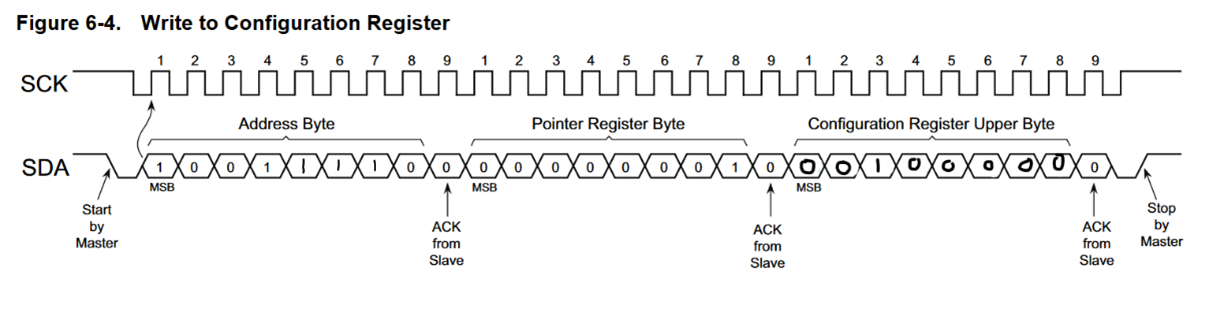
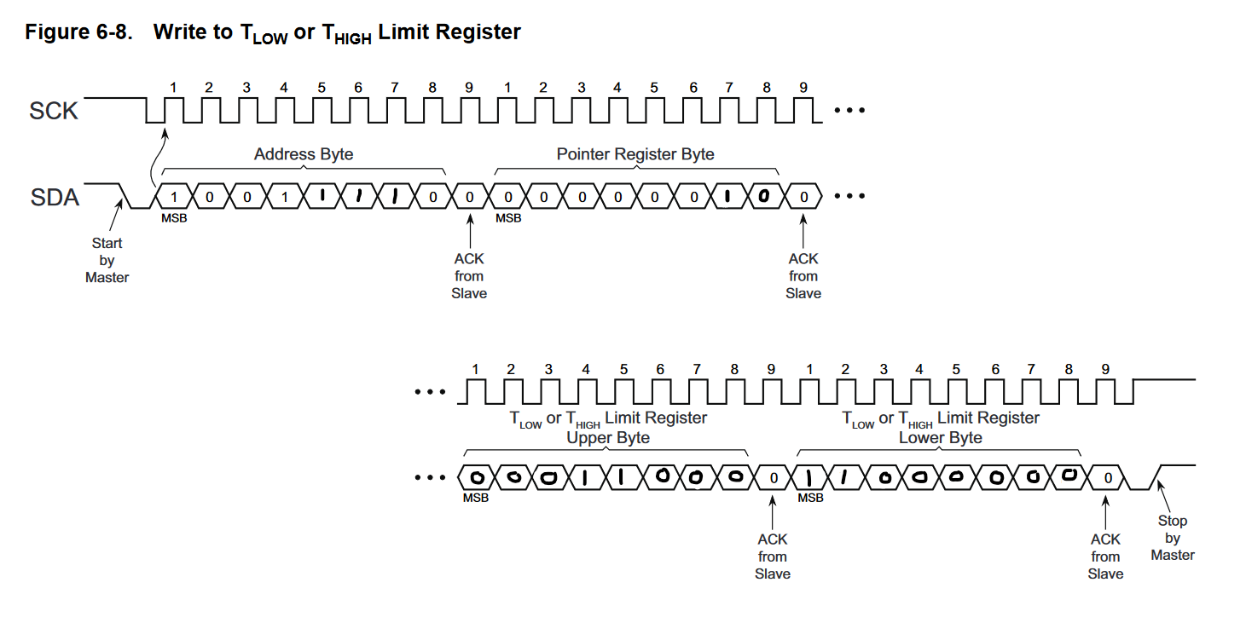
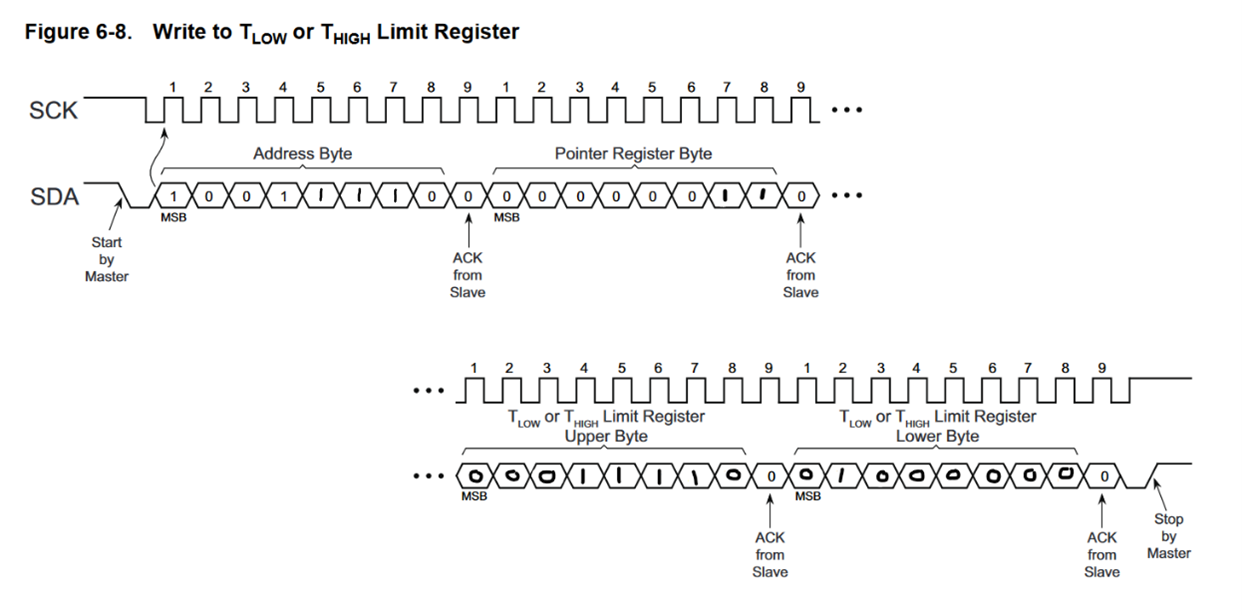
Interface Control Document - AT30TSE75# Temperature Sensor (Content Exam Extra Credit)

10/17/2024 Reese Ford

# Specific Order of Signals

1. Set Pointer to Configuration Register AND Write to the Configuration Register, setting the Temperature Resolution to 10-bits
   1. 
   2. 10011110 00000001 00100000
2. Convert Temperature to 10-bit register value
   1. Convert to binary
   2. or
3. Set to using Step 3
   1. 
   2. 10010000 00000010 00011000 11000000
4. Set to using Step 3
   1. 
   2. 10010000 00000011 00011110 01000000

# Question(s) from Problem

Pin EXT\_9 on the IO board is for the Temp Alarm Signal, so setting up an EIC interrupt for EXT2\_PIN\_9 will allow us to detect a temperature “fault”. If the pin goes high, that means the temperature has either exceeded the temp or fallen below the temp. When the pin goes high, it will trigger an EIC interrupt.