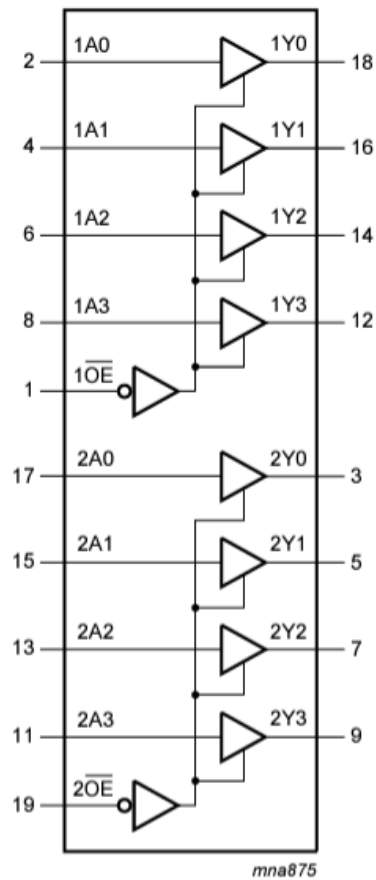
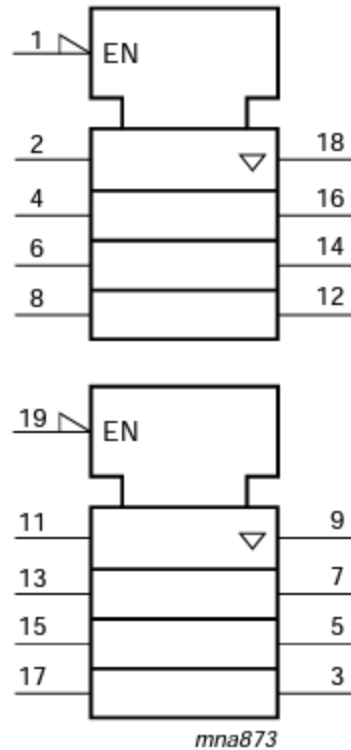


1. Describe the functions of pins 1 and 19 in the 74HCT244. Is it necessary to connect both of these to ground? Why?





Based on these pictures I found online, we can see that pin 19 and 1 act as enables for everything else. However because they are “not-ed” we need a zero input to actually turn anything on hence why both are connected to ground.

2. Write a message comprised of 32-bit words (in hexadecimal) that can be used to set the first LED in the string to red.

0x00000000 0xe70000ff

(I chose 7 for my brightness)

There is no end frame for this light or if there is, it's just 0x00.

3. Decide whether you will use the function spi8 in your lab projects. Explain what you decided and why.

I will use spi8 as some frames (end frame) requires less than 4 bytes of data. Spi8 allows me to only send one byte.