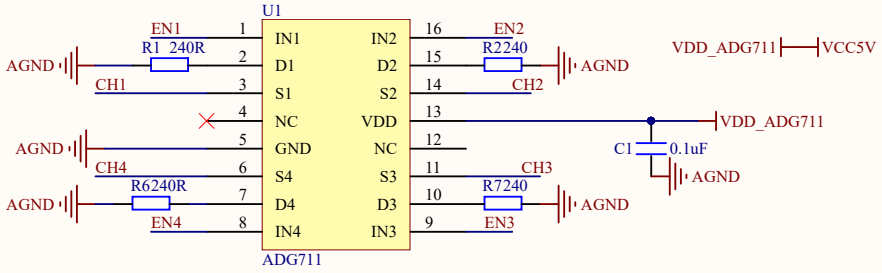
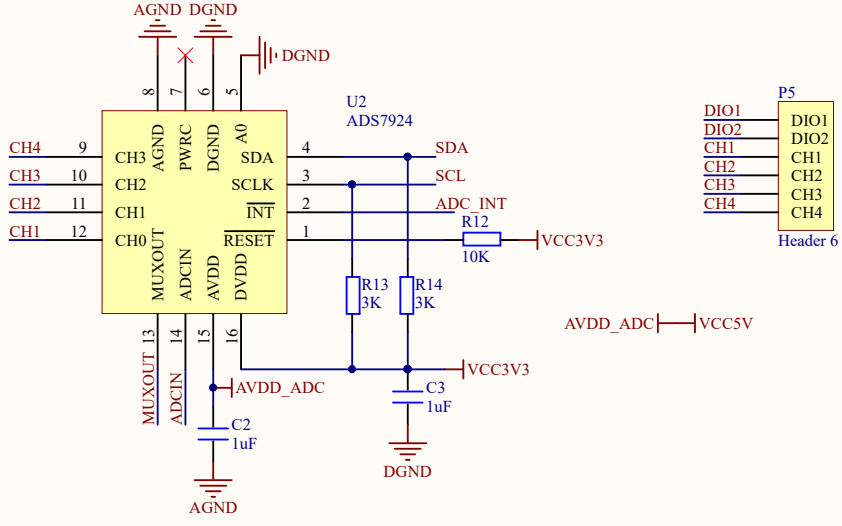
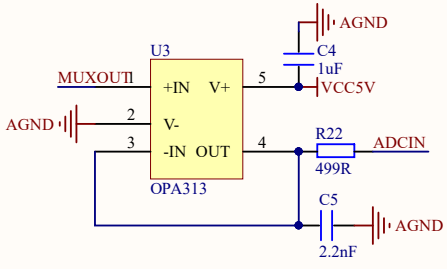
电压/电流ADC接口

R1、R2、R6、R7采用低温漂电阻

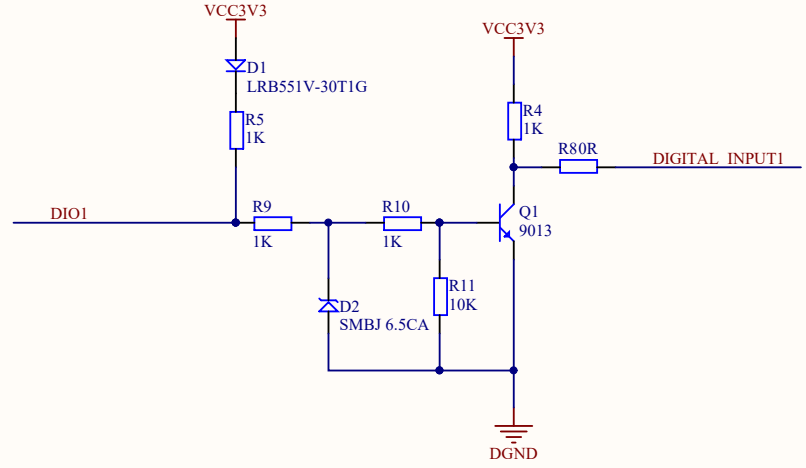


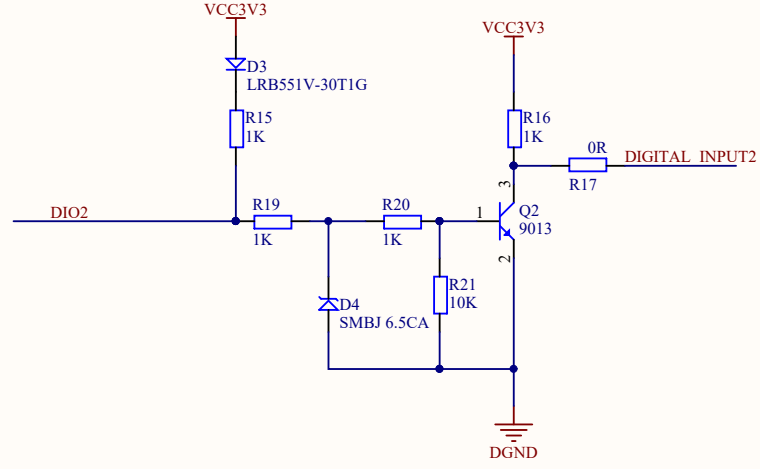
ADG711：EN=0，ON；EN=1，OFF

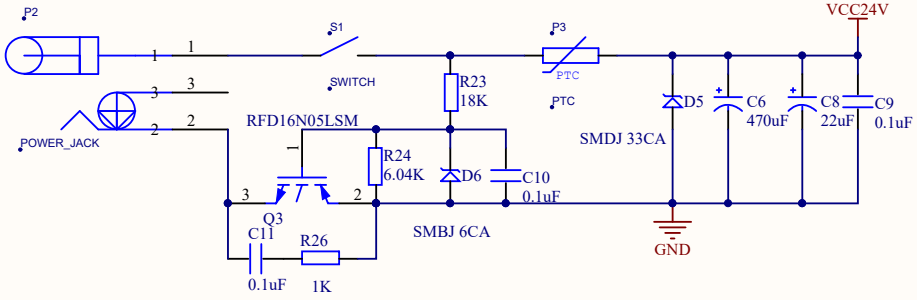




数字输入接口

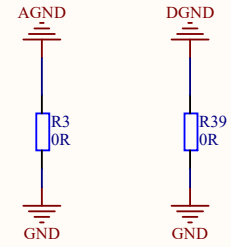




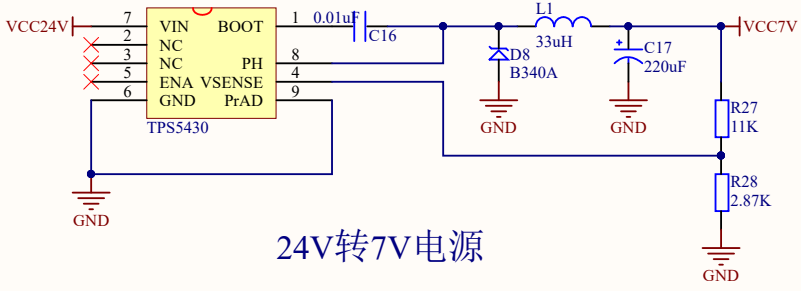


24V电源

电源地、数字地和模拟地单点共地

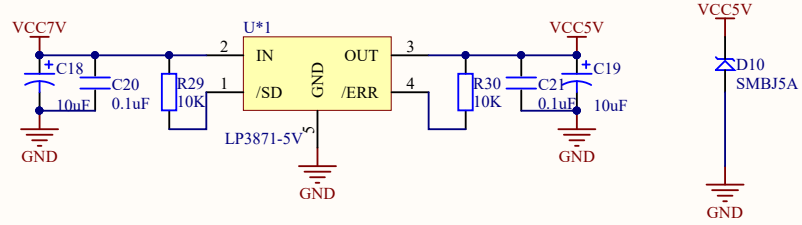


GND： 电源地　　AGND：模拟地　　DGND： 数字地

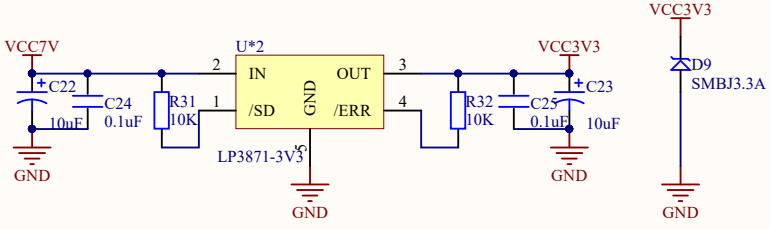


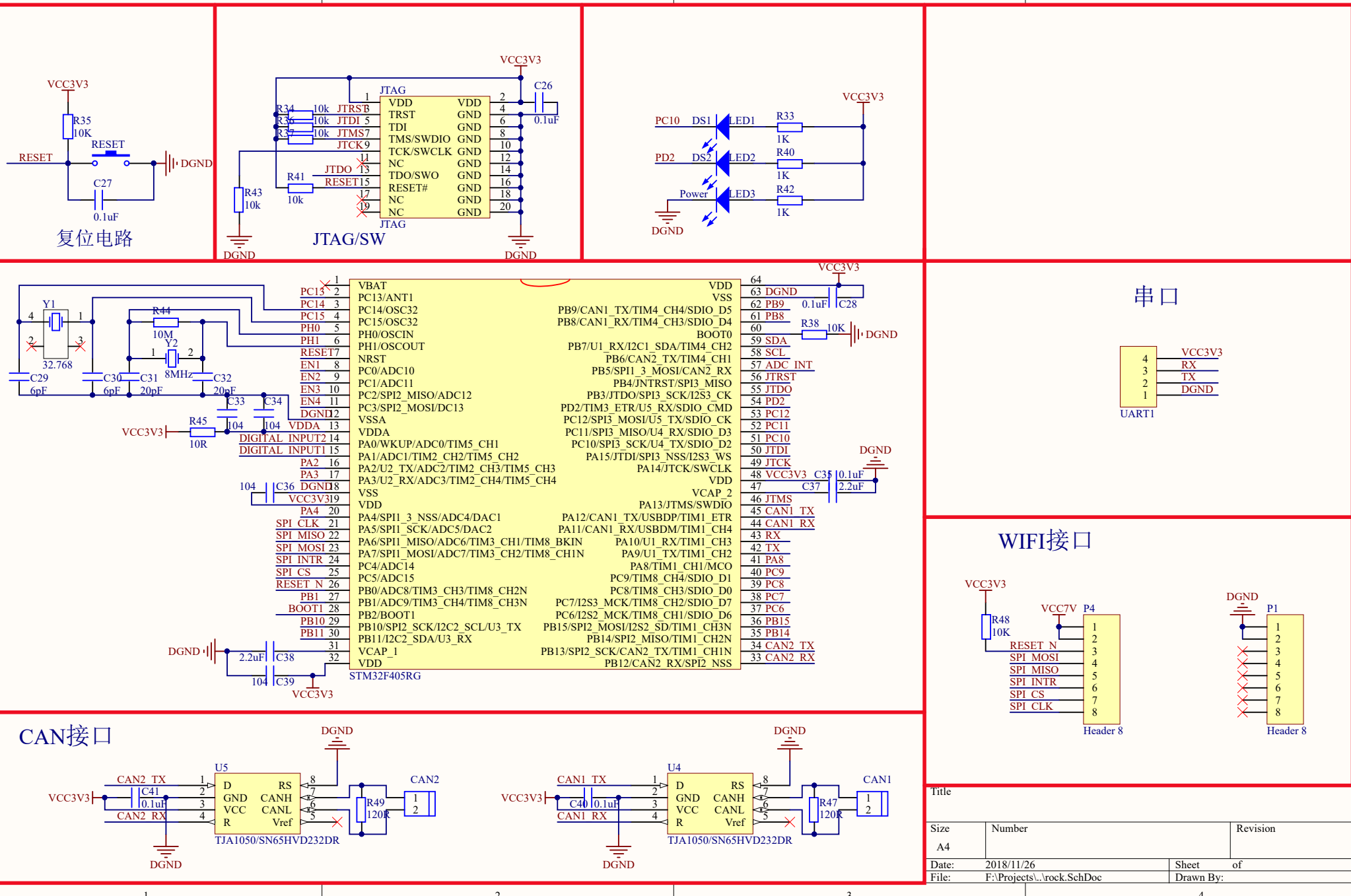
24V转7V电源

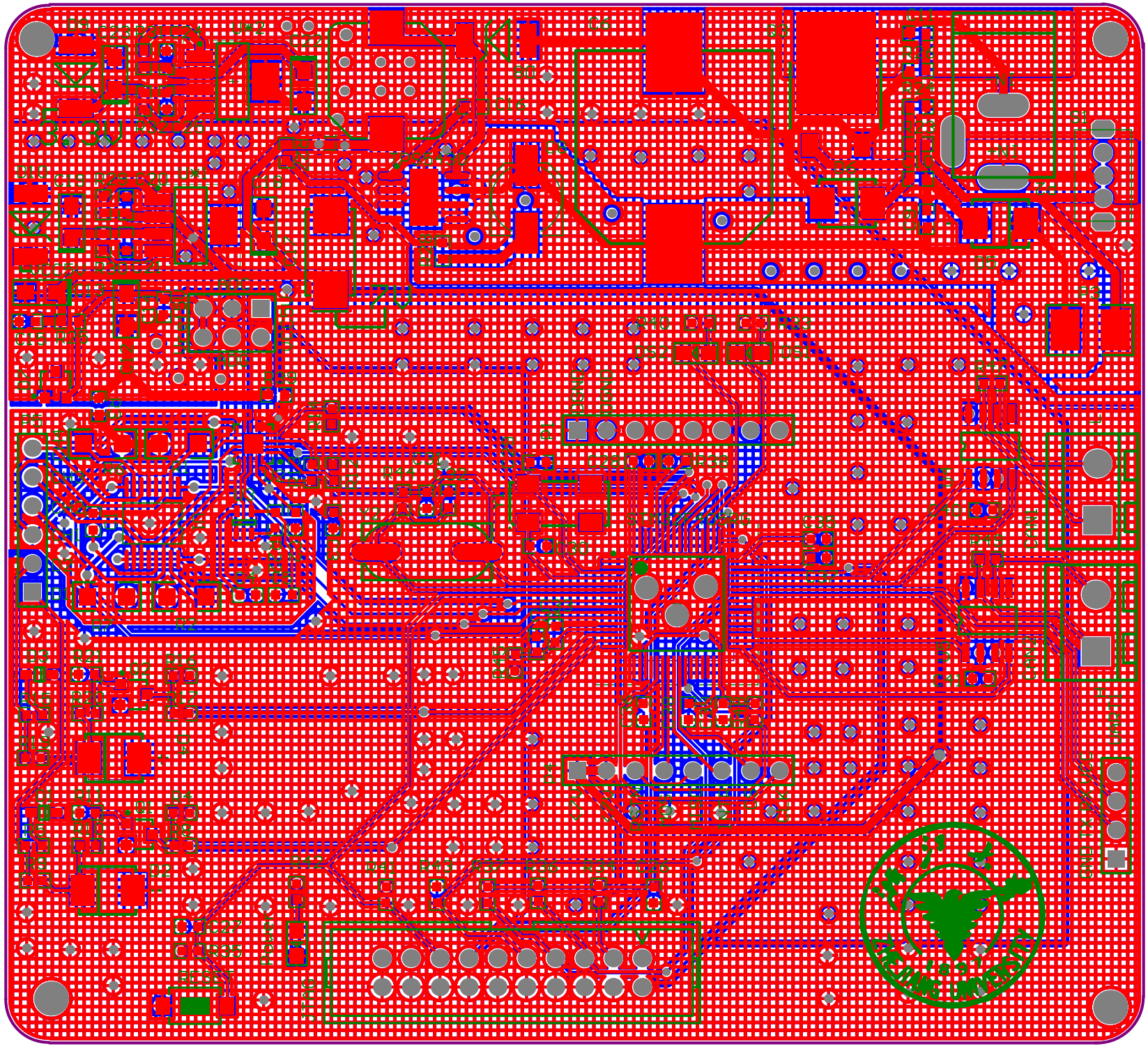
7V转5V



7V转3.3V




复位电路
JTAG/SW
串口
UART1
WIFI接口
CAN接口
STM32F405RG
TJA1050/SN65HVD232DR
Header 8
Title
Size
A4
Number
Revision
Date: 2018/11/26
Sheet of
File: F:\Projects\..\rock.SchDoc
Drawn By:



Comment	Description	Designator	Footprint	LibRef	Quantity
0.1uF	[NoValue], Cap,0.1uF,104, Cap,0.1uF,104, Cap,0.1uF,104, [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue]	C1, C9, C10, C11, C20, C21, C24, C25, C26, C27, C28, C35, C40, C41	0603	C, C_0.1uF, C_0.1uF, C_0.1uF, C, C, C, C, C, C, C, C, C	14
1uF		C2, C3, C4	0603	C	3
2.2nF		C5	0603	C	1
470uF	Cap,100uF,DIP	C6	SMD16	CAP+_100uF	1
22uF	钽电容 SMD 6.3*5.5 50V	C8	SMD6	CAP+_100uF	1
0.01uF		C16	0603	C	1
220uF	钽电容/220uF(227) 1 0% 16V	C17	CAP-7343	CAP	1
Cap Pol3	Polarized Capacitor (Surface Mount)	C18, C19, C22, C23	CAP-3216	Cap Pol3	4
6pF		C29, C30	0603	C	2
20pF		C31, C32	0603	C	2
104		C33, C34, C36, C39	0603	C	4
2.2uF		C37, C38	0603	C	2
CAN1		CAN1	HEAD2L-0.8	HEAD2	1
CAN2		CAN2	HEAD2L-0.8	HEAD2	1
LRB551V-30T1G	LRB551V-30T1G 20V 0.5A 肖特基二极管	D1, D3	SOD-323	D_DIODE LRB	2
SMBJ 6.5CA	TVS,SMBJ 6.5CA,600W SMD Transient Voltage Suppressor Diodes,	D2, D4	DO-214AA	SMBJ 6.5CA	2
SMDJ 33CA	TVS,SMBJ 6.5CA,600W SMD Transient Voltage Suppressor Diodes,	D5	SMC	SMBJ 6.5CA	1
SMBJ 6CA	TVS,SMBJ 6.5CA,600W SMD Transient Voltage Suppressor Diodes,	D6	DO-214AA	SMBJ 6.5CA	1
B340A	TVS	D8	SMBJ	SMBJ	1
SMBJ3.3A	TVS	D9	SMBJ	SMBJ	1
SMBJ5A	TVS	D10	SMBJ	SMBJ	1
LED1	Typical RED, GREEN, YELLOW, AMBER GaAs LED	DS1	SMDLED	LED2	1
LED2	Typical RED, GREEN, YELLOW, AMBER GaAs LED	DS2	SMDLED	LED2	1
JTAG		JTAG	JTAG_20	JTAG	1
Inductor	电感	L1	L-SMD-10	Inductor	1
Header 8	Header, 8-Pin	P1, P4	HDR8X1_A1	Header 8	2
POWER_JACK		P2	DC_IN	POWER_JACK	1
PTC		P3	1812	PTC	1
Header 6	接插件	P5	HDR6X1_A	Header 6	1
LED3	Typical RED, GREEN, YELLOW, AMBER GaAs LED	Power	SMDLED	LED2	1
9013	L2SC4617RT1G	Q1, Q2	SOT-23	L2SC4617RT1G	2
RFD16N05LSM	Insulated Gate Bipolar Transistor (N-Channel)	Q3	TO-252AA	IGBT-N	1
240R		R1, R6	1206	R	2
240		R2, R7	1206	R	2
0R	Res,1K,0603, [NoValue], [NoValue], Res,1K,0603	R3, R8, R17, R39	0603	R_1K, R, R, R_1K	4
1K	Res,1K,0603, Res,1K,0603, Res,1K,0603, Res,1K,0603, Res,1K,0603, Res,1K,0603, Res,1K,0603, [NoValue], [NoValue], [NoValue], [NoValue]	R4, R5, R9, R10, R15, R16, R19, R20, R26, R33, R40, R42	0603	R_1K, R_1K, R_1K, R_1K, R_1K, R_1K, R_1K, R_1K, R_1K, R, R, R	12
10K	Res,1K,0603, Res,1K,0603, Res,1K,0603, [NoValue], 贴片电阻, [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue]	R11, R12, R21, R34, R35, R36, R37, R38, R41, R43, R48	0603	R_1K, R_1K, R_1K, R, Res1, R, R, R, R, R, R	11
3K		R13, R14	0603	R	2
499R		R22	0603	R	1
18K		R23	0603	R	1
6.04K		R24	0603	R	1
11K		R27	0603	R	1
2.87K		R28	0603	R	1
Res1	贴片电阻	R29, R30, R31, R32	0603	Res1	4
10M		R44	0603	R	1
10R		R45	0603	R	1
120R		R47, R49	0603	R	2
SW-PB	微动开关	RESET	SW_PB2_A2	SW-PB	1
SWITCH		S1	Switch_2mm	SWITCH	1
STM	STM32F405RG_64Pins	STM32F405RG	LQFP-64	STM32F405RG	1
TPS	降压开关电源芯片	TPS5430	NSO8_TP4056	TPS5430	1
ADG711		U1	TSSOP16	ADG711	1
ADS7924		U2	WQFN16	ADS7924	1
OPA313		U3	SC70-5	OPA313	1
TJA1050/SN65HVD232DR		U4, U5	SOP-8	SN65HVD230D	2
LP3871-5V	LDO电源芯片5V	U*1	SOT-223-5	LP3871	1
LP3871-3V3	LDO电源芯片3V3	U*2	SOT-223-5	LP3871	1
Header 4	接插件	UART1	HDR4X1_A	Header 4	1
MC306	贴片晶振MC306	Y1	XTAL_8x3.8	XTAL_8x3.8	1
8MHz	Crystal Oscillator	Y2	X-SM49	XTAL	1