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Vinput = 3.75-5.0 V ( Reg from Instrument )

Power Supply Voltages:

VReg = 3.3 V

HM5530 CMOS Sensor

DVDD = 1.25 V

IOVDD = 1.8 V

AVDD = 2.8 V

PVDD = 1.2 V

DS90UB953 Serializer

VDD = 1.8 V

VI2C\_1 = 1.8 V

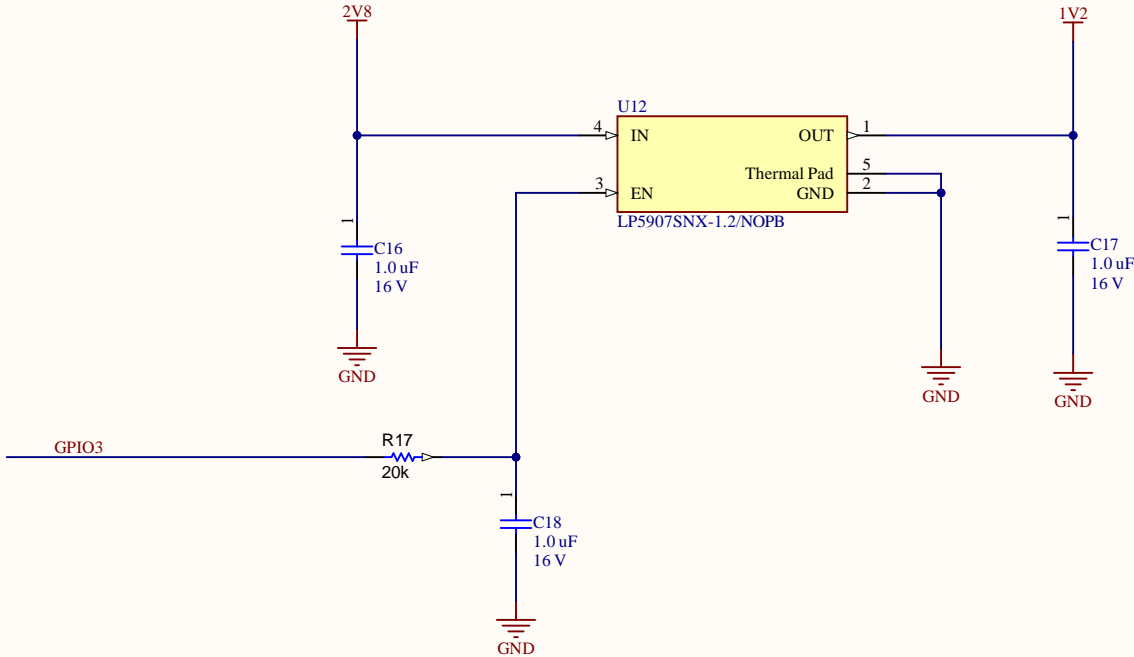
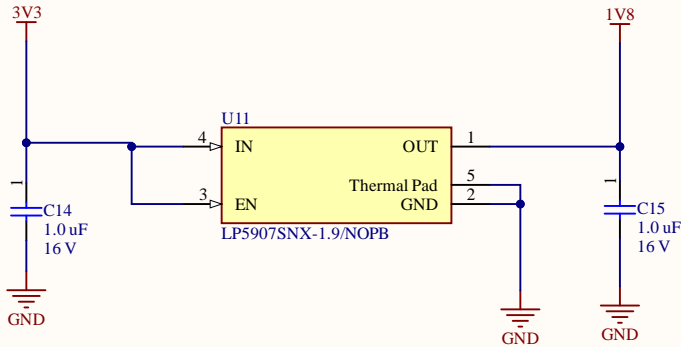
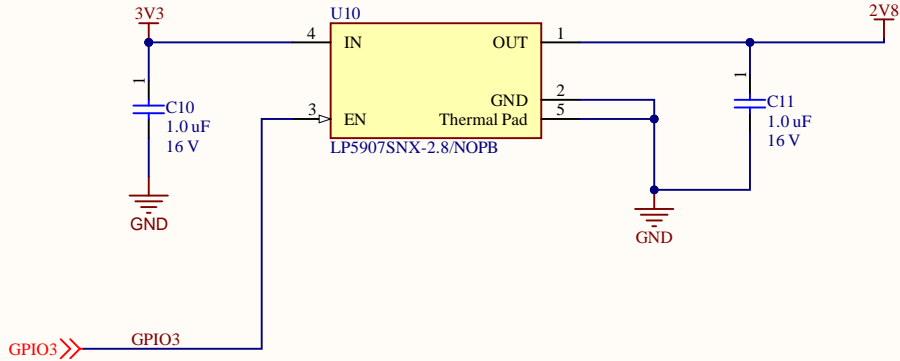
VI2C\_2 = 3.3 V

V\_Logic

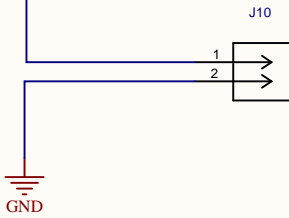
VCC = 3.3

VDD = 1.8 V

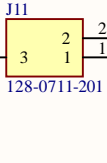
Harmonize power nets such that they are consistent over three configurations. Check to be sure that all regullators have adequate current plus margin



Mates with 2 pin headers on regulator board



DOUT\_P



Mates with 4 pin headers on regulator board

EXT\_FSIN

EXT\_PCLK

3V3\_SCL

3V3\_SDA

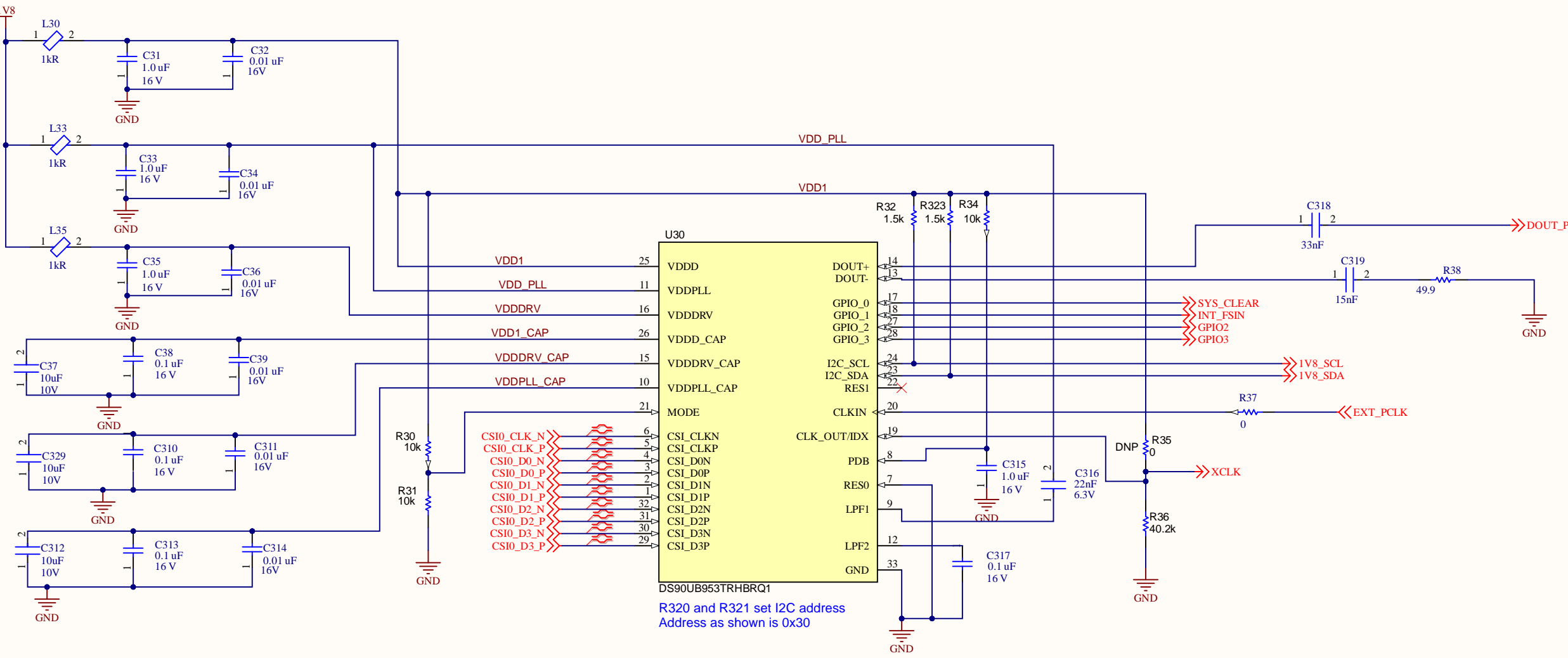
J12

TPGND



## POWER /INTERCONNECT

Title: <i>HM5530 LVDS Camera Sensor</i>			<b>Openwater</b> 733 Front Street Suite C1A San Francisco, CA 94111, USA	
Size: C	Item Number: 7000-0134	Revision: 02		
Date: June 15, 2022	Document Number: 7200-0134	Sheet 1 of 4		



LVDS option consistet with STP cabling

SERIALIZER/ LVDS

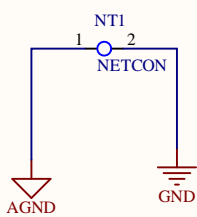
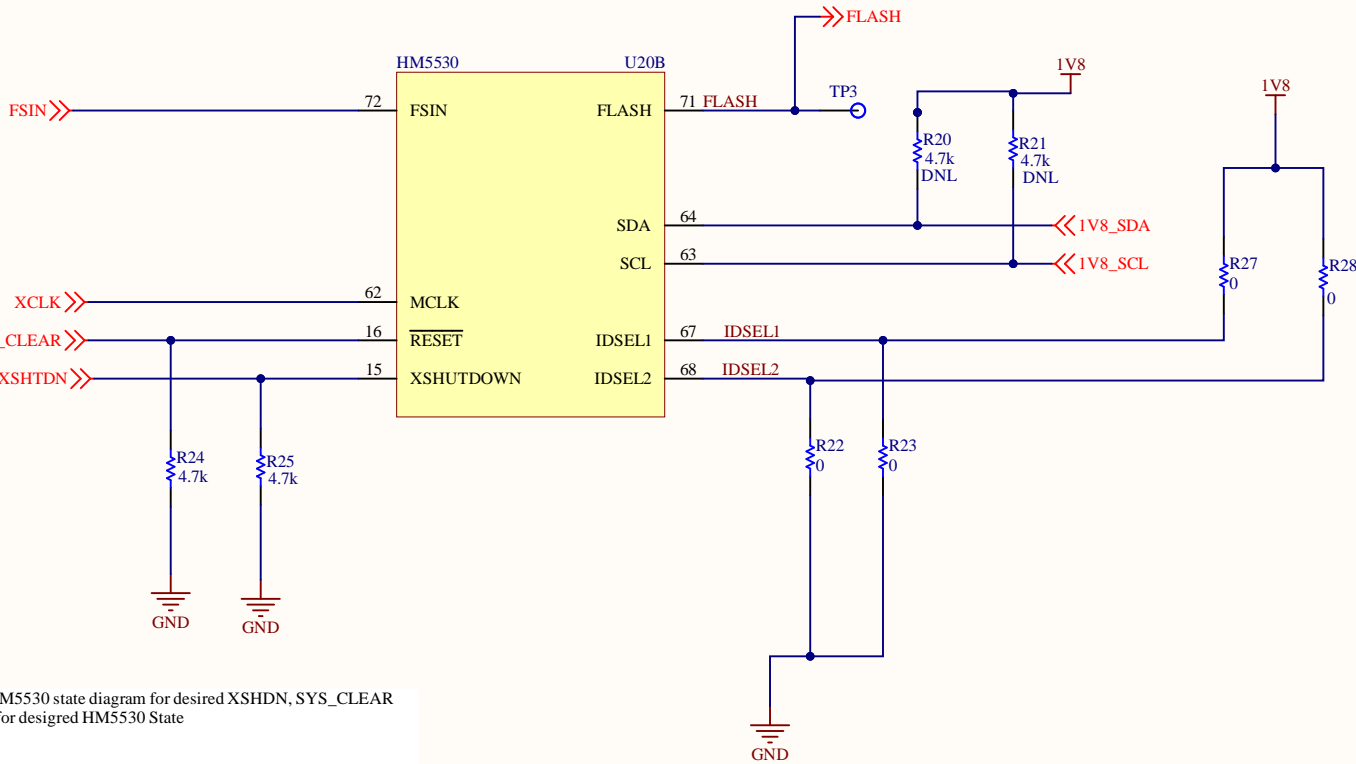
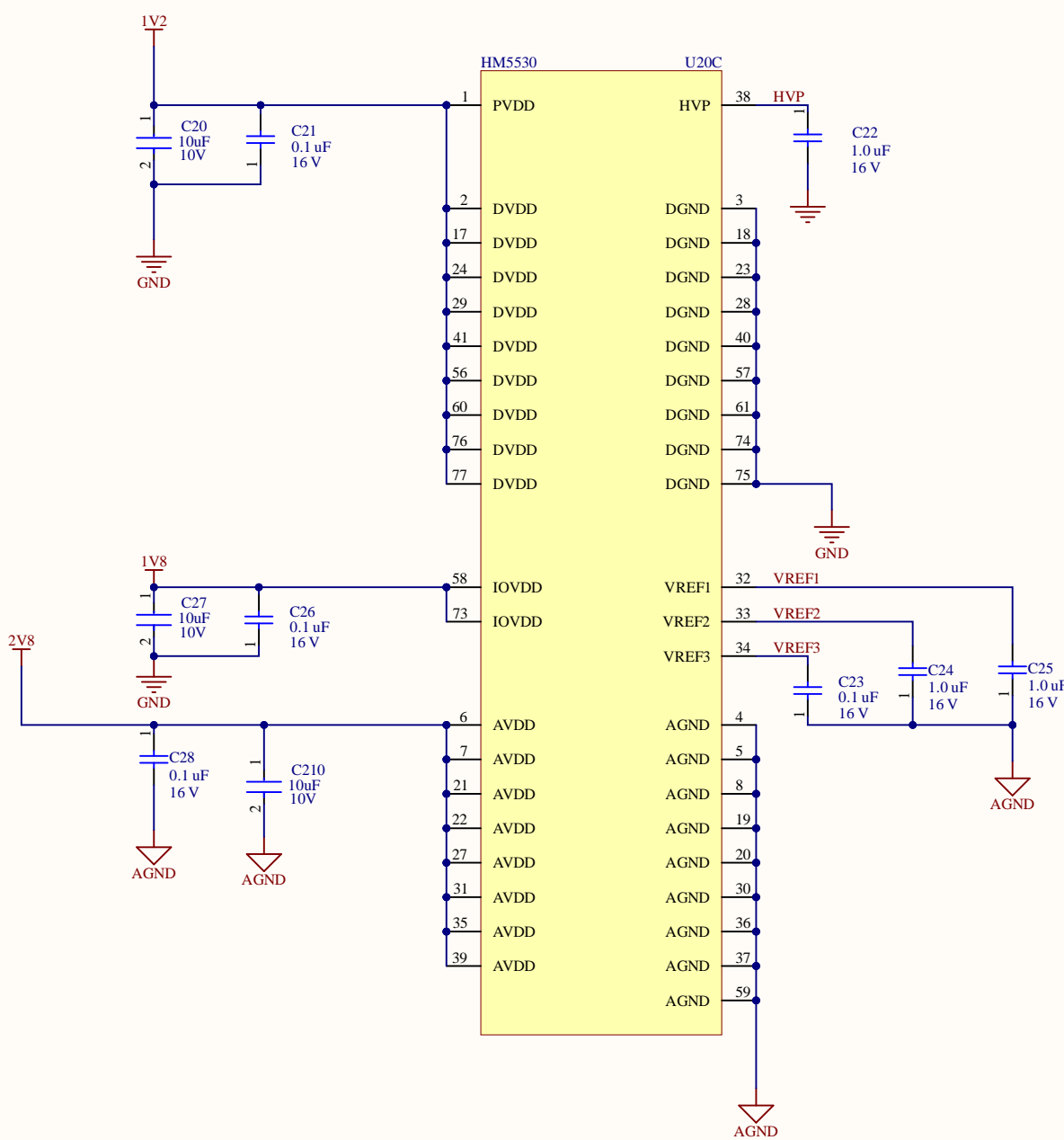
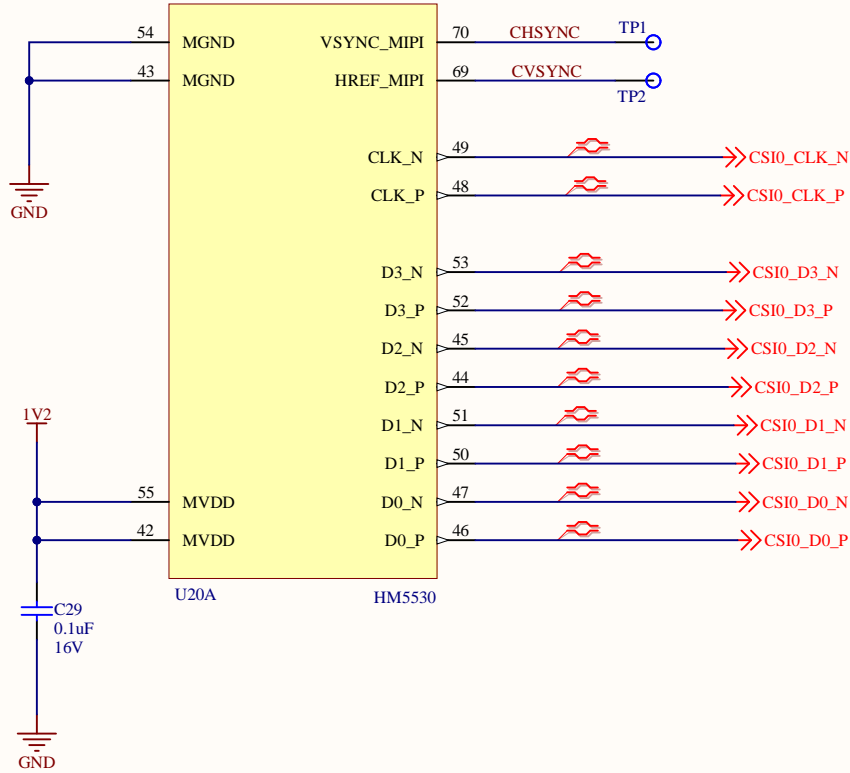
Title: <i>HM5530 LVDS Camera Sensor</i>			<b>Openwater</b> 733 Front Street Suite C1A San Francisco, CA 94111, USA	
Size: C	Item Number: 7000-0134	Revision: 02		
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Refer to HM5530 state diagram for desired XSHDN, SYS\_CLEAR sequence for desired HM5530 State

Build in differential pair consistent with DS90UB953. Integrate control signals consistent with DS90UB960 and separate FSIN and pclk

### HM5530 Image Sensor

Title: <i>HM5530 LVDS Camera Sensor</i>			<b>Openwater</b> 733 Front Street Suite C1A San Francisco, CA 94111, USA
Size: C	Item Number: 7000-0134	Revision: 02	
Date: June 15, 2022	Document Number: 7200-0134	Sheet 2 of 4	

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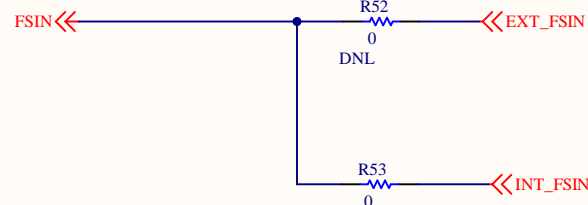
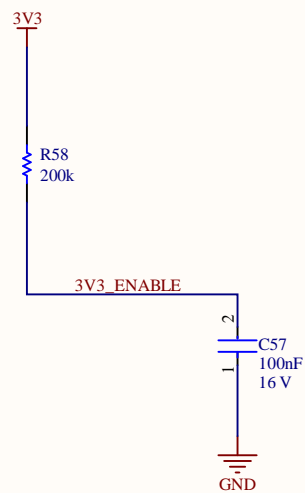
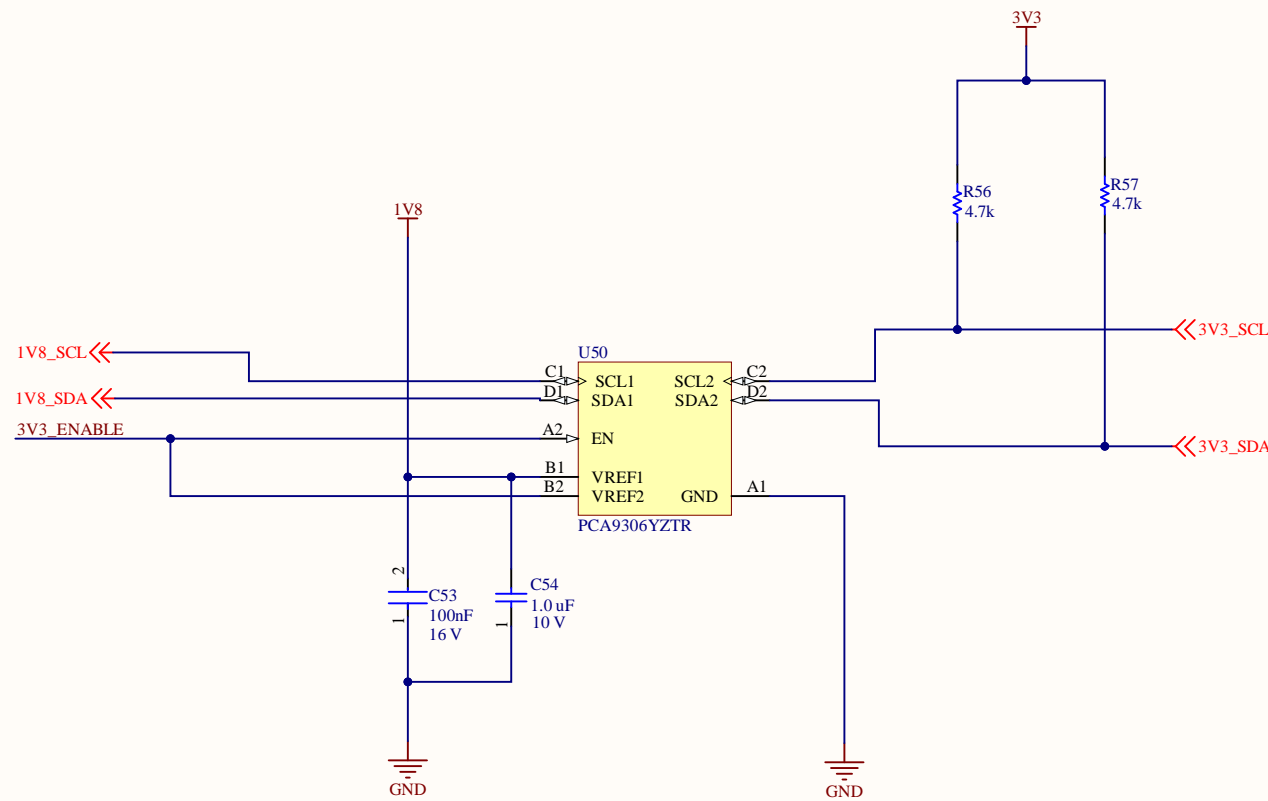
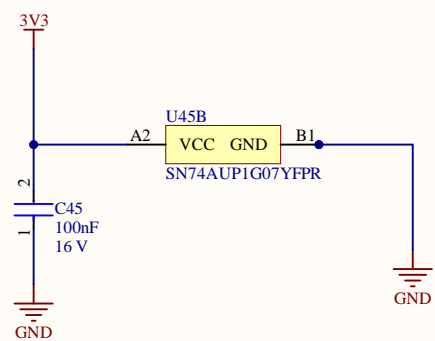
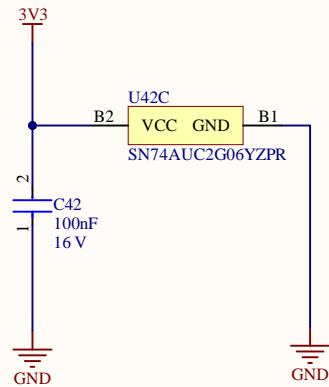
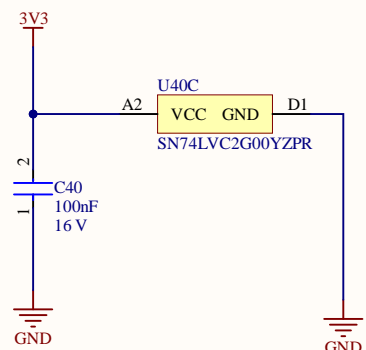
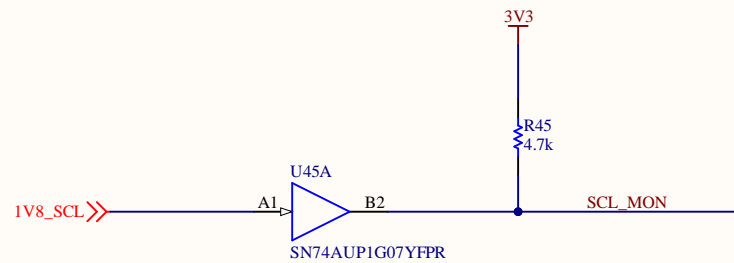
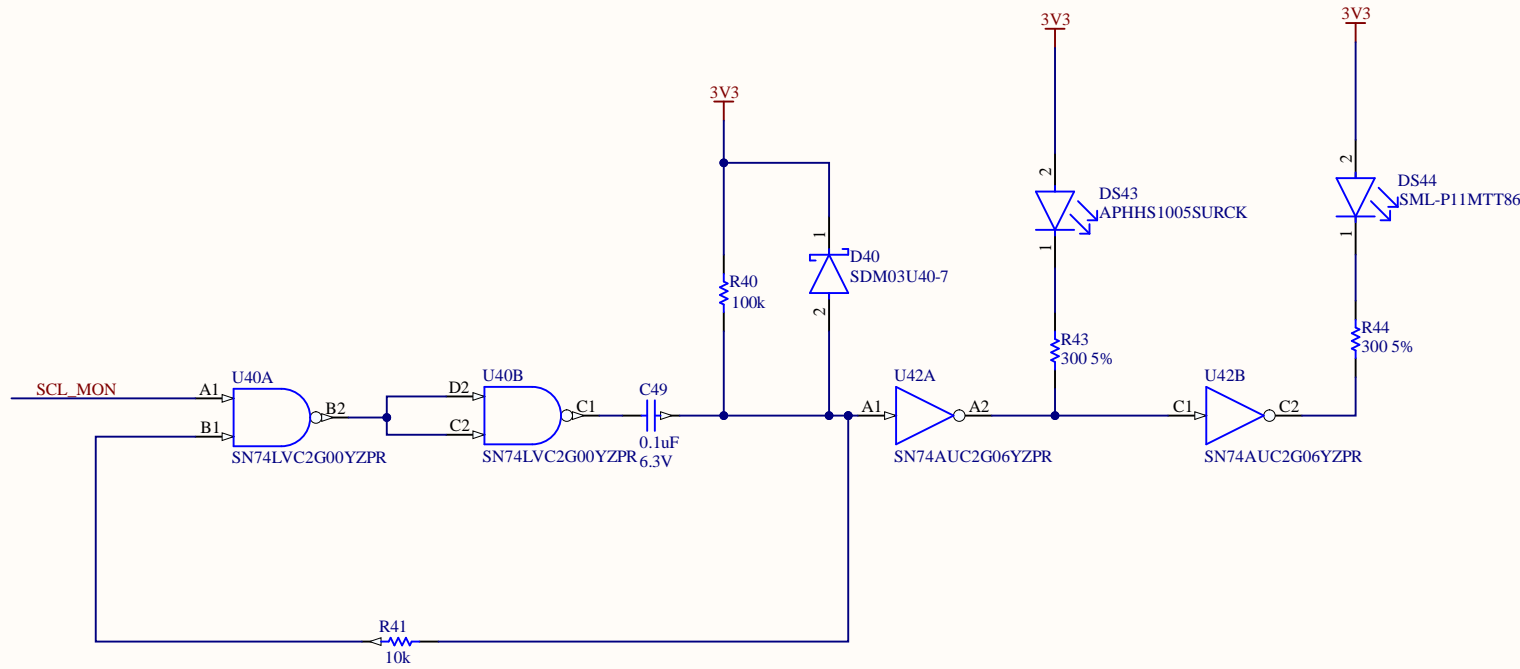
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Configured tor INT\_FSIN DS90UB953 GPIO



Title: **HM5530 LVDS Camera Sensor**

Size: C Item Number: 7000-0134 Revision: 02

Date: June 15, 2022 Document Number: 7200-0134 Sheet 4 of 4

**Openwater**

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