Board

Quantity	References	Value	buy suggestion
9	C11, C21, C31, C41, C51, C61, C71, C81, C201	100nF 50V	lcsc.com
8	C12, C22, C32, C42, C52, C62, C72, C82	1uF 50V	lcsc.com
1	C100	10nF 25V	lcsc.com
1	C101	470uF 50V	lcsc.com
1	C200	220uF 10V	lcsc.com
8	*R1, R2, R3, R4, R5, R6, R7, R8	0R36 +-1%	lcsc.com
1	R20	4k7	lcsc.com
1	R100	82k	lcsc.com
1	R200	3k3	lcsc.com
8	L1, L2, L3, L4, L5, L6, L7, L8	100uH	lcsc.com
8	D1, D2, D3, D4, D5, D6, D7, D8	MBR0560	lcsc.com
1	D100	BZT52C10	lcsc.com
1	D200	Pow	lcsc.com
8	U1, U2, U3, U4, U5, U6, U7, U8	PT4115	lcsc.com
1	U10	ESP32 mini (CP2104 drive)	aliexpress.com
1	U20	dallas temp	lcsc.com
1	U200	step down 5V 1A	aliexpress.com
1	F100	Holder 5.2x20mm	lcsc.com
		5A fast blowing	lcsc.com
1	F200	1A	lcsc.com
9	1, LED1, LED2, LED3, LED4, LED5, LED6, LED7, LEI	Screw_Terminal_01x02	lcsc.com
1	Q100	BR50P06	lcsc.com
1	J110	Conn_01x06_Male	lcsc.com
1	J120	Conn_01x03_Male	lcsc.com
1	J130	Conn_01x04_Male	lcsc.com

* Note for R1 – R8

The board can handle up to 500mA per channel. Changing the resistor has impact on Iled max which is calculated 0.1 / R.

With 0.36Ω, it's 0.1 / 0.36 = 278mA (measured 290mA)

Form factor 0805 or 1206 is reommended, please use +-1% tolerance for the value.

Smallest recommended resistor is 0.22Ω which will end up in Iled max per channe little more than 450mA

Installation

Quantity	Reference	Value	buy suggestion
1	Power supply	24V/100W	aliexpress.com
1	Enclosure box	150x100x50mm	aliexpress.com
4	M3x5 screw	M3x6	aliexpress.com
4	M3 washer	M3x6x0.8	aliexpress.com
9	DC sockets	DC-022B	aliexpress.com
9	DC plugs	DC-022B	aliexpress.com
100m	DC cable	20AWG	aliexpress.com
1	Rotary encoder	EC11	aliexpress.com
1	Blank cover panel		aliexpress.com
1	Encoder knob		aliexpress.com
1	Motion detection sensor	AM312	aliexpress.com
1	Crimping plier JST XH	SN-2549	aliexpress.com