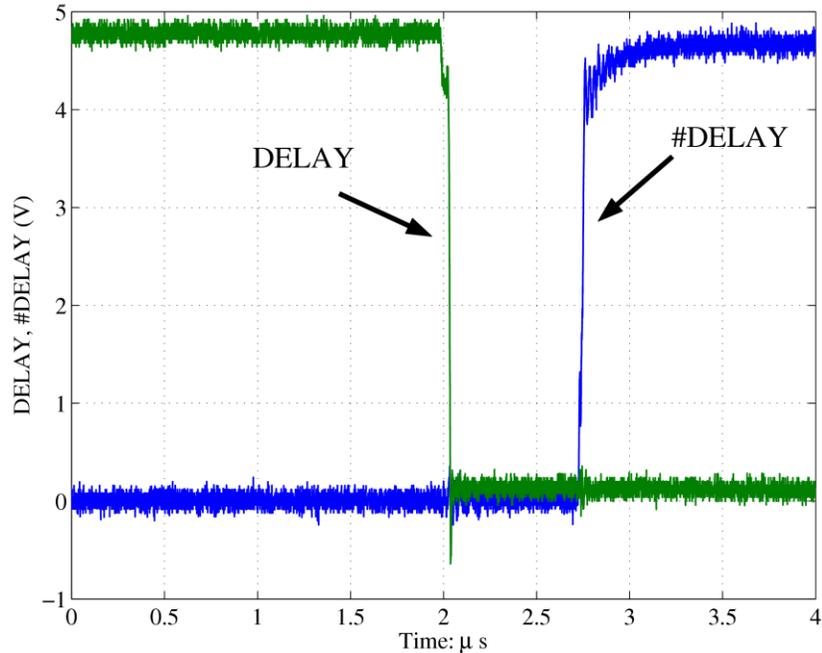


Making Delay Measurements

In the lab, you need to measure the delay created by your “Delay Circuit.” If the input to the circuit is a “falling edge,” then you should see something like the following at the two outputs. Note that there is about 750ns between the two edges.



How do you measure this on the scope? With the Tektronix scope, we need to try something like the following:

- Measure the DELAY signal with Channel 1 (Yellow)
- Measure the #DELAY signal with Channel 2 (Blue)
- Press the “Trigger Menu” button, and select the following:
 - Source: Channel 1
 - Type: Edge
 - Slope: Falling
 - Coupling: DC
 - Mode: Auto
- You may then need to move the trigger location using the trigger knob. Once the signal is “triggered,” both of the waveforms should be stationary on the screen.
- As necessary, use the Horizontal adjust knob to move the waveforms left and right .
- Zoom in on the “delay” and use the cursors to measure it

The above procedure allows you to measure the “delay” shown in the figure above. To measure the other “delay,” which is the one that occurs when the signal DELAY transitions from low to high, change the “Slope” under the “Trigger Menu” to “Rising.”