

The BoosterPack has low-side current shunt sense for each half-bridge (phases A, B, and C). The current sense setup takes advantage of the DRV8305's triple shunt current amplifiers (phases A, B, and C). The configuration for the low-side sense is shown in Figure 9. The differential amplifier senses voltage across a  $0.007\text{-}\Omega$  power sense resistor with differential connections. The differential voltage is then amplified by 10 V/V and centered at 1.65 V to allow for sensing both positive and negative currents. The sense resistor has been scaled for 0- to 20-A peak currents.

