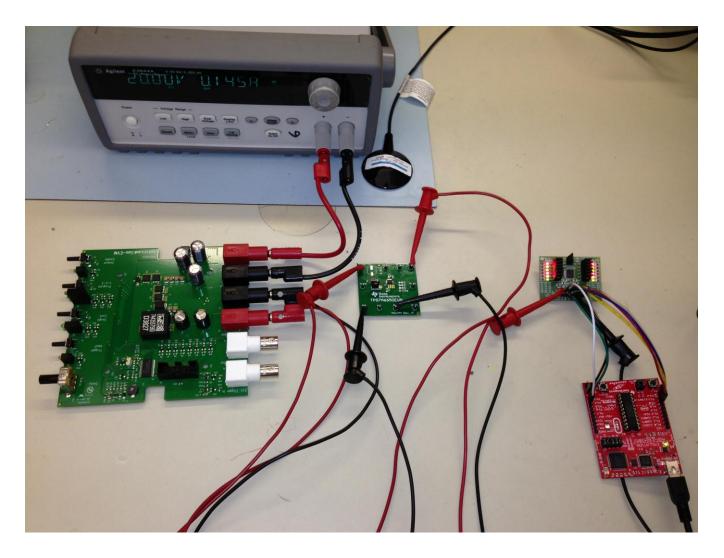


TIDA-00278 TI Design Test Data Automotive Cluster Telltale Driver Reference Design

The following test data was collected using Texas Instrument's <u>AutoCrankSim-EVM</u> and <u>MSP-EXP430G2 LaunchPad</u> in addition to the TIDA-00278 hardware.

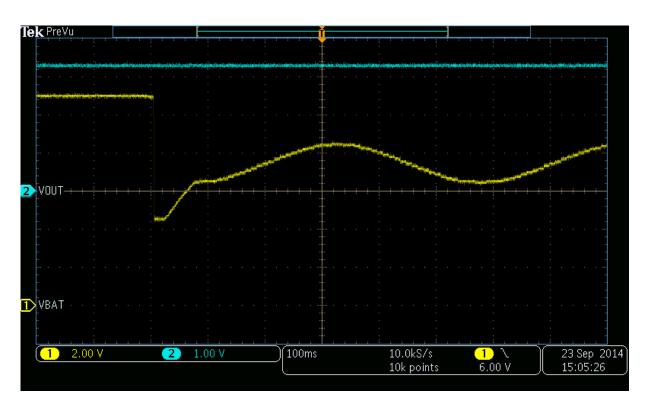
The Volkswagen Cold-Start Test Pulse source code of the Cranking Simulator was modified to provide a minimum voltage of 4.5V at the input of the TPS7A6633-Q1 hardware. The LaunchPad was utilized to control the illumination of the 12 Telltale LEDs through the serial communication interface provided on the TLC6C5912-Q1 hardware.

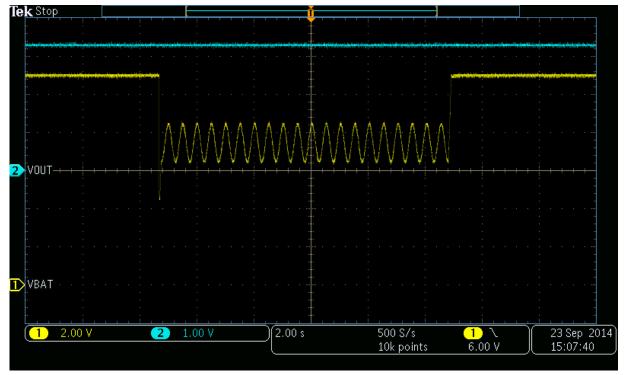
The test setup used to collect the test data presented in this report is illustrated below.





The waveforms below illustrate the 3.3V output voltage stability of the TPS7A6633-Q1 hardware during the Volkswagen Cold-Start Test Pulse. With a stable 3.3V supply voltage, the current flowing through the 12 Telltale LEDs on the TLC6C5912-Q1 hardware will be stable as well.





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