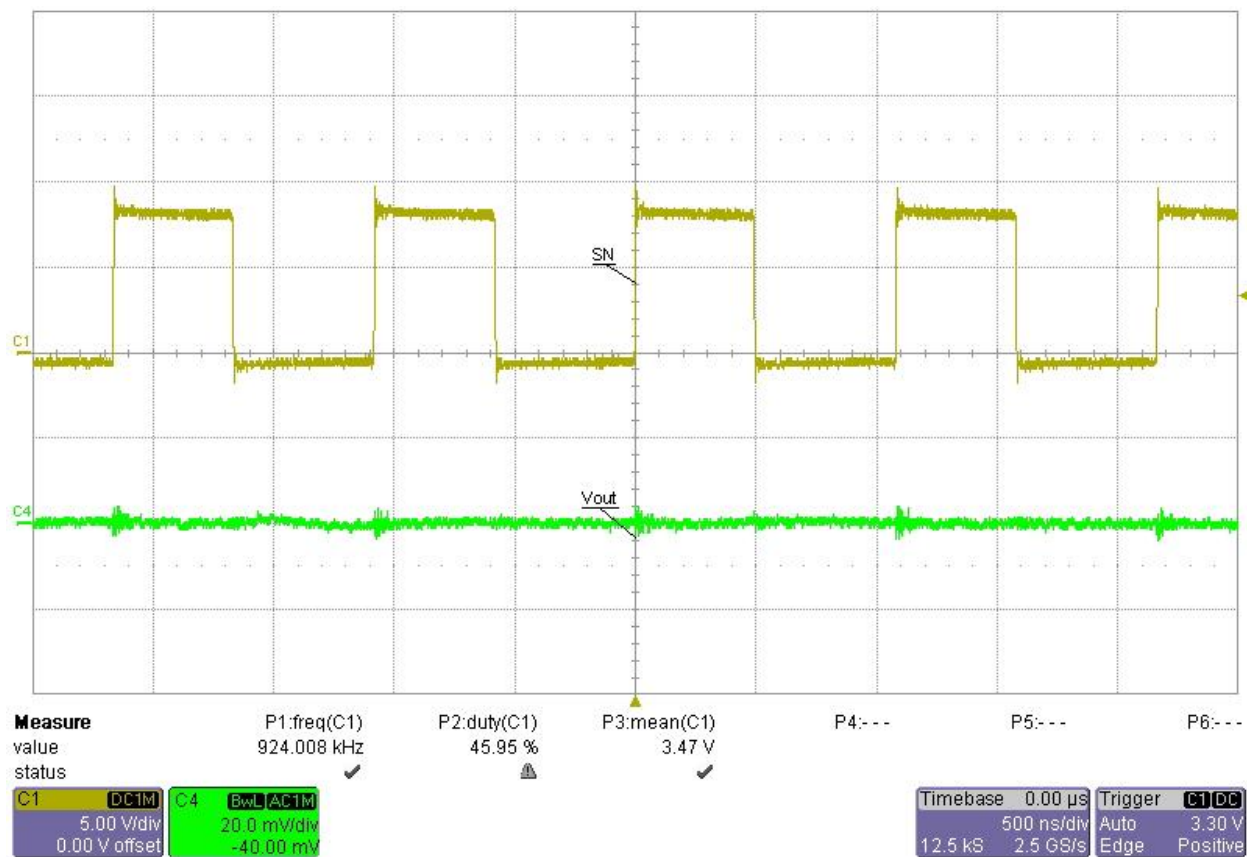
Timebase -200 ns100 ns/div2.50 kS

Trigger C4 DCAuto2.44 VEdge Positive

## 7 Output ripple voltage

Input voltage = 8.0VDC

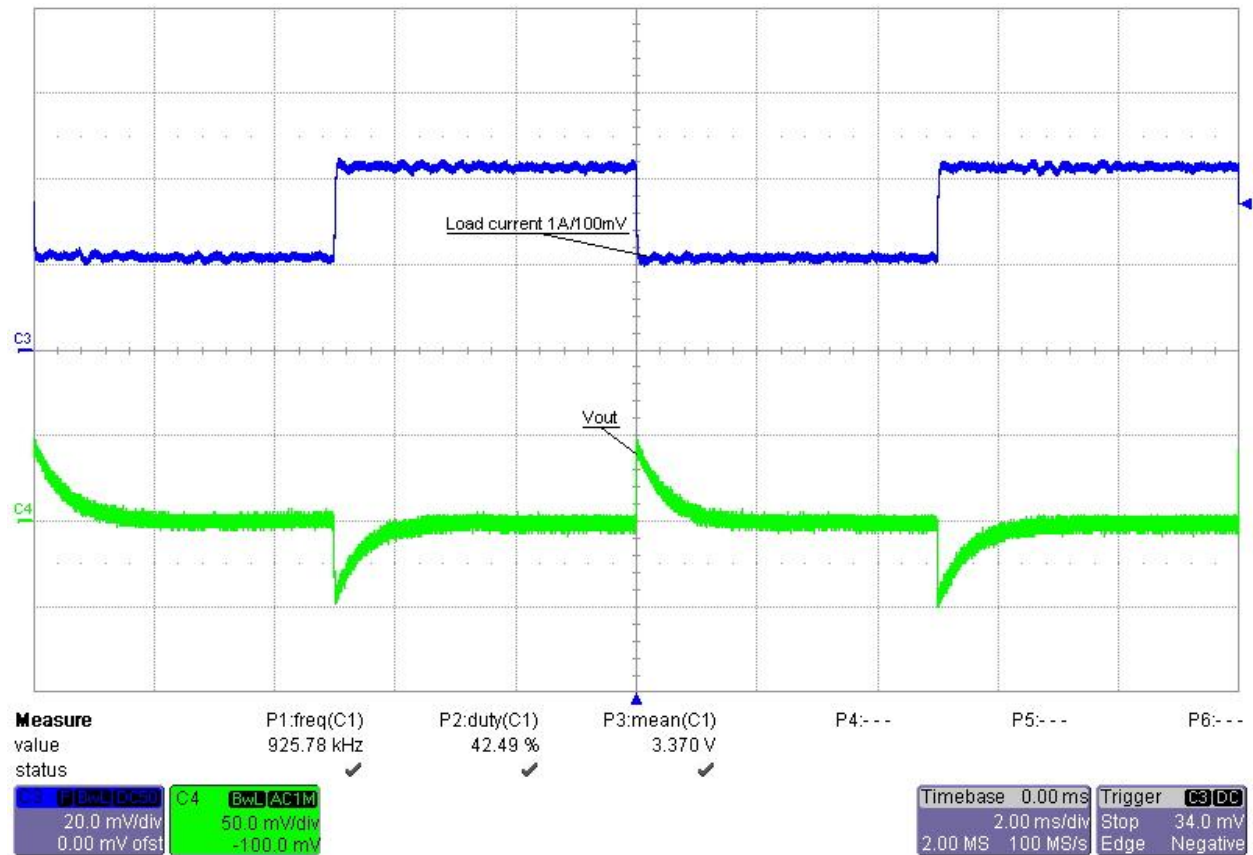
Load current = full load (0.42A)



## 8 Load Transients

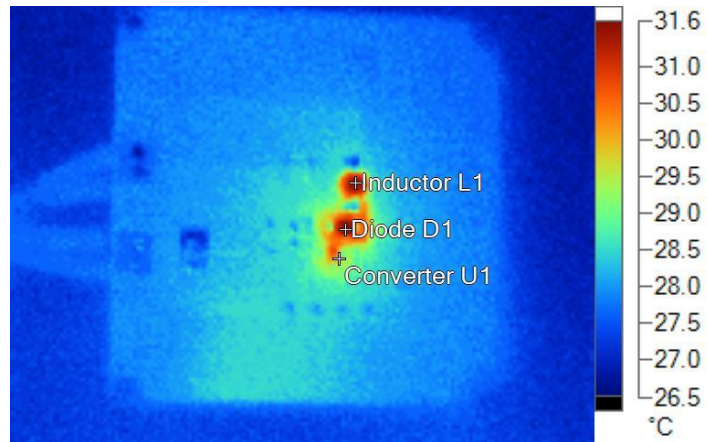
Input voltage = 8.0VDC

Load current = full load (0.42A)



## 9 Thermal Analysis

The images below show the infrared images taken from the FlexCam after 15min at full load (3.3V@0.42A).



Name	Temperature	
Converter U1	29.8°C	
Diode D1	31.5°C	
Inductor L1	31.5°C	

Input voltage = 8VDC  
 Output power = 1.4W  
 Ambient temperature = 25°C  
 No heatsink, no airflow

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