Clock in

R36 D54 R39 R38
100k
1M
10k
Q5
2N3904

a−b

Out 2

b

a

R11 R13 R12
1k
10k
10k
Q2
2N3904

10k
10k
1k
R4 R5 R2
Q1
2N3904

Out 1

R14
10k

Arduino Nano   A1

100nF
C3

R33
10k

U3   MCP23017

100nF   C10

Out 4

10k
R22

Euclidean rhythm*
generator

2N3904 *Godfried Toussaint, 2004

R29
1k
R26 R30
10k
10k
Q4

Q3
10k
10k
1k
R18 R20 R17
2N3904

$GCD(a,b) = GCD(b, a−b)$
for $\{a,b\} \in \mathbb{N}$, $a > b$:
Euclid, Elements, 300 BC

Out 3

R57
10R
10uF   330nF
C27   C25

PCB by TimMJN
github.com/TimMJN

C18 R47
L7805
U6
10uF
220nF   1k   C26
100nF
10R
R52
J7
Q6
2N3904

10k
1N5817
1M   K
100k
R48 R49 D56 R45

Reset

03-07-21 JLCJLCJLCJLC

U1
C4
100nF

J10
TLC5940
R37
4k7
R15

10nF   10nF
10k   R8 R10 C6   10k
R1   R3 C2
10k   10k

C1
10uF

C5 R9 R7
10k
10k
10nF

J8

Euclidean
rhythm
generator

10nF   R25R28C12   10nF
10k   R19R21 C8   10k
10k   10k

C11R27R24
10k
10k
10nF

C9 R32
4k7
100nF
U2   TLC5940

C7
10uF

C13
10uF

U4
TLC5940
100nF   4k7
R44C15

10nF   R4 R43C17   10nF
10k   R34 R35C14   10k
10k   10k

C16R42R40
10k
10k
10nF

PCB by TimMJN
github.com/TimMJN

J12

10uF
C19

10nF   R54R56C24   10nF
10k   R50R51C20   10k
10k   10k

U5
TLC5940

J14
03-07-21 JLCJLCJLCJLC

C23R55R53
10k
10k
10nF

4k7   100nF
R58C21