

Title		
Size	Number	Revision
A4		
Date:	3/29/2024	Sheet of
File:	C:\Users\...\RT1064_CoreBoard.SchDoc	Drawn By:

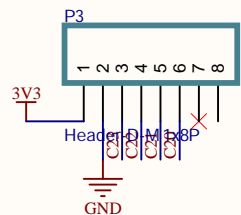
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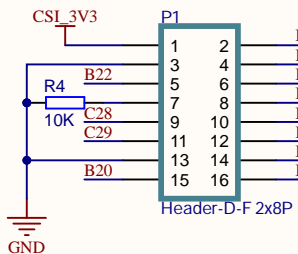
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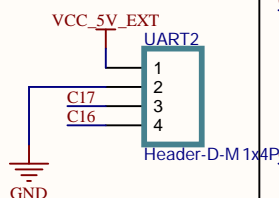
姿态传感器接口



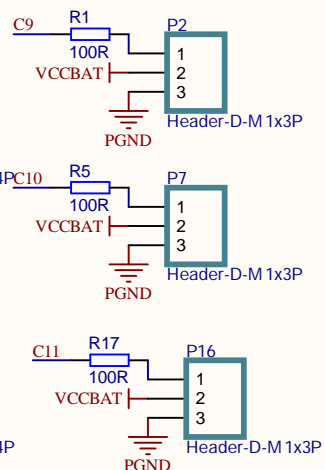
CSI摄像头接口



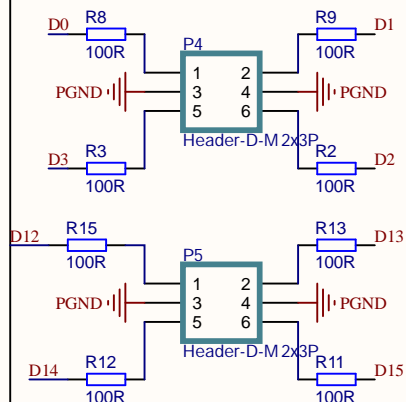
UART接口



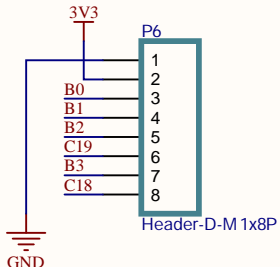
电磁铁接口



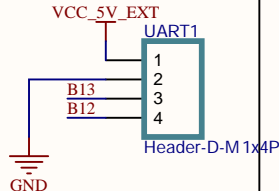
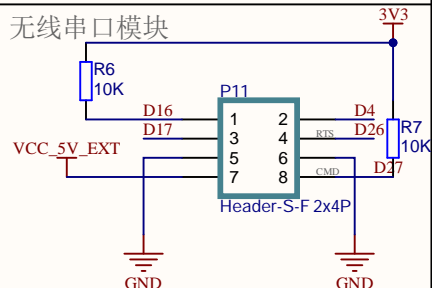
电机信号接口



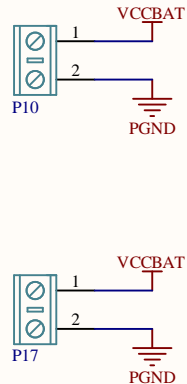
屏幕接口



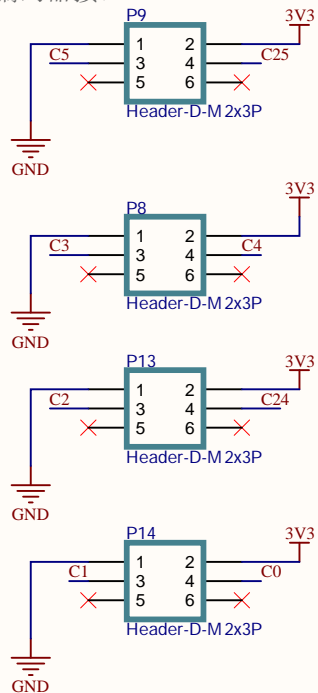
无线串口模块



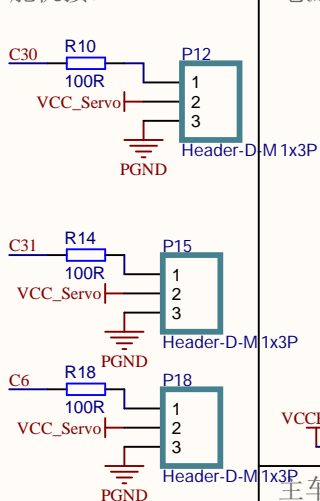
电机驱动接口



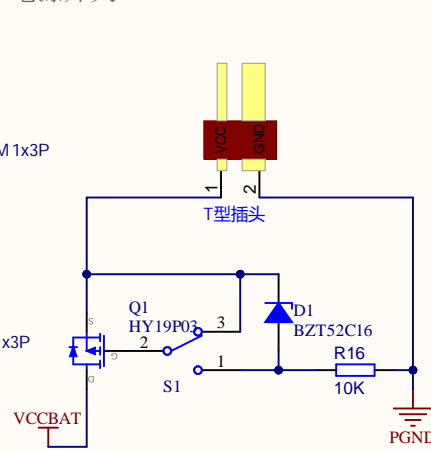
编码器接口



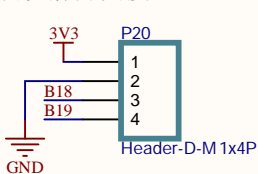
舵机接口



电源开关



主车蓝牙数据转发接口



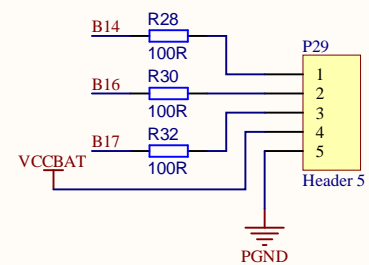
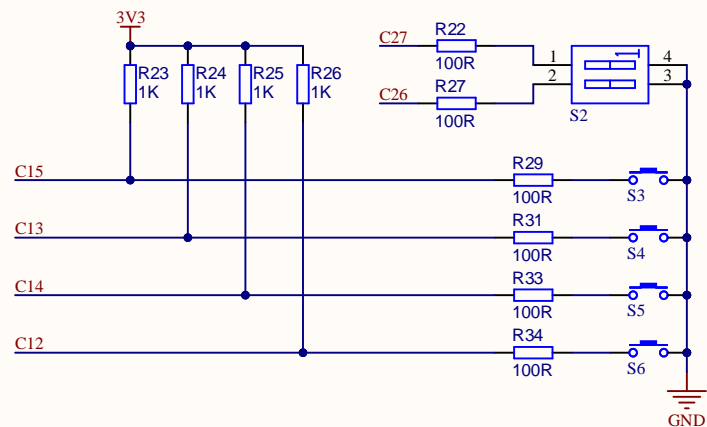
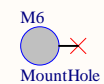
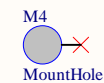
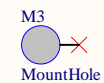
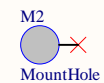
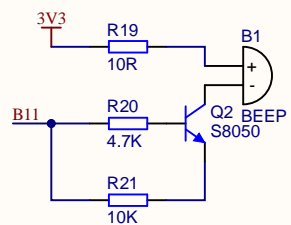
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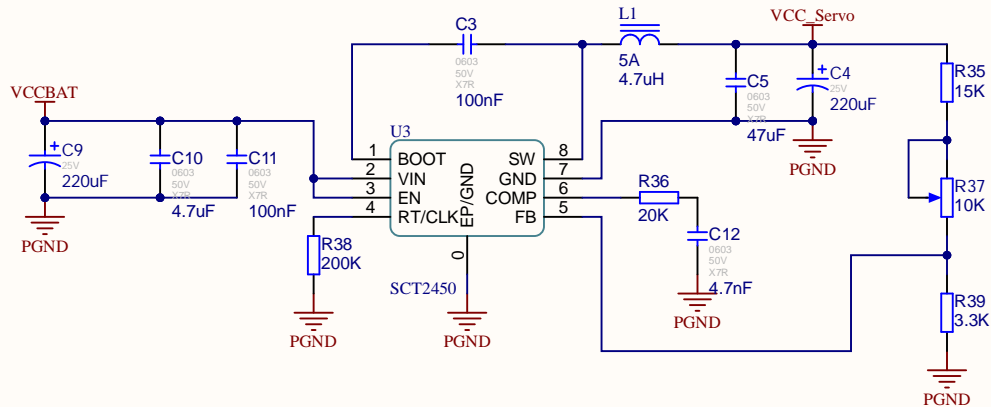
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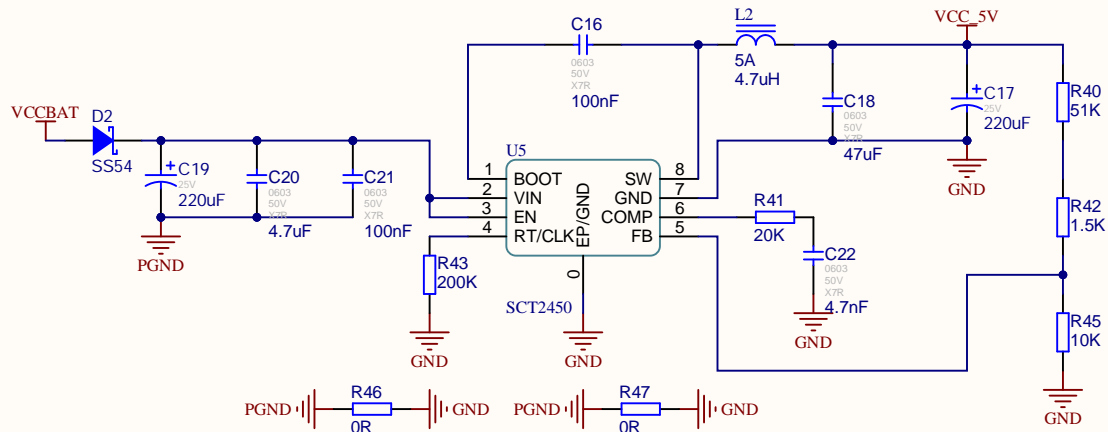


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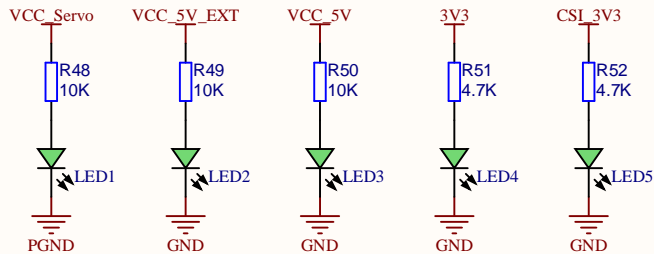
舵机稳压电路



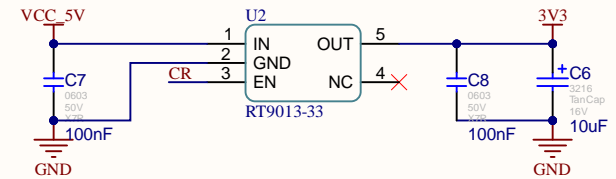
5V稳压电路



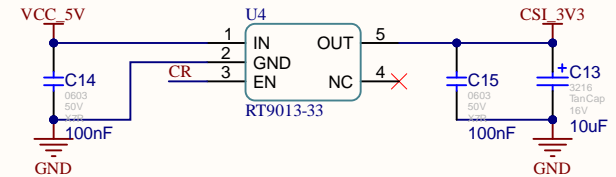
电源指示灯



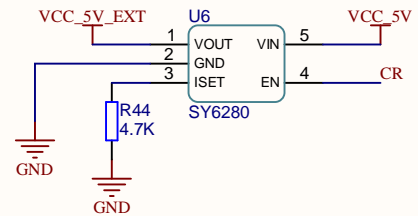
3V3电源



CSI摄像头电源

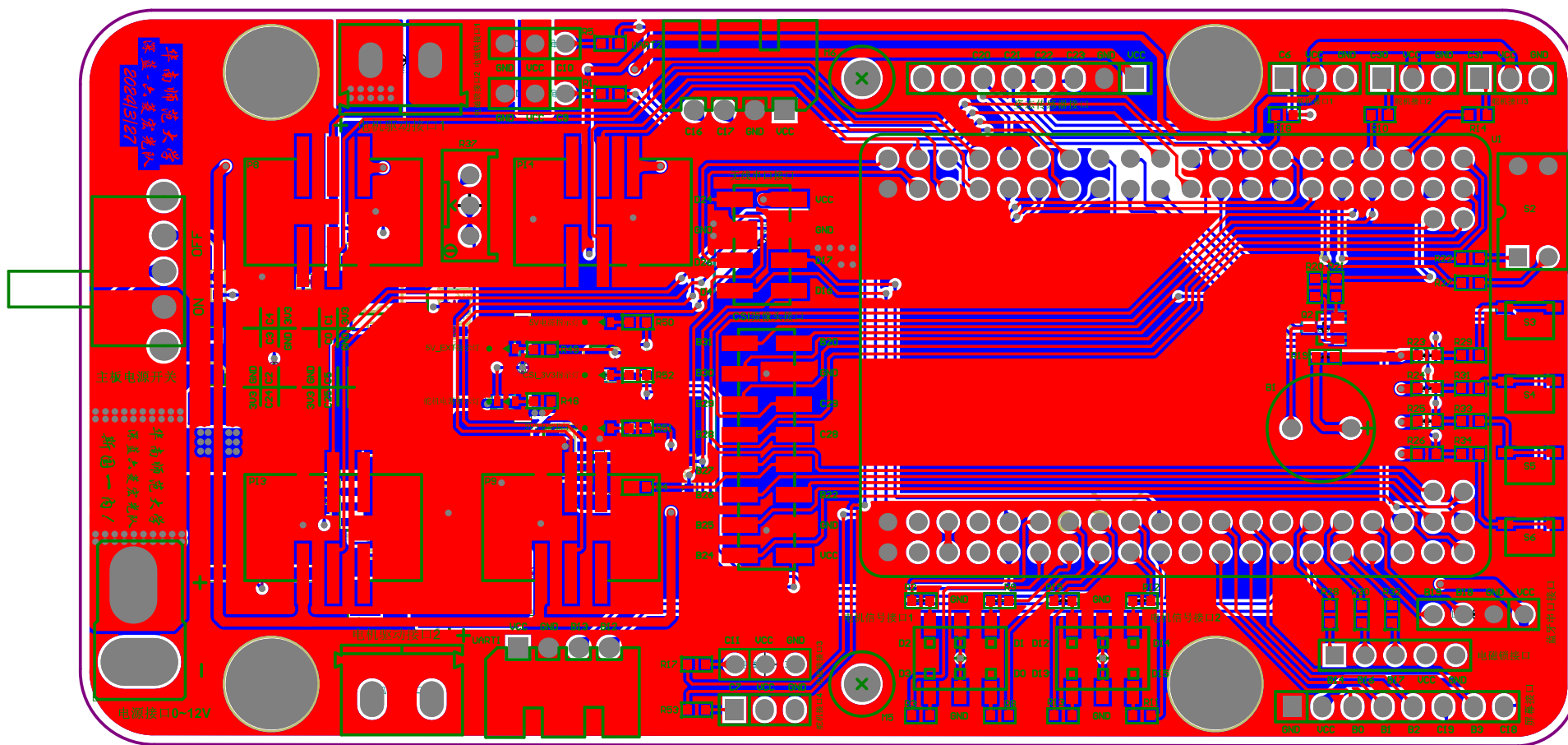


5V外设上电时序控制



驱动板使能信号

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126.37 (mm)

62.10 (mm)

Comment	Description	Designator	Footprint	LibRef	Quantity
BEEP	蜂鸣器	B1	BEEP 9x5.5mm	BEEP	1
T-S 10uF 3216 16V	贴片钽电容 10uF 3216 16V	C1, C6, C13	CAP-T-S 3216	T-S 10uF 3216 16V	3
1uF 16V X7R	贴片瓷片电容: MLCC: 0603(1608)	C2	CAPC1608[0603]S-L	1uF 0603 16V X7R	1
100nF 50V X7R	贴片瓷片电容: MLCC: 0603(1608)	C3, C7, C8, C11, C14, C15, C16, C21	CAPC1608[0603]S-L	100nF 0603 50V X7R	8
220uF 25V 铝电解	贴片电解电容 220uF 25V 6.3x7.7	C4, C9, C17, C19	CAP-E-S 6.3	E-S 220uF 25V 6.3x7.7	4
47uF 50V X7R	贴片瓷片电容: MLCC: 0603(1608)	C5, C18	CAPC1608[0603]S-L	100nF 0603 50V X7R	2
4.7uF 50V X7R	贴片瓷片电容: MLCC: 0603(1608)	C10, C20	CAPC1608[0603]S-L	100nF 0603 50V X7R	2
4.7nF 50V X7R	贴片瓷片电容: MLCC: 0603(1608)	C12, C22	CAPC1608[0603]S-L	4.7nF 0603 50V X7R	2
BZT52C16	稳压二极管 齐纳二极管 Zener Diode	D1	SOD-123-L	Diode Zen	1
SS54	SS54 肖特基二极管	D2	SMA-[LDO-214AC]	SS54	1
T型插头	T型插头	DCIN1	CONN-TH_AM-1015B-F	T_Header	1
4.7uH 5A	功率电感	L1, L2	0630 TPC 7*7*3	Ind-Power	2
翠绿贴片LED	翠绿贴片LED	LED1, LED2, LED3, LED4, LED5	LEDC1608(0603)-L	LED Chip Green	5
Header-D-F 2x8P	2x8pin, 直插, 双排座	P1	Cam_HDR2X8-F-SMT	Header-D-F 2x8P	1
Header-D-M 1x3P	1x3pin, 直插, 排针	P2, P7, P16	HDR1X3-M	Header-D-M 1x3P	3
Header-D-M 1x8P	1x8pin, 直插, 排针	P3, P6	Fe-HDR1X8/2.54-S	Header-D-M 1x8P	2
Header-D-M 2x3P	2x3pin, 贴片, 双排针	P4, P5	HDR2.54-M-LS-2x3P	Header-S-M 2x3P	2
Header-D-M 2x3P	2x3pin, 贴片, 双排针	P8, P9, P13, P14	DC3-6P-2.54mm	Header-S-M 2x3P	4
KF/WJ/DG 30x connector	接线端子 2Pin	P10, P17	KF/WJ/DG 301-2p-5.0mm	KF/WJ/DG 30x	2
Header-S-F 2x4P	2x4pin, 贴片, 双排座	P11	HDR2X4-F-SMT	Header-S-F 2x4P	1
Header-D-M 1x3P	1x3pin, 直插, 排针	P12, P15, P18, P19	Fe-HDR1X3/2.54-S	Header-D-M 1x3P	4
Header-D-M 1x4P	1x4pin, 直插, 排针	P20	HDR1X4-M	Header-D-M 1x4P	1
Header 5	Header, 5-Pin	P29	HDR1X5	Header 5	1
HY19P03	HY19P03 P-Channel MOSFET	Q1	TO-252AA	HY19P03	1
S8050	Discrete NPN Bipolar Transistor	Q2	SOT-23	NPN S8050	1
100R ±1%	贴片电阻	R1, R2, R3, R5, R8, R9, R10, R11, R12, R13, R14, R15, R17, R18, R22, R27, R28, R29, R30, R31, R32, R33, R34, R53	RESC1608[0603]S-L	Res-Chip	24
10K ±1%	贴片电阻	R4, R6, R7, R16, R21, R45, R48, R49, R50	RESC1608[0603]S-L	Res-Chip	9
10R ±1%	贴片电阻	R19	RESC1608[0603]S-L	Res-Chip	1
4.7K ±1%	贴片电阻	R20, R44, R51, R52	RESC1608[0603]S-L	Res-Chip	4
1K ±1%	贴片电阻	R23, R24, R25, R26	RESC1608[0603]S-L	Res-Chip	4
15K ±1%	贴片电阻	R35	RESC1608[0603]S-L	Res-Chip	1
20K ±1%	贴片电阻	R36, R41	RESC1608[0603]S-L	Res-Chip	2
10K	可调电阻	R37	RESPOT3296W	Res-Adj-3p	1
200K ±1%	贴片电阻	R38, R43	RESC1608[0603]S-L	Res-Chip	2
3.3K ±1%	贴片电阻	R39	RESC1608[0603]S-L	Res-Chip	1
51K ±1%	贴片电阻	R40	RESC1608[0603]S-L	Res-Chip	1
1.5K ±1%	贴片电阻	R42	RESC1608[0603]S-L	Res-Chip	1
0R ±1%	贴片电阻	R46, R47	RESC1608[0603]S-L	Res-Chip_1	2
SW-SPDT	单刀双掷开关 3脚船型、钮子、拨动开关 SPDT Subminiature Toggle Switch	S1	SS-12F23	SW-SPDT	1
SW DIP-2	2位拨码开关	S2	Code SW-2-DIP-2.54	Code SW-2	1
Button	按键	S3, S4, S5, S6	PTS810-3*4-CurvePin	KEY	4
MIMXRT1064xVL_C oreBoard	逐飞科技iMX RT1064核心板整体原理, 可直接使用	U1	MIMXRT1064xVL_C oreBoard - 3D	MIMXRT1064xVL_C oreBoard	1
RT9013-33	3.3V 500mA SOT-23-5 LDO	U2, U4	SOT-23-5	RT9013-33	2
SCT2450	3.8V-36V Vin, 5A, High Efficiency Synchronous Step-down DCDC Converter with Programmable Frequency	U3, U5	SOP-8E	SCT2450	2
SY6280	SY6280 2A 限流配电开关	U6	SOT-23-5	SY6280	1
Header-D-M 1x4P	1x4pin, 直插, 排针	UART1, UART2	XH2.54-WI-4P	Header-D-M 1x4P	2