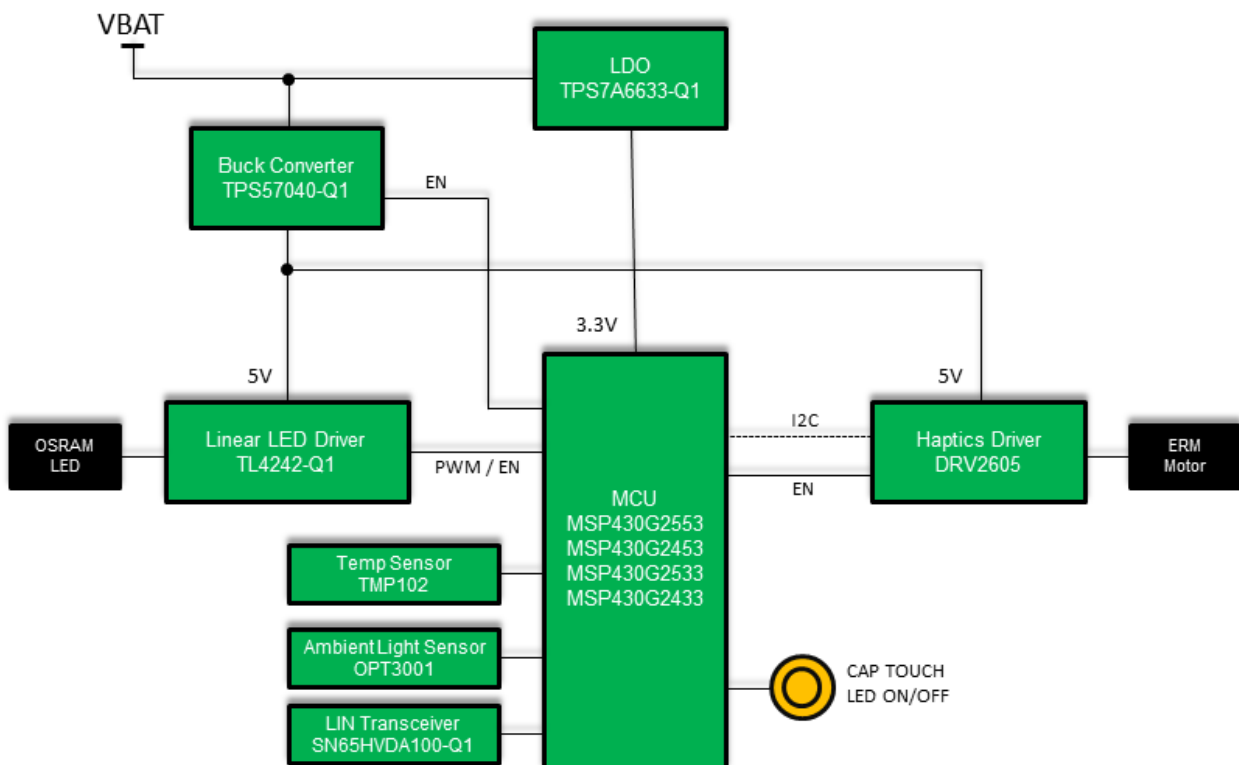


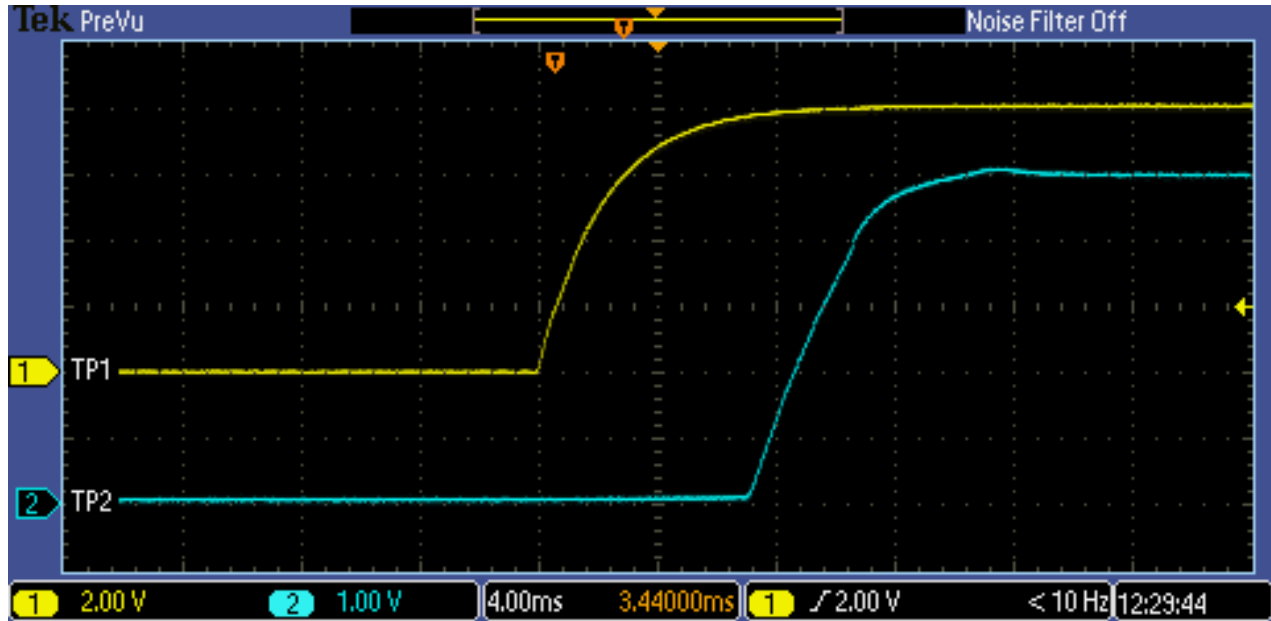
The following items are included in this test report:

- A. Startup Power Sequence off 8V Power Supply: 5V Buck Output
- B. Startup Power Sequence off 12V Power Supply: 3.3V LDO Output and 5V Buck Output
- C. Dome Light LED Turning ON: 5V Buck Output and LED PWM Signal
- D. Dome Light LED Dimming: 5V Buck Output and LED PWM Signal
- E. Dome Light LED Turning OFF: 5V Buck Output and LED PWM Signal
- F. MSP430 Cap Touch Power Designer Calculation
- G. Thermal Imaging



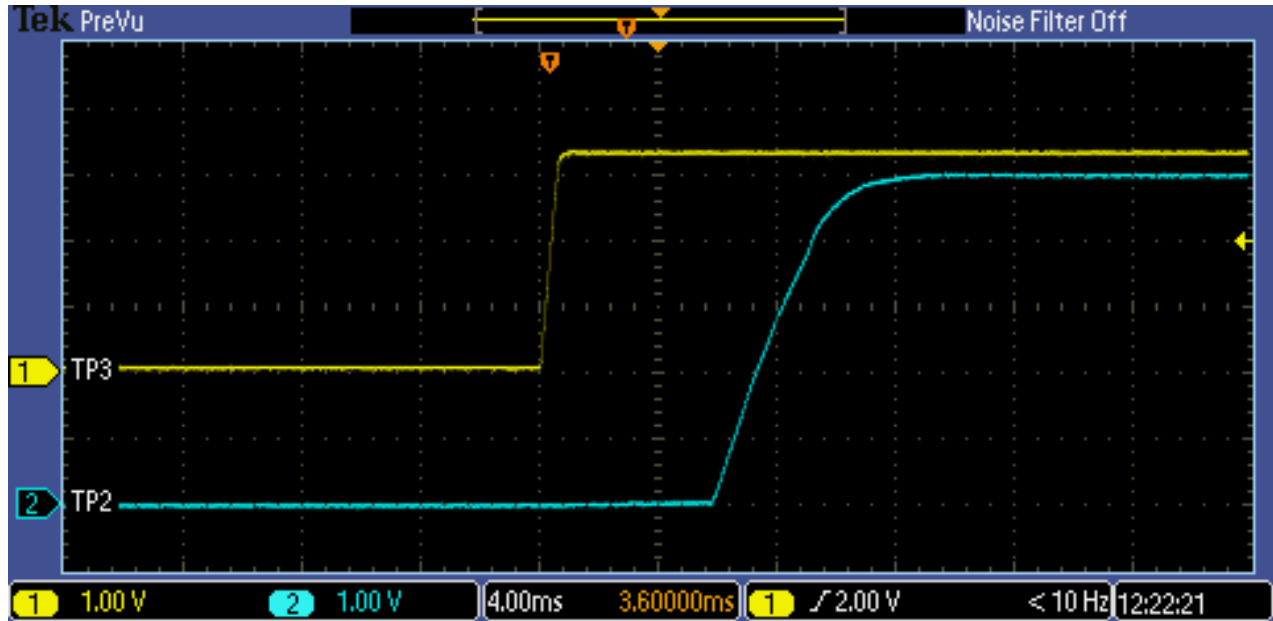
A. Startup Power Sequence off 8V Power Supply: 5V Buck Output

The following waveforms illustrate the startup sequence of the 5V Buck Converter Output after an 8V Power Supply was connected to TP1.



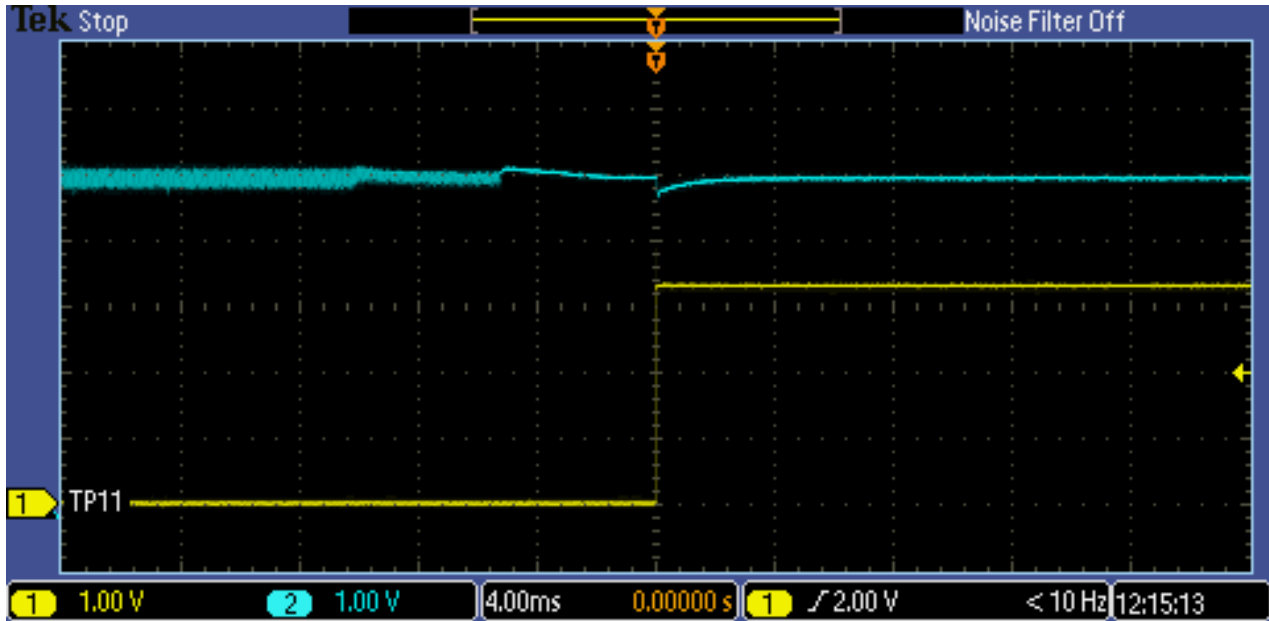
B. Startup Power Sequence off 12V Power Supply: 3.3V LDO Output and 5V Buck Output

The following waveforms illustrate the startup sequence of the 3.3V LDO Output and the 5V Buck Converter Output after a 12V Power Supply was connected to TP1.



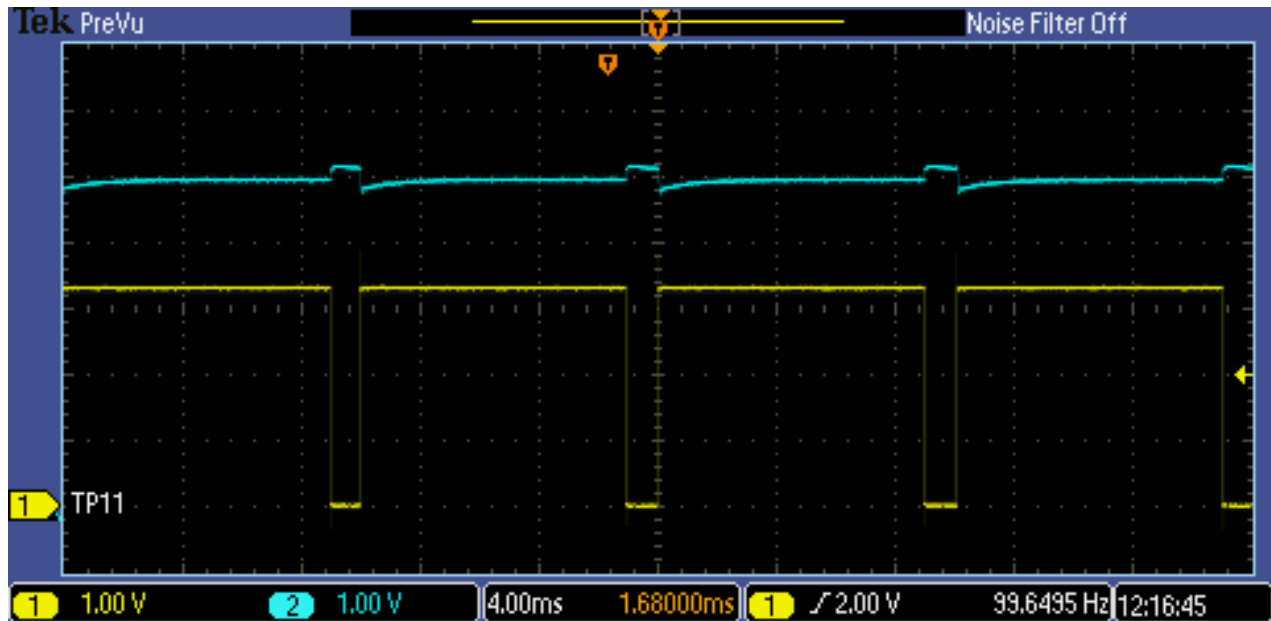
C. Dome Light LED Turning ON: 5V Buck Output and LED PWM Signal

The following waveforms illustrate the 5V Buck Converter Output and the LED PWM Signal while the Dome Light LED was turning on. This test was performed with a 12V Power Supply connected to TP1.



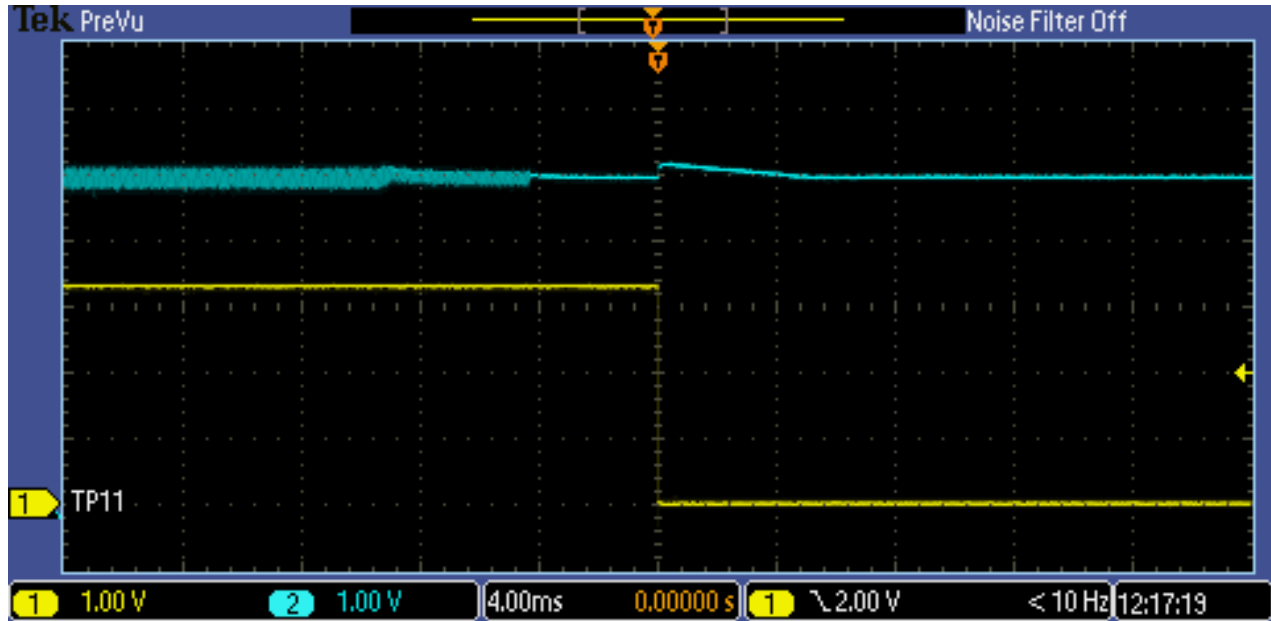
D. Dome Light LED Dimming: 5V Buck Output and LED PWM Signal

The following waveforms illustrate the 5V Buck Converter Output and the LED PWM Signal while the Dome Light LED was dimming. This test was performed with a 12V Power Supply connected to TP1.



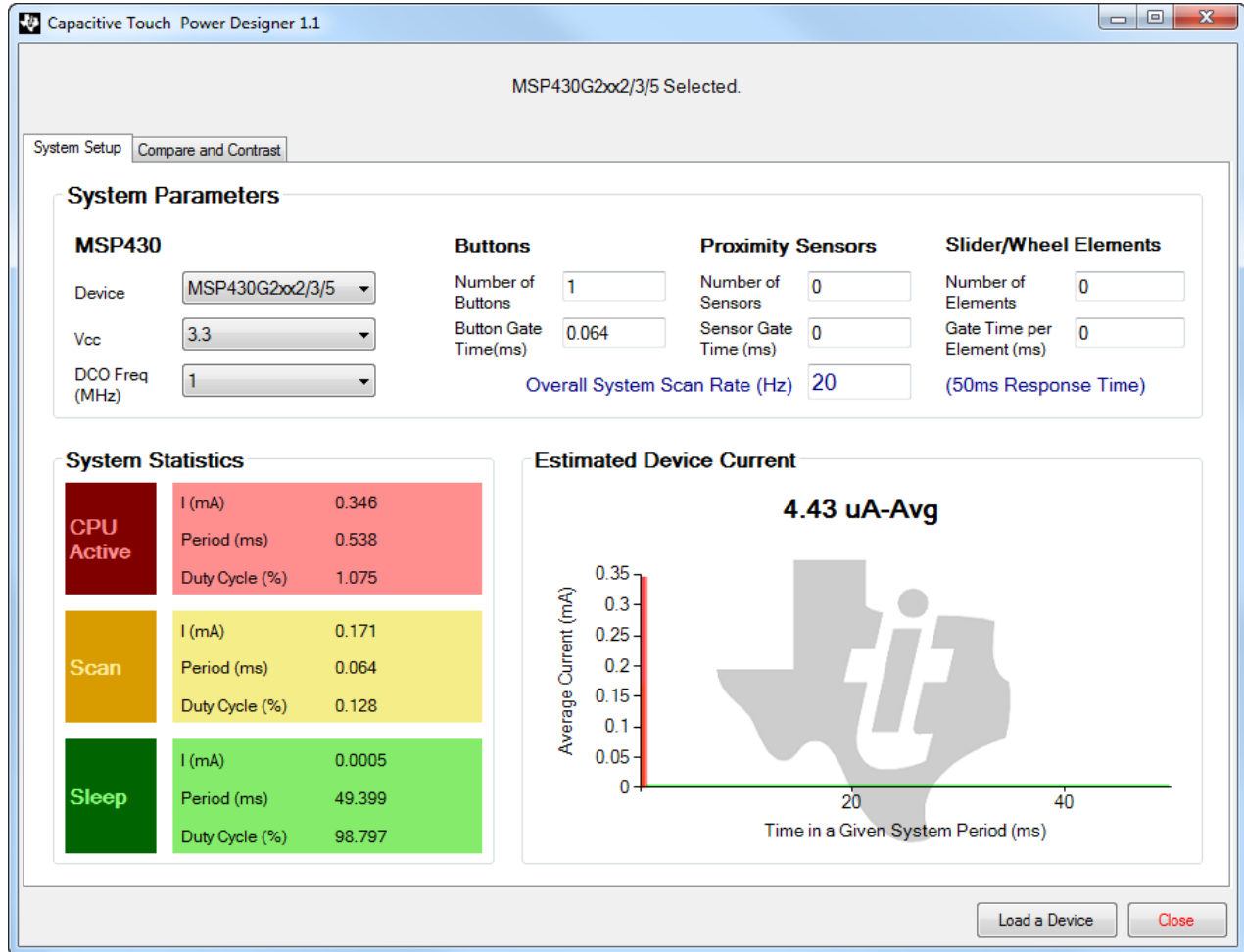
E. Dome Light LED Turning OFF: 5V Buck Output and LED PWM Signal

The following waveforms illustrate the 5V Buck Converter Output and the LED PWM Signal while the Dome Light LED was turning off. This test was performed with a 12V Power Supply connected to TP1.



F. MSP430 Cap Touch Power Designer Calculation

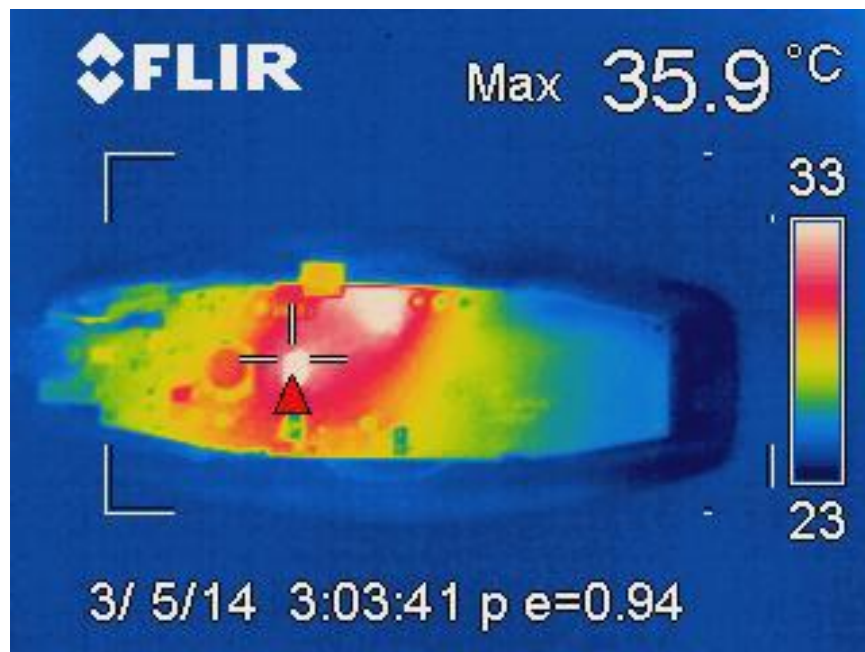
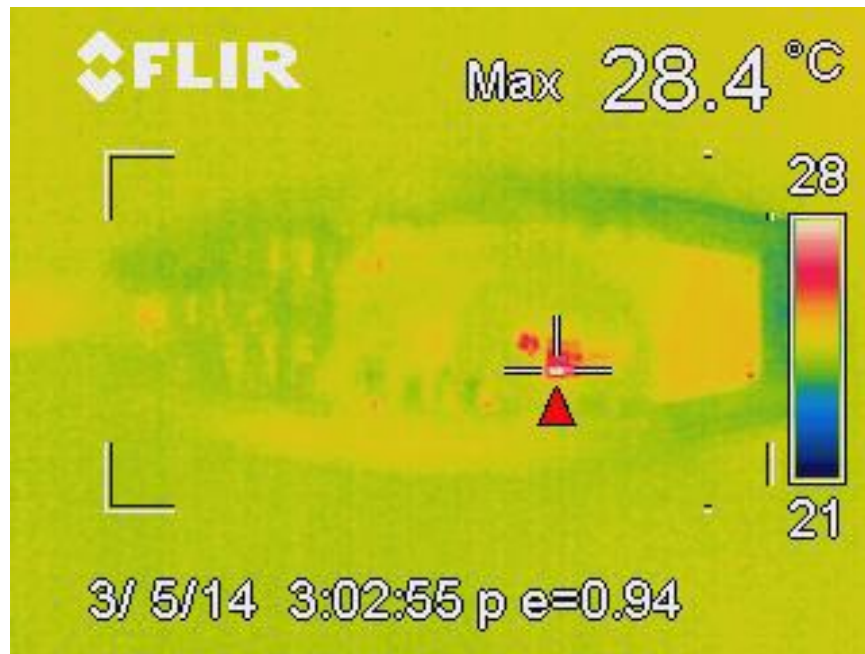
The following calculation provides the estimated current consumption of the MSP430 microcontroller according to the reference design hardware and software with the Dome Light LED turned off.

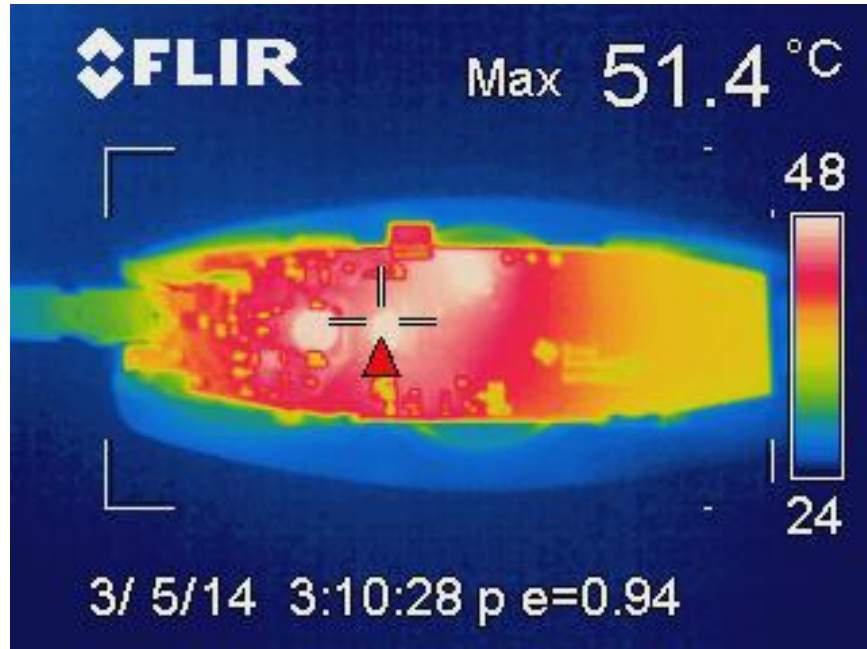


G. Thermal Imaging

The following are thermal images of the reference design hardware captured at startup, immediately after the LED and Haptic Effect were turned on, and several minutes after the LED and Haptic Effect had been left on respectively.

These images were taken with a 12V Power Supply connected to J1.





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