Analog Level Shifter

APPLICATION NOTE MI-AN-010

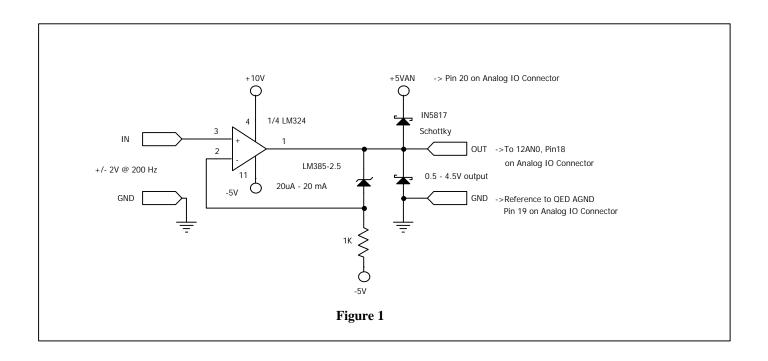
Summary

The following explains how to convert a $\pm 2V$ signal to a 0.5-4.5 V signal on the QED board.

Description

The circuit below (Figure 1) takes a ±2V signal and converts it to a 0.5 - 4.5V signal. All connections are to

the Analog I/O connector on the QED board. If the negative supply available is not -5V, then the supply must be at least -3V. The resistor should be resized such that 20•A-20mA of current is going through the LM385-2.5 in all conditions. This will ensure a 2.5V drop across the zener. The Schottky diodes clamp the input voltage to the valid input range of the A/D converter. Any schottky diode will work.



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