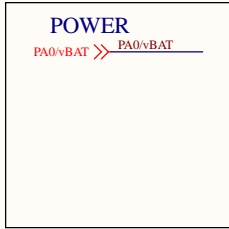
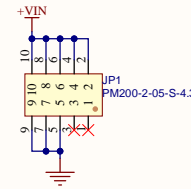
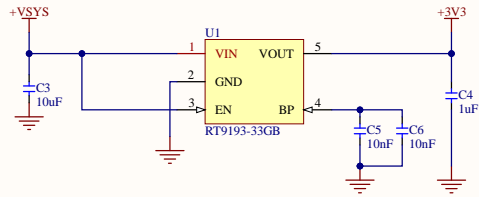


# 1 POWER

## Power.SchDoc



5V TO 3V3@100mA



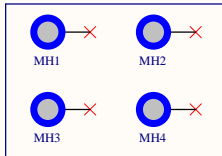
Mounting Hole

Logo STM32

Logo EPCB

ESD

Logo Grove Module



AK BASE KIT 2.1

Title: AK Base Kit 2.1.PjPcb

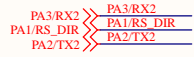
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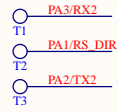
# 2 RS485

## RS485.SchDoc

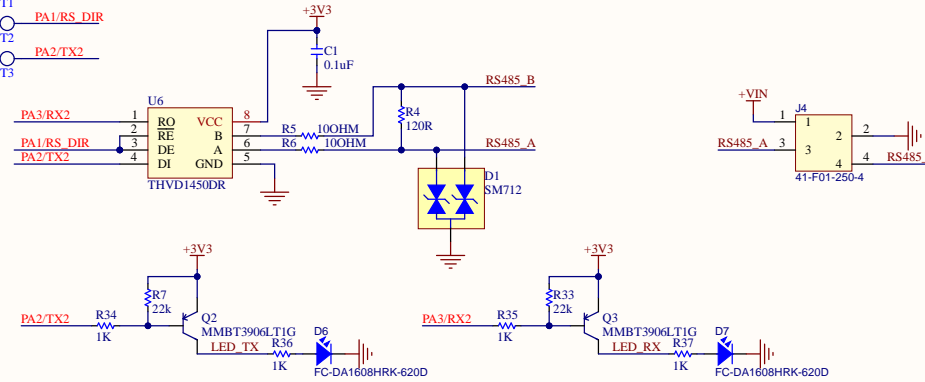
### RS485



Test Point RS485



### RS485



### AK BASE KIT 2.1

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# 3 NRF24L01

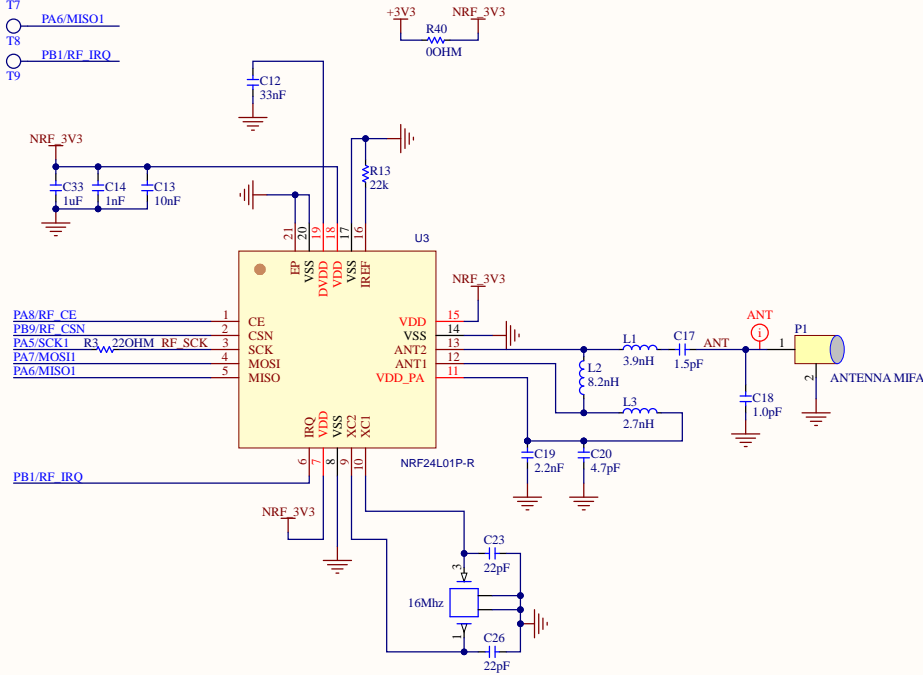
## NRF24L01.SchDoc

NRF24L01	
PA8/RF_CE	PA8/RF_CE
PB9/RF_CSN	PB9/RF_CSN
PA5/SCK1	PA5/SCK1
PA7/MOSI1	PA7/MOSI1
PA6/MISO1	PA6/MISO1
PB1/RF_IRQ	PB1/RF_IRQ

Test Point nRF

- T4 PA8/RF\_CE
- T5 PB9/RF\_CSN
- T6 RF\_SCK
- T7 PA7/MOSI1
- T8 PA6/MISO1
- T9 PB1/RF\_IRQ

NRF24L01

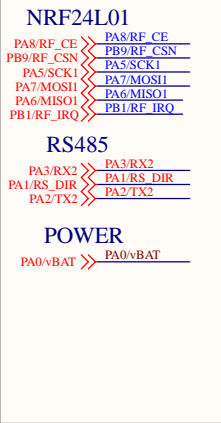


AK BASE KIT 2.1

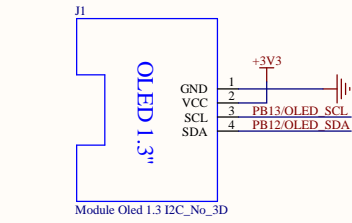
Title: AK Base Kit 2.1.PjPcb	
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# 4 MCU

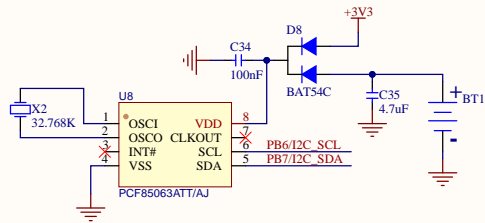
## MCU.SchDoc



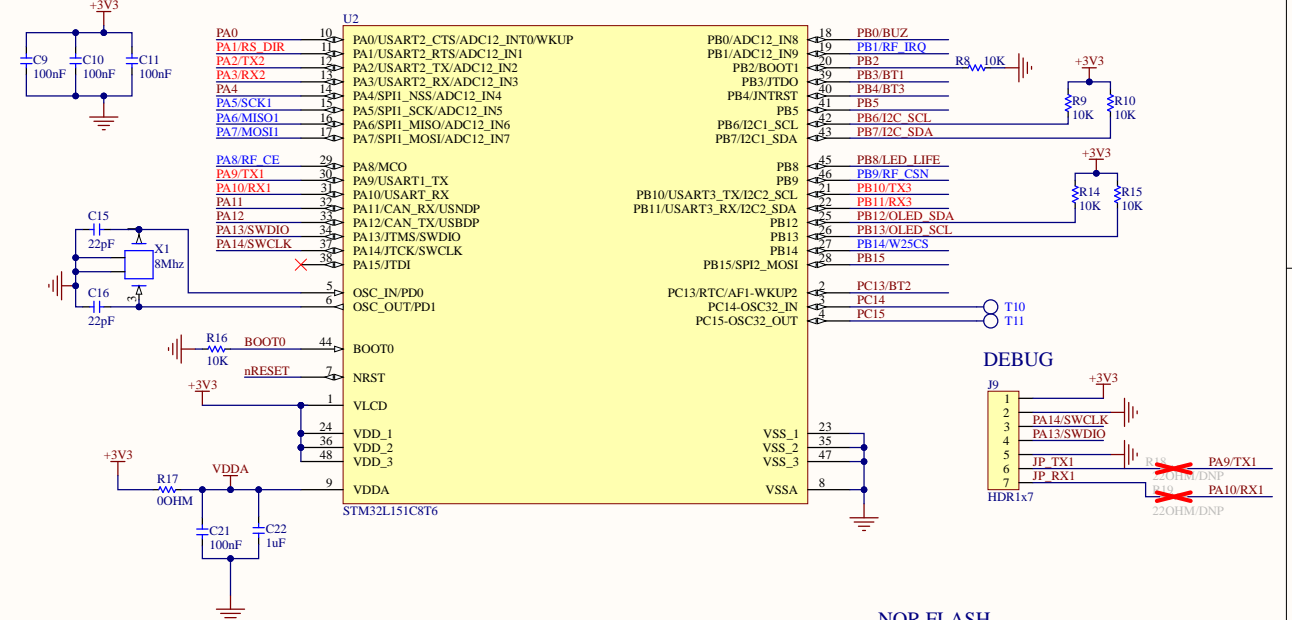
## Module LCD Oled I2C



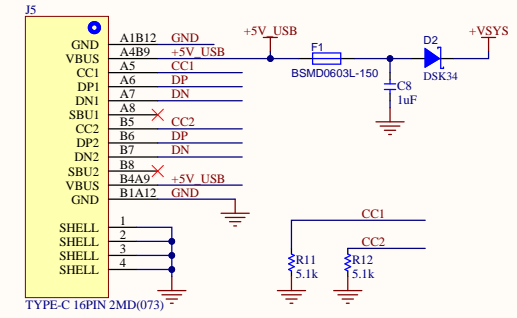
## RTC PCF85063



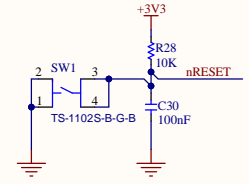
## STM32L151C8T6



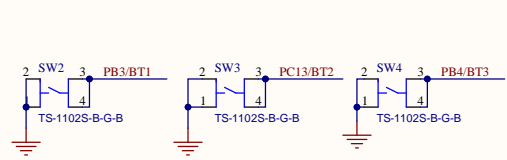
## USB Type C



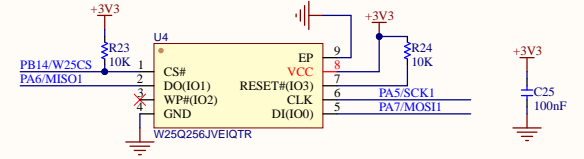
## RESET



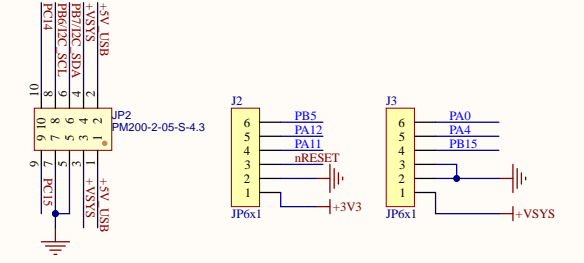
## BUTTON



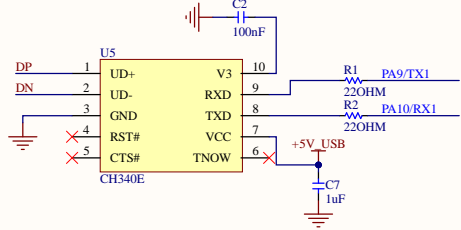
## NOR FLASH



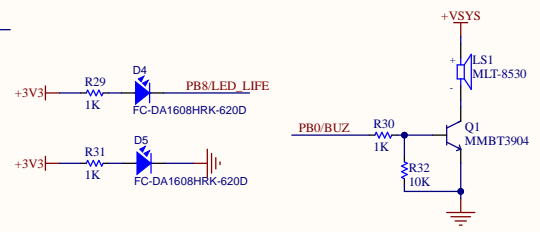
## PINOUT



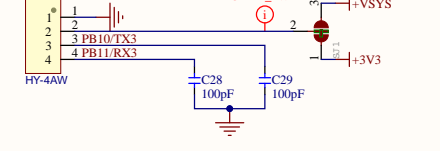
## CH340E



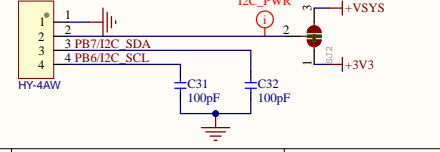
## LED & BUZZER



## GROVE UART



## GROVE I2C



## AK BASE KIT 2.1

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**AK Base Kit 2.1.PrjPcb**

	Name	Design	Footprint	CS Part Num	Manufacturer Part Num	Manufacturer	Quantity	Description	Assembly Typ	Link
1	MY-1220-03	BT1	Batt CR1220	C964818	MY-1220-03	MYOUNG	1	MY-1220-03 Battery but	SMT Assembly	
2	0.1uF	C1	C_0603	C14663	CC0603KRX7R9BB104	YAGEO	1	100NF 50V 0603 ROHS	SMT Assembly	
3	100nF	C2, C9,	C_0402	C41851	0402B104K160NT	FH(Guangdong Fenghua Adva	8	100nF 16V X7R ±10%	SMT Assembly	
4	10uF	C3	C_0805	C15850	CL21A106KAYNNE	Samsung Electro-Mechanics	1	10UF 25V 0805 ROHS	SMT Assembly	
5	1uF	C4, C7,	C_0603	C15849	CL10A105KB8NNNC	Samsung Electro-Mechanics	5	1UF 50V 0603 ROHS	SMT Assembly	
6	10nF	C5, C6,	C_0402	C1547	0402CG120J500NT	FH(Guangdong Fenghua Adva	3	10nF 50V X7R ±10%	SMT Assembly	
7	33nF	C12	C_0402	C106862	CC0402KRX7R9BB333	YAGEO	1	50V 33nF X7R ±10%	SMT Assembly	
8	1nF	C14	C_0402	C1523	0402B102K500NT	FH(Guangdong Fenghua Adva	1	1nF 50V X7R ±10%	SMT Assembly	
9	22pF	C15, C1	C_0402	C1555	0402CG220J500NT	FH(Guangdong Fenghua Adva	4	22pF 50V C0G ±5%	SMT Assembly	
10	1.5pF	C17	C_0402	C1552	0402CG1R5C500NT	FH(Guangdong Fenghua Adva	1	1.5pF 50V C0G ±0.25p	SMT Assembly	
11	1.0pF	C18	C_0402	C1550	0402CG1R0C500NT	FH(Guangdong Fenghua Adva	1	1.0pF 50V C0G ±5%	SMT Assembly	
12	2.2nF	C19	C_0402	C1531	0402B222K500NT	FH(Guangdong Fenghua Adva	1	2.2nF 50V C0G ±5%	SMT Assembly	
13	4.7pF	C20	C_0402	C1569	0402CG4R7C500NT	FH(Guangdong Fenghua Adva	1	4.7pF 50V C0G ±5%	SMT Assembly	
14	100pF	C28, C2	C_0402	C1546	0402CG101J500NT	FH(Guangdong Fenghua Adva	4	100pF 50V C0G ±5%	SMT Assembly	
15	4.7uF	C35	C_0603	C19666	CL10A475KO8NNNC	Samsung Electro-Mechanics	1	4.7UF 16V 0603 ROHS	SMT Assembly	
16	SM712	D1	SOT-23-3_L2.9-W1.	C502564	SM712	MDD (Microdiode Electronics	1	TVS DIODE 12V 21V S	SMT Assembly	
17	DSK34	D2	SOD-123_L2.8-W1.8	C41029	DSK34	MDD (Microdiode Electronics	1	DSK34 40V 550mV@3	SMT Assembly	
18	FC-DA1608HRK-620	D4, D5,	LED0603-RD_RED	C84263	FC-DA1608HRK-620D	NATIONSTAR	4	LED Red 0603 Light Er	SMT Assembly	
19	BAT54C	D8	SOT-23-3_L2.9-W1.	C14308	BAT54CLT1G	ON Semicon	1	SCHOTTKY BARRIER	SMT Assembly	
20	BSMD0603L-150	F1	F0603	C914094	BSMD0603L-150	BHFUSE	1	6V 1.5A 50A 1W -40°C-	SMT Assembly	
21	Module Oled 1.3 I2C	J1	Module Oled 1.3 - Nd	N/A	N/A	EPCB.vn	1	Module Oled 1.3 I2C	Hand Soldering	
22	41-F01-250-4	J4	CONN-TH_41-F01-2	C173392	41-F01-250-4	HIWA	1	Terminal Block 4 0.138	Hand Soldering	
23	TYPE-C 16PIN 2MD	J5	USB-C-SMD_TYPE	C2765186	TYPE-C16PIN	SHOU HAN	1	5A 1 Surface Mount 16	SMT Assembly	
24	HY-4AW	J6, J8	CONN-TH_4P-P2.0	C146068	HY-4AW	BOOMELE	2	HY-4AW 1x4P 1.2mm 4	Hand Soldering	
25	HDR1x7	J9	HDR1X7H		HDR1x7 Horizontal		1	Header IDC, 1x8 Pin ho	Hand Soldering	
26	PM200-2-05-S-4.3	JP1, JP	HDR-SMD_10P-P2.0	C3975169	PM200-2-05-S-4.3	HCTL(华灿天禄)	2	SMD,P=2mm Female H	SMT Assembly	
27	3.9nH	L1	L_0402	C317939	FHW0402UC3N9JST	FH(Guangdong Fenghua Adva	1	3.9nH 840mA ±5% 66m	SMT Assembly	
28	8.2nH	L2	L_0402	C317946	FHW0402UC8N2JST	FH(Guangdong Fenghua Adva	1	8.2nH 680mA ±5% 100	SMT Assembly	
29	2.7nH	L3	L_0402	C317935	FHW0402UC2N7KST	FH(Guangdong Fenghua Adva	1	2.7nH 640mA ±10% 12	SMT Assembly	
30	MLT-8530	LS1	BUZ-SMD_4P-L8.5-	C94599	MLT-8530	Jiangsu Huaneng Elec	1	BUZZERS MAGNETIC	SMT Assembly	
31	MMBT3904	Q1	SOT-23-3_L2.9-W1.	C20526	MMBT3904	Changjiang Electronics Tech (	1	MMBT3904 TRANSISTO	SMT Assembly	
32	MMBT3906LT1G	Q2, Q3	SOT-23-3_L2.9-W1.	C53444	MMBT3906LT1G	ON Semicon	2	MMBT3906 TRANSISTO	SMT Assembly	
33	22OHM	R1, R2,	R_0402	C25092	0402WGF220JTCE	Uniroyal Elec	3	22Ω 0402 62.5mW Thic	SMT Assembly	
34	120R	R4	R_0603	C22787	0603WAF1200T5E	UNI-ROYAL(Uniroyal Elec)	1	120 OHMS ±1% 1/10W	SMT Assembly	
35	100HM	R5, R6	R_0805	C17415	0805W8F100JT5E	Uniroyal Elec	2	100HMS ±1% 1/8W 08	SMT Assembly	
36	22k	R7, R13	R_0402	C25768	0402WGF2202TCE	Uniroyal Elec	3	22k 0402 62.5mW Thic	SMT Assembly	
37	10K	R8, R9,	R_0402	C25744	0402WGF1002TCE	Uniroyal Elec	10	10kΩ 0402 62.5mW Th	SMT Assembly	
38	5.1k	R11, R1	R_0402	C25941	0402WGF0512TCE	Uniroyal Elec	2	5.1KOHMS ±5% 1/16W	SMT Assembly	
39	0OHM	R17, R4	R_0603	C21189	0603WAF0000T5E	Uniroyal Elec	2	0OHMS ±1% 1/10W 06	SMT Assembly	
40	1K	R29, R3	R_0402	C11702	0402WGF1001TCE	Uniroyal Elec	7	1kΩ 0402 62.5mW Thic	SMT Assembly	
41	TS-1102S-B-G-B	SW1, S	SW-SMD_4P-L6.0-	C381064	TS-1102S-C-F-B	XKB Connectivity	4	Botton SMD TACTILE S	SMT Assembly	
42	RT9193-33GB	U1	SOT-23-5_L3.0-W1.	C15651	RT9193-33GB	Richtek Tech	1	5.5V 300mV @ 300mA	SMT Assembly	
43	STM32L151C8T6	U2	LQFP-48_L7.0-W7.0	C9861	STM32L151C8T6	STMicroelectronics	1	STM32 ARM-based 32-	SMT Assembly	
44	NRF24L01P-R	U3	QFN-20_L4.0-W4.0-	C8791	NRF24L01P-R	NORDIC	1	NRF24L01P-R SPI QFN	SMT Assembly	
45	W25Q256JVEIQTR	U4	WSON-8_L8.0-W6.1	C97522	W25Q256JVEIQTR	Winbond Elec	1	W25Q256 WSON-8_8p	SMT Assembly	
46	CH340E	U5	MSOP-10_L3.0-W3.0-P0.50-LS5.0-BL			WCH(Jiangsu Qin Heng)	1	Transceiver USB 2.0 2I	SMT Assembly	
47	THVD1450DR	U6	SOIC-8_3.9x4.9x1.2	C2671361	THVD1450DR	Texas Instruments	1	THVD1450DR transcei	SMT Assembly	
48	PCF85063ATT/AJ	U8	TSSOP-8_L3.0-W3.3	C165608	PCF85063ATT/AJ	NXP	1	TSSOP-8-3.0mm Real	SMT Assembly	
49	8Mhz	X1	SMD-3225_4P	C133366	1C208000CE0Q	KDS Daishinku	1	8Mhz 3225 SMD CRYST	SMT Assembly	
50	32.768K	X2	SMD-3215_2P	C32346	Q13FC1350000400	Seiko Epson	1	32.768K SMD CRYSTA	SMT Assembly	
51	16Mhz	X3	SMD-3225_4P	C13738	X322516MLB4SI	Yangxing Tech	1	16MHz SMD Crystal Re	SMT Assembly	