Controller CH32V003

VCC = 3.3V

SW1
Mode

GND

VCC

U1
CH32V003F4P6

J1
SAO Connector

VCC 1 2 GND
SDA 3 4 SCL
SWD 5 6 PD0

GND

PC0	10	9 VDD	PD0	8
PC1	11		PD1	18
PC2	12		PD2	19
PC3	13		PD3	20
PC4	14		PD4	1
PC5	15		PD5	2
PC6	16		PD6	3
PC7	17		PD7	4
			PA1	5
		7 VSS	PA2	6

IO0
IO1
IO2
IO3
IO4
IO5
IO6

VCC   VCC

C1   C2
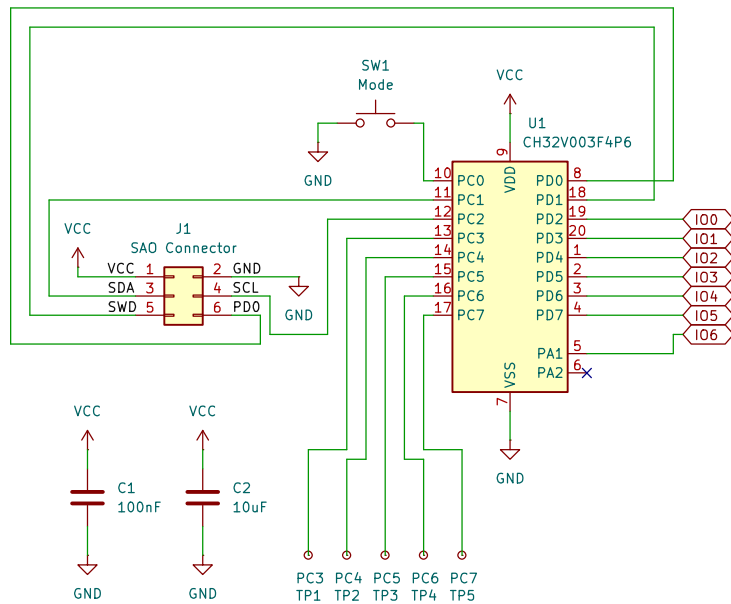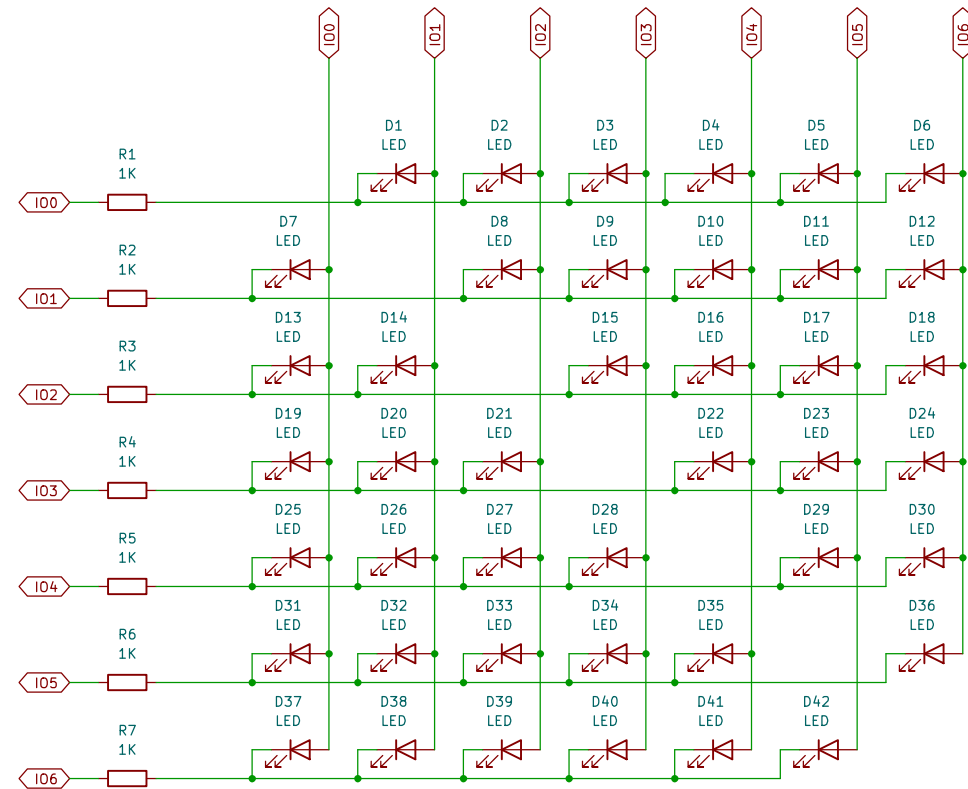100nF   10uF

GND   GND

PC3 PC4 PC5 PC6 PC7
TP1 TP2 TP3 TP4 TP5

SAO Connector is also used as
WCH LINKE programming header:

Pin 1: VCC +3.3V
Pin 2: GND
Pin 5: SWD

Charlieplexed LEDs

IO0 IO1 IO2 IO3 IO4 IO5 IO6

R1
1K
IO0

R2
1K
IO1

R3
1K
IO2

R4
1K
IO3

R5
1K
IO4

R6
1K
IO5

R7
1K
IO6

D1 LED	D2 LED	D3 LED	D4 LED	D5 LED	D6 LED
D7 LED	D8 LED	D9 LED	D10 LED	D11 LED	D12 LED
D13 LED	D14 LED	D15 LED	D16 LED	D17 LED	D18 LED
D19 LED	D20 LED	D21 LED	D22 LED	D23 LED	D24 LED
D25 LED	D26 LED	D27 LED	D28 LED	D29 LED	D30 LED
D31 LED	D32 LED	D33 LED	D34 LED	D35 LED	D36 LED
D37 LED	D38 LED	D39 LED	D40 LED	D41 LED	D42 LED

Title: SAO Attraktor

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attraktor