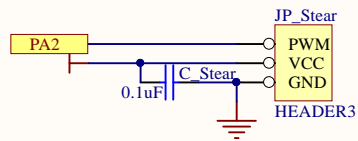
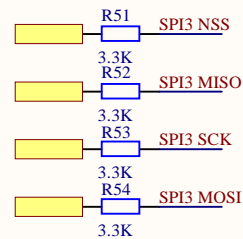


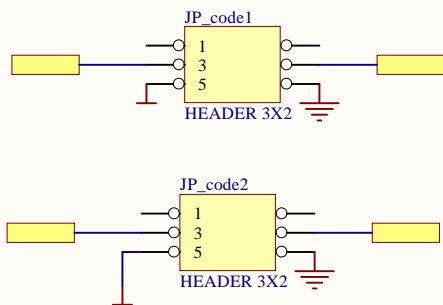
LED模块



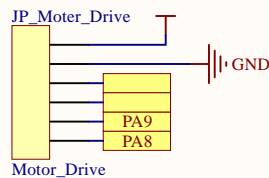
舵机模块



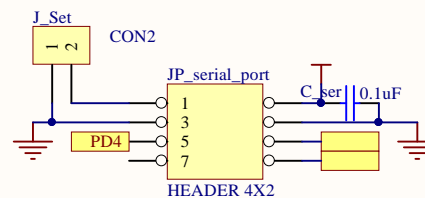
TF卡接口外围电路



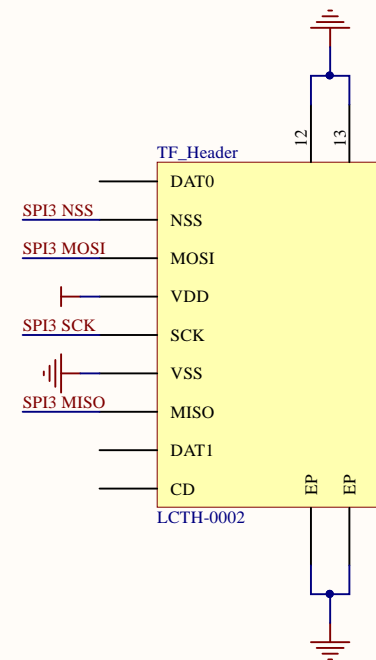
编码器



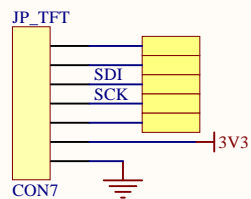
电机驱动模块



无线模块

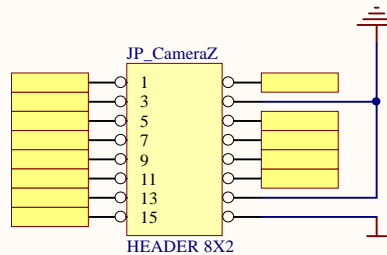


TF卡接口

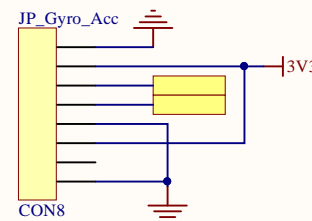


TFT

LCD屏接口

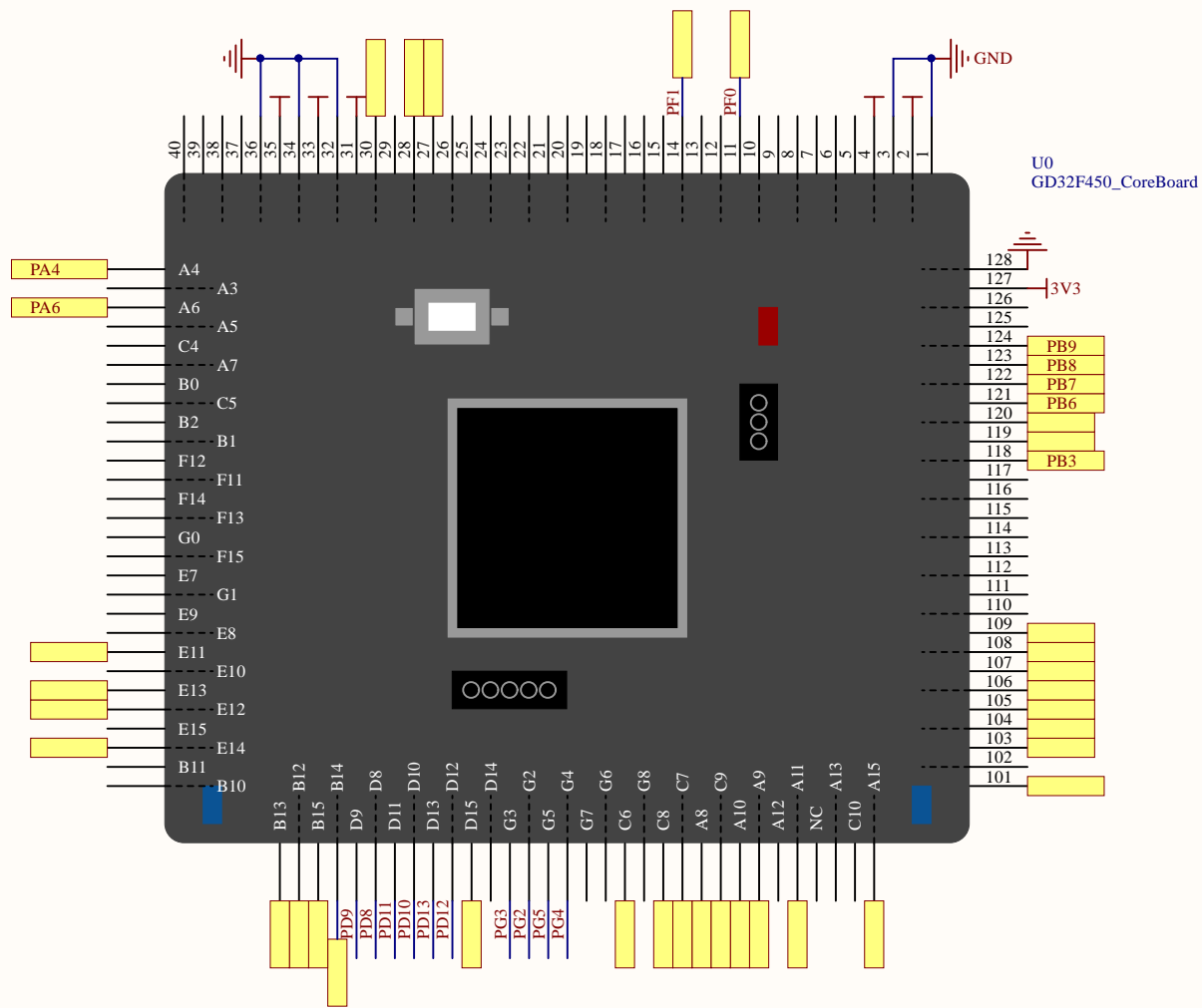


总钻风摄像头接口



姿态传感器

Title		GD32F450摄像头主板_外部扩展模块		绘制: 高钟安
Size		Number		审核: 王元轩
A4		3/3		Revision
Date:	2021/8/29	Sheet	of	V1.0
File: C:\Users\...\GD32F450_External_Expansion\GD32F450_V1.0.SchDoc				



核心板接口

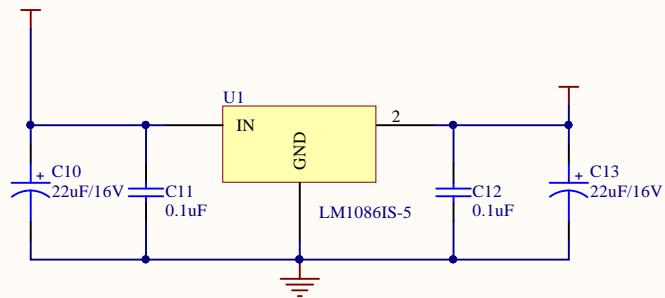
拨码开关模块

按键模块

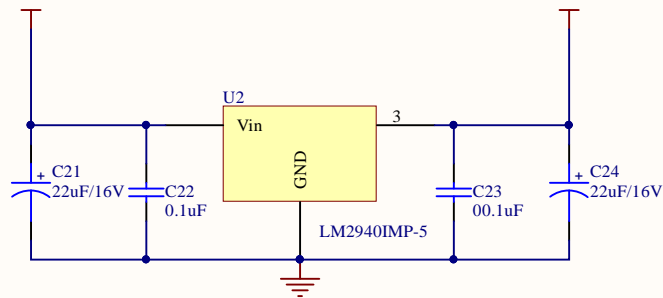
OLED接口

定位孔

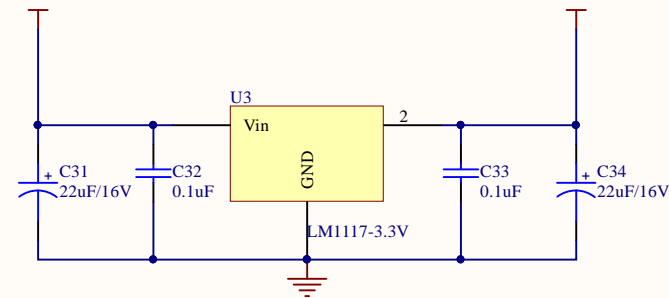
Title			绘制：高钟安 审核：王元轩
GD32F450摄像头主板_底座及部分外设			
Size	Number	Revision	
A4	1/3	V1.0	
Date:	2021/8/29	Sheet	of
File:	C:\Users\...\GD32F450_Main_Board(CamDraw)\WB0.SchDoc		



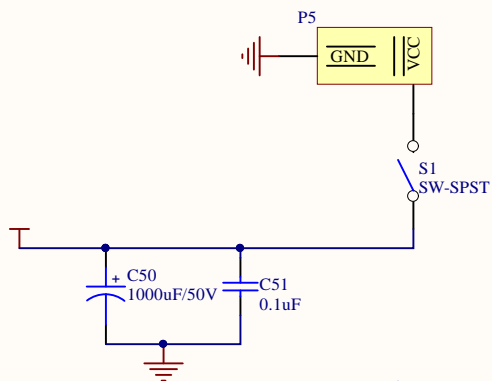
5V供外设转换电路



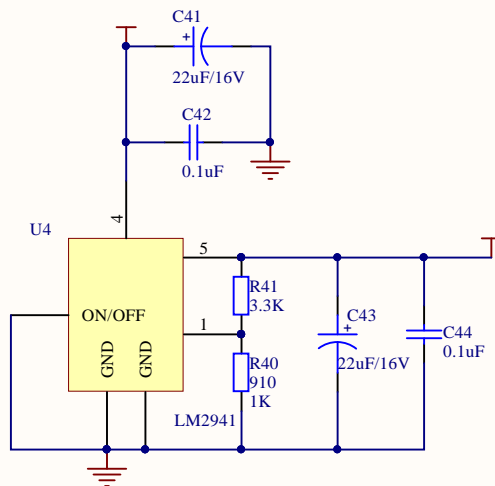
5V供MCU转换电路



3.3V转换电路

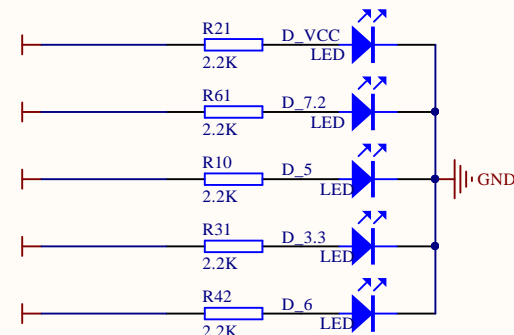


电源输入电路

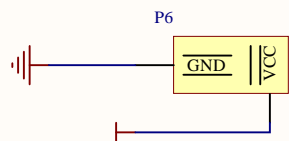


$$V_{out} = 1.275 * (R41 + R40) / R40 = 5.48$$

6V供舵机转换电路



电源模块指示灯



7.2V电机驱动

Title		GD32F450摄像头主板_电源管理模块		绘制: 高钟安
Size		Number		审核: 王元轩
A4		2/3		Revision V1.0
Date:	2021/8/29	Sheet	of	
File:	C:\Users\...\GD32F450_Power_Management\GD32F450_V1.0.SchDoc			

Bill of Materials

<Parameter Title not found>

Source Data From: GD32F450_Main_Board_Camera_REV1.0.PrjPcb
 Project: GD32F450_Main_Board_Camera_REV1.0.PrjPcb
 Variant: None

Creation Date: 2021/8/29 11:07:23
 Print Date: 44437 44437.46351

Footprint	Comment	LibRef	Designator	Description	Quantity
3528	22uF/16V	CAPACITOR	C10, C13, C21, C24, C31, C34, C41, C43	Capacitor	8
0805C	0.1uF	POL			
		CAP	C11, C12, C22, C32, C33, C42, C44, C51, C_ser, C_Stear	Capacitor	10
0805C	00.1uF	CAP	C23	Capacitor	1
CM	1000uF/50V	CAPACITOR	C50	Capacitor	1
F(10*10.2)		POL			
1206LED	LED	LED	D0, D1, D2, D3, D_3.3, D_5, D_6, D_7.2, D_VCC		9
HOLE-3.5	CON1	CON1	J1, J2, J3	Connector	3
IDC16-JLC	HEADER 8X2	HEADER 8X2	JP_CameraZ		1
IDC6-JLC	HEADER 3X2	HEADER 3X2	JP_code1, JP_code2		2
SIP8	CON8	CON8	JP_Gyro_Acc	Connector	1
SIP6N	Motor_Drive	CON6	JP_Moter_Drive	Connector	1
OLED	CON4	CON4	JP_OLED	Connector	1
IDC8-JLC	HEADER 4X2	HEADER 4X2	JP_serial_port		1
SIP3	HEADER3	STEER	JP_Stear		1
SIP7	CON7	CON7	JP_TFT	Connector	1
SIP2	CON2	CON2	J_Set	Connector	1
KEY2-6X3	SW-PB	SW-PB	KEY1, KEY2, KEY3, KEY4, KEY5, KEY6		6
T_Type_Adapter	T_Type_Adapter	T_Type_Adapter	P5, P6		2
0805R	2.2K	RES2	R10, R21, R31, R42, R61		5
0805R	Res2	Res2	R11, R12, R13, R14	Resistor	4
0805	910	Res2	R40	Resistor	1
0805	3.3K	Res2	R41	Resistor	1
0805R		Res2	R51, R52, R53, R54	Resistor	4
SWITCH-MINI	SW-SPST	SW-SPST	S1		1
CSW DIP-4P	SW DIP-4	SW DIP-4	SWITCH	DIP Switch	1
TF_2	LCTH-0002	Component_2	TF_Header		1
GD32F450_CoreBoard	GD32F450_CoreBoard	GD32F450_CoreBoard	U0		1
TO263-3A	LM1086IS-5	LT1086	U1		1
SOT-223	LM2940IMP-5	LM1117-3.3V	U2		1
SOT-223	LM1117-3.3V	LM1117-3.3V	U3		1
TO-263	LM2941	LM2941	U4		1
					73

Approved	Notes