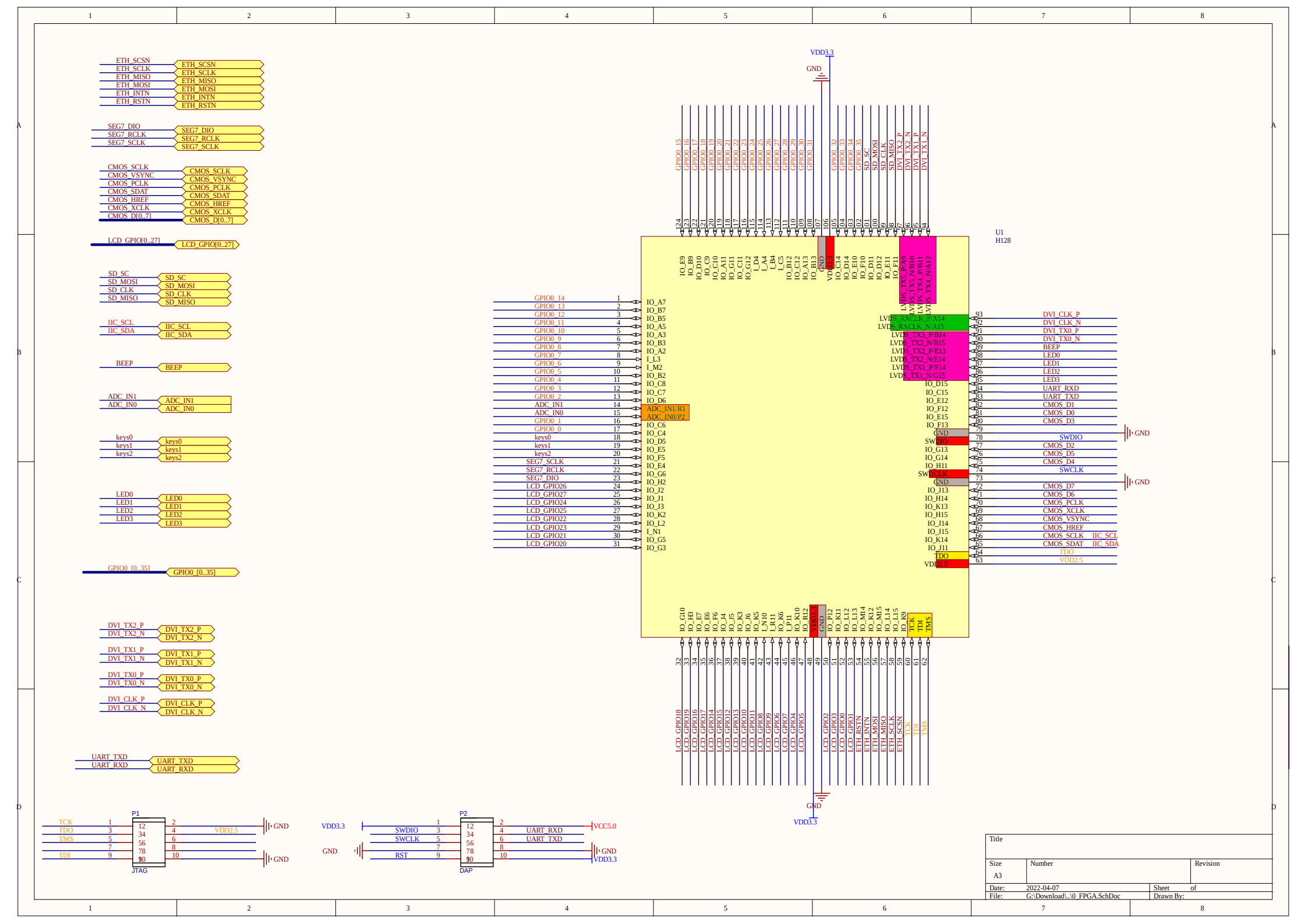
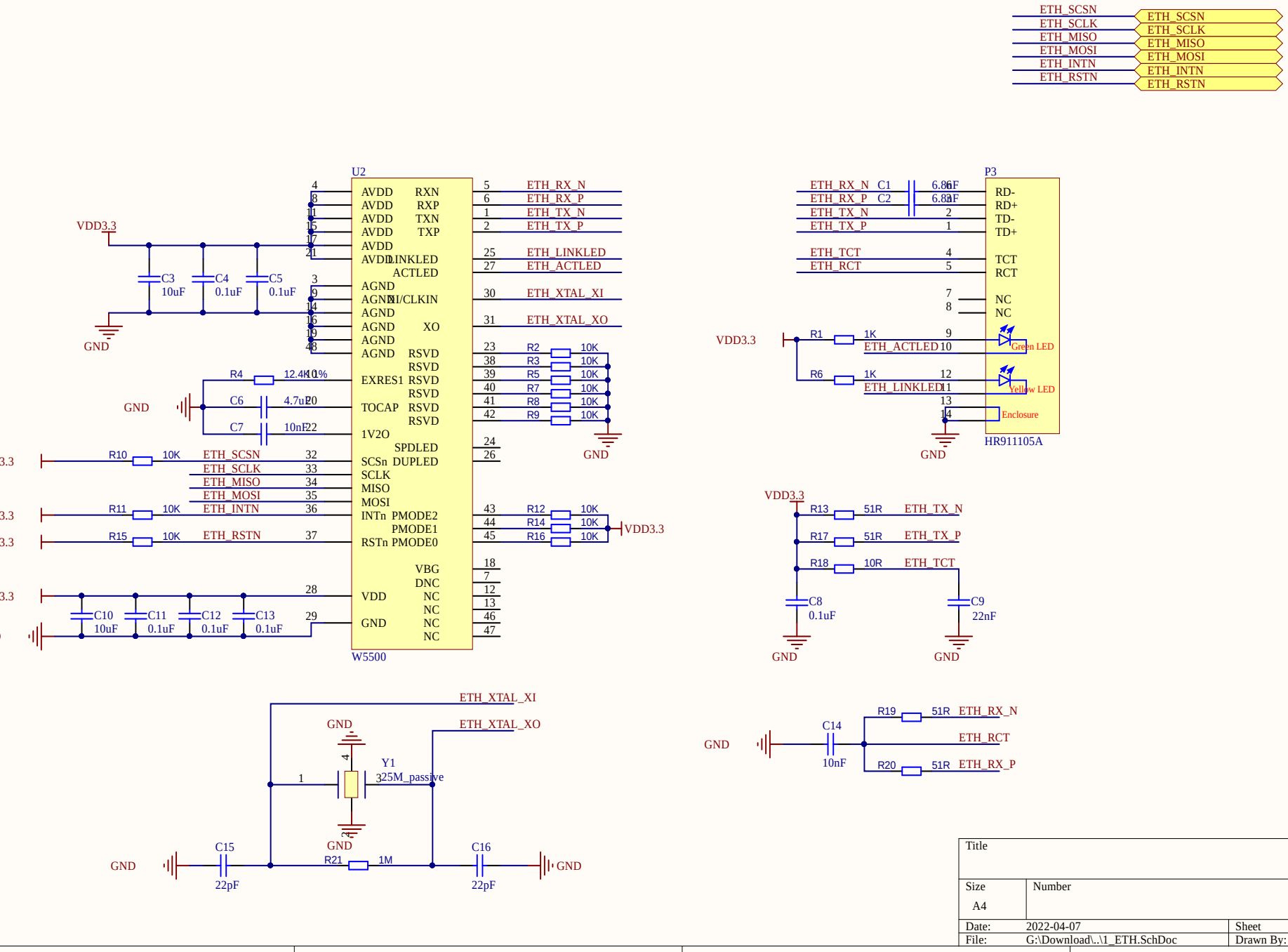
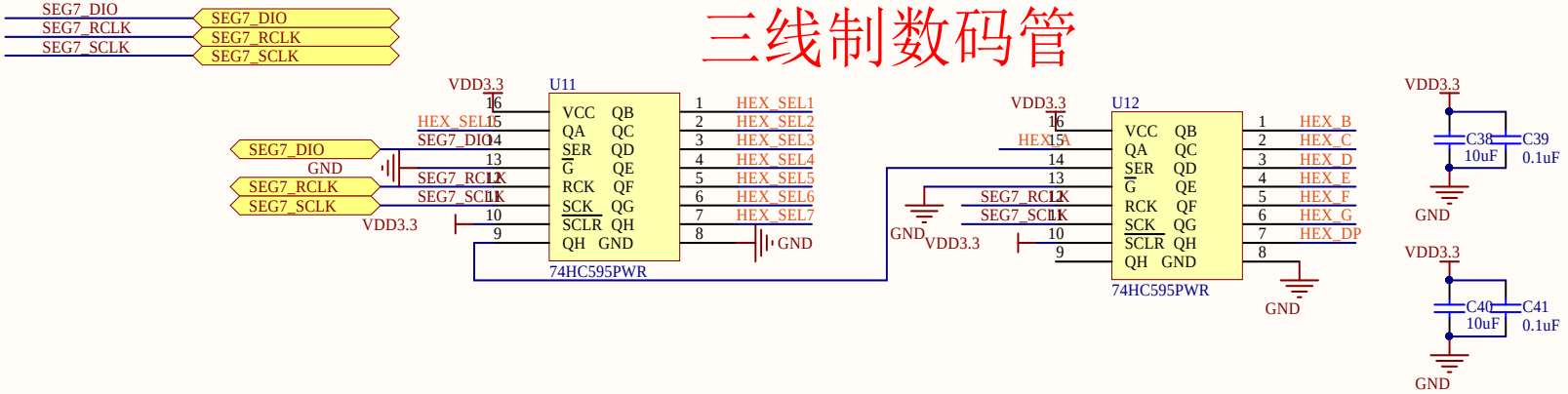
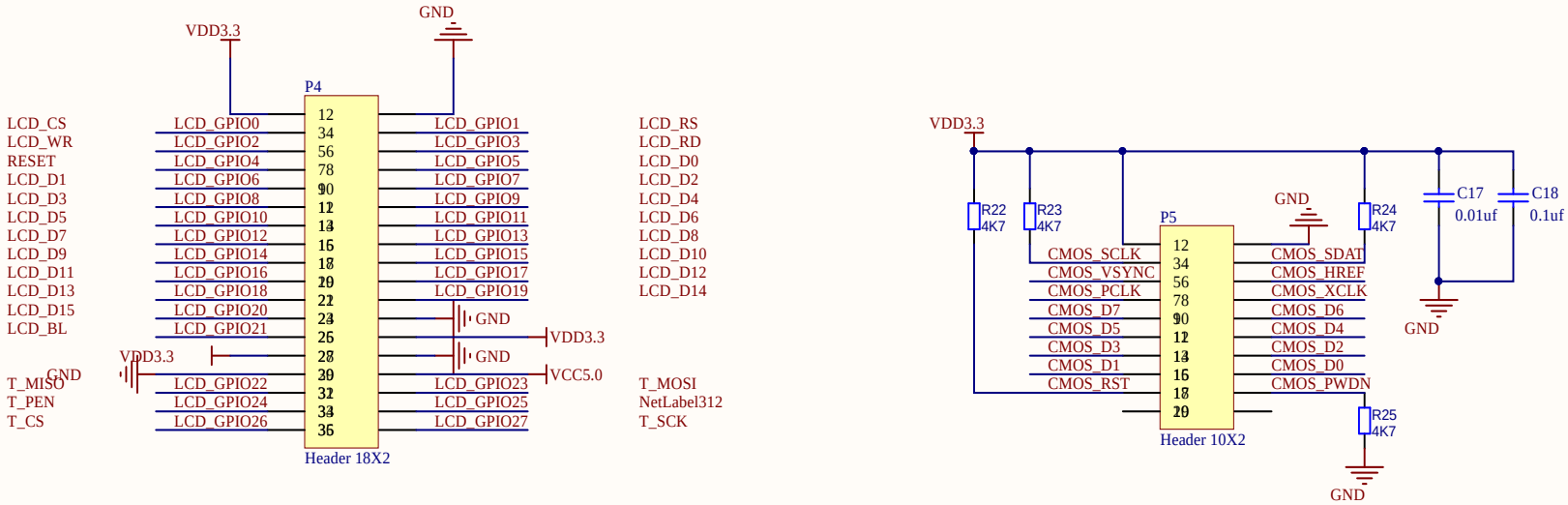


Title			
Size A3	Number		Revision
Date: 2022-04-07		Sheet	of
File: G:\Download\..\0_FPGA.SchDoc		Drawn By:	


ETH_SCSN
ETH_SCLK
ETH_MISO
ETH_MOSI
ETH_INTN
ETH_RSTN
U2
W5500
AVDD
AGND
RXN
RXP
TXN
TXP
LINKLED
ACTLED
XI/CLKIN
XO
RSVD
EXRES1
TOCAP
1V2O
SPDLED
DUPLED
SCSn
SCLK
MISO
MOSI
INTn
RSTn
PMODE2
PMODE1
PMODE0
VBG
DNC
NC
VDD
GND
VDD3.3
C3 10uF
C4 0.1uF
C5 0.1uF
R4 12.4K 1%
C6 4.7uF
C7 10nF
R10 10K
R11 10K
R15 10K
R2 10K
R3 10K
R5 10K
R7 10K
R8 10K
R9 10K
R12 10K
R14 10K
R16 10K
C10 10uF
C11 0.1uF
C12 0.1uF
C13 0.1uF
P3
HR911105A
RD-
RD+
TD-
TD+
TCT
RCT
NC
Green LED
Yellow LED
Enclosure
R1 1K
R6 1K
C1 6.8nF
C2 6.8nF
R13 51R
R17 51R
R18 10R
C8 0.1uF
C9 22nF
C14 10nF
R19 51R
R20 51R
Y1
25M_passive
C15 22pF
C16 22pF
R21 1M
Title
Size
A4
Number
Revision
Date: 2022-04-07
File: G:\Download\..\1_ETH.SchDoc
Sheet of
Drawn By:



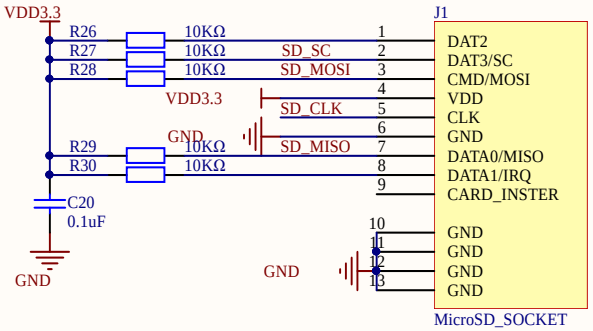
Title		
Size A4	Number	Revision
Date: 2022-04-07	Sheet of	
File: G:\Download\..\2_SEG7.SchDoc	Drawn By:	

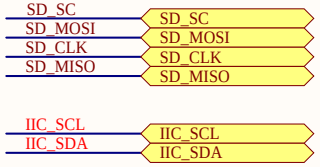


通用显示扩展接口

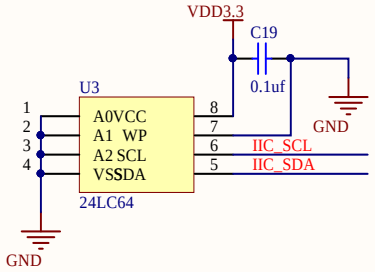
Title		
Size A4	Number	Revision
Date: 2022-04-07	Sheet of	
File: G:\Download\..\3_LCD_CAMERA.SchDoc	Drawn By:	

SPI SD 卡接口

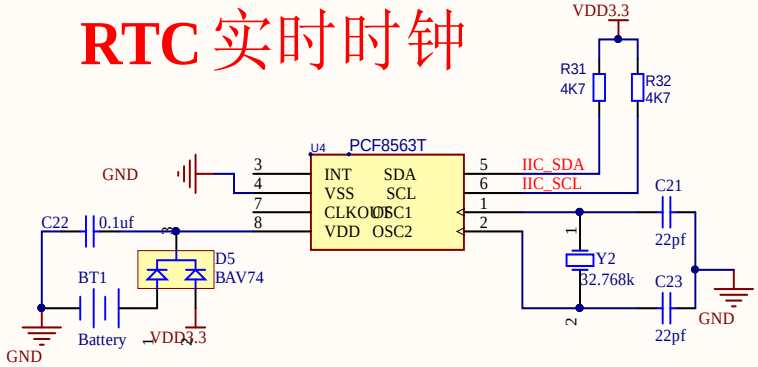




EEPROM 存储器

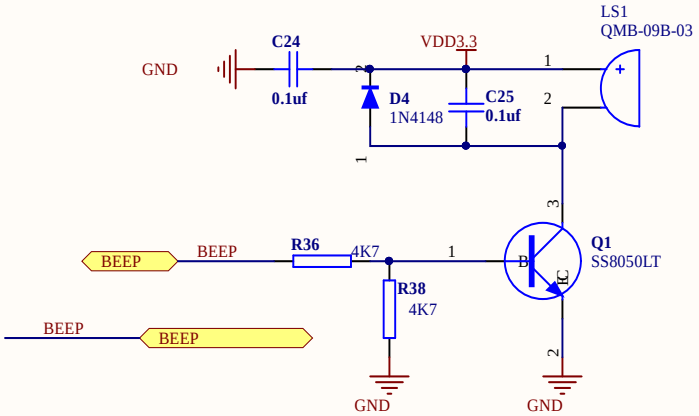


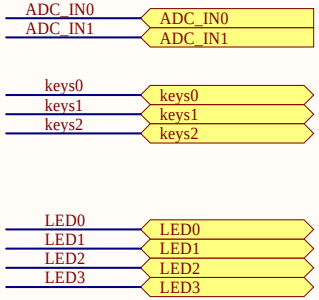
RTC 实时时钟



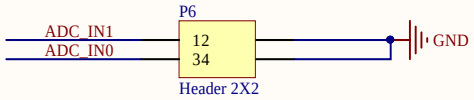
Title		
Size: A4	Number	Revision
Date: 2022-04-07		Sheet of
File: G:\Download\..\4_IIC_SPI.SchDoc		Drawn By:

无源蜂鸣器电路

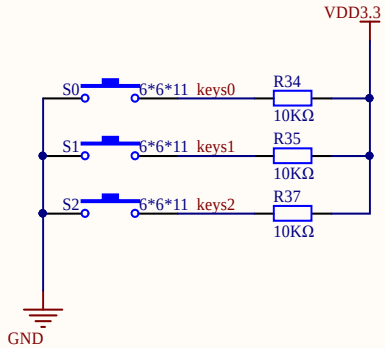




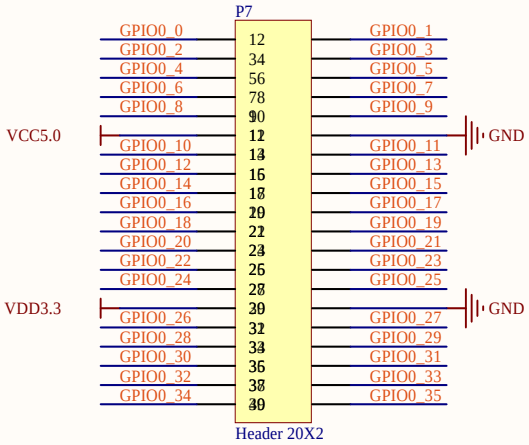
ADC



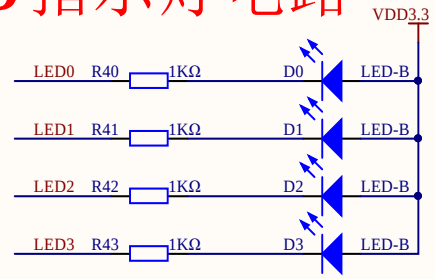
轻触按键电路



兼容DE2的通用扩展接口

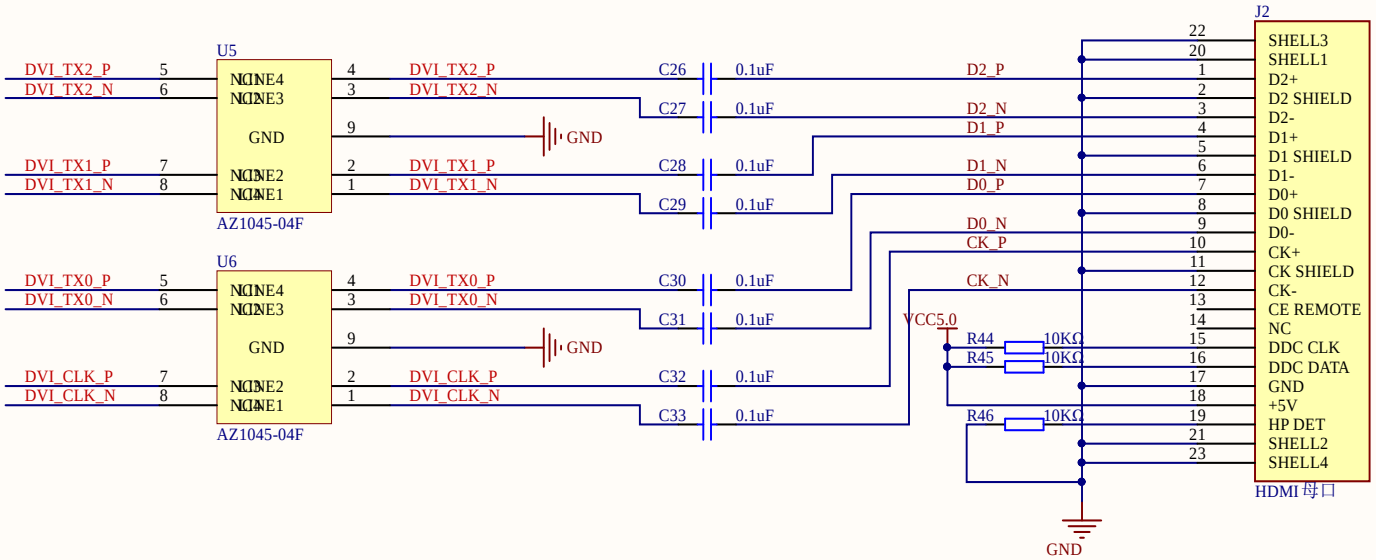


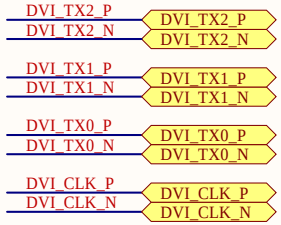
LED指示灯电路



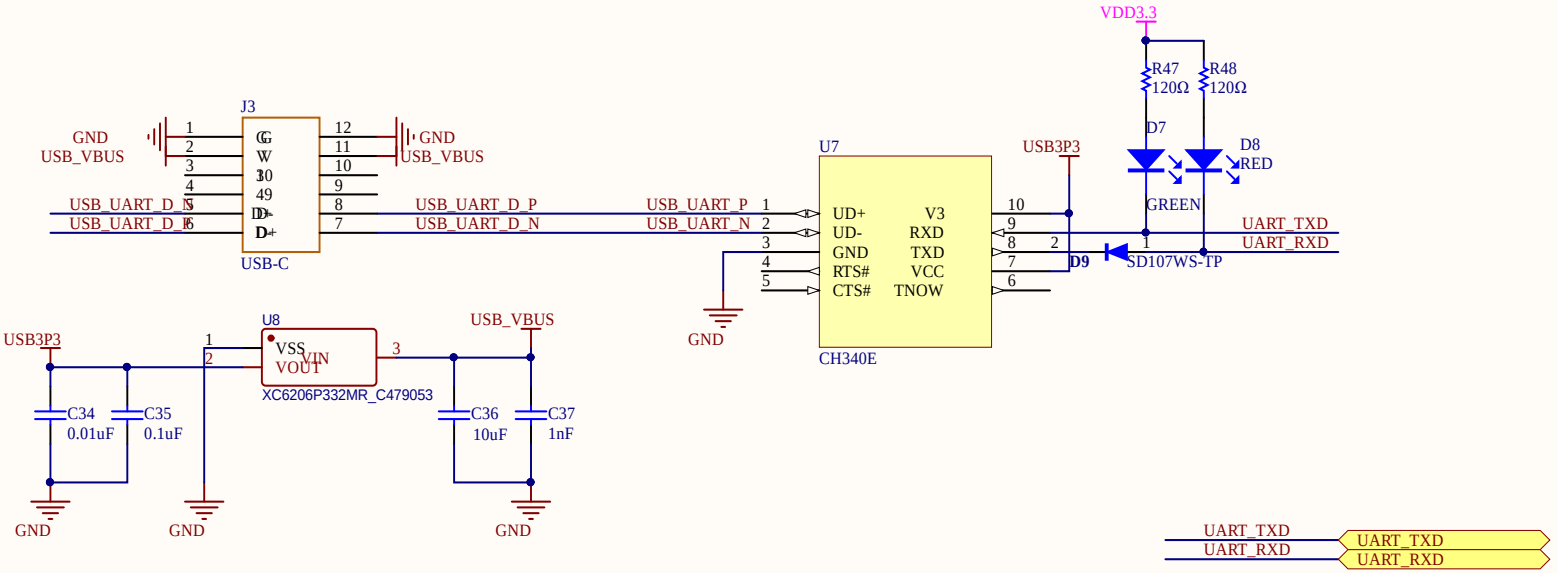
Title		
Size A4	Number	Revision
Date: 2022-04-07		Sheet of
File: G:\Download\..\5_GENERAL.SchDoc		Drawn By:

HDMI

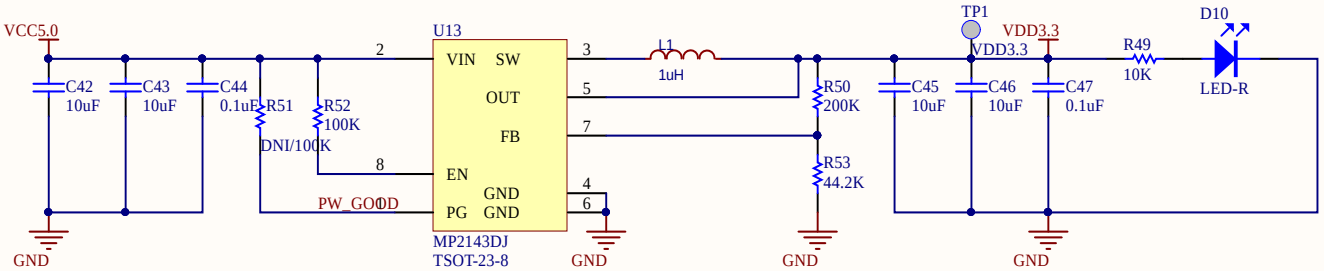


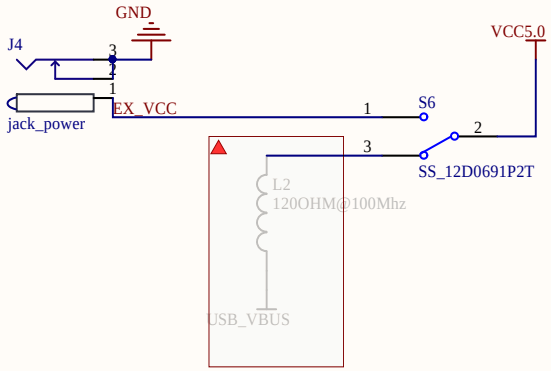


Title		
Size A4	Number	Revision
Date: 2022-04-07	Sheet of	
File: G:\Download\..\6_HDMI.SchDoc	Drawn By:	



Title		
Size: A4	Number	Revision
Date: 2022-04-07		Sheet of
File: G:\Download\..\7_UART.SchDoc		Drawn By:





Title		
Size A4	Number	Revision
Date: 2022-04-07		Sheet of
File: G:\Download\..\8_POWER.SchDoc		Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
Battery	CR1220 贴片电池座	BT1	CR1220 贴片电池座	Battery	1
6.8nF	Capacitor	C1, C2	C0603	Cap_1	2
10uF	Capacitor, Capacitor, Capacitor, Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor, Capacitor, Capacitor	C3, C10, C36, C38, C40, C42, C43, C45, C46	C0603	Cap_1, Cap_1, Cap1, Cap Semi, Cap Semi, Cap, Cap, Cap, Cap	9
0.1uF	Capacitor, Capacitor, Capacitor, Capacitor, Capacitor, Capacitor, Capacitor, Capacitor, Capacitor, 0.1μF,±10%,16V,X7R,0603,RoHS, 0.1μF,±10%,16V,X7R,0603,RoHS, Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor, Capacitor (Semiconductor SIM Model), Capacitor (Semiconductor SIM Model), Capacitor, Capacitor	C4, C5, C8, C11, C12, C13, C18, C19, C20, C22, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C35, C39, C41, C44, C47	C0603	Cap_1, Cap_1, Cap_1, Cap_1, Cap_1, Cap_1, Cap_1, Cap, Cap, Cap, Cap, 1.02.17.0006, 1.02.17.0006, Cap Semi, Cap Semi, Cap Semi, Cap Semi, Cap Semi, Cap Semi, Cap Semi, Cap Semi, Cap Semi, Cap1, Cap Semi, Cap Semi, Cap, Cap	25
4.7uF	Capacitor	C6	C0603	Cap_1	1
10nF	Capacitor	C7, C14	C0603	Cap_1	2
22nF	Capacitor	C9	C0603	Cap_1	1
22pF	Capacitor, Capacitor, [NoValue], [NoValue]	C15, C16, C21, C23	C0603	Cap_1, Cap_1, CAP, CAP	4
0.01uf	Capacitor	C17, C34	C0603	Cap, Cap1	2
1nF	Capacitor	C37	C0603	Cap1	1
LED-B	贴片蓝色普亮二极管	D0, D1, D2, D3	0603 LED	LED	4
DIODE1	1N4148,SOD-323,RoHS	D4	SOD323	1.04.07.0027	1
DIODE-D	BAV74,SOT-23,,RoHS	D5	SOT23		1
GREEN	贴片绿色普亮二极管	D7	0603 LED	LED	1
RED	贴片红色普亮二极管	D8	0603 LED	LED	1
SD107WS-TP	1N4148,SOD-323,RoHS	D9	SOD323	1.04.07.0027	1
LED-R	贴片红色普亮二极管	D10	0603 LED	LED_1	1
MicroSD_SOCKET		J1	MicroSD_SOCKET	SDCARD_TF	1
HDMI 母口		J2	HDMI_A	HDMI	1
USB-C		J3	USB Type-c	USB-C-16	1
jack_power		J4	DS-0205(DC 插座)	jack_pwr	1
1uH		L1	IND-SMD_L2.0-W1.6	1uH	1
QMB-09B-03	9*5.5无源蜂鸣器	LS1	蜂鸣器 9*5mm	1.06.09.0016	1
JTAG		P1	IDC-TH_10P-P2.54-H-S2-C5-S2.54	IDC Box 2X5 2.54MM	1
DAP		P2	IDC-TH_10P-P2.54-H-S2-C5-S2.54	IDC Box 2X5 2.54MM	1
HR911105A	RJ45 座，带隔离变压器	P3	RJ45-LED(HR911105A)	RJ45	1
Header 18X2	Header, 18-Pin, Dual row	P4	HDR2X18	Header 18X2	1
Header 10X2	2.54mm，弯针，2*10，排母	P5	2.54mm 针座，90°弯针	Header 10X2	1
Header 2X2	Header, 2-Pin, Dual row	P6	HDR2X2	Header 2X2	1
Header 20X2	Header, 20-Pin, Dual row	P7	HDR2X20	Header 20X2	1
SS8050LT	SS8050LT(1.5A),SOT-23,江苏长电,RoHS	Q1	SOT23	1.04.09.0001	1
1K		R1, R6	0603R	R	2
10K	[NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], Resistor	R2, R3, R5, R7, R8, R9, R10, R11, R12, R14, R15, R16, R49	0603R	R, R, R, R, R, R, R, R, R, R, Res1	13
12.4K 1%		R4	0603R	R	1
51R		R13, R17, R19, R20	0603R	R	4
10R		R18	0603R	R	1
1M		R21	0603R	R	1
4K7	[NoValue], [NoValue], [NoValue], [NoValue], [NoValue], [NoValue], 4.7K,±5%,0603,RALEC,RoHS, 4.7K,±5%,0603,RALEC,RoHS	R22, R23, R24, R25, R31, R32, R36, R38	0603R	R, R, R, R, R, R, 1.01.17.0019, 1.01.17.0019	8
10KΩ	Resistor, Resistor, Resistor, Resistor, Resistor, Resistor, Resistor, Resistor, [NoValue], [NoValue], [NoValue]	R26, R27, R28, R29, R30, R34, R35, R37, R44, R45, R46	0603R	Res2, Res2, Res2, Res2, Res2, Res2, Res2, Res2, RES, RES, RES	11
1KΩ	Resistor	R40, R41, R42, R43	0603R	Res2	4
120Ω	Resistor	R47, R48	0603R	Res1	2
200K	Resistor	R50	0603R	Res1	1
DNI/100K	Resistor	R51	0603R	Res1	1
100K	Resistor	R52	0603R	Res1	1
44.2K	Resistor	R53	0603R	Res1	1
6*6*11	4脚通孔 6*6*8.5mm	S0, S1, S2	KEY-DIP4	SW-PB	3
SS_12D0691P2T	SPDT Subminiature Toggle Switch, Right Angle Mounting, Vertical Actuation	S6	SS12D06(1P2T)	SW-SPDT	1
VDD3.3		TP1	tp32	TestPoint	1
H128		U1	CORE-124PIN_SMT	H128	1
W5500	TCP/IP 嵌入式以太网控制器，SPI接口	U2	QFP48	W5500	1
24LC64		U3	SOP-8-1	24LC256	1
PCF8563T		U4	SOP-8-1	PCF8563	1
AZ1045-04F		U5, U6	SLP2710P8	AZ1045-04F	2
CH340E	USB to TTL Serial / UART	U7	msop-10	CH340E	1
XC6206P332MR_C479053		U8	SOT-23-3_L2.9-W1.6-P1.90-LS2.8-BR	XC6206P332MR_C4790533_1	1
2441BB	3.6寸4位共阳极数码管，[NoValue]	U9, U10	LED-SEG-TH_SLR0224CR5C1BD-3.6	smg_6*8	2
74HC595PWR		U11, U12	TSSOP-16	74hc595	2
MP2143DJ	MP2143DJ	U13	SOT23-8	MP2143DJ	1
25M_passive		Y1	X4-3225	OSC	1
32.768k		Y2	MC-146	XATL	1