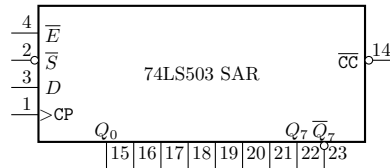


74LS503 SAR Emulator

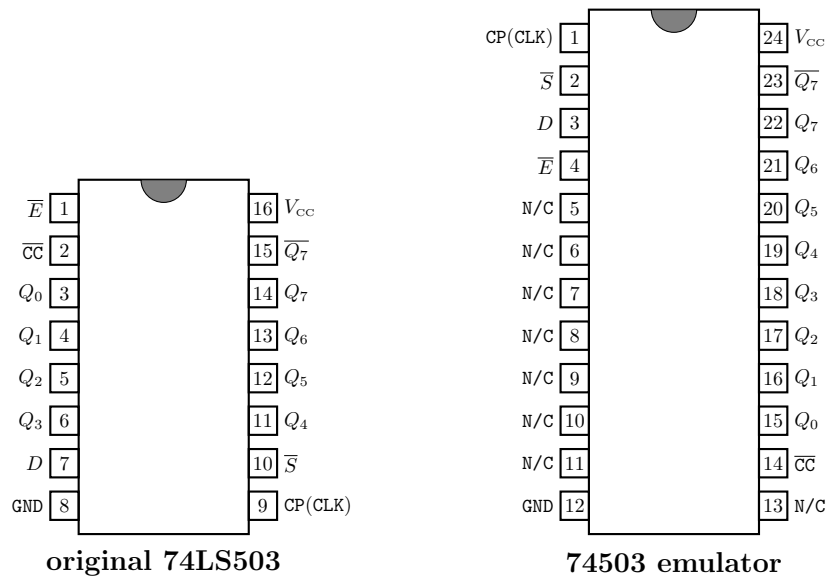
D. Steck, 6/5/15

This document briefly describes the implementation of an emulator, based on the ATF750C CPLD, of the 74LS503 successive-approximation register, formerly available from Fairchild Semiconductor. More details about chip operation are available in Fairchild's original data sheets for the DM74LS503 and DM74LS502, and more details about this particular emulator can be found online.¹ Files for "burning" the PLD emulator can also be found online.²

Schematic symbol (emulator):



Pin diagram compared to original:



¹Daniel A. Steck, *Analog and Digital Electronics* (2014), available online at <http://atomoptics-nas.uoregon.edu/~dsteck/teaching/electronics>.

²<http://atomoptics-nas.uoregon.edu/~dsteck/teaching/74503>