

Using a Silicon Designs Differential Accelerometer Module with an Oscilloscope

Connecting the AOP + & AON- signal to an oscilloscope using a conventional oscilloscope probe will ground the AON - signal to the case of the device, can cause signal problems, and may cause the accelerometer to overheat and eventually fail.

Use a differential probe to make sure both AOP + and AON - remain isolated from the ground of the oscilloscope.

Single Ended Probe



Differential Probe



Differential probes tend to be expensive so if you have at least a (2) channel oscilloscope there is a workaround that will allow you to view the signal in differential mode.

With a multi channel oscilloscope connect AOP + to Channel A and AON - to Channel B. Using the MATH functions do an A -B the output is "pseudo" differential. Oscilloscope probes are grounded to the black (-) power wire.

This information is valid for all Silicon Designs 2012, 2210, 2220, 2240 & 2260 single axis modules and all 2422, 2460, 2470 & 2480 tri-axis modules.