IR TV Remote

Last updated 3/26/18

TV Remote

- Remote Control Operation
  - PWM output
  - 40KHz waveform
  - Pulse train width determines '1' or '0'
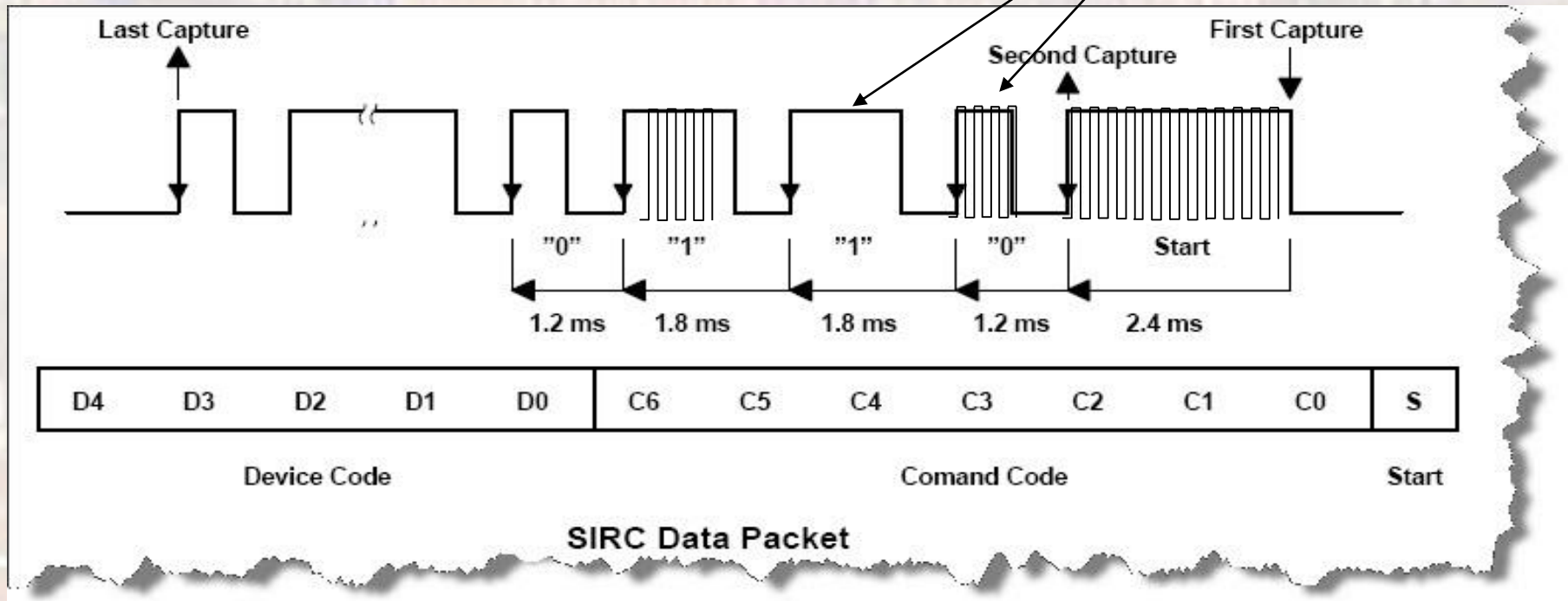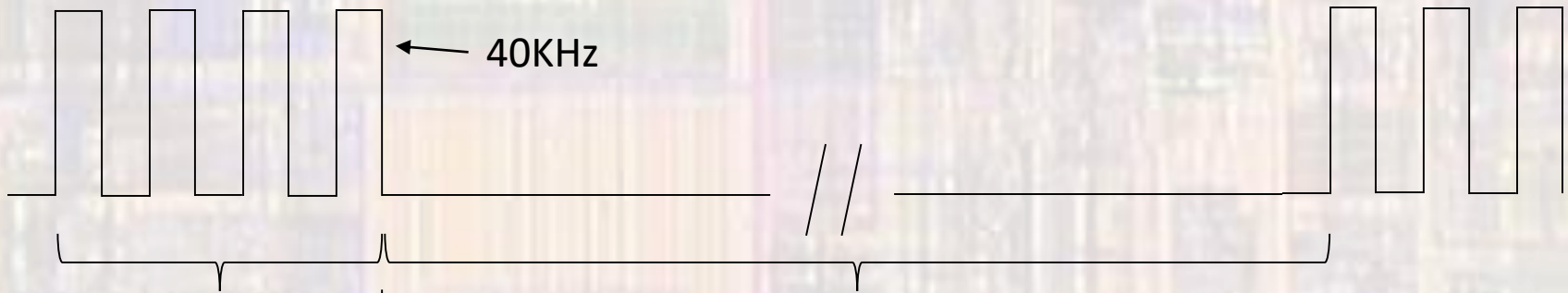
← 40KHz

TV Remote

- Remote Control Operation
  - PWM output
  - 12 bit waveform
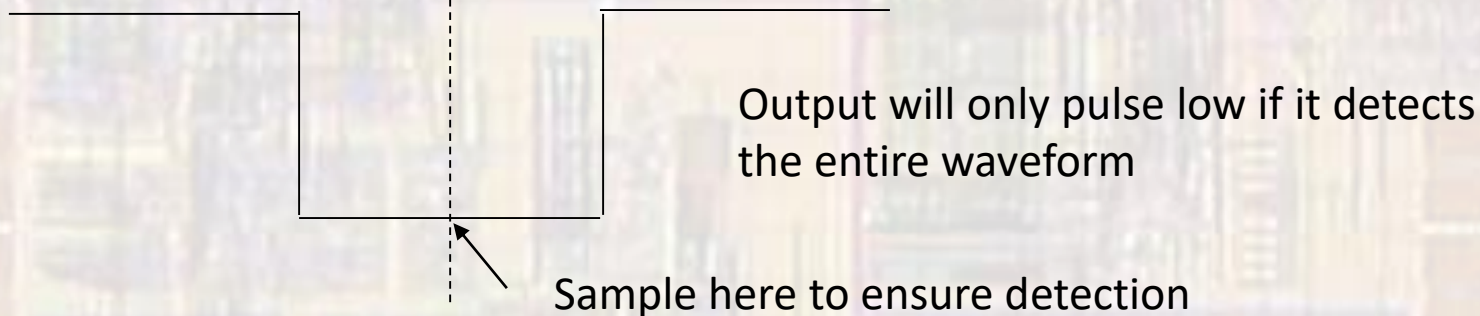 - Pulse train width determines '1' or '0'

pulses are 40KHz pulse trains

SIRC Data Packet

TV Remote

- ## Remote Control Operation
  - ### Detector captures the edge of the pulse train

← 40KHz

- ## Detector output

Output will only pulse low if it detects the entire waveform

Sample here to ensure detection
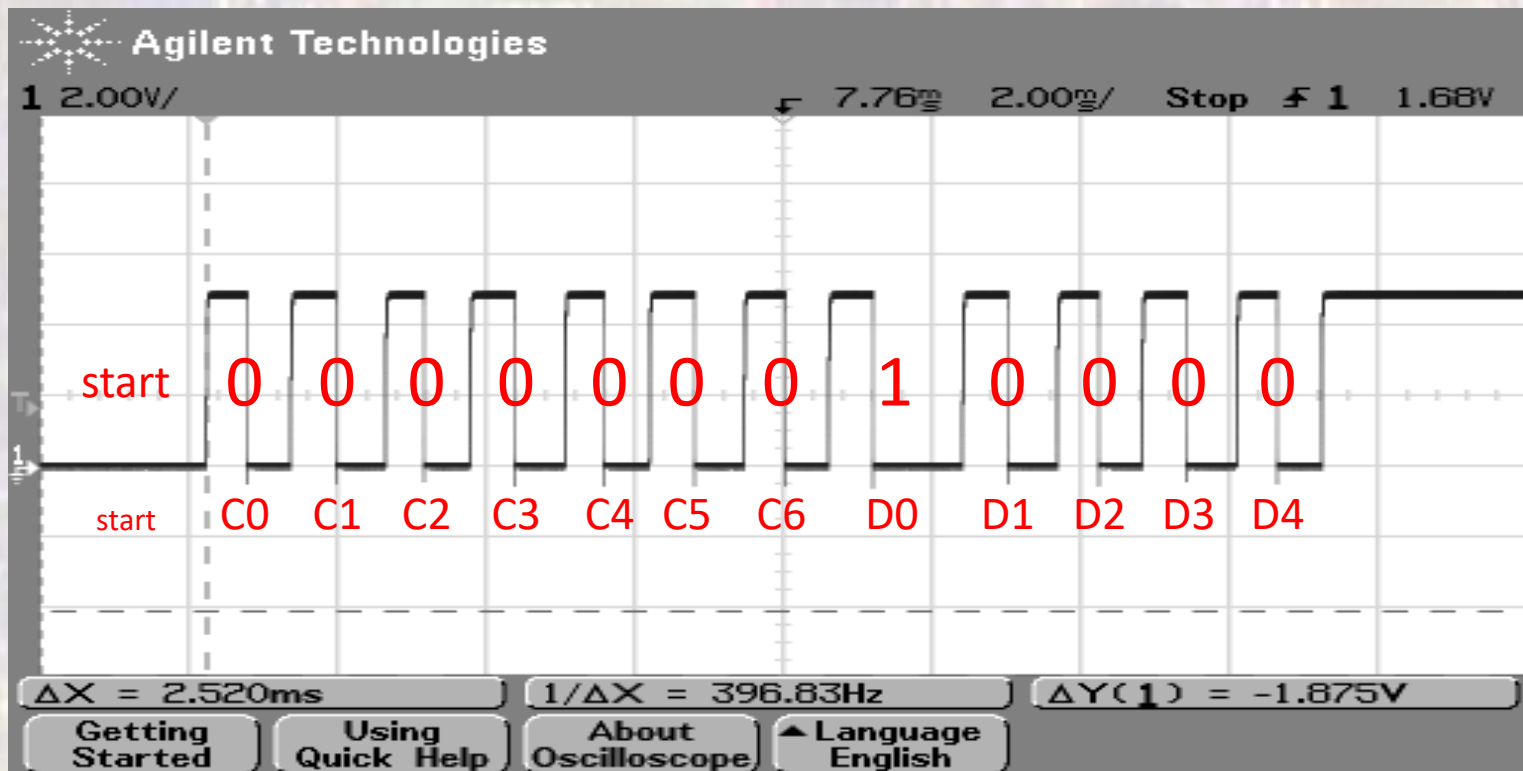
TV Remote

- Remote Control Operation
  - Remember, detector output is inverted
  - key 1, data = 0

Command Code (Hex)	Function
0	Key 1
1	Key 2
2	Key 3
3	Key 4

TV Remote

- Remote Control Operation
  - Remember, detector output is inverted
  - key 2, data = 1

Command Code (Hex)	Function
0	Key 1
1	Key 2
2	Key 3
3	Key 4
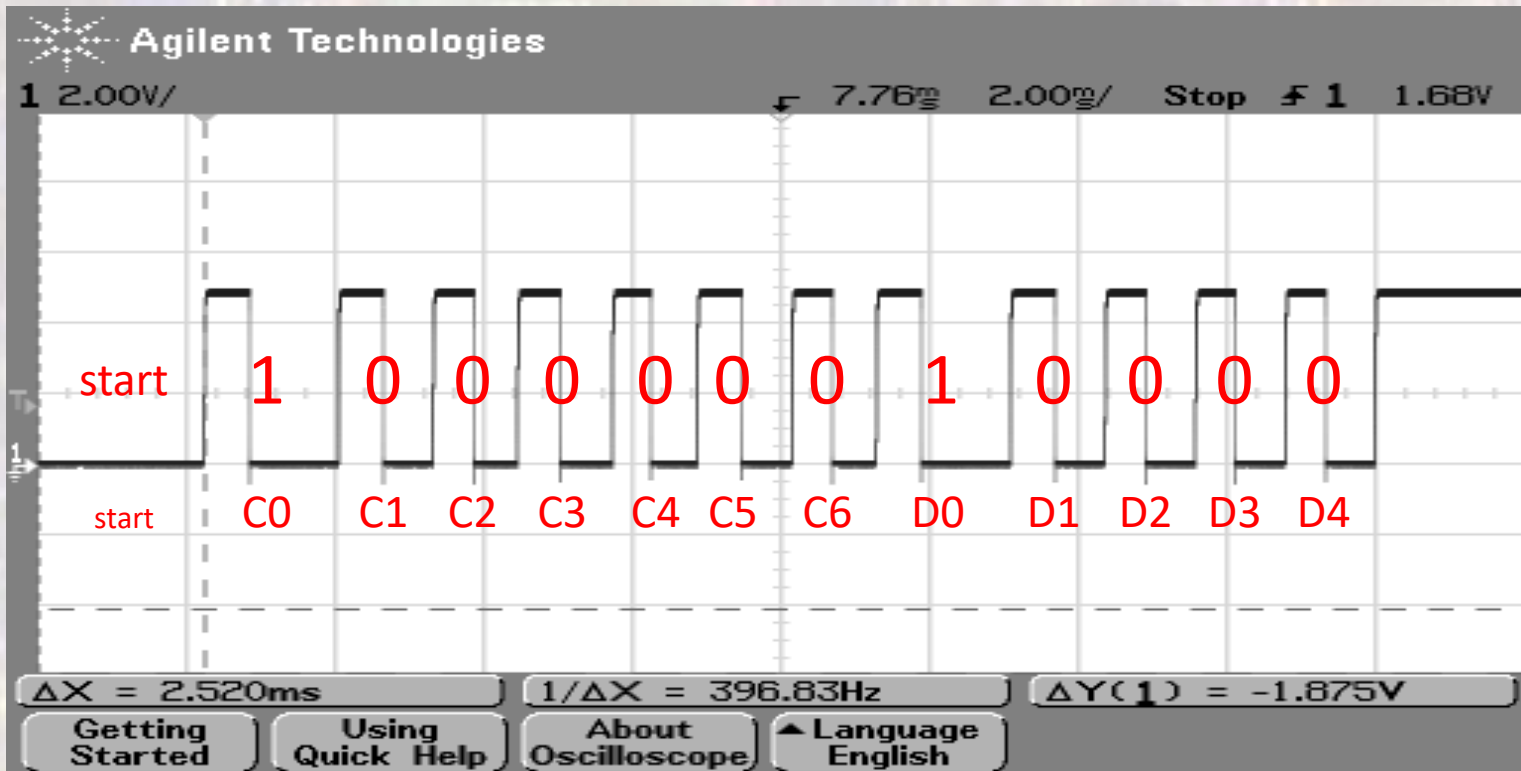
TV Remote

- Remote Control Operation
  - Remember, detector output is inverted
  - key channel down, data = 0x11

Command Code (Hex)	Function
0x10	Channel +
0x11	Channel -
0x12	Volume +
0x13	Volume -
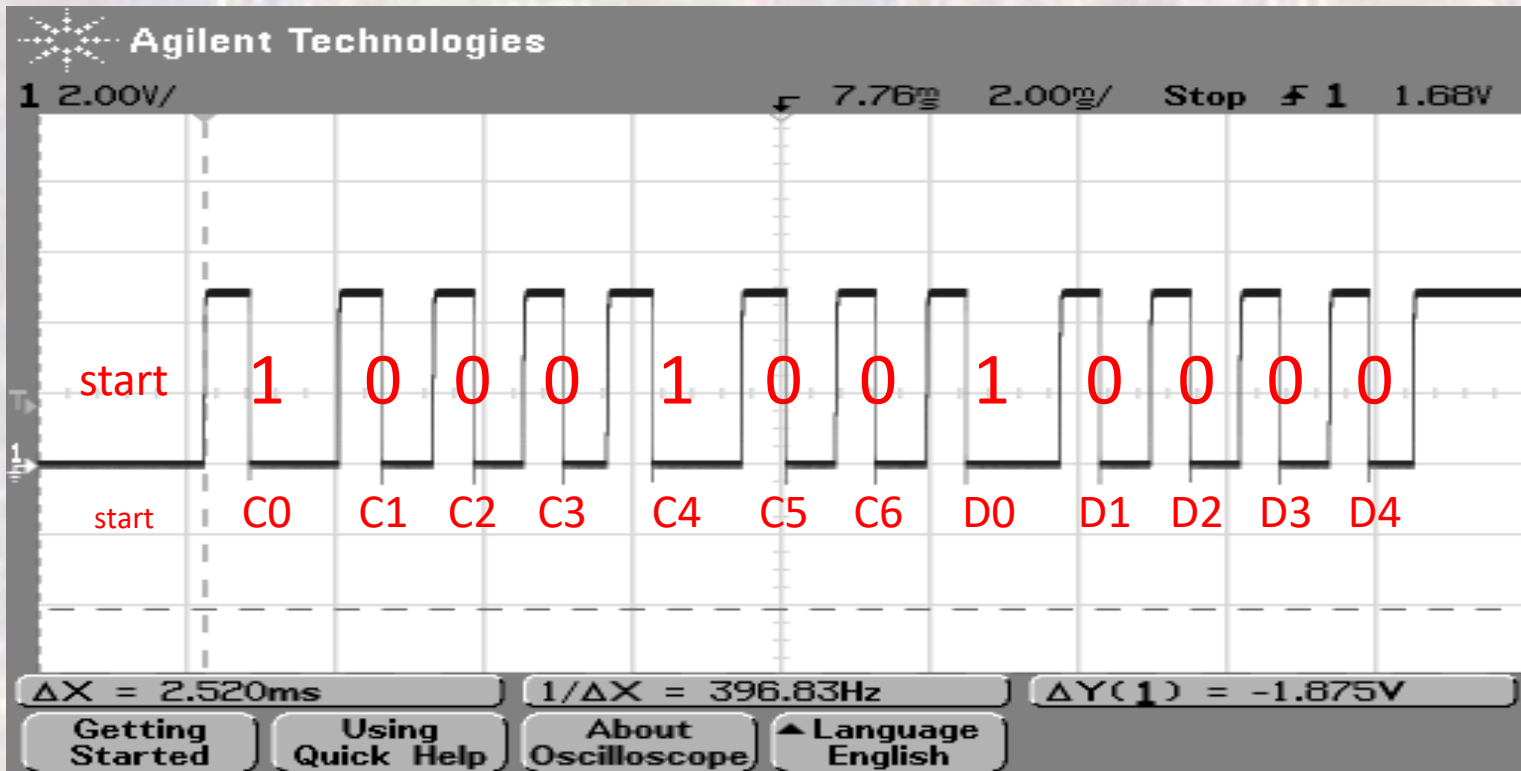
TV Remote

- Remote Control Operation
  - Available in the Tech Center
  - Make sure you program the remote before using it

CODE
1071

Direct Code Entry

1. Press and hold the **SETUP** button until the red indicator stays on, then release the **SETUP** button.

2. Press and release the desired device button (**TV**, ~~DVR, etc.~~). The red indicator blinks, then stays lit.

TV

3. Enter the 4 digit code from the back

Note: after a valid code entry, the red indicator turns off. For an invalid code, the red indicator flashes.