

■ CLASS DISCUSSION ITEM 9.6

Encoder 1X Circuit with Jitter

An incremental encoder connected to a 1X quadrature decoder circuit is experiencing a small rotational vibration with an amplitude roughly equivalent to one quadrature pulse width. During this vibration, you observe many pulses on both the CW and CCW lines but no net change in the output of the up-down counter. Explain why this happens.