

D

D

C

C

B

B

A

A

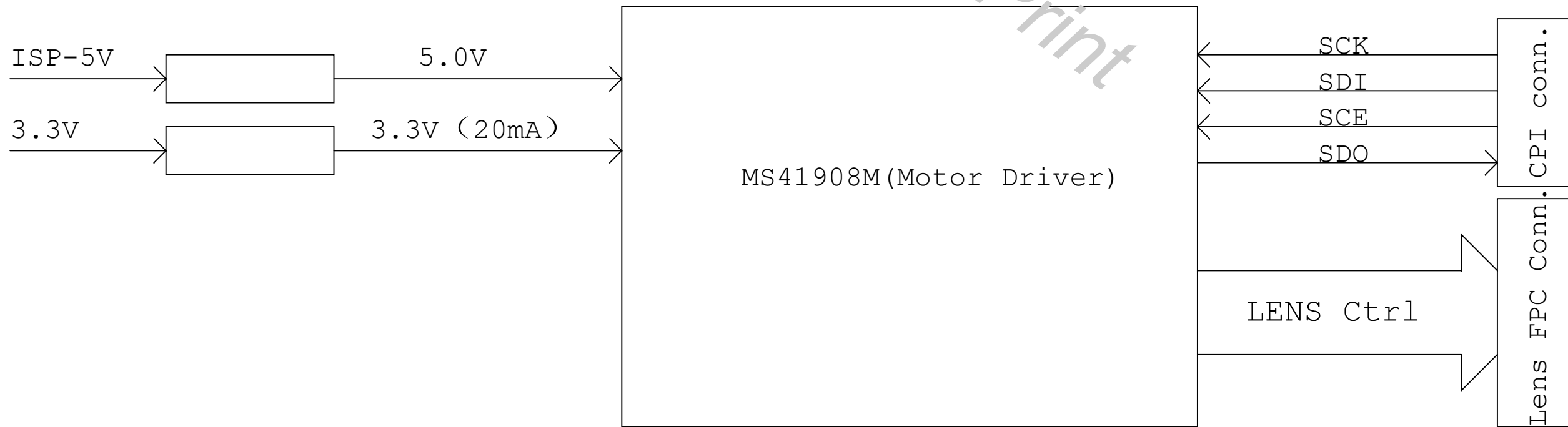
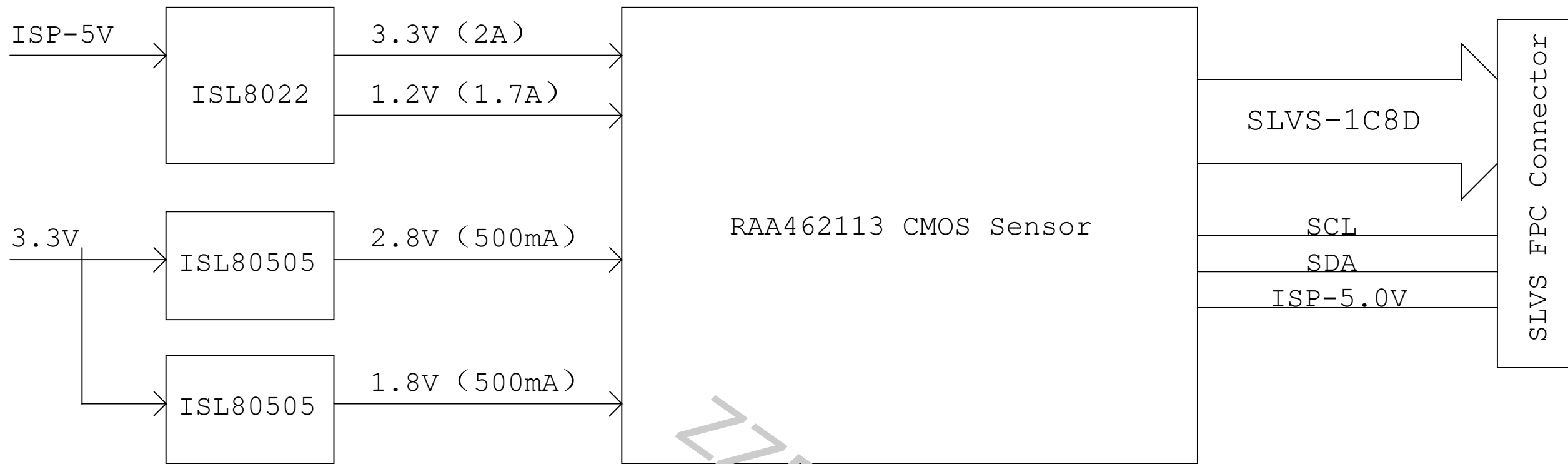
# Index

- 01.Index
- 02.Revision History
- 03.Block Diagram
- 04.Power Tree
- 05.Power-DC IN
- 06.RAA462113-A Power
- 07.RAA462113-A MIPI CSI2
- 08.Lens Controller

ZZDS\_pdfPrint

Systemtec Corporation LTD			
Schematic: 1.Index			
Size	Project		Rev
A4	RAA462113 EVB		0.3
Date:	Thursday, February 06, 2020	Sheet	1 of 8

Version	Date	Author	Change List	Approved
V0.1	20200120	Josen	Initial for RAA462113_EVB	
V0.2	20200123		First Released Version	
V0.3	20200123		1. Corrected some errors; 2. Add IR-CUT output buffer	
V0.4	20200130		1. MIPI CSI Data/CLK order changed. J3.1~26 ( D1P ~ CK1N changed to CK1N ~ D1P ) 2. LX1 changed to 3V3 from 1V2. LX2 changed to 1V2 from 3V3. 3. R4 changed to 450K from 100K. R8 changed to 100K from 450K 4. Removed R40 ~ R43 5. Connected SACK to J3.28 and move R61 and changed value to 100R. 6. Add LENS_RSTN and connected to J3.46 for MS41908. 7. C97 changed 100nF to 100pF. C98 changed 100pF to 100nF. 8. Reverse R30 to NC. 9. Unify DGND and AGND labels.	
V0.5	20200203		1. Splited motor and sensor ground. motor ground slipt to GNDD and GNDA. 2. Add R69/R70 to connect GNDD and GNDA. 3. Add R71/R72 ro connect DGND and GNDD.	
V0.6	20200206		1. Changed some netname. 2. Changed J2 from 10PIN to 14PIN. 3. Redefined J2 signals. 4. Removed SPI connection for sneor. Sensor SPI just pull up to VDD1V8_IO. 5. SPI pullup to DVDD_3V3 and connect to MS41908 only. 6. Removed R68 7. R35 changed to NC. 8. R36 changed to 0R 9. Connected Focus_PI/Zoom_PI Collector to J2 10. Combined GNDD and GNDA. Removed R69/R70. 11. Connected U1.A5, U1.A10 to AGND from DGND according with sensor demo schematic.	
V1.0	20200210		1. Exchanged DxN and DxP on J3 PINS. 2. PCB added CS Lens assembling position. 3. PCB added Board version and finished date.	
V1.1	20200310		1. Modify Lens mechanical position (Mirrored Left/Right) 2. Enlarge CS fixed hole 3. Add one Lens connector(J5) at top layer for mirriored assembly. 4. Add TP8/TP9 for CLK_RF1/TRIG 5. Change H1/H2/H3/H4 connection to float 6. Insert GND between data lanes.	



ISP-5.0V

ISL8022

3.3V

1.2V

VCC\_5V0



VDD\_DG



VDD\_PL



VDD\_SL



VDD5\_4V8



MVCCA\_4V8



MVCCB\_4V8

ISL80505

1.8V



VDD\_IO



VRLF

ISL80505

2.8V



VDD\_PX



VDD\_AN



VDD\_AD



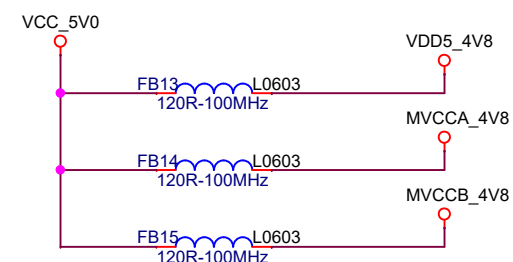
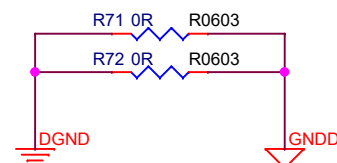
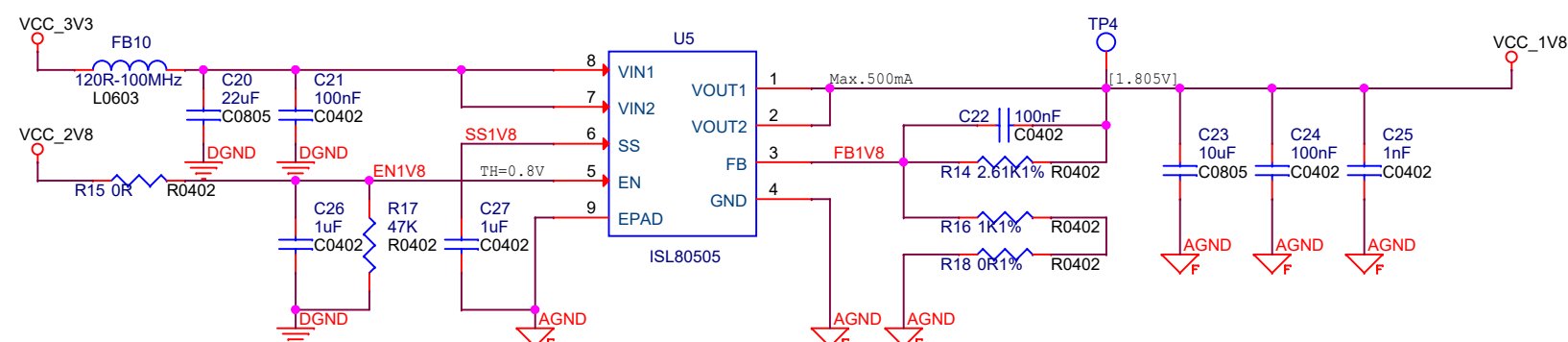
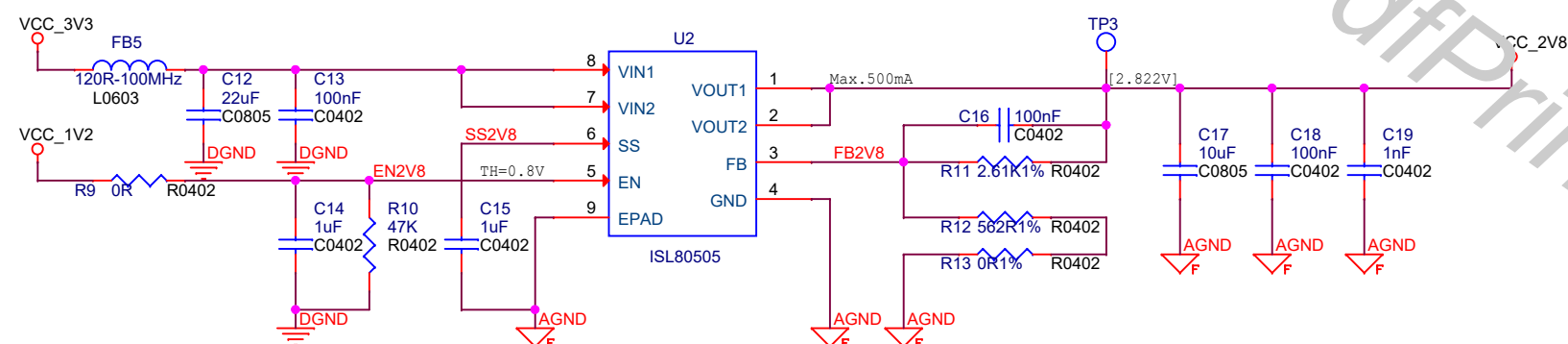
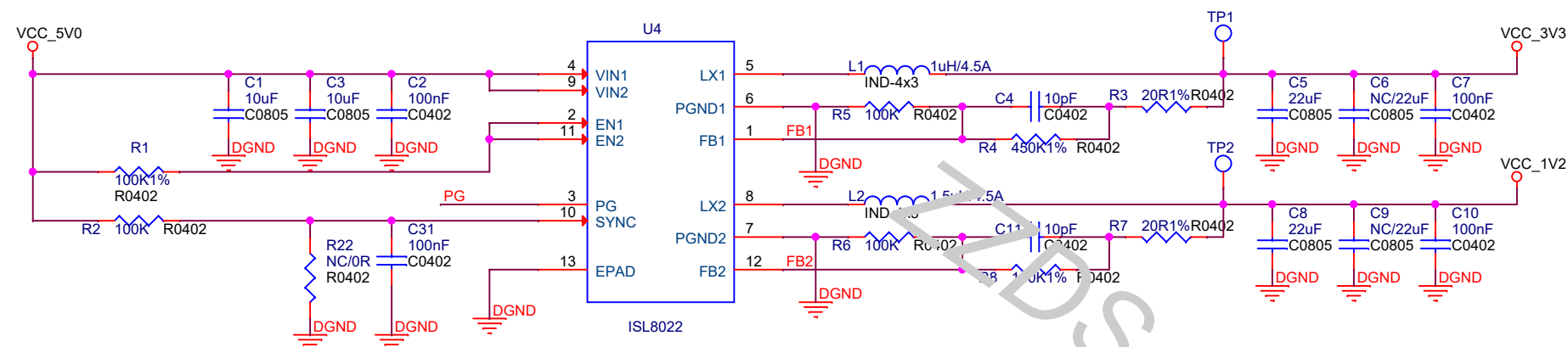
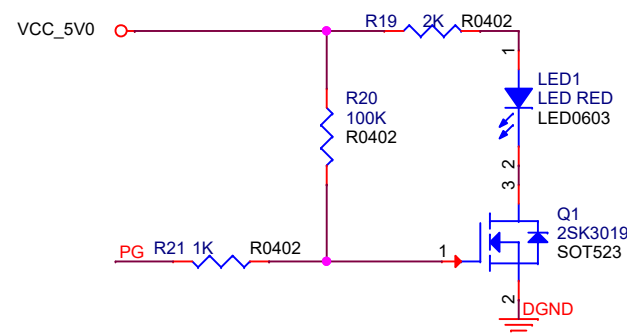
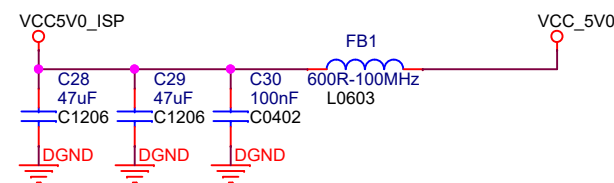
VDD\_RG



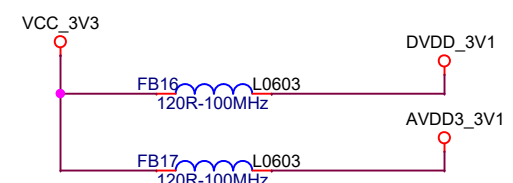
DVDD\_3V1



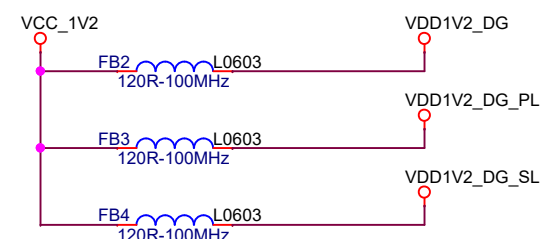
AVDD\_3V1



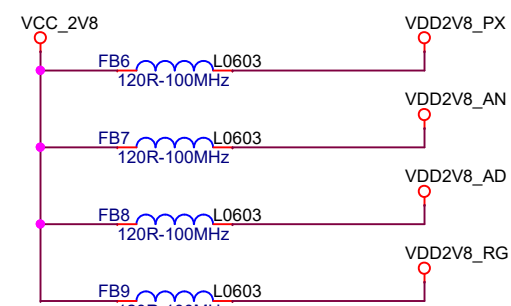
VDD5: Typ.100mA ( Max.150mA )  
 MVCCA: Typ.1A ( Max.1.5A )  
 MVCCB: Typ.1A ( Max.1.5A )  
 TO BE CONFIRMED



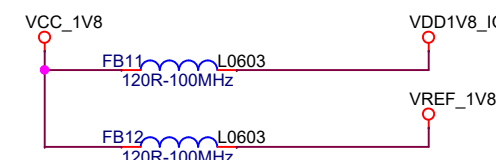
DVDD: Typ.100mA ( Max.200mA )  
 AVDD3: Typ.100mA ( Max.200mA )  
 TO BE CONFIRMED



VDD\_DG: Typ.400mA ( Max.520mA )  
 VDD\_DG\_PL1: Typ.9mA ( Max.12mA )  
 VDD\_DG\_PL2: Typ.9mA ( Max.12mA )  
 VDD\_DG\_SL : Typ.9mA ( Max.12mA )

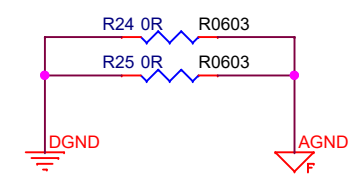
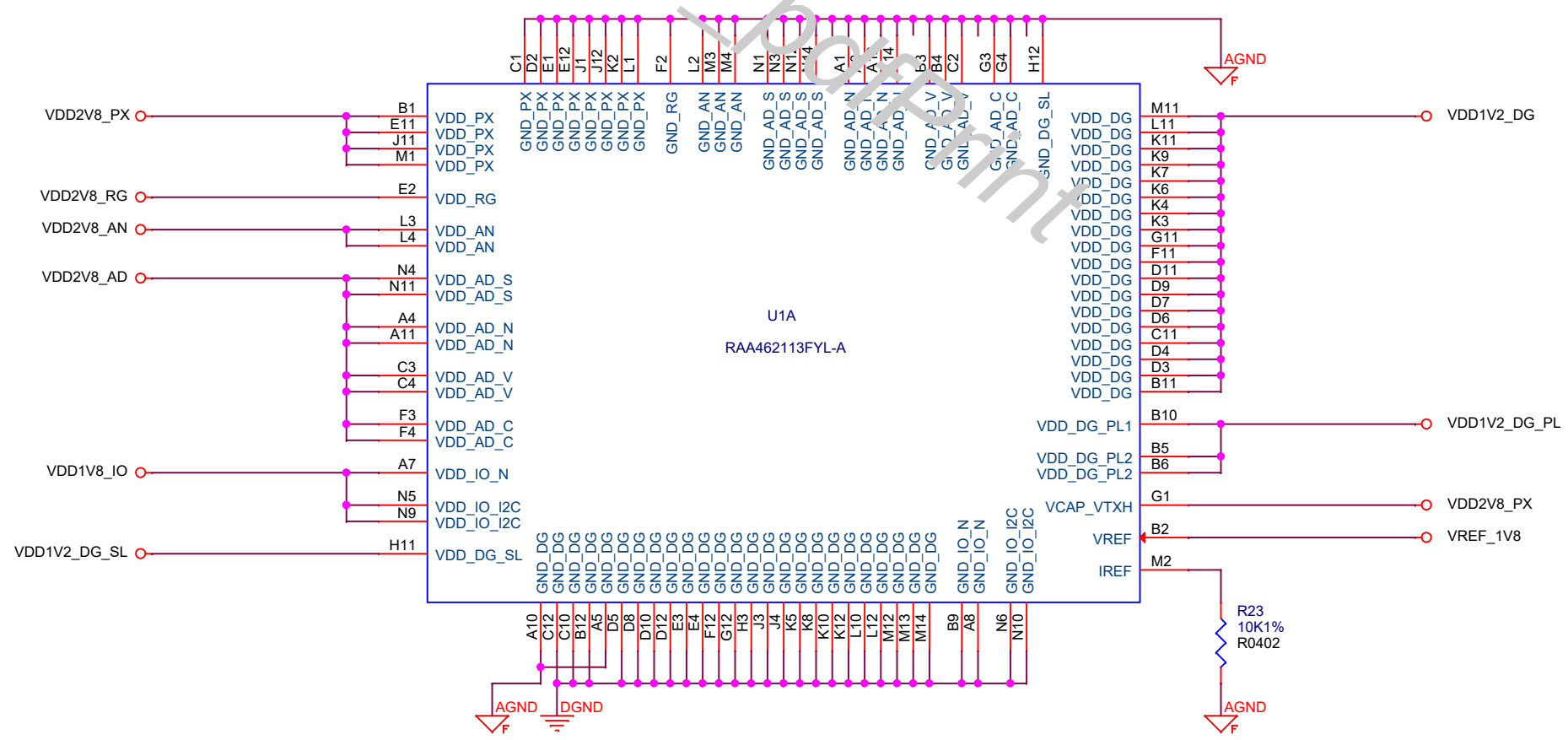
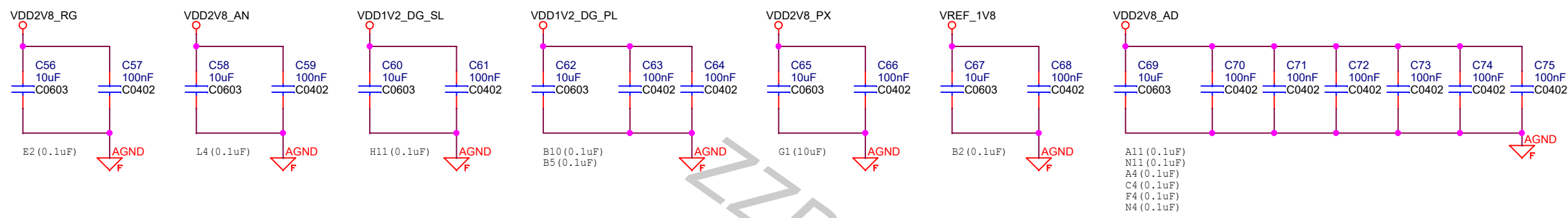
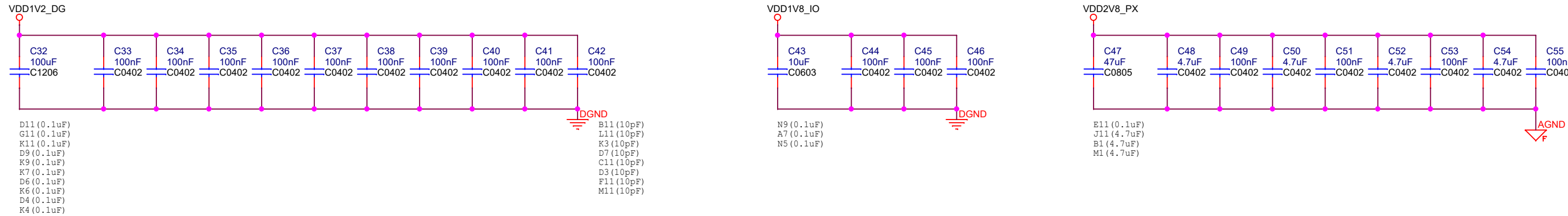


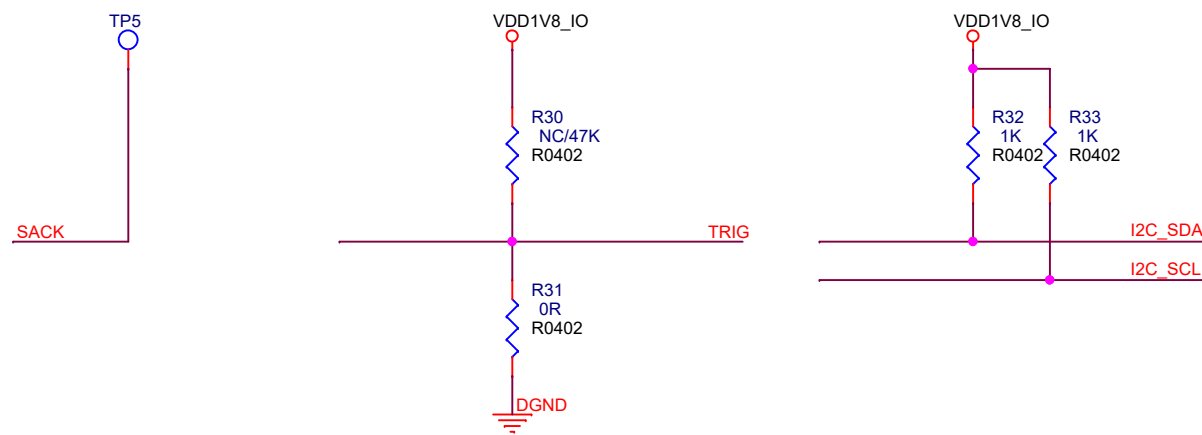
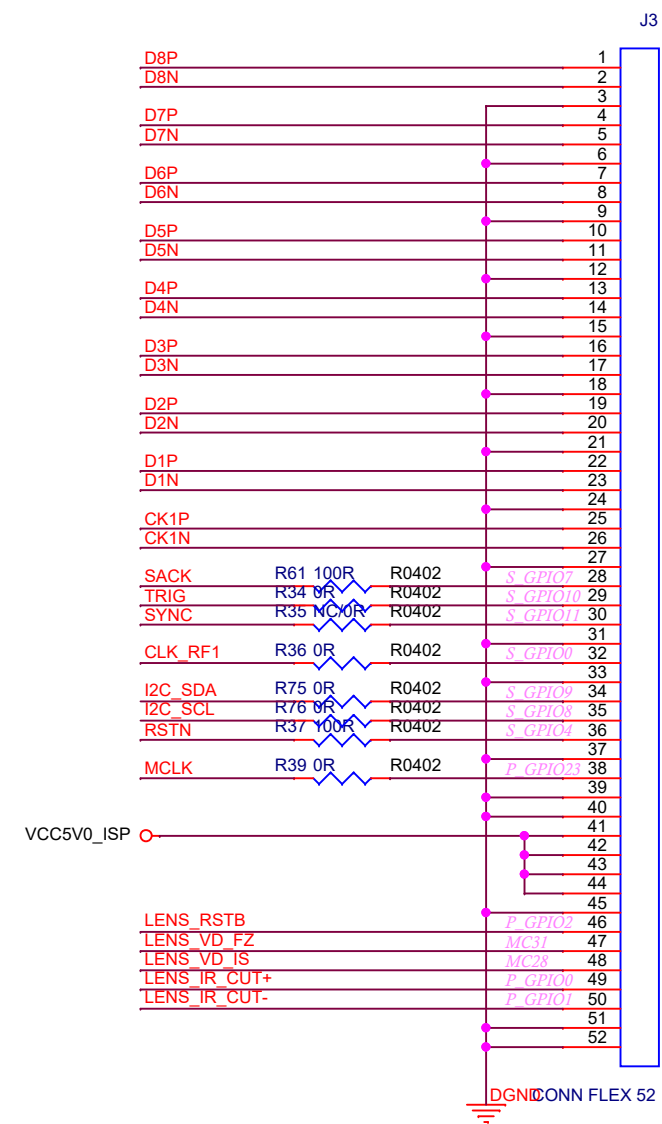
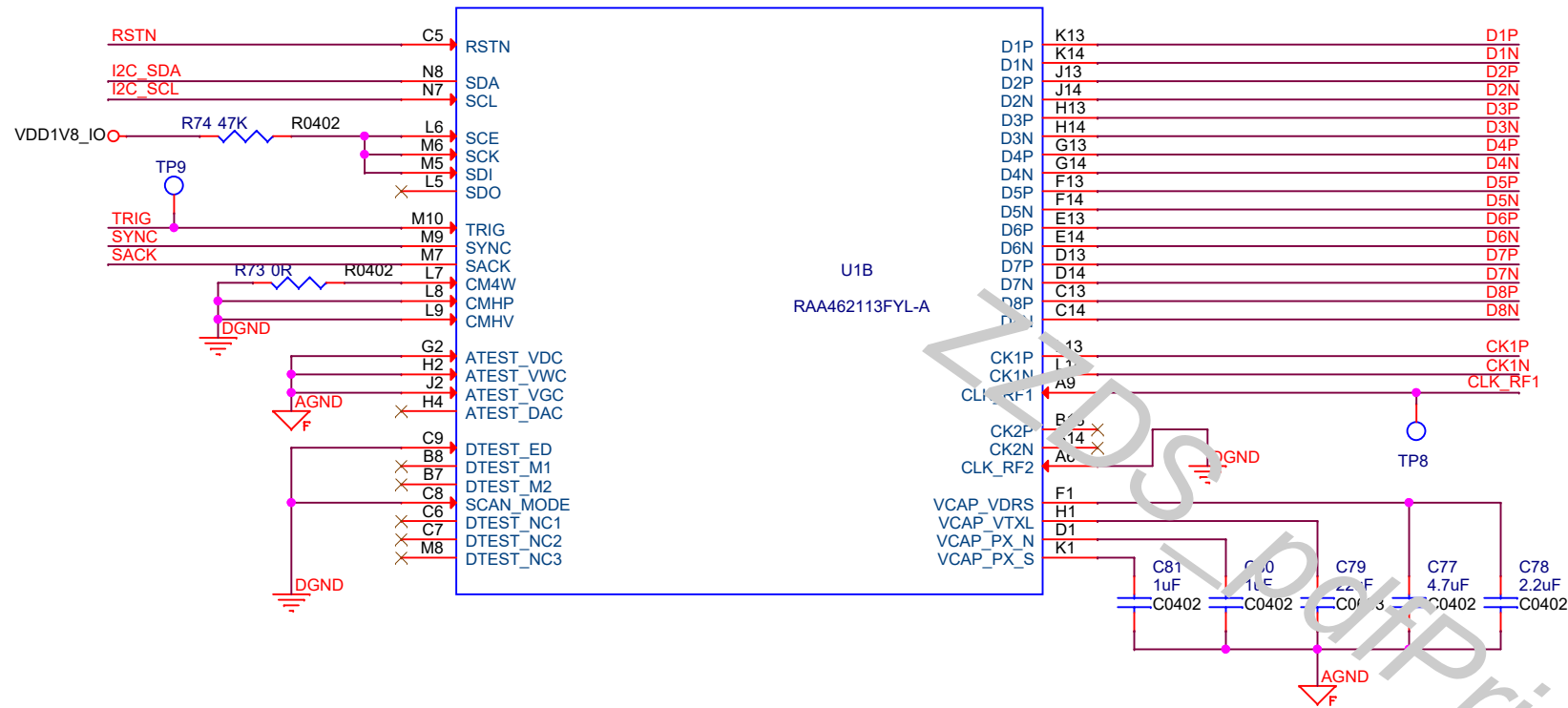
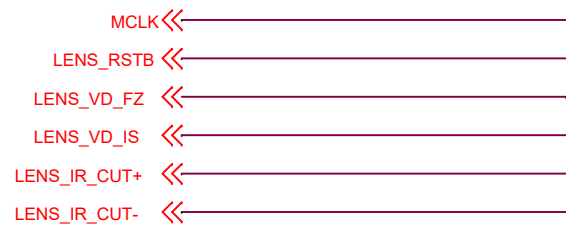
VDD\_PX, VDD\_RG, VDD\_AD, VDD\_AN, VTXH:  
 Typ.160mA ( Max.210mA )

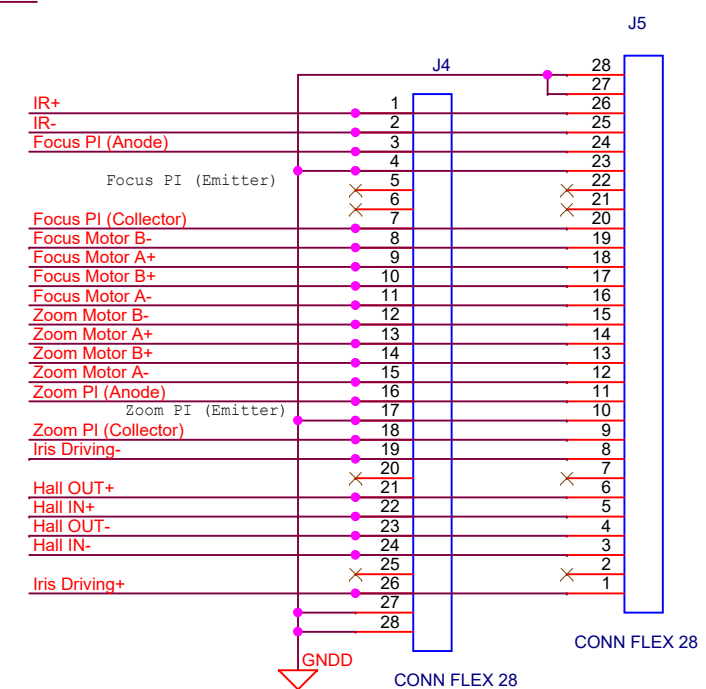
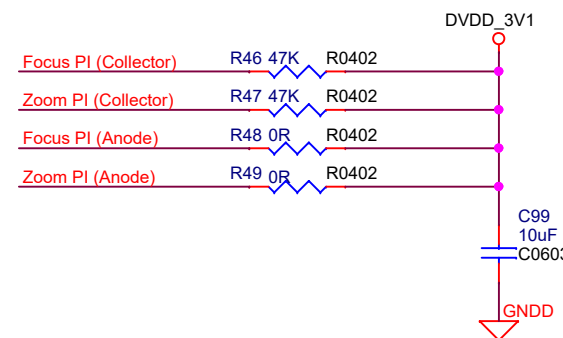
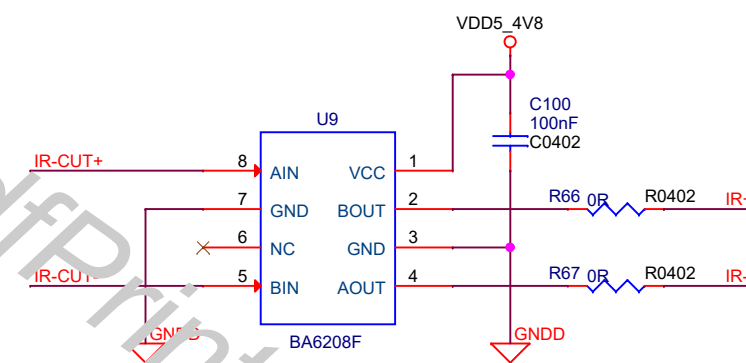
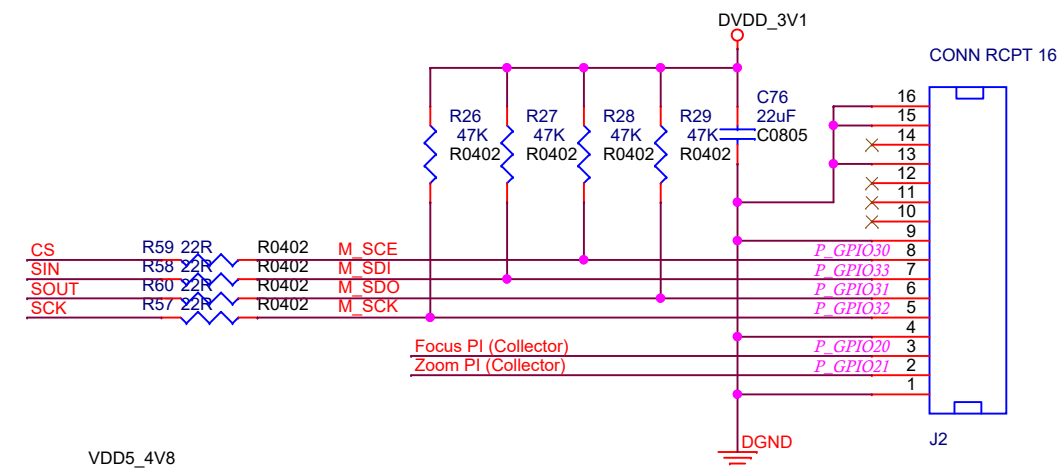
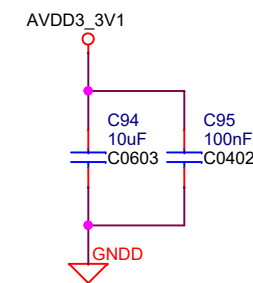
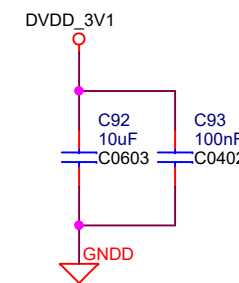
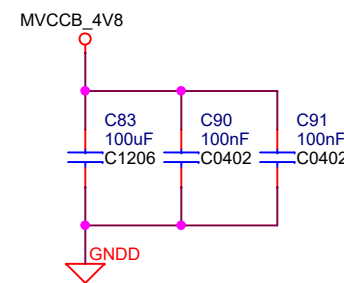
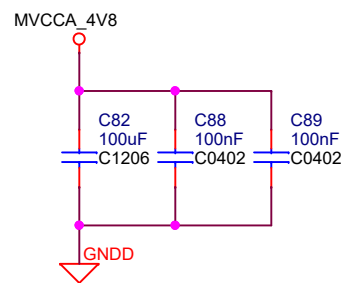
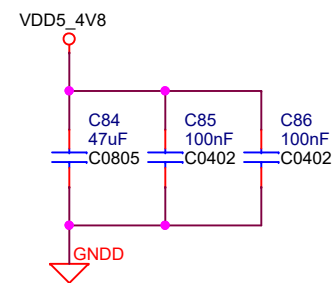
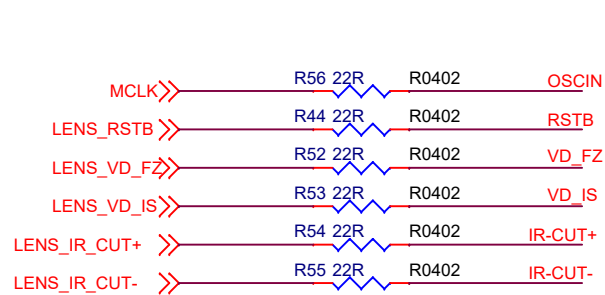


VDD\_IO\_N, VDD\_IO\_I2C: Typ.0.1mA ( Max.4mA )  
 VREF: Typ.0.1mA ( Max.4mA )









Note:

- MS41908 power supply typically ask as 4.8V and 3.1V. To simplify, use 5.0V as 4.8V, 3.3V as 3.1V for supply. It is in range of specification requirement.
- Hall IN/OUT与LENS接口定义做了对调