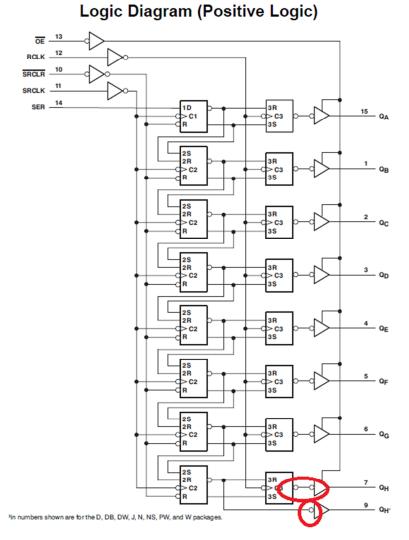
Looking at the 74HC595 (shift register with latch), I was surprised by the block diagram:



Besides the fact that Qh is the latched version of Qh', this block diagram let me understand that they have opposite polarity.

Double inversion for Qh, single inversion for Qh'

But looking at timing diagram, I understand that there is no inversion for Qh'

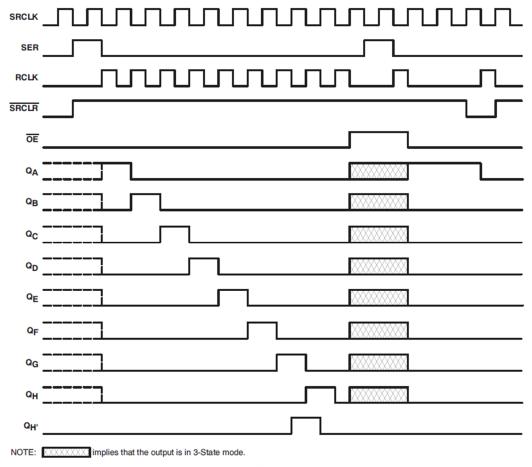


Figure 1. Timing Diagram

The reason of my question is that it seems we did our symbol based on the TI block diagram, that I believe to be wrong.

Can you please clarify?