D
SW[0]

Pin1

Nand1
74LS00

Pin2

74LS00

Pin3   Pin4

74LS00

Nand3

Pin5

Pin6

Qa   LED1

SW[1]

CLK

Pin7

Nand2

Not1

Pin1   Pin2

Pin8

74LS04

74LS00

Pin9   Pin11

Pin10

Nand4

Pin12

74LS00

Qb   LED2

Connected to all chips:
Pin #7: Gnd
Pin #14: Vcc

4) Should not test when Clk is 0 first because the nand will
be 0