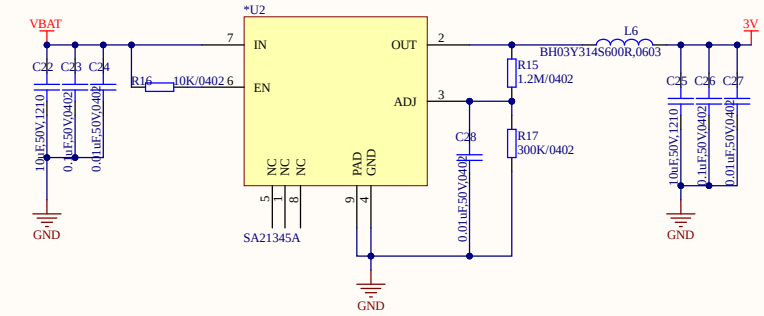
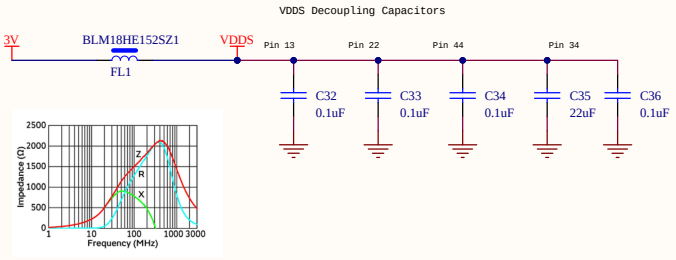
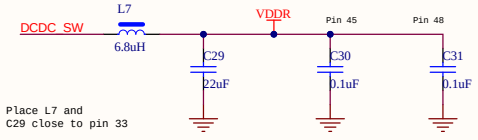
3V输出



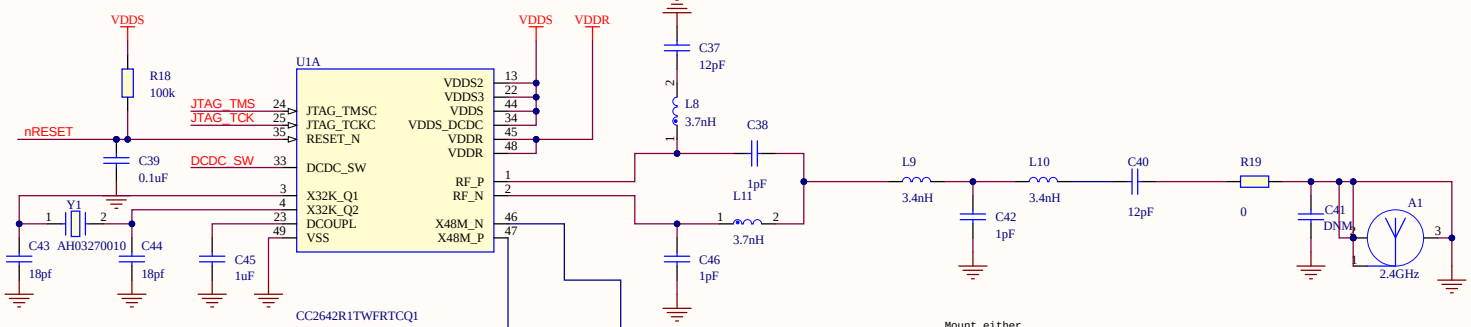
VDDS,VDDR设计

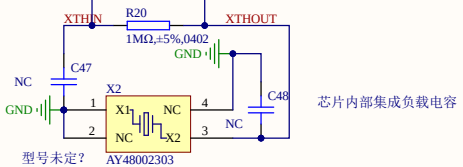




系统根据负载选择DCDC还是LDO

仅LDO供电时，需要断开DCDC_SW管脚

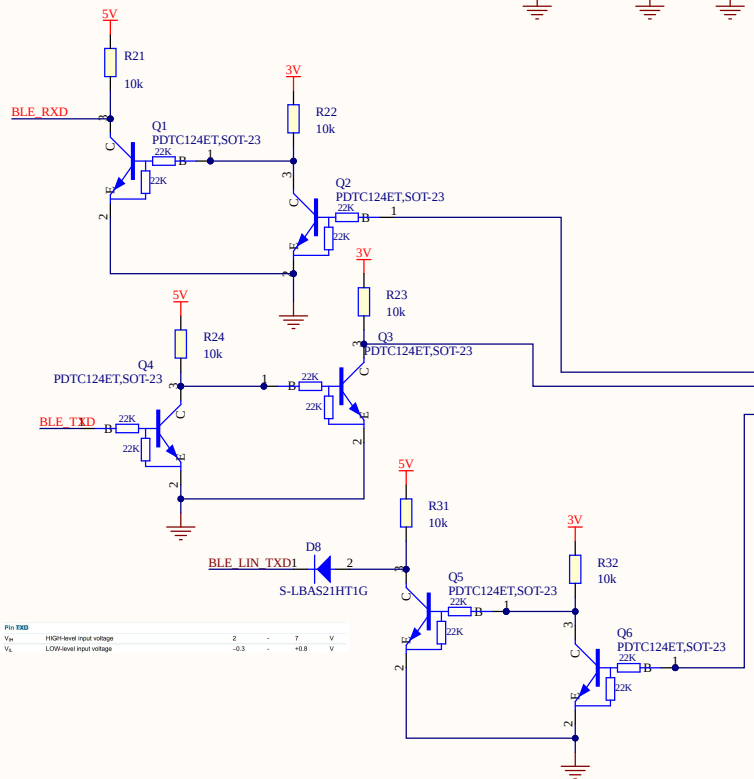


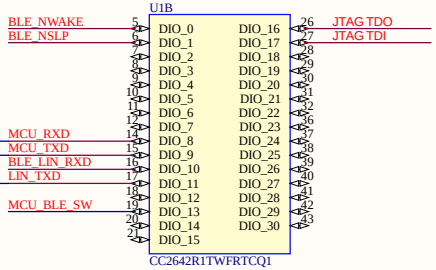


芯片内部集成负载电容

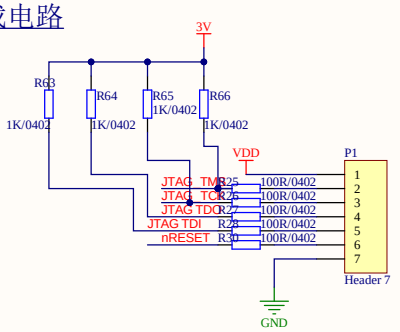
Mount either
C24 or C14
to select SMA
or PCB antenna.

Note that a
DC-blocking
capacitor must
be used if
antenna
has DC-path
to ground.





JTAG下载电路



Title		
Size A3	Number	Revision
Date: 11/09/2022	Sheet of	
File: D:\工作\BLE\BLE\PCB_Project\BLE.SchDoc	Drawn By:	

Comment	Description	Designator	Footprint	LibRef	Quantity
FM33LG0X6A		(U1	LQFP64	FM33LG0X6A	1
SA21345A		*U1, *U2	SO8E	SA21345A	2
2.4GHz	ANTENNA, NON COMPONENT, 2.4GHz INVERTED F ANTENNA, NOT APPLY	A1	ANTENNA_DN007AN	ANTENNA_DN007	1
0.1uF,50V,0402	GRM155R71C104KA88D,0402,MURATA,0.1uF,X7R,±10%,16V,	C1, C5, C7, C16, C19, C23, C26, C62, C69	0402C	02.01.00263	9
1nF,50V,0402	GRM155R71H102KA01D,0402,MURATA,1nF,X7R,±10%,50V,,GRM1555C1H221JA01D,0402,MURATA,220pF,C0G,±5%,50V,	C2, C64, C71	0402C	02.01.00329, 02.01.00289	3
10nF,50V,0402	GRM155R71H102KA01D,0402,MURATA,1nF,X7R,±10%,50V,,GRM155R71C104KA88D,0402,MURATA,0.1uF,X7R,±10%,16V,	C3, C4	0402C	02.01.00329, 02.01.00263	2
10uF,50V,1210	UMK325BJ106KM-T,1210,TAIYO,10uF,X5R,±10%,50V,	C6, C15, C18, C22, C25	1210	02.01.00248	5
4.7pf	GRM1555C1H8R2CA01D,0402,MURATA,8.2pF,C0G,±0.25pF,50V,	C8, C9	0402C	02.01.00305	2
0.1uF,16V,0402	GRM155R71C104KA88D,0402,MURATA,0.1uF,X7R,±10%,16V,	C10, C65	0402C	02.01.00263	2
10uF/16V/0603	TAIYO Capacitor	C11, C14, C49, C57	C-0603	C_0603_10uF/16V/20%	4
0.1uF/50V/0402	Yageo Capacitor	C12, C13, C50, C58	C-0402	C_0402_0.1uF/50V/10%	4
0.01uF,50V,0402	GRM155R71C104KA88D,0402,MURATA,0.1uF,X7R,±10%,16V,,GRM155R71H103KA88D,0402,MURATA,0.01uF,X7R,±10%,50V,	C17, C20, C21, C24, C27, C28, C70	0402C	02.01.00263, 02.01.00275	7
22uF	CAPACITOR, CERAMIC X6S, 22uF, 6.3V, -20%/+20%, -55DEGC/+105DEGC, 0603, SMD	C29, C35	CAPC1608X100A2N	CAPACITOR	2
0.1uF	CAPACITOR, CERAMIC X6S, 0.1uF, 25V, -10%/+10%, -55DEGC/+105DEGC, 0201, SMD	C30, C31, C32, C33, C34, C36, C39	CAPC0603X35B2N	CAPACITOR	7
12pF	CAPACITOR, CERAMIC C0G/NP0, 12pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0201, SMD	C37, C40	CAPC0603X35B2N	CAPACITOR	2
1pF	CAPACITOR, CERAMIC C0G/NP0, 1pF, 50V, -0.25%/+0.25pF, -55DEGC/+125DEGC, 0201, SMD	C38, C42, C46	CAPC0603X35B2N	CAPACITOR	3
DNM	CAPACITOR, CERAMIC, TBD, 0201, SMD, DNM	C41	CAPC0603X35B2N	CAPACITOR	1
18pf	CAPACITOR, CERAMIC C0G/NP0, 12pF, 50V, -5%/+5%, -55DEGC/+125DEGC, 0201, SMD	C43, C44	CAPC0603X35B2N	CAPACITOR	2
1uF	CAPACITOR, CERAMIC X7S, 1uF, 10V, -10%/+10%, -55DEGC/+125DEGC, 0402, SMD	C45	CAPC1005X60B2N	CAPACITOR	1
NC	GRM1555C1H8R2CA01D,0402,MURATA,8.2pF,C0G,±0.25pF,50V,	C47, C48	0402C	02.01.00305	2
47nF,50V,0402/NC	GRM155R71C104KA88D,0402,MURATA,0.1uF,X7R,±10%,16V,	C51, C52, C67, C68	0402C	02.01.00263	4
47pF,50V,0402	GRM155R71H471KA01D,0402,MURATA,470pF,X7R,±10%,50V,	C53, C66	0402C	02.01.00270	2
470pF,50V,0402	GRM155R71H471KA01D,0402,MURATA,470pF,X7R,±10%,50V,	C54	0402C	02.01.00270	1
10uF/16V/0603/NC	TAIYO Capacitor	C55	C-0603	C_0603_10uF/16V/20%	1
0.1uF/50V/0402/NC	Yageo Capacitor	C56	C-0402	C_0402_0.1uF/50V/10%	1
1uF/NC	C2012X7R1E105KT000N,0805,TDK,1uF,X7R,±10%,25V,	C59	0805C	02.01.00170	1
0.1uF/NC	GRM155R71C104KA88D,0402,MURATA,0.1uF,X7R,±10%,16V,	C60	0402C	02.01.00263	1
1uF,50V,0805	C2012X7R1E105KT000N,0805,TDK,1uF,X7R,±10%,25V,	C61	0805C	02.01.00170	1
220pF,50V,0402/NC	GRM1555C1H221JA01D,0402,MURATA,220pF,C0G,±5%,50V,	C63	0402C	02.01.00289	1
SS115LWHRVG	SS115LWHRVG	D1	SOD-123MH		1
P6SMB30CAHM4G	P6SMB30CAHM4G	D2	SOD-1812		1
BAS316,SOD-323/NC	BAS316,SOD-323,NEXPERIA,	D3	SOD-323	04.01.00064	1
BAS316,SOD-323	BAS316,SOD-323,NEXPERIA,	D4	SOD-323	04.01.00064	1
PESD1LIN/NC	PESD1LIN,SOD2/SOD323,NEXPERIA,	D5	SOD-323	09.04.00142	1
PESD1LIN	PESD1LIN,SOD2/SOD323,NEXPERIA,	D6	SOD-323	09.04.00142	1
BZT52C5V1S,SOD-323	BZT52C5V6S,SOD-323,JCET,	D7	SOD-323	04.03.00019	1
Single switching diode VR = 300 V,IF=250mA		D8	SOD323	DIODE	1
BLM18HE152SZ1	FILTER, EMI, FERRITE BEAD, 1500@1GHz, -25%/+25%, -55DEGC/+125DEGC, 0603, SMD	FL1	FILC1608X100A2N	FILTER_FERRITE	1
CON5	Connector	J1	SIP-5-2.54	CON5	1
BH03Y314S600R,0603	BH03Y314S600R,0603,GAUSSTEK,600Ω,±25%,DCR,Max0.2Ω,1A,	L1, L4, L5, L6	0805L	03.03.00015	4
SCBM321609U501T,1206	BH03Y314S600R,0603,GAUSSTEK,600Ω,±25%,DCR,Max0.2Ω,1A,	L2, L3	R1206	03.03.00015	2
6.8uH	INDUCTOR, STANDARD, FERRITE CORE, 6.8uH, -20%/+20%, 0.11A, -55DEGC/+125DEGC, 0805, SMD	L7	INDC2012X150A2N	IND_CORE	1
3.7nH	INDUCTOR, RF, CHIP, NON-MAGNETIC CORE, 3.7nH, -0.1nH/+0.1nH, 0.4A, -55DEGC/+125DEGC, 0201, SMD	L8, L11	INDC0603X33A2N	INDUCTOR_HOR_1_2	2
3.4nH	INDUCTOR, RF, CHIP, NON-MAGNETIC CORE, 3.4nH, -0.1nH/+0.1nH, 0.45A, -55DEGC/+125DEGC, 0201, SMD	L9, L10	INDC0603X33A2N	INDUCTOR	2
BH03Y314S600R,0603	BH03Y314S600R,0603,GAUSSTEK,600Ω,±25%,DCR,Max0.2Ω,1A,	L12, L15, L17	0603L		3
ACT45B-510-2P	ACT45B-510-2P,TDK	L13	INDP450X320X300-4N	03.02.00052	1
BH03Y314S600R,0603/NC	BH03Y314S600R,0603,GAUSSTEK,600Ω,±25%,DCR,Max0.2Ω,1A,	L14	0603L		1
BH03Y314S600R/NC	BH03Y314S600R,0603,GAUSSTEK,600Ω,±25%,DCR,Max0.2Ω,1A,	L16	0603L		1
Header 7	Header, 7-Pin	P1	HDR1X7	Header 7	1
Header 4	Header, 4-Pin	P3	HDR1X4	Header 4	1
Header 8	Header, 8-Pin	P?	HDR1X8	Header 8	1
PDTC124ET,SOT-23	PDTC124ET,SOT-23	Q1, Q2, Q3, Q4, Q5, Q6, Q8, Q13	SOT-23		8
PDTC124ET,SOT-23/NC	PDTC124ET,SOT-23	Q7, Q10, Q11	SOT-23		3
三极管Vceo= -80V,Ic=500mA,PNP	BC857CLT1G,SOT-23,ON,PNP,	Q9	SOT23	05.01.00033	1
BC856,SOT-23	BC857CLT1G,SOT-23,ON,PNP,	Q12	SOT-23	05.01.00033	1
1MΩ,±5%,0402	RTT02105JTH,0402,RALEC,1MΩ,±5%,1/16W,	R1, R20	0402R	01.01.00042	2
1KΩ,0402	RTT02103JTH,0402,RALEC,10KΩ,±5%,1/16W	R2	0402R	01.01.00001	1
10KΩ	RTT02103JTH,0402,RALEC,10KΩ,±5%,1/16W	R3, R7, R12	0402R	01.01.00001	3
100R/0402	Yageo RESISTOR	R4, R5, R8, R9, R10, R25, R26, R27, R28, R30	R0402	R_0402_100R/5%	10
47R/0603	Yageo RESISTOR	R6	R0603	R_0603_47R/5%	1
1.5M/0402	Yageo RESISTOR	R11	R0402	R_0402_100R/5%	1
10K/0402	Yageo RESISTOR	R13, R16	R0402	R_0402_100R/5%	2
200K/0402	Yageo RESISTOR	R14	R0402	R_0402_100R/5%	1
1.2M/0402	Yageo RESISTOR	R15	R0402	R_0402_100R/5%	1
300K/0402	Yageo RESISTOR	R17	R0402	R_0402_100R/5%	1
100k	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R18	RESC0603X35B2N	RESISTOR	1
0	RESISTOR, THICK FILM, 0, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R19	RESC0603X35B2N	RESISTOR	1
10k	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R21, R22, R23, R24, R31, R32	RESC0603X35B2N	RESISTOR	6
10k/NC	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R29, R33, R34	RESC0603X35B2N	RESISTOR	3
1.8k	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R35	RESC0603X35B2N	RESISTOR	1
10KΩ,±5%,0402/NC	RTT02103JTH,0402,RALEC,10KΩ,±5%,1/16W	R36, R46	0402R	01.01.00001	2
10KΩ,±5%,0402	RTT02103JTH,0402,RALEC,10KΩ,±5%,1/16W	R37, R47	0402R	01.01.00001	2
22Ω,±5%,0402/NC	RTT02220JTH,0402,RALEC,22Ω,±5%,1/16W,	R38, R42	0402R	01.01.00014	2
30KΩ,±5%,0402/NC	RTT02243JTH,0402,RALEC,24KΩ,±5%,1/16W,	R39	0402R	01.01.00251	1
22Ω,±5%,0402	RTT02220JTH,0402,RALEC,22Ω,±5%,1/16W,	R40, R43	0402R	01.01.00014	2
1KΩ,±5%,0402	RTT02243JTH,0402,RALEC,24KΩ,±5%,1/16W,,RTT02102JTH,0402,RALEC,1KΩ,±5%,1/16W,	R41, R51	0402R	01.01.00251, 01.01.00007	2
1K±5%/0402/NC	1011150138 Yageo RESISTOR	R44	R0402	R_0402_1K/5%	1
1K±5%/0402	1011150138 Yageo RESISTOR	R45	R0402	R_0402_1K/5%	1
10KΩ,0402/NC	RTT02103JTH,0402,RALEC,10KΩ,±5%,1/16W	R48	0402R	01.01.00001	1
10KΩ,0402	RTT02103JTH,0402,RALEC,10KΩ,±5%,1/16W	R49, R59, R62	0402R	01.01.00001	3
1KΩ,±5%,0402/NC	RTT02102JTH,0402,RALEC,1KΩ,±5%,1/16W,	R50	0402R	01.01.00007	1
20k/NC	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R52	RESC0603X35B2N	RESISTOR	1
2.4k/NC	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R53	RESC0603X35B2N	RESISTOR	1
60Ω,1210	RTT123900FTP,1210,RALEC,390Ω,±1%,1/2W,	R54, R56	1210R	01.01.00615	2
0Ω,0402	RTT02000JTH,0402,RALEC,0Ω,±5%,1/16W,	R55	0402R	01.01.00004	1
51k/NC	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R57	RESC0603X35B2N	RESISTOR	1
12K/NC	RESISTOR, THICK FILM, 100k, -5%/+5%, 0.05W, 30V, -55DEGC/+155DEGC, 0201, SMD	R58	RESC0603X35B2N	RESISTOR	1
100KΩ,0402	RTT02104JTH,0402,RALEC,100KΩ,±5%,1/16W,	R60	0402R	01.01.00013	1
20KΩ,0402	RTT022002DTH,0402,RALEC,20KΩ,±0.5%,1/16W,	R61	0402R	01.01.00120	1
1K/0402	Yageo RESISTOR	R63, R64, R65, R66	R0402	R_0402_100R/5%	4
PESD2IVN24-T	PESD2IVN24-T,SOT23/TO-236AB,NEXPERIA,	T9	SOT-23	09.04.00202	1
CC2642R1TWFRTCQ1	IC, CUSTOM, CC2642R1TWFRTCQ1 , QFN48-EP, SMD	U1	QFNFC50P700X700X100-49A2N	IC_RF_CC2642R1TWFRTCQ1_QFN48	1
TJA1044T,SO-8	TJA1044T,SO-8,NXP,	U2	SOIC127P600X175-8N	08.08.00754	1
TLE7259-3GE/NC	TJA1021T/20/CM,SO8,NXP,	U3	SOIC127P600X175-8N	08.08.00738	1
TLE7259-3GE	TJA1021T/20/CM,SO8,NXP,	U4	SOIC127P600X175-8N	08.08.00738	1
NCV8450/NC		U5		NCV8450	1
16MHz	AY16000303	X1	OSCCC165X206X45-4N		1
AY48002303	AY16000303	X2	OSCCC165X206X45-4N		1
AH03270010	CRYSTAL, RESONATOR, 32.768kHz, -40DEGC/+125DEGC, SMD	Y1	XTAL_FC13A_B2N	XTAL	1