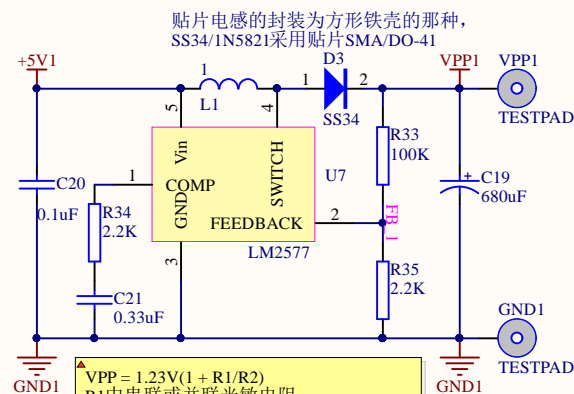
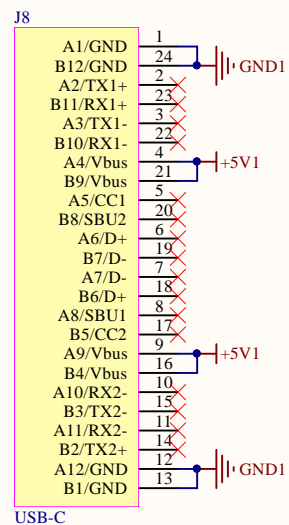
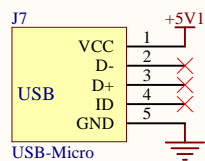
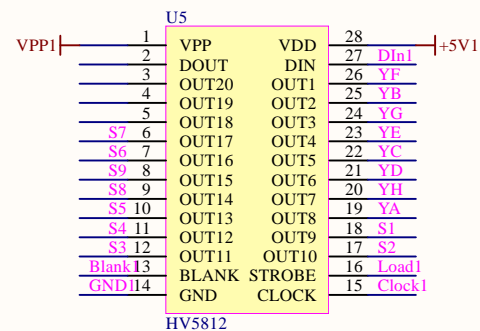
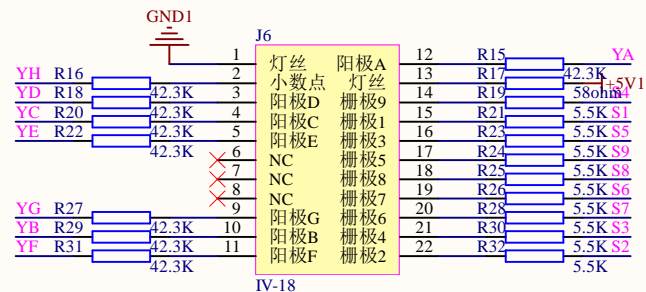


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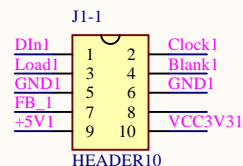


$V_{PP} = 1.23V(1 + R1/R2)$
 R1中串联或并联光敏电阻,
 则R1+光敏电阻的范围为 114K79K
 R1 = 114K R2 = 2.2K $V_{out} = 65V$ V_{max}
 R1 = 79K R2 = 2.2K $V_{out} = 45V$ V_{min}
 R2中串联或并联光敏电阻,
 则R2+光敏电阻的范围为
 R1 = 114K R2 = 2.2K $V_{out} = 65V$ V_{max}
 R1 = 114K R2 = 3.2K $V_{out} = 45V$ V_{min}

光敏电阻5506亮电阻26k暗电阻0.15M

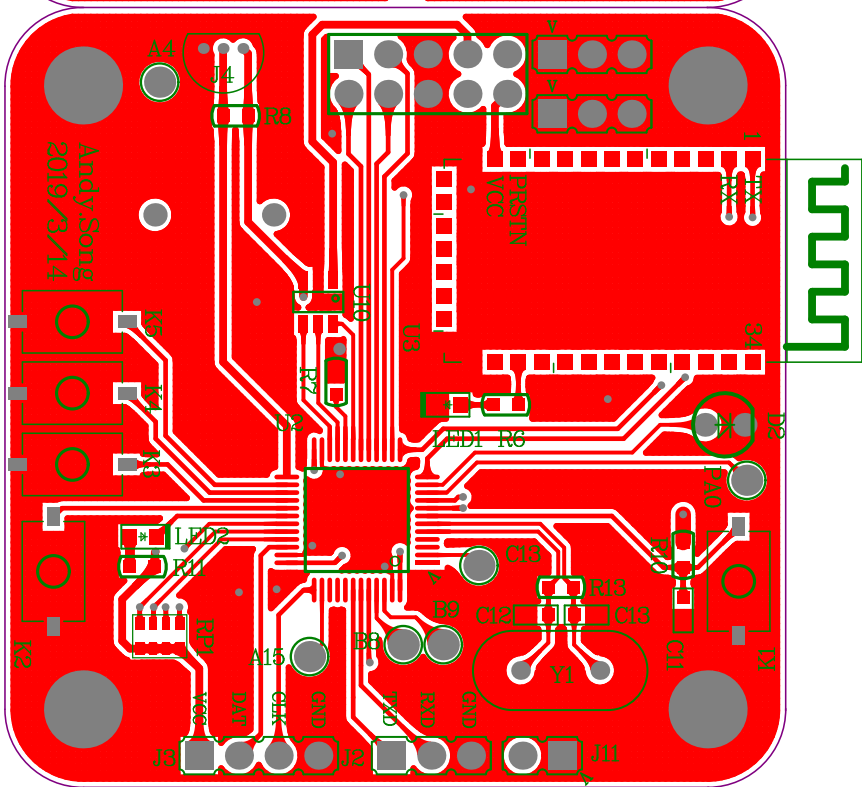
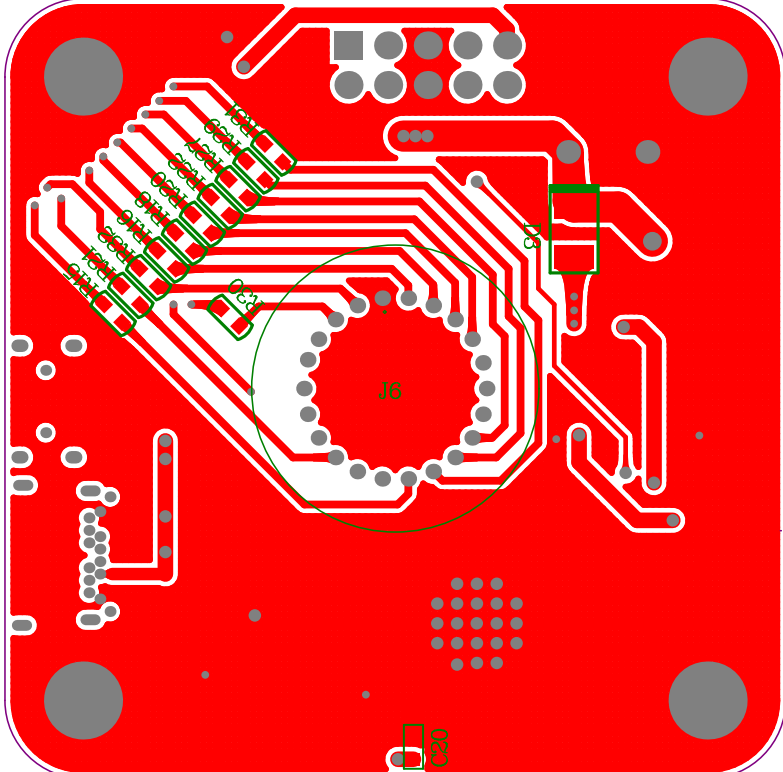


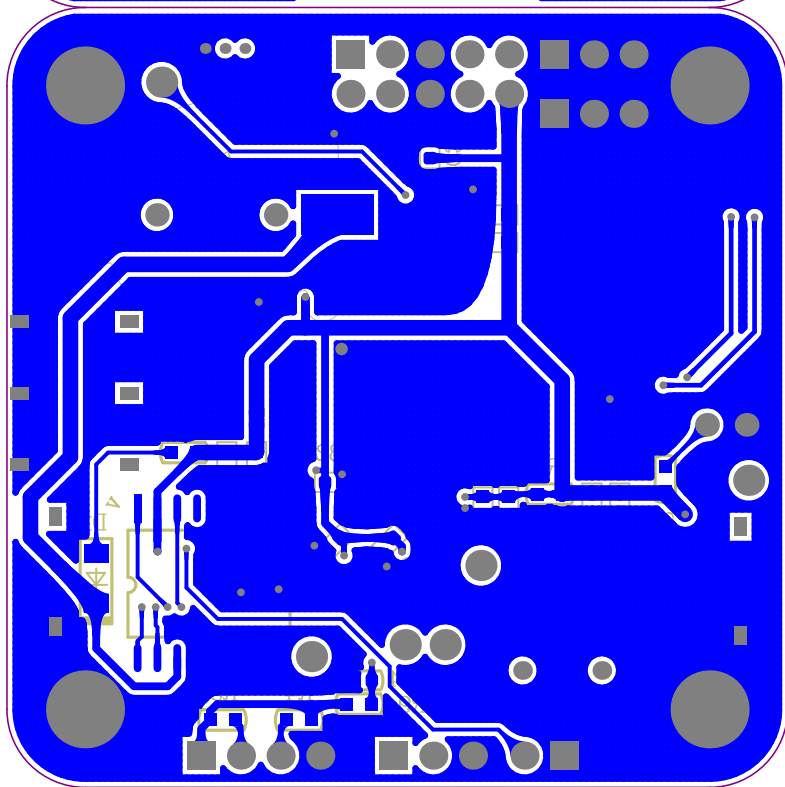
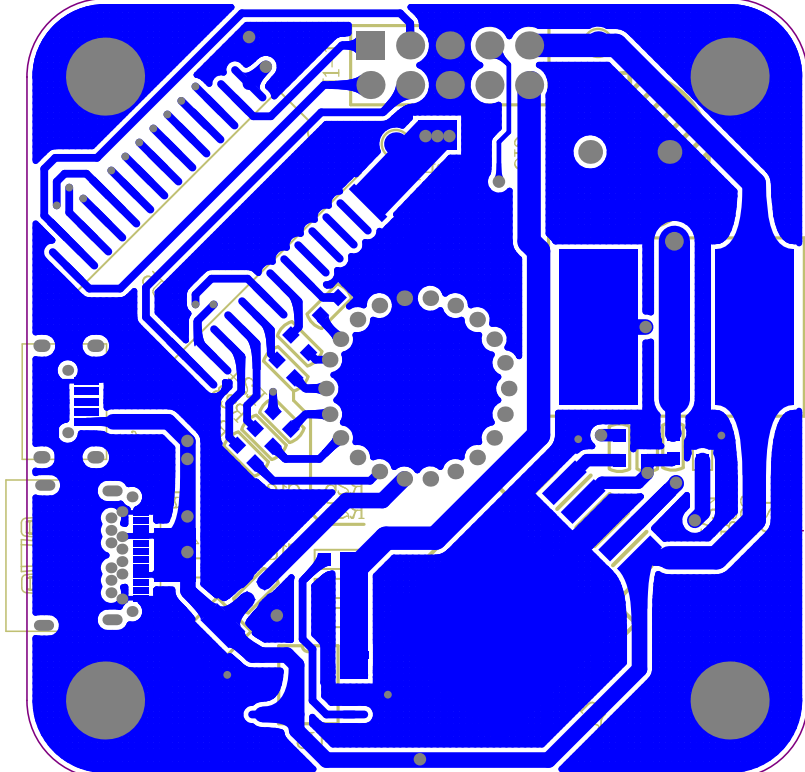
Min	Type	Max	UNITS
	灯丝电压	: 4.3	5.5 V
	灯丝电流	: 75	85 mA
	每段阳极电流		1.3 mA
	总阳极电流		45 mA
	动态显示 阳极电压:	50	70 V
	动态显示 栅极电压:	50	70 V
	栅极电流		10 mA
	使用寿命	: 10000	h
	阳极限流电阻	: 55V/1.3mA = 42K3	
	栅极限流电阻	: 55V/10mA = 5K5	



电源部分采用两种方法供电
分别为电池供电和USB供电,
USB应更换为TypeC或Micor
接口
取消使用Mini接口的USB
目的是使其适应能力更强

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Comment	Description	Designator	Footprint	LibRef	Quantity
TESTPAD		+ 1, GND1, VPP1	TP-1.5	TESTPAD	3
L1		1	L-101	INDUCTOR	1
0.01uF		C1, C3	C0603	CAP	2
10uF		C2, C4, C16	C0603	CAP	3
0.1uF		C5, C8, C9, C11, C14, C18, C20, C32, C33, C34, C35	C0603	CAP	11
1uF		C6, C17	C0603	CAP	2
电池		C7	CR1220	CAP	1
22pF		C12, C13	C0603	CAP1	2
100uF/10V		C15	C1210	CAP	1
680uF		C19	CAP200	CAPE	1
0.33uF		C21	C0603	CAP	1
4148		D1	D1206	DIODE	1
光敏电阻		D2	LED4	LED	1
SS34		D3	D1210	DIODE	1
HEADER10		J1, J1-1	HEAD100-10	HEADER10	2
CON3		J2, J9, J10	SIP-3	CON3	3
SWD		J3	SIP-4	CON4	1
DS18B20		J4	DS18B20	DS18B20	1
IV-18		J6	IV-18	IV-18	1
USB-Micro		J7	usb-micro	USB-Micro	1
USB-C		J8	USB-C	USB-C	1
CON2		J11	SIP-2	CON2	1
RESET		K1	BUTTON-3*6*2.5	BUTTON	1
BUTTON		K2, K3, K4, K5	BUTTON-3*6*2.5	BUTTON	4
LED		LED1	LED0603	LED	1
GREEN		LED2	LED0603	LED	1
TESTPAD		PA0, PA4, PA15, PB8, PB9, PC13	TP-2	TESTPAD	6
10		R1, R2	R0603	RES	2
220		R3	R0603	RES2	1
10K		R4, R5, R7, R9, R10	R0603	RES	5
4.7K		R6, R8	R0603	RES2, RES	2
2K		R11	R0603	RES	1
50K		R12	R0603	RES	1
1M		R13	R0603	RES	1
470R		R14	R0603	RES	1
42.3K		R15, R16, R18, R20, R22, R27, R29, R31	R0603	RES	8
58ohm		R17	R0603	RES	1
5.5K		R19, R21, R23, R24, R25, R26, R28, R30, R32	R0603	RES	9
100K		R33	R0603	RES	1
2.2K		R34, R35	R0603	RES	2
4K7		RP1	R8P0603	RESX4	1
DS3231		U1	S0-16	DS3131	1
STM32F103C8Tx		U2	LQFP-48	STM32F103C8Tx	1
HC-05		U3	HC-05	HC-05	1
HV5812		U5	SOP-28	HV5812	1
LT1763-3.3		U6	SOP-8	LT1763	1
LM2577		U7	TO-263-5	LM2577	1
DAC7512		U10	SOT23-6	DAC7512	1
CRYSTAL		Y1	CRY-XTAL	CRYSTAL	1