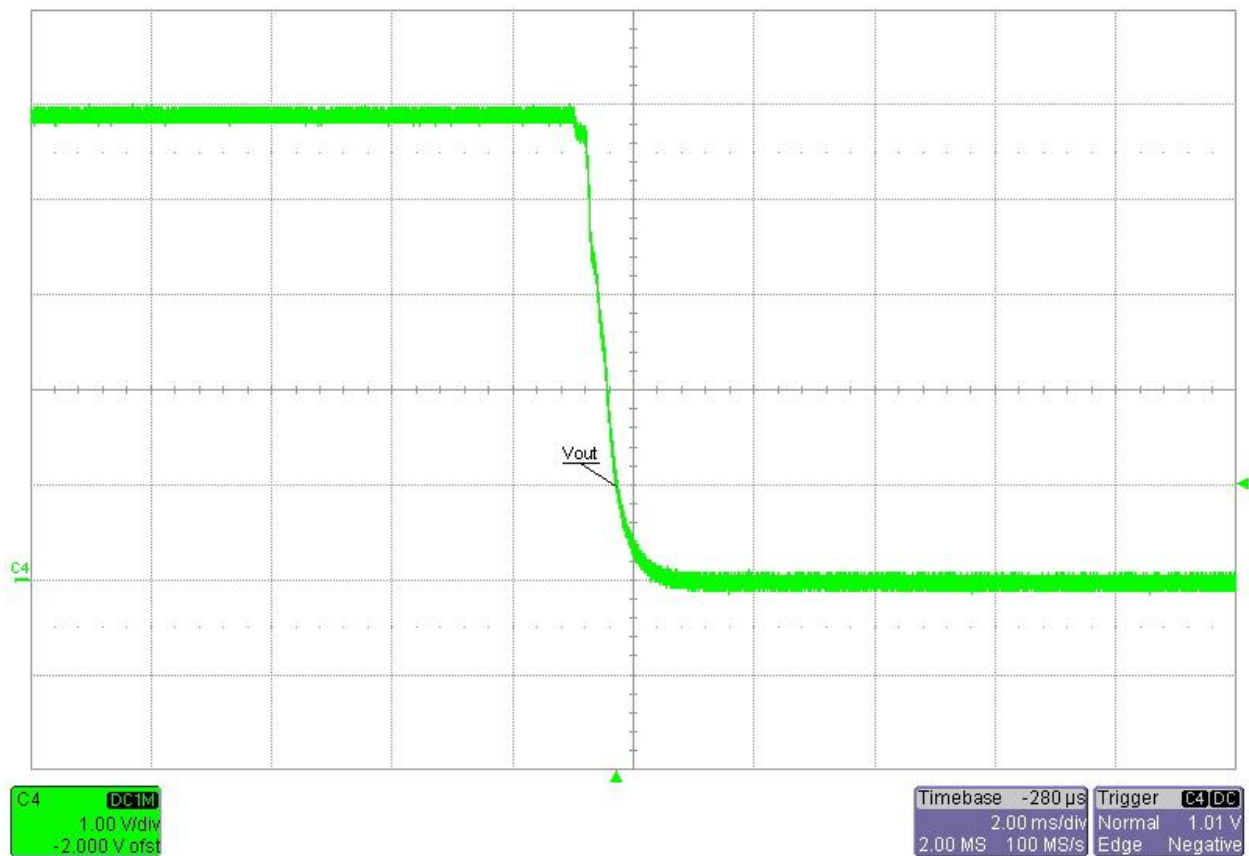




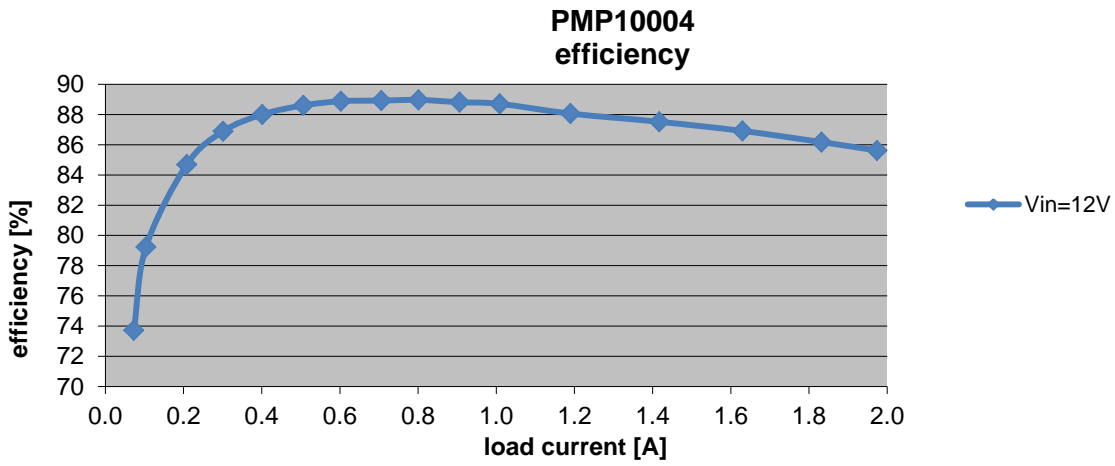
## 1 Shutdown

Input voltage = 12VDC

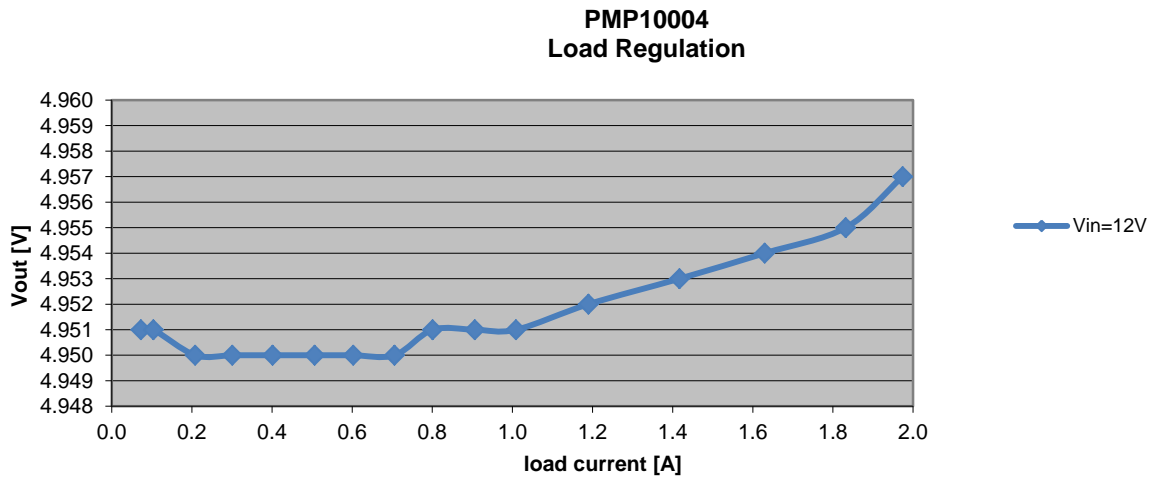
Load current = full load (2.0A)



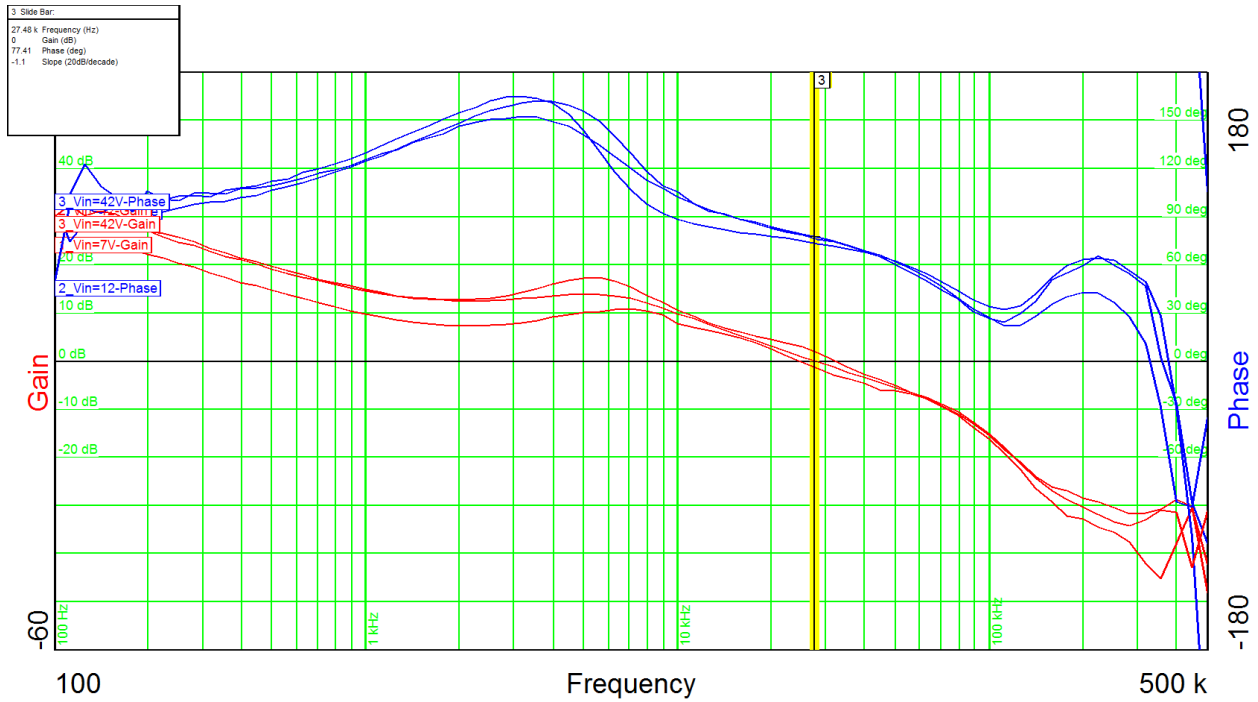
## 2 Efficiency



## 3 Load regulation



### 4 Control Loop Frequency Response



Output power = 5V@2.0A  
 Input voltage = 7VDC  
 Phase margin = 79°  
 Bandwidth = 24.4kHz

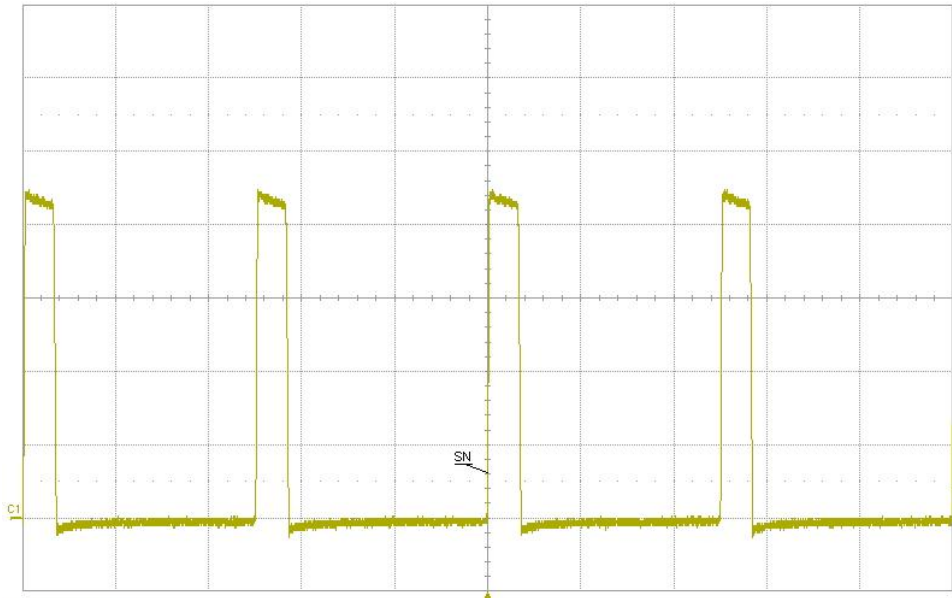
Output power = 5V@2.0A  
 Input voltage = 12VDC  
 Phase margin = 71°  
 Bandwidth = 32.0kHz

Output power = 5V@2.0A  
 Input voltage = 42VDC  
 Phase margin = 77°  
 Bandwidth = 27.5kHz

## 5 Switch Node

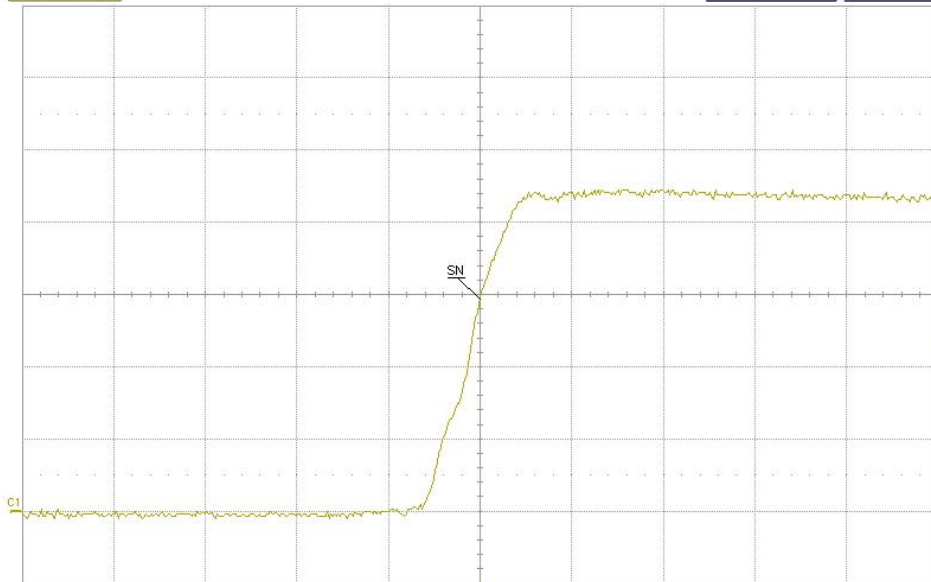
Input voltage = 42VDC

Load current = full load (2.0A)



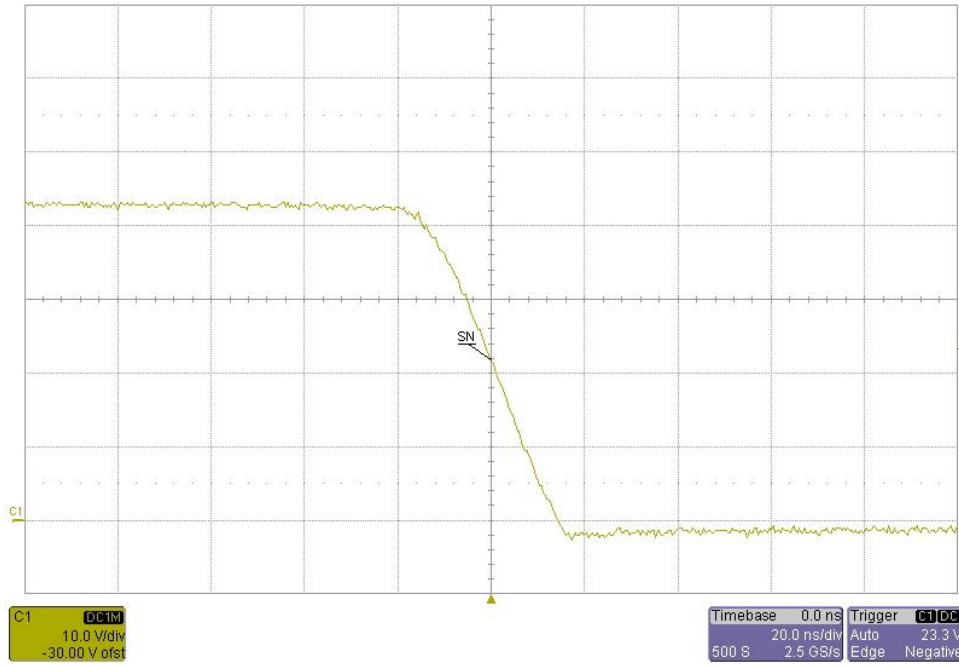
C1 DC:IM  
10.0 V/div  
-30.00 V ofst

Timebase 0.00 μs Trigger C1:DC  
1.00 μs/div Auto 4.0 V  
25.0 kS 2.5 GS/s Edge Positive



C1 DC:IM  
10.0 V/div  
-30.00 V ofst

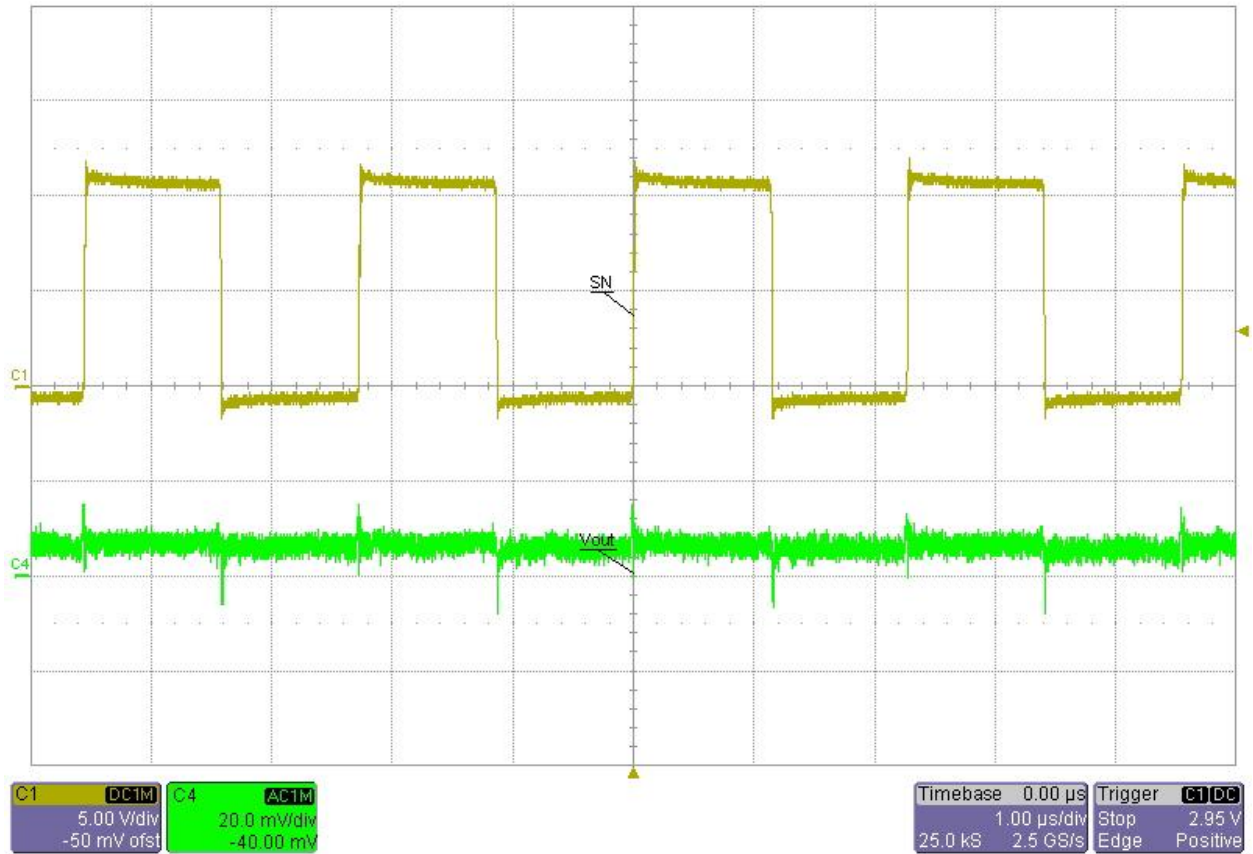
Timebase 0.0 ns Trigger C1:DC  
20.0 ns/div Auto 23.3 V  
500 S 2.5 GS/s Edge Positive



## 6 Output ripple voltage

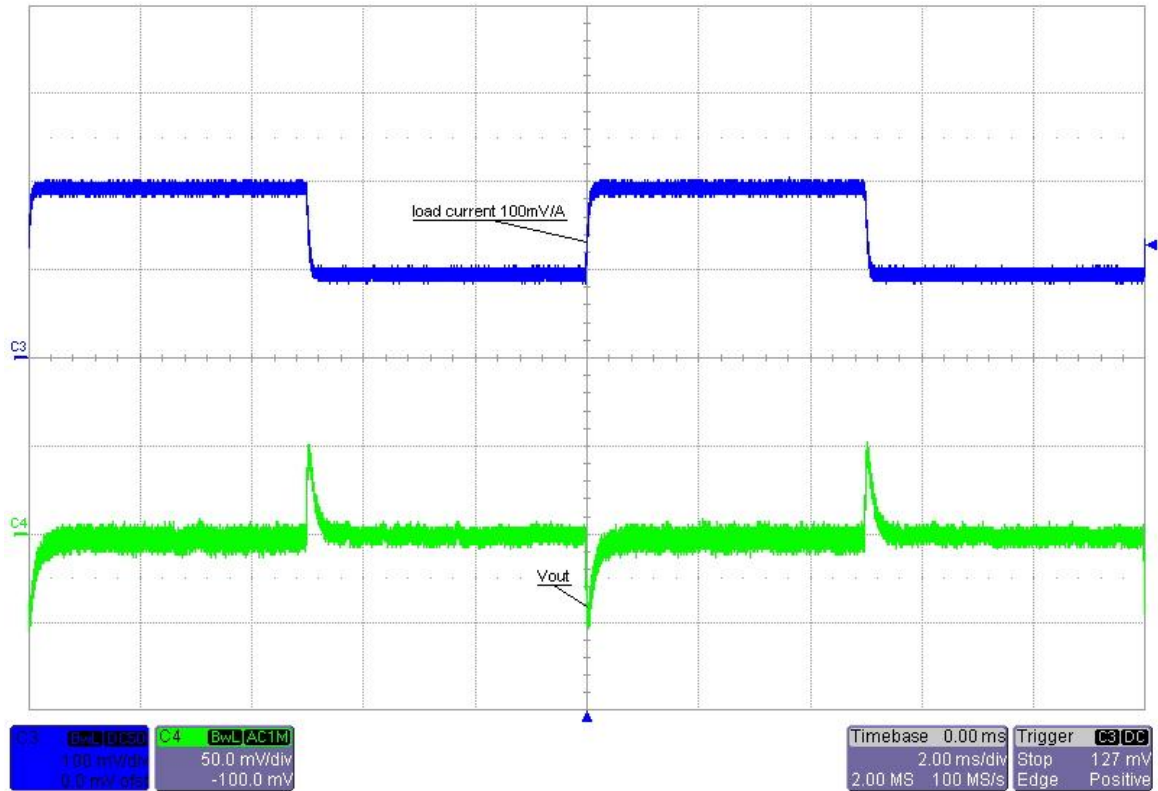
Input voltage = 12VDC

Load current = full load (2.0A)



## 7 Load Transients

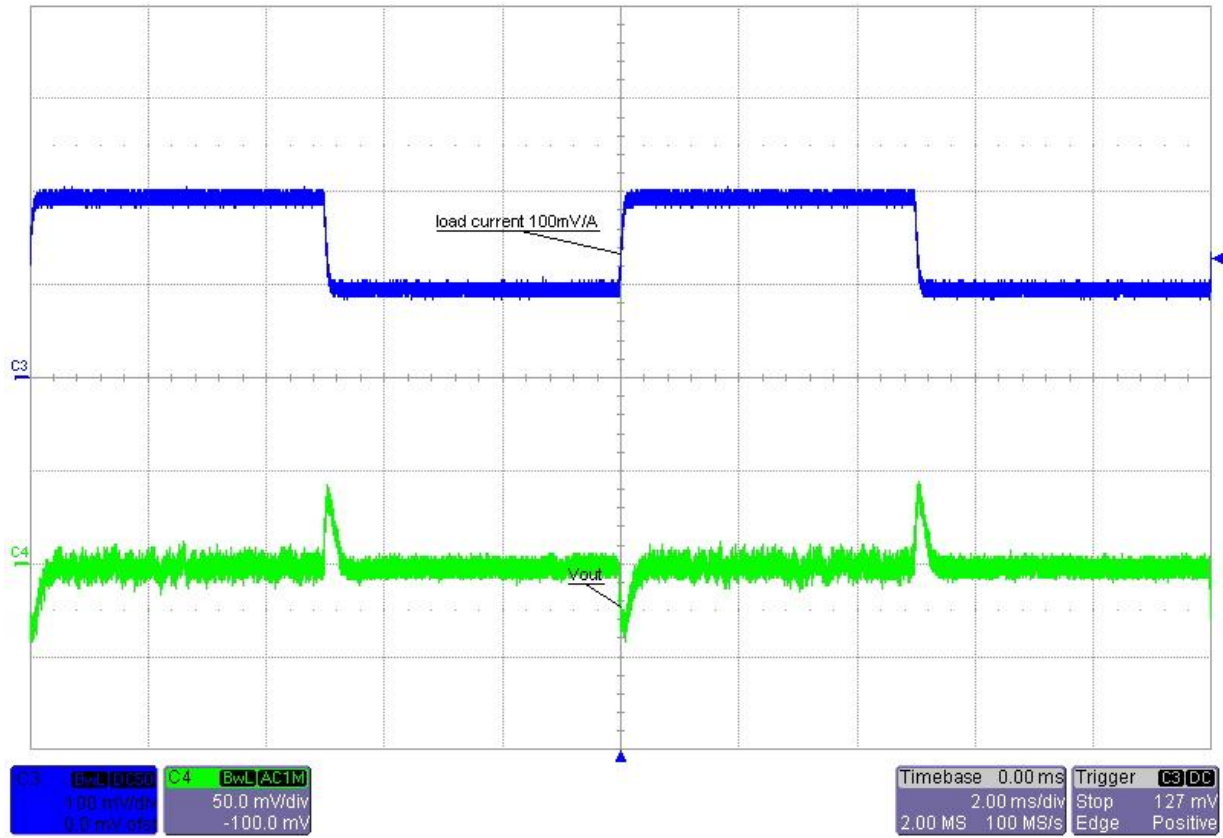
Input voltage = 12VDC  
Load current = 1.0A to 2.0A



# PMP10004\_RevB Test Results



Input voltage = 6VDC  
Load current = 1.0A to 2.0A

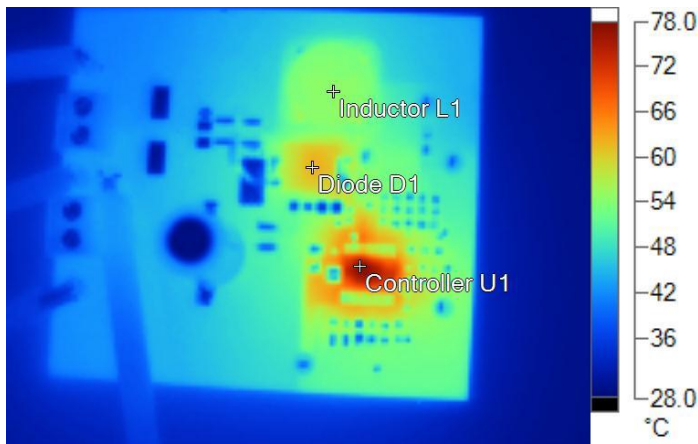




## 8 Thermal Analysis

The images below show the infrared images taken from the FlexCam after 15min at full load.

Input voltage = 12V  
 Output power = 10W (5.0V@2.0A)  
 Ambient temperature = 25°C  
 No heatsink, no airflow



Name	Temperature	
Controller U1	78.0°C	
Diode D1	62.0°C	
Inductor L1	54.4°C	

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