Figure 1: Simulation Plot of Vin from the Barrel Jack and Vout from the Buck Converter
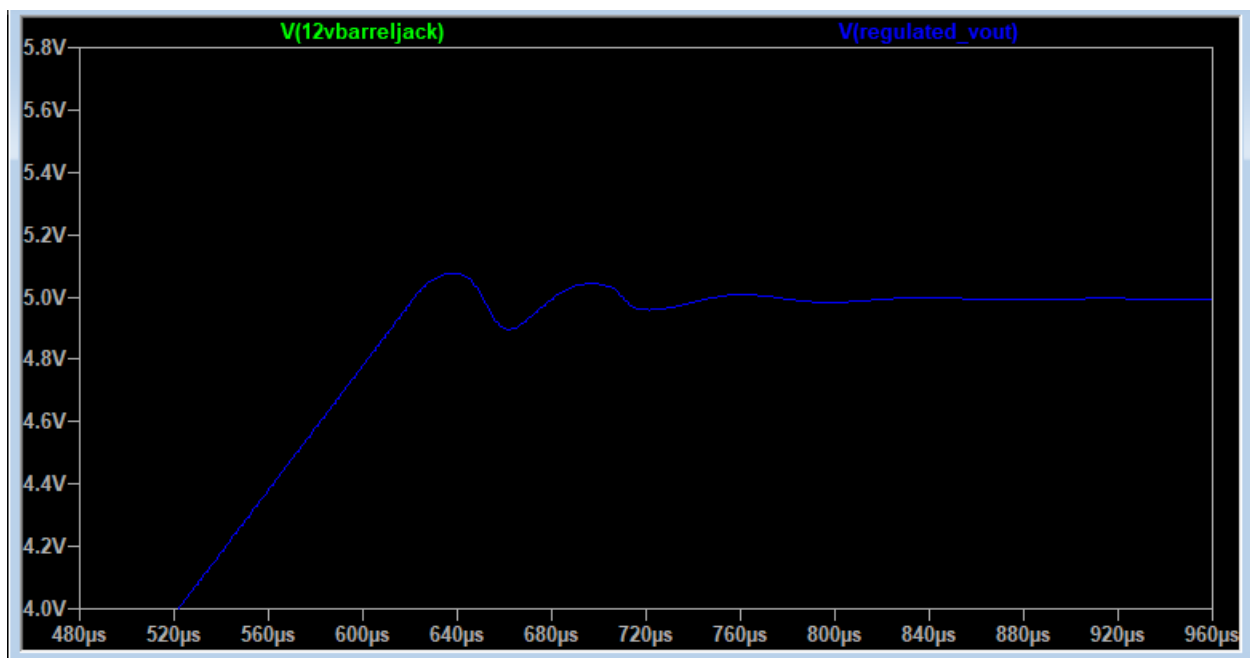

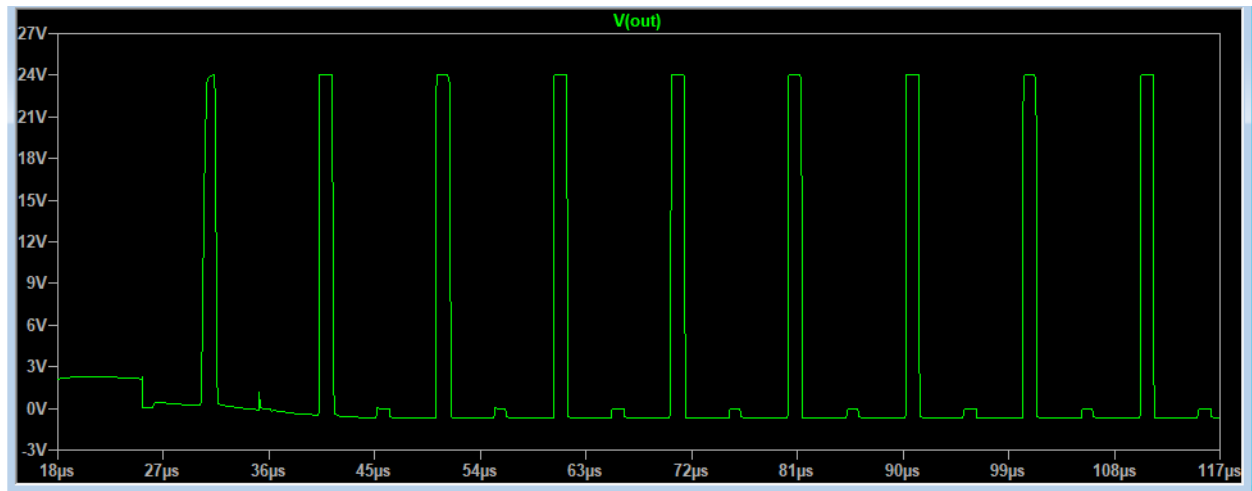Figure 2: Simulation of the Slightly Underdamped Response of the Buck Converter

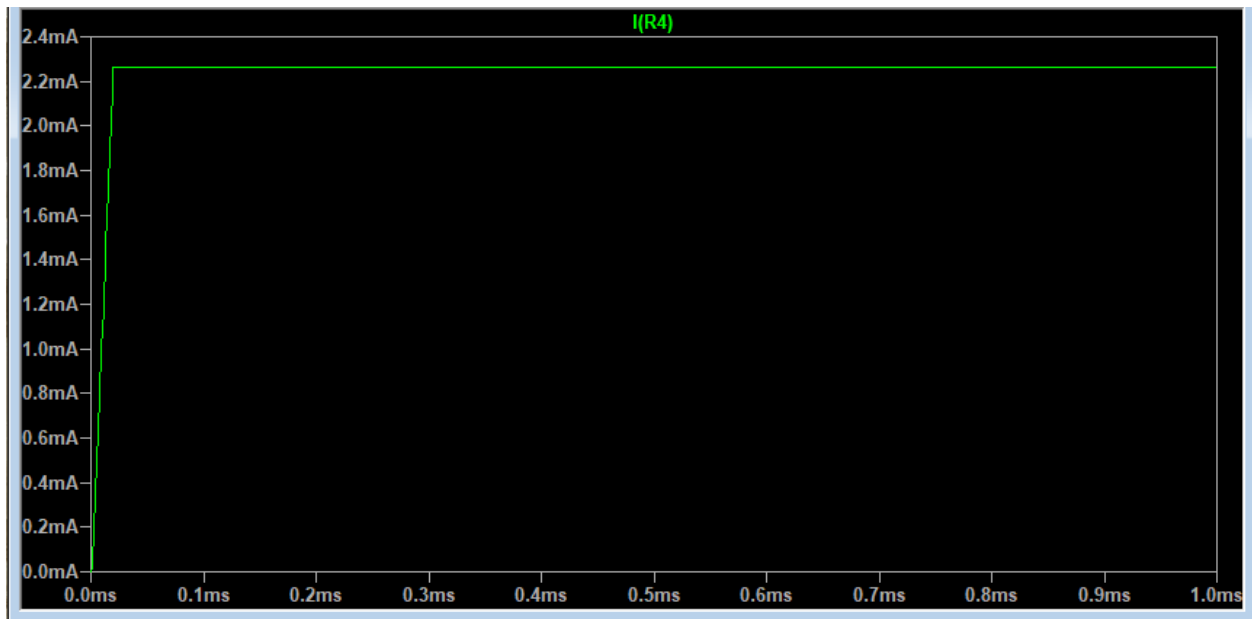Figure 3: Plot showing the output voltage of the motor driver

Figure 4: Plot showing the input current sourced by the Motor Driver
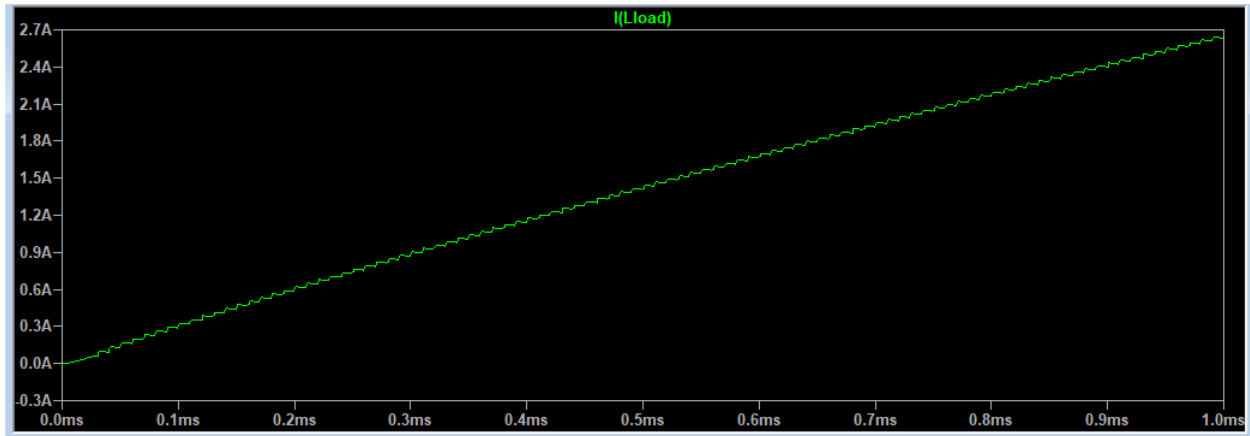
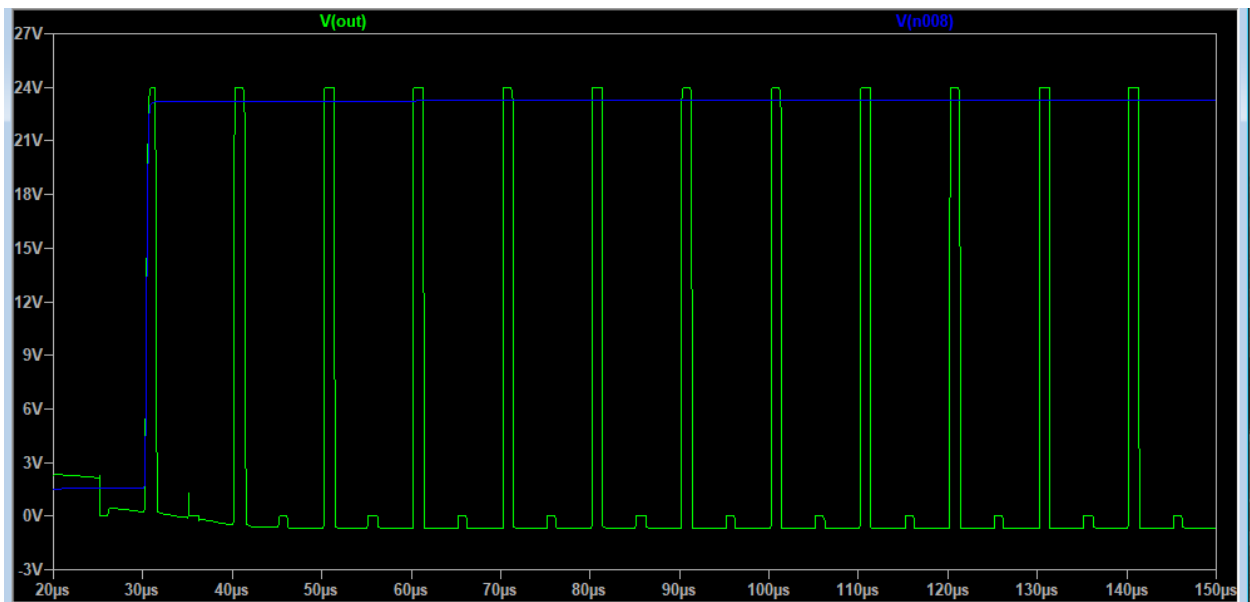Figure 5: Plot showing the output current sank to the motor by the motor driver

Figure 6: Plot of the motor driver output voltage (in green) and the voltage across the Motor Status LED after the holdup circuit

Figure 7: Voltage Across (Green) and Current through (Blue) the Power Supply Status LED