Dice MC (DIP)

| Quantity	Name	Description	Label/Color Code
1	C1	Ceramic Capacitor 100 nF	104
1	IC1	Micro Controler Atmel ATTiny 2313A	
7	LED1–LED7	LED 5 mm	
7	R1–R7	Resistor 82 Ω	GR RE BK GO
1	S1	Push Button	
1	X1	Terminal 2-polig	
1	IC-Socket 20-polig		
1	Battery Holder		
2	Battery Mignon (AA)		
1	PCB		

Difficulty: ●●○○○   Build Time: 1–2 hours

Manual   v1.0a   CC BY-SA 4.0 Binary Kitchen e.V.

PCB   v1.0   CC BY-SA 4.0 Binary Kitchen e.V.

Farblegende: SI = silber; GO = gold; BK = schwarz; BR = braun; RE = rot; OR = orange; YE = gelb; GR = grün; BL = blau; VI = violett; GR = grau; WH = weiß
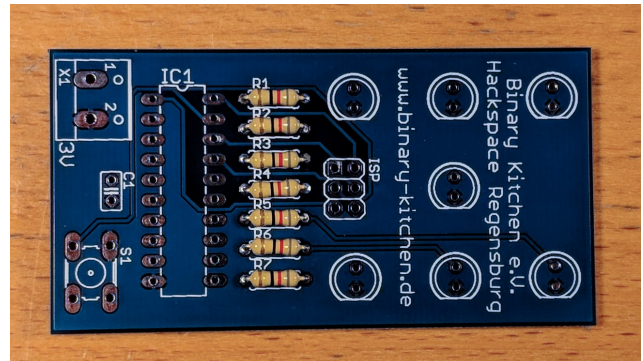
Schritt 1

a) Hints:

b) Resistor size can be determined by color coding

c) Alignment of the board so, that LED designation can be read normally (see picture)

d) Alignment for resistors does not matter

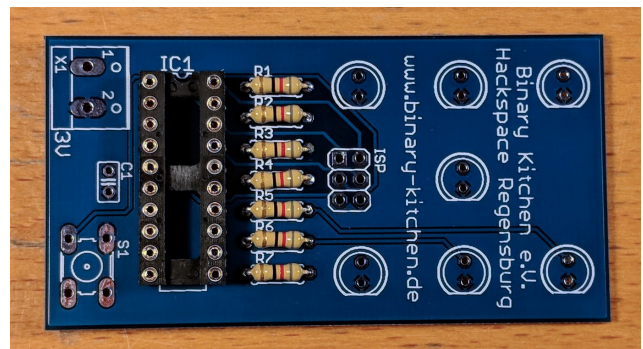e) LEDs have a flat side and a shorter leg. Both indicate the negative side
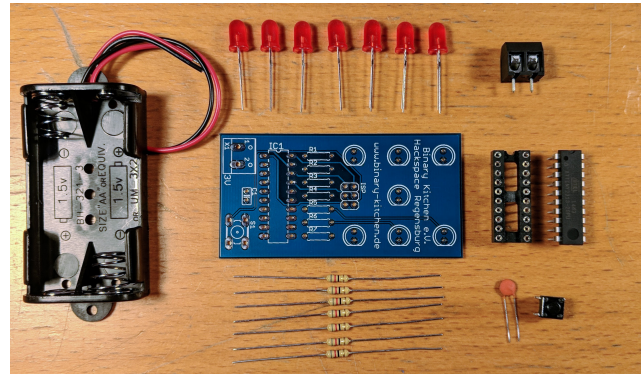
Schritt 2

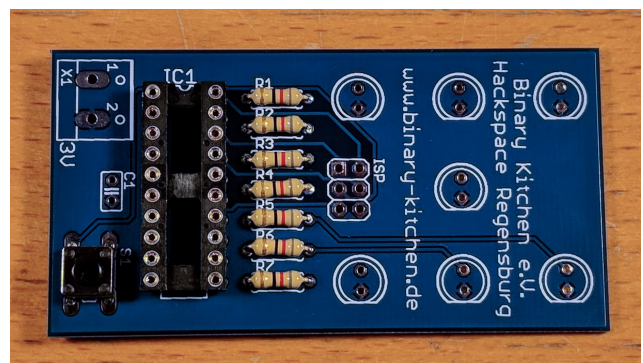a) Solder resistors R1 to R7 (82 Ω) GR RE BK GO

b) orientation does not matter

Schritt 3

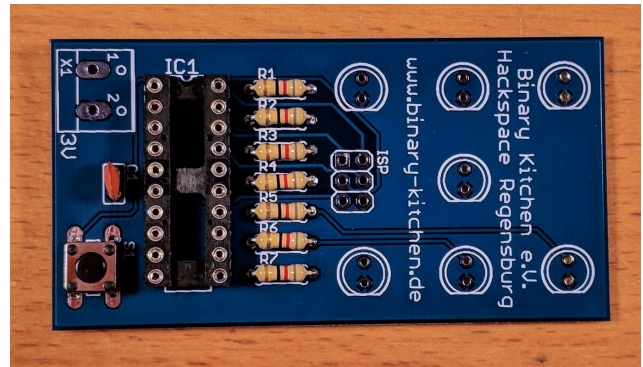a) Solder IC1 socket with the nose to the left on the board

Schritt 4

a) Solder button S1

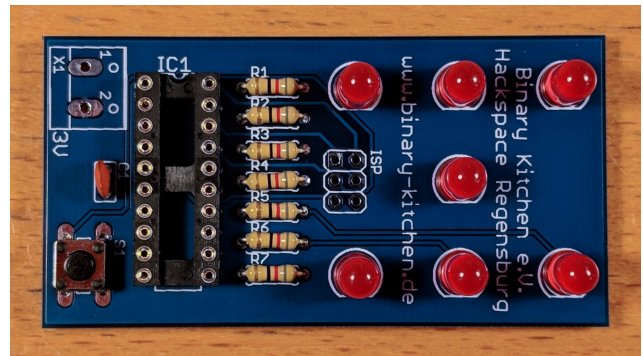b) Hint: Legs have different distances. Nothing has to be bent. Switch fits exactly

Schritt 5

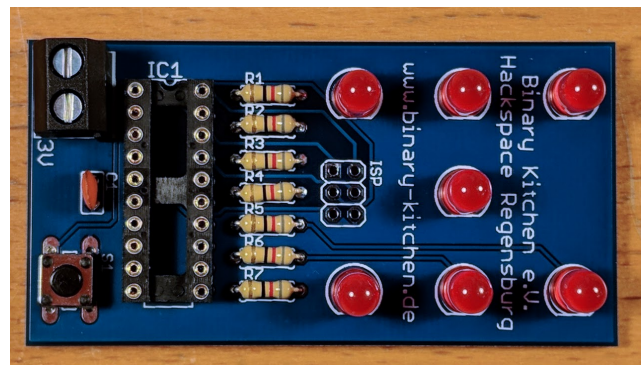a) Solder capacitor C1 (104)
b) orientation does not matter

Schritt 6

a) Solder LED1 to LED7
b) Attention! Alignment is important. LEDs have a flat side and a shorter leg. Both indicate the negative side
c) On the board

the negative side is represented by a flat

Schritt 7

a) Power connector X1 with opening downwards

Schritt 8

a) Insert IC1 with the nose to the left into the socket
b) Hint: The legs of the IC must be slightly bent, to fit into the socket
c) Possibly remove and tin the insulation at the tips of the connecting cables of the battery
d) Screw on the battery (+ red, - black)
e) Insert the batteries
f) Done!
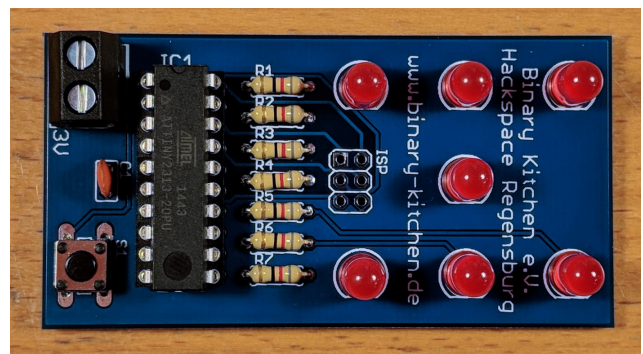
Binary Kitchen e.V.
Hackspace Regensburg

www.binary-kitchen.de

ISP

R1 R2 R3 R4 R5 R6 R7

IC1

C1

S1

1 2

X1 3V