Figure 15. AC FFT for channel 3 (AIN3) using on-board isolated power, a 0V to 10V 1kHz sine wave input signal, 17kΩ input impedance, a 20ksp sample rate, and a Blackman-Harris window.
Figure 16. DC histogram for channel 3 (AIN3) using on-board isolated power; a 5V input signal; 17kΩ input impedance; a 20ksp sample rate; 65,536 samples; a code spread of 8 LSBs with 96.07% of the codes falling within the four center LSBs; and a standard deviation of 1.006.
Figure 17. AC FFT for channel 3 (AIN3) using external power, a 0 to 10V 1kHz sine wave input signal, 17kΩ input impedance, a 20ksp sample rate, and a Blackman-Harris window.
Figure 18. DC histogram for channel 3 (AIN3) using external power; a 5V input signal; 17kΩ input impedance; a 20ksps sample rate; 65,536 samples; a code spread of 10 LSBs with 96.77% of the codes falling within the four largest LSBs; and a standard deviation of 0.961.