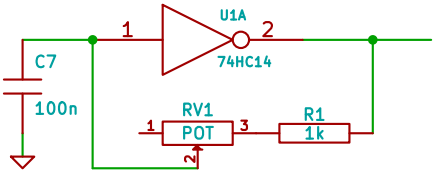
8 bit random pattern generator (e.g. for CMOS synthesizers) v0.1

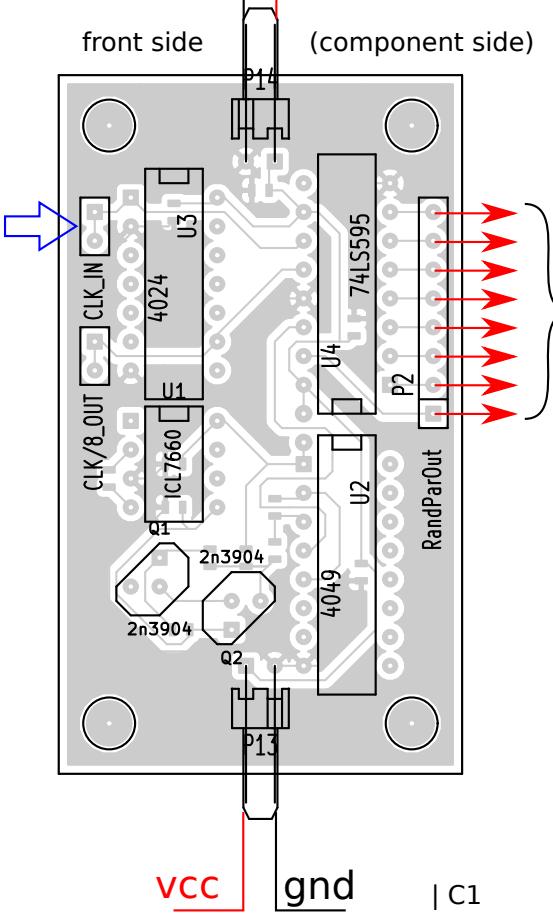
clock oscillator (example)



clock signal (TTL)

gnd vcc = 5V

front side (component side)

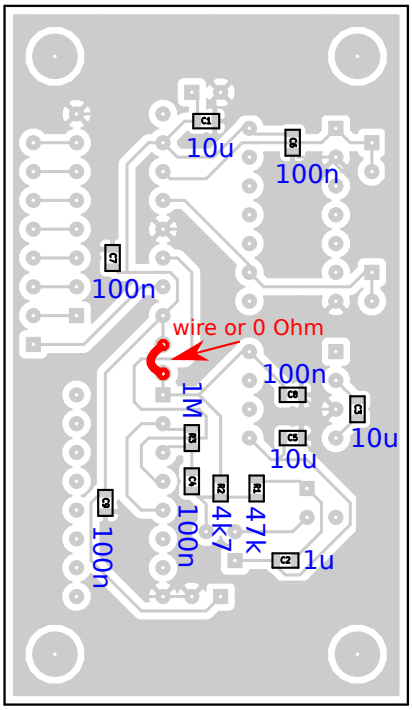


8 bit random pattern (8 independet random sequence outputs)

updates every 8 cycles of CLK_IN

vcc gnd

back side (copper/solder side)



all back side components are SMD 0603

C1	10u
C2	1u
C3	10u
C4	100n
C5	10u
C6	100n
C7	100n
C8	100n
C9	100n
P1	SIL2 header
P2	SIL8 header
P3	SIL2 header
P13	SIL2 header
P14	SIL2 header
Q1	2n3904
Q2	2n3904
R1	47k *
R2	4k7 *
R3	1M
U1	ICL7660
U2	4049
U3	4024
U4	74LS595

* circuit also works with R1=100k, R2=10k

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