

## **PMP11668 Test Results**

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### **1 General**

#### 1.1 Purpose

This test report is to provide the detailed data for evaluating and verifying the PMP11668 which employs one Buck Controller ---- LMR23630 and a USB Charging Port Controller ---- TPS254900-Q1.

#### 1.2 Reference Documentation

Schematic: PMP11668\_Schematic.pdf

Layout: PMP11668\_Layout.zip

BOM: PMP11668\_Bom.pdf

#### 1.3 Test Equipment

Multi-meter (current): Fluke 287C

Multi-meter (voltage): Fluke 287C

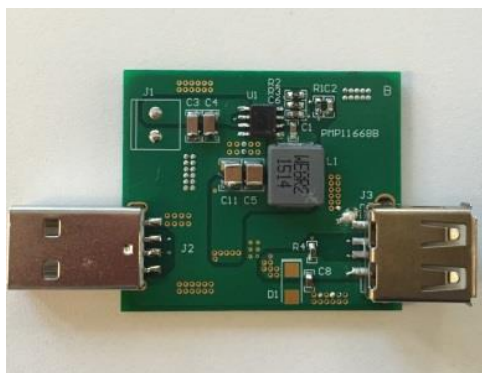
DC Source: Chroma 62012P-600-8

E-Load: Chroma 63103A module

Oscilloscope: Tektronix DPO3054

Electrical Thermography: Fluke Ti9

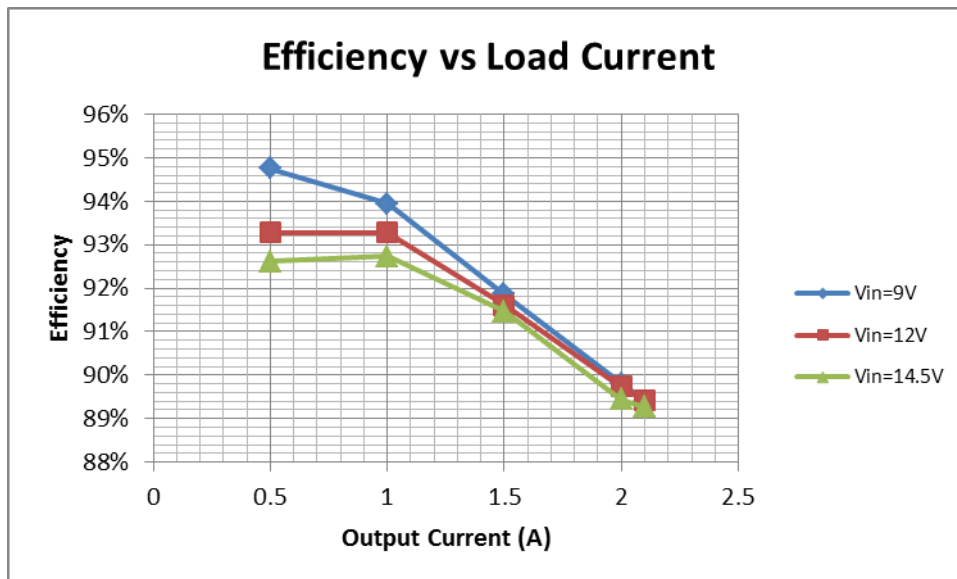
#### 1.4 Photos



## 2 Performance Data and Waveform

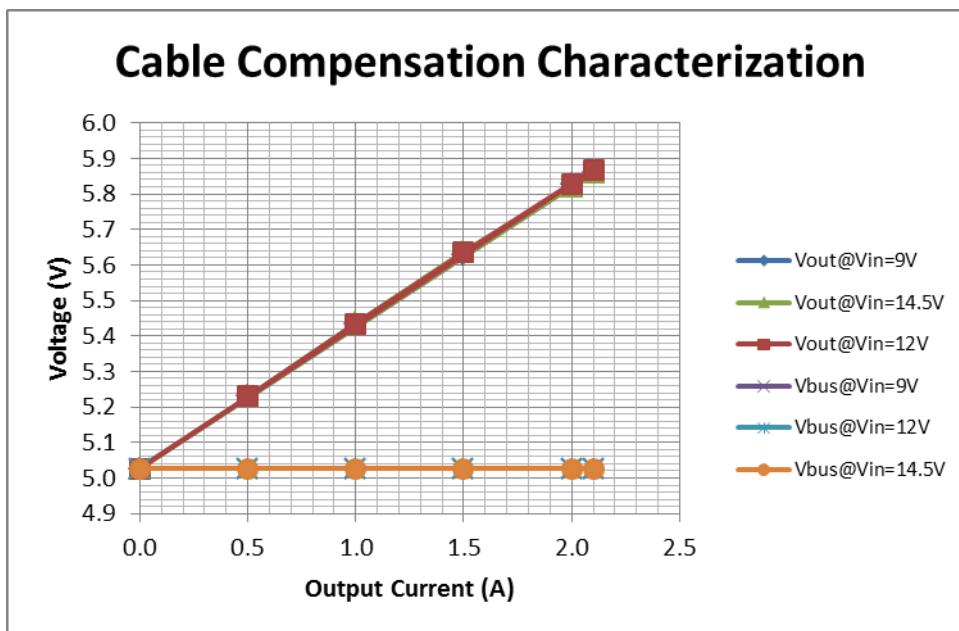
### 2.1 Efficiency

Vin (V)	Iin (A)	Vout (V)	Iout (A)	Efficiency
9.010	0.013	5.030	0.010	41.76%
8.960	0.308	5.230	0.500	94.76%
8.900	0.650	5.435	1.000	93.95%
8.814	1.046	5.630	1.500	91.86%
8.730	1.490	5.827	2.000	89.81%
8.710	1.586	5.860	2.100	89.39%
12.010	0.013	5.029	0.010	31.32%
11.980	0.234	5.230	0.500	93.28%
11.940	0.488	5.435	1.000	93.28%
11.890	0.776	5.635	1.500	91.61%
11.840	1.097	5.828	2.000	89.74%
11.830	1.170	5.868	2.100	89.41%
14.500	0.012	5.029	0.010	26.57%
14.480	0.195	5.230	0.500	92.61%
14.450	0.406	5.436	1.000	92.73%
14.400	0.642	5.637	1.500	91.46%
14.370	0.906	5.820	2.000	89.45%
14.360	0.960	5.860	2.100	89.27%



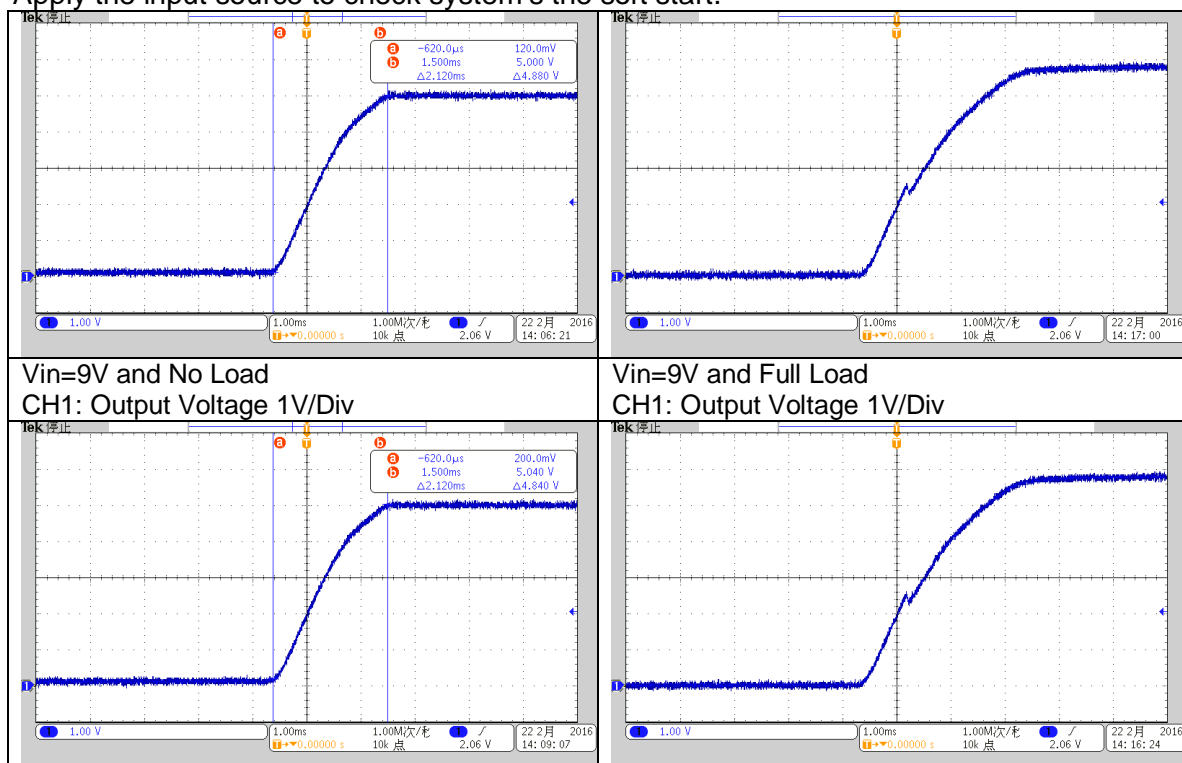
## 2.2 Cable Compensation

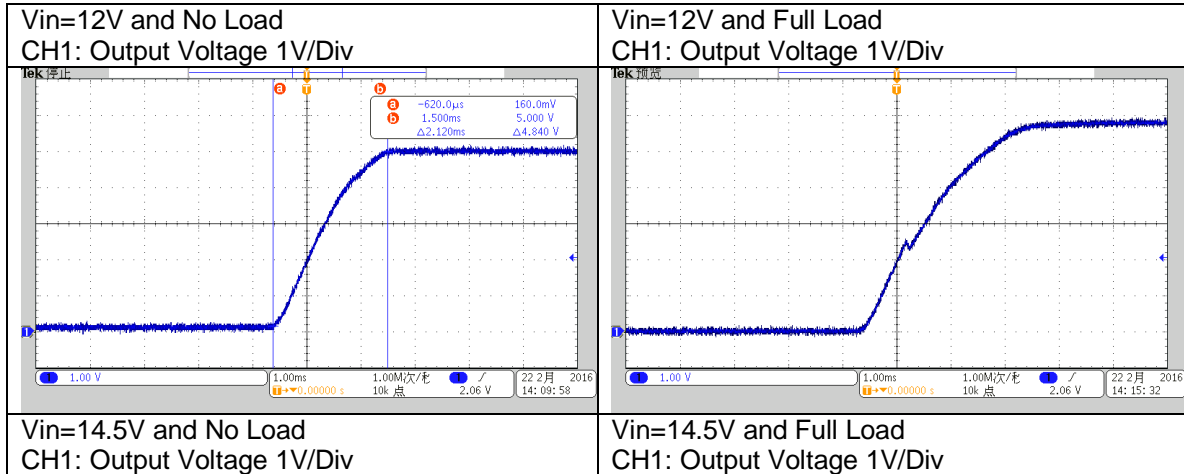
Test the output voltage of DCDC converter with the increase of load current.



## 2.3 Start Up

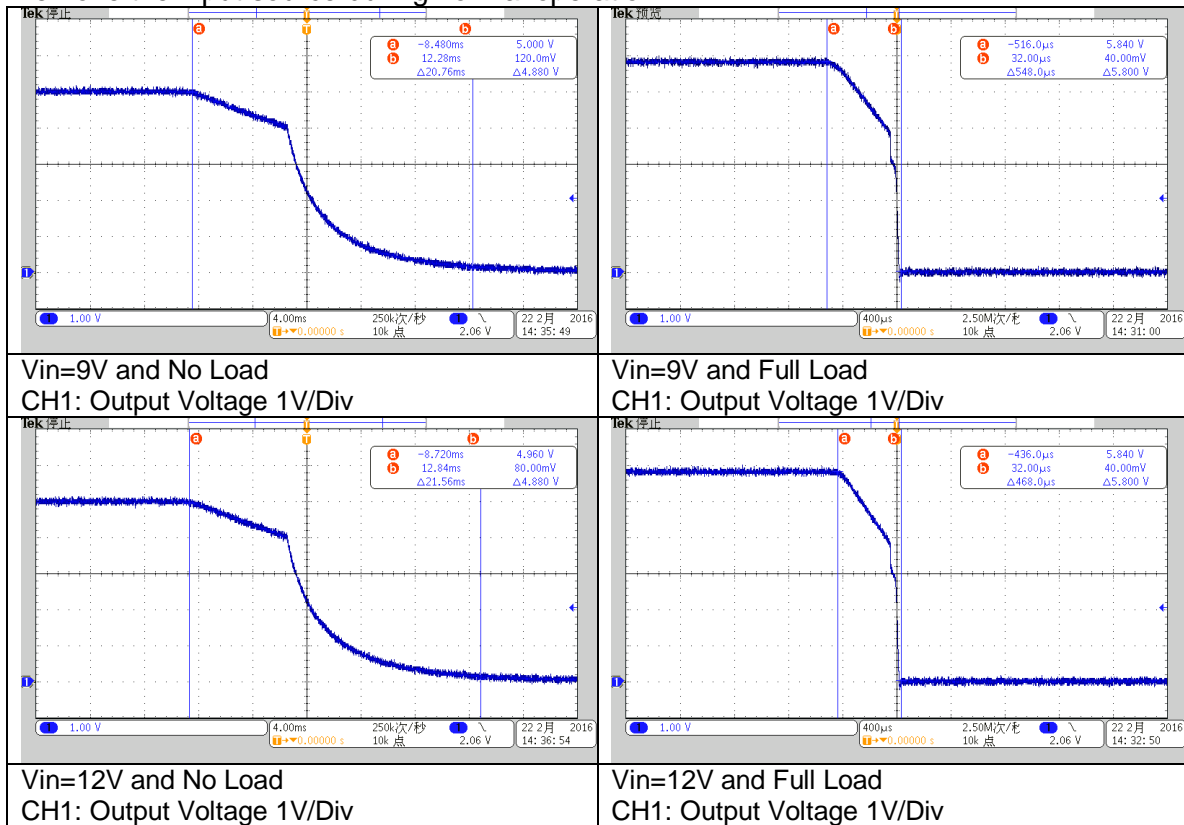
Apply the input source to check system's the soft start.

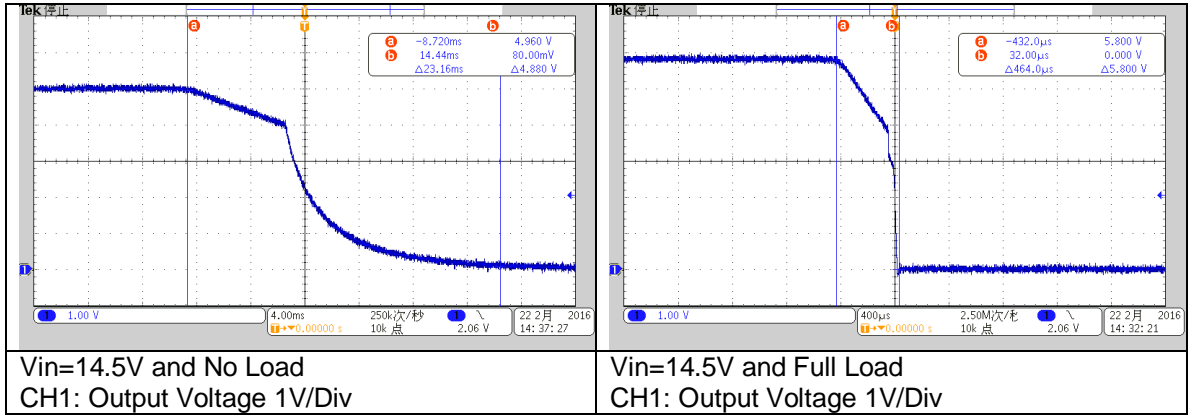




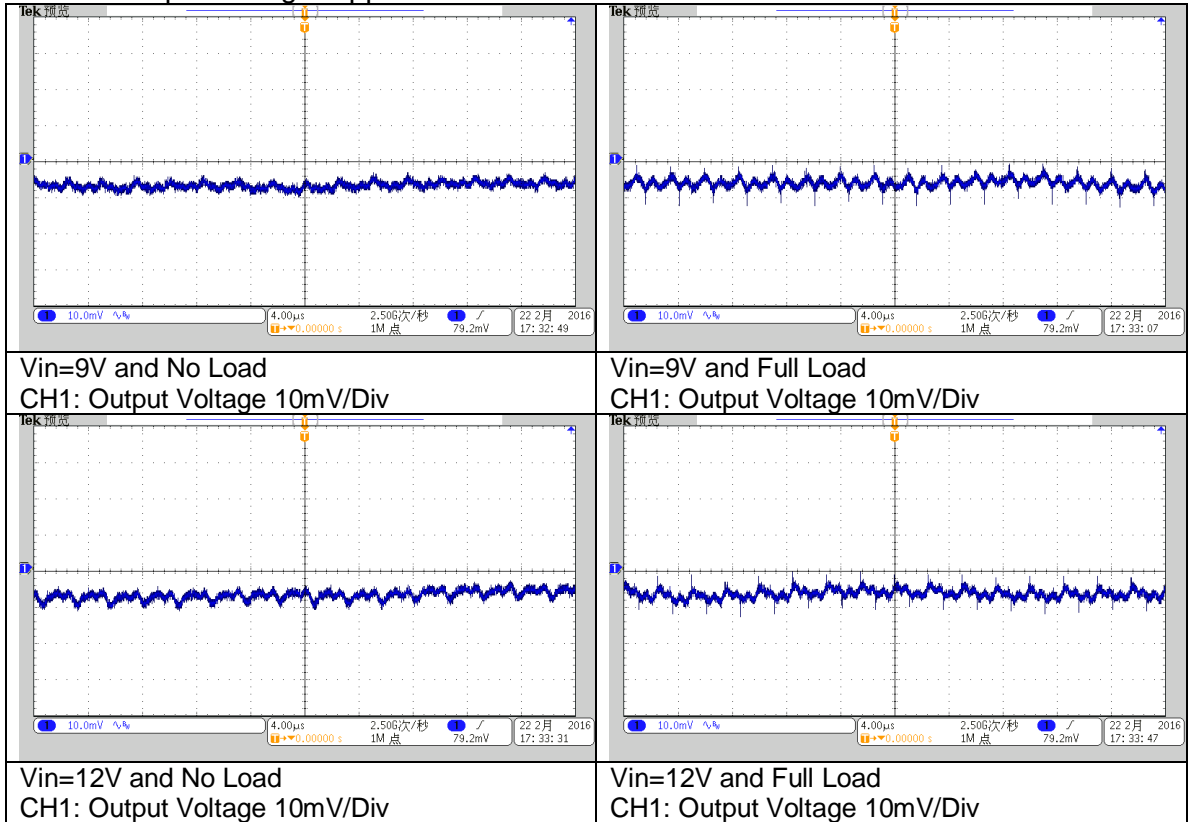
## 2.4 Shut Down

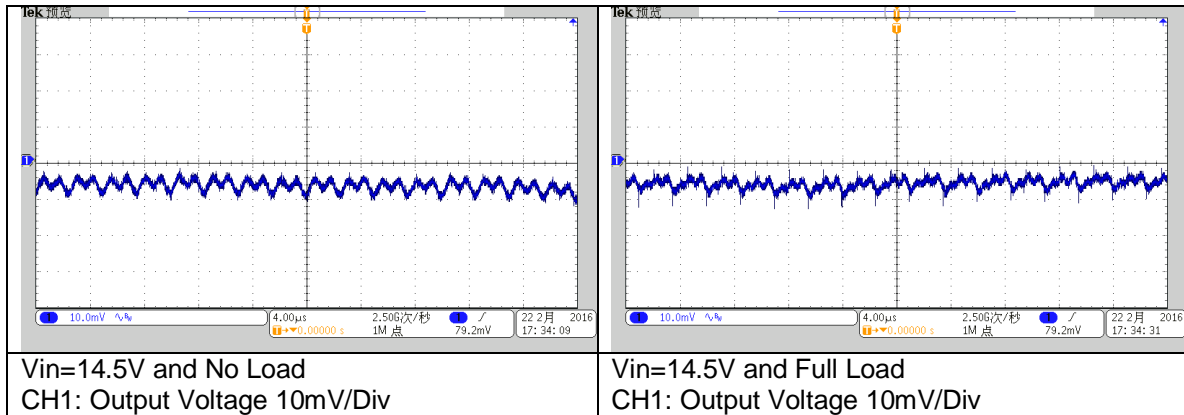
Remove the input source during normal operation.



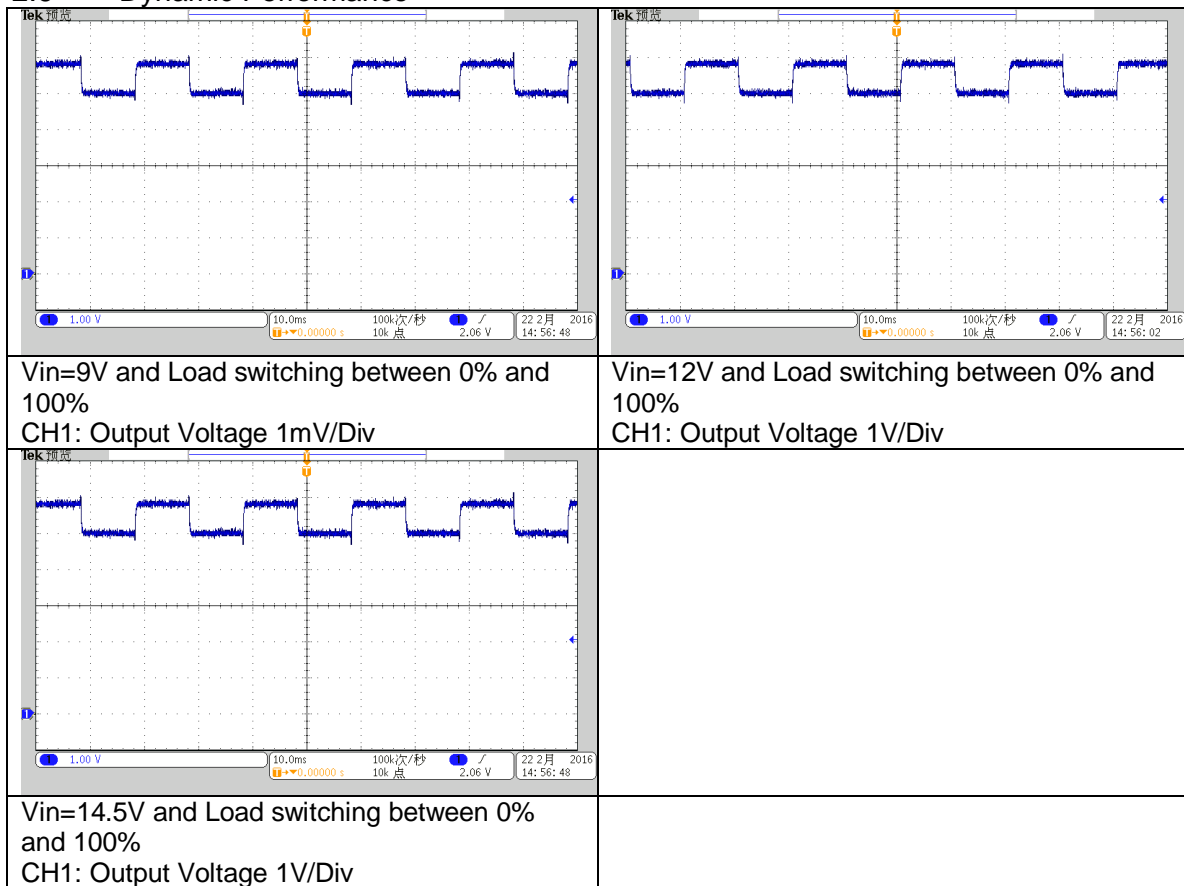


## 2.5 Output Voltage Ripple



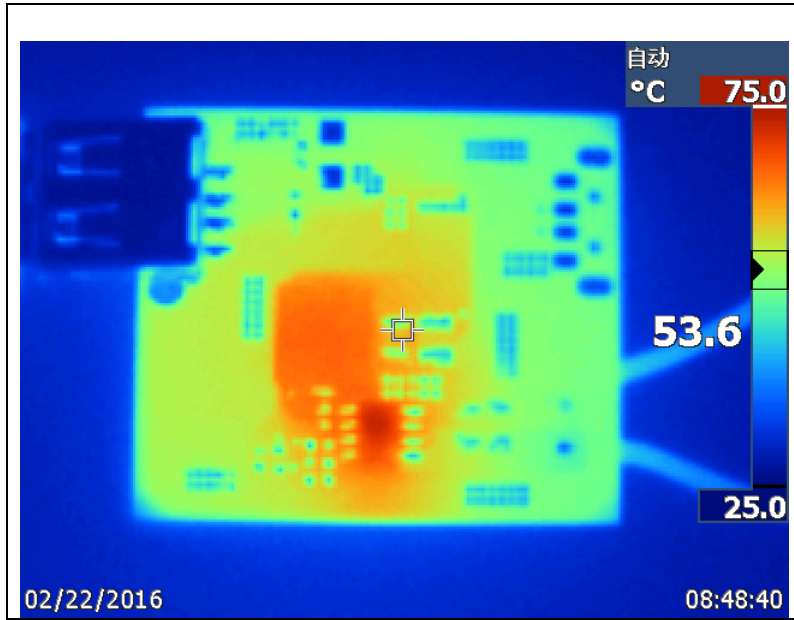


## 2.6 Dynamic Performance



## 2.7 Thermal Performance

The board is applied a 12V DC voltage and runs about 10min for warming up.



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