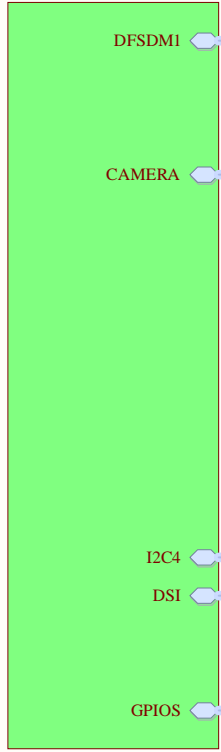


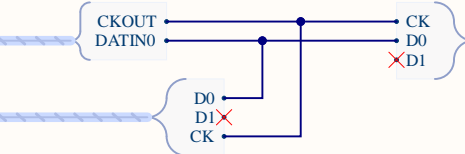
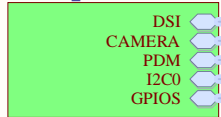
GIGA

GIGA.SchDoc

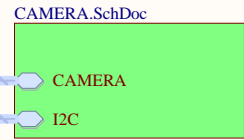


PORTENTA

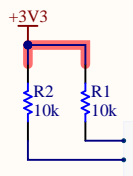
HDCConn_FEMALE.SchDoc



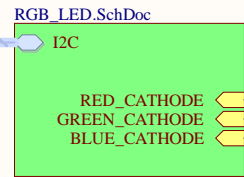
MICROPHONE



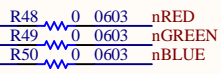
CAMERA



I2C PULLUPS



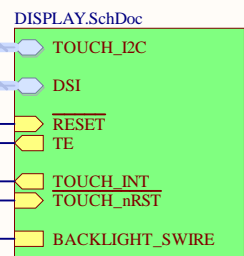
RGB



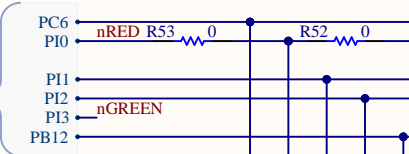
nBLUE is not connected to the GIGA which is able to drive the blue LED only if the I2C LED driver is mounted.



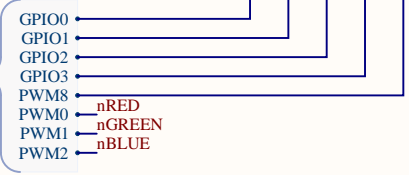
ACCELEROMETER



DISPLAY



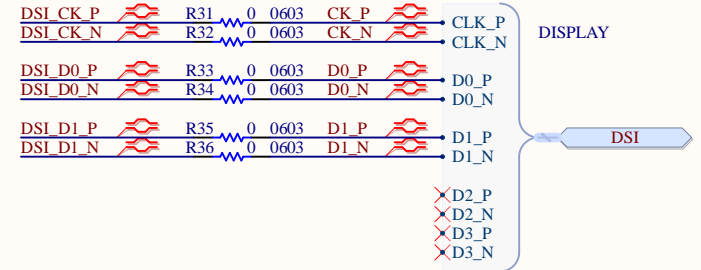
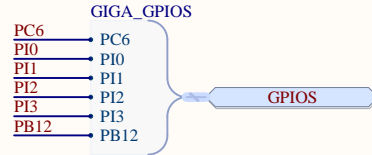
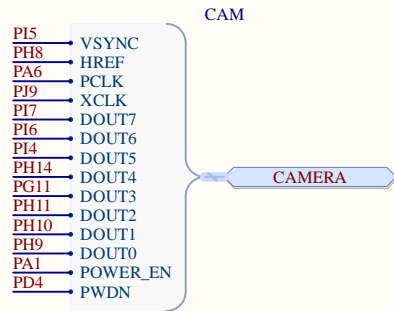
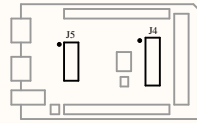
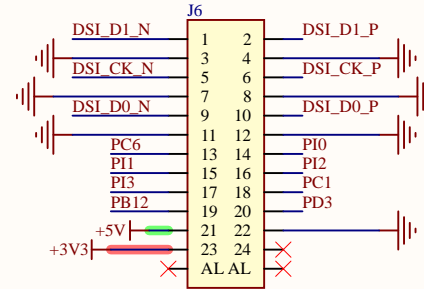
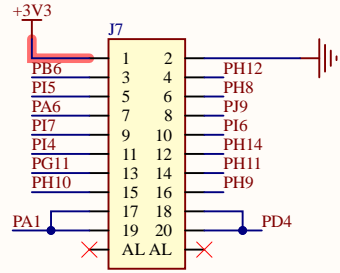
- Fiducial_1
Fiducial mark 1mm
- Fiducial_2
Fiducial mark 1mm
- Fiducial_3
Fiducial mark 1mm
- Fiducial_4
Fiducial mark 1mm
- Fiducial_5
Fiducial mark 1mm



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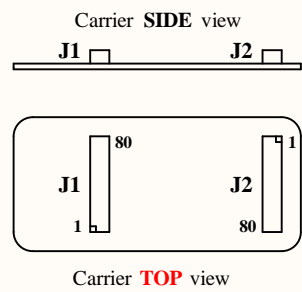
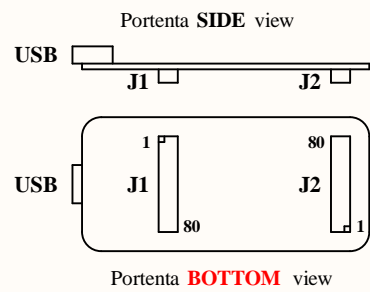
Title: TOP				
ID: ASX00039		Revision: V0.5		
Date: 8/31/2023 Time: 8:15:44 AM		Sheet 1 of 8		
File: TOP.SchDoc		Author: Silvio Navaretti		RevAuthor: Silvio Navaretti

ON GIGA CAMERA SHARES: I2C4 WITH JDIGITAL

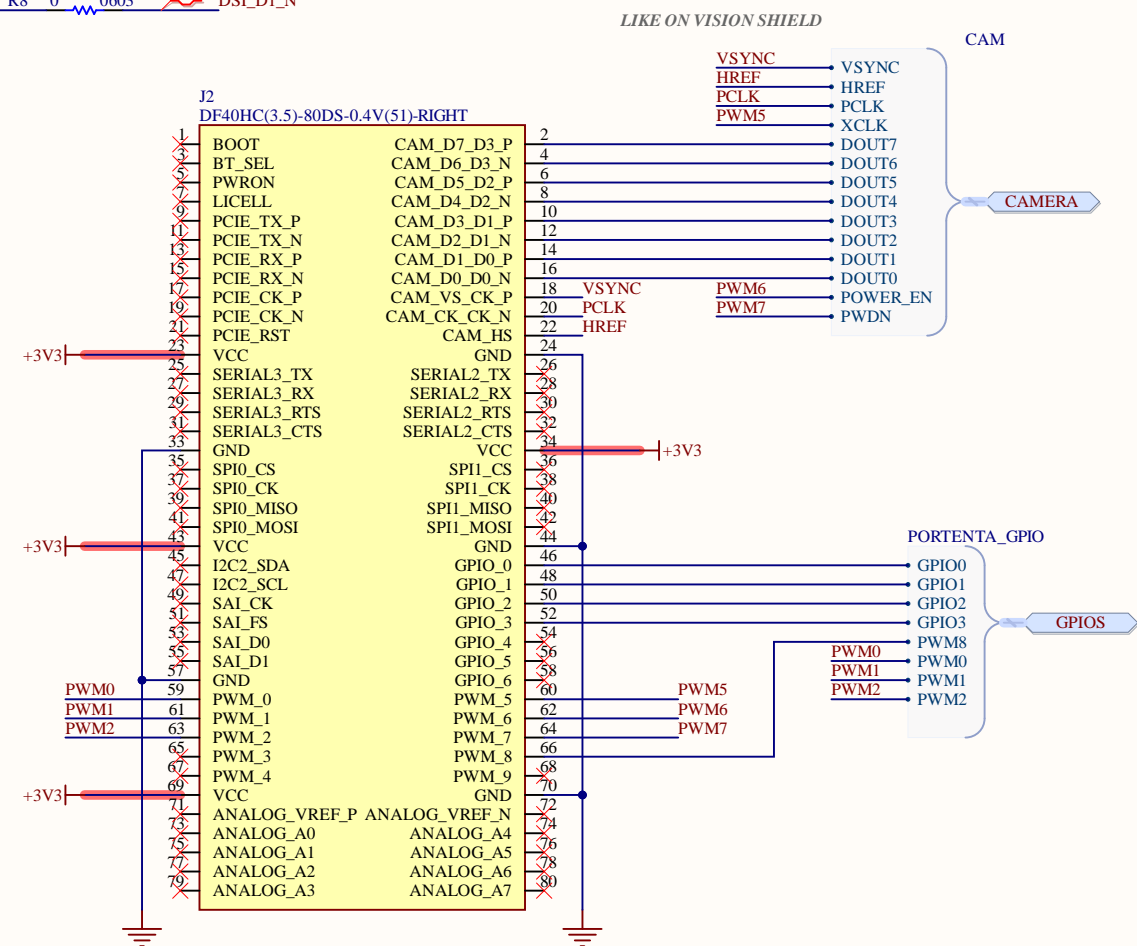
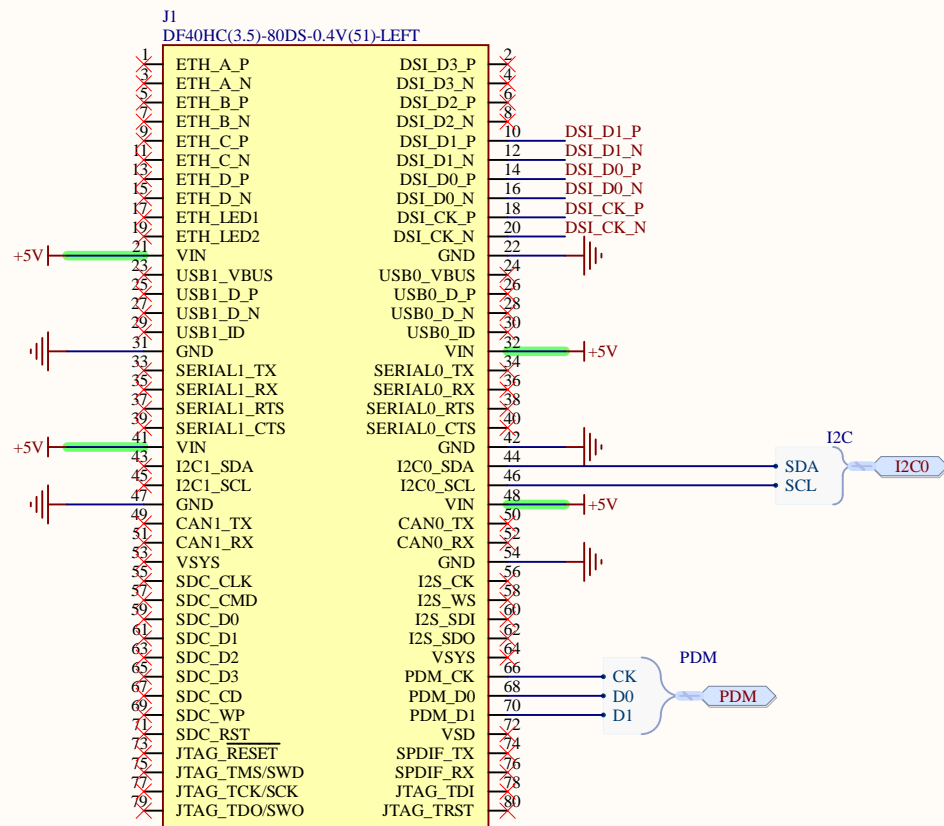
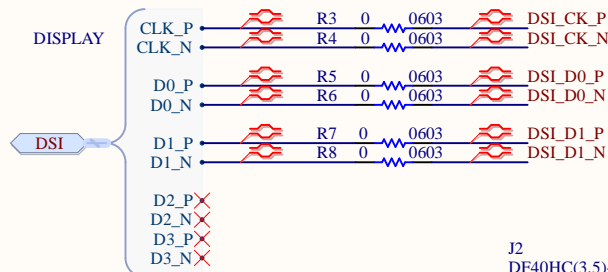
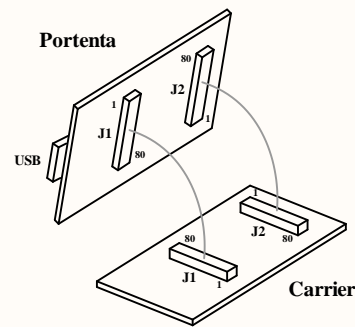


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Title: GIGA HEADERS				
ID: ASX00039				
Date: 8/31/2023	Time: 8:15:53 AM	Sheet 2 of 8		
File: GIGA.SchDoc		Author: Silvio Navaretti		RevAuthor: Silvio Navaretti



HD Connectors on the carrier are mirrored



POWER NETS TABLE

NET	TYPE	RANGES
VIN	PORTENTA INPUT	1.1V to 3.3V in steps, max 1A.
VCC	PORTENTA OUTPUT	1.1V to 3.3V in steps, max 1A.
VSYS	PORTENTA RESERVED OUTPUT	RESERVED, DO NOT USE 3.5V to 4.2V, max 600mA.
LICELL	PORTENTA INPUT	Coinc cell max 3.6V, max 46uA.

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Title: **HD Connectors female**

ID: ASX00039

Date: 8/31/2023 Time: 8:16:05 AM

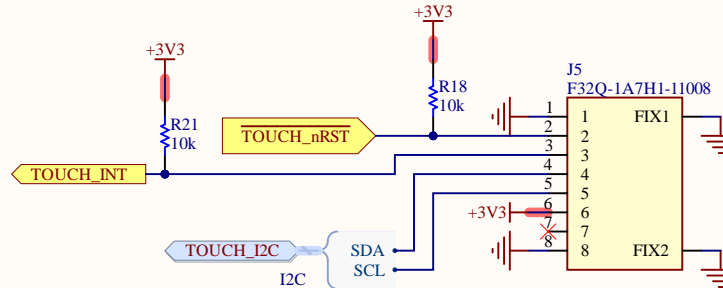
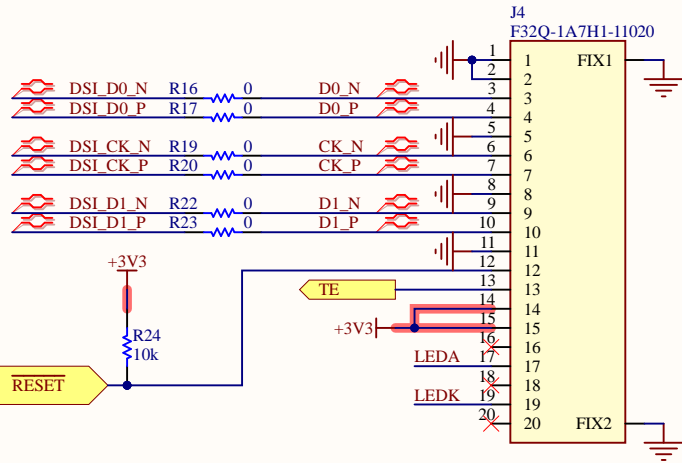
File: HDConn_FEMALE.SchDoc

Revision: V0.5

Sheet 3 of 8

Author: Silvio Navaretti

RevAuthor: Silvio Navaretti

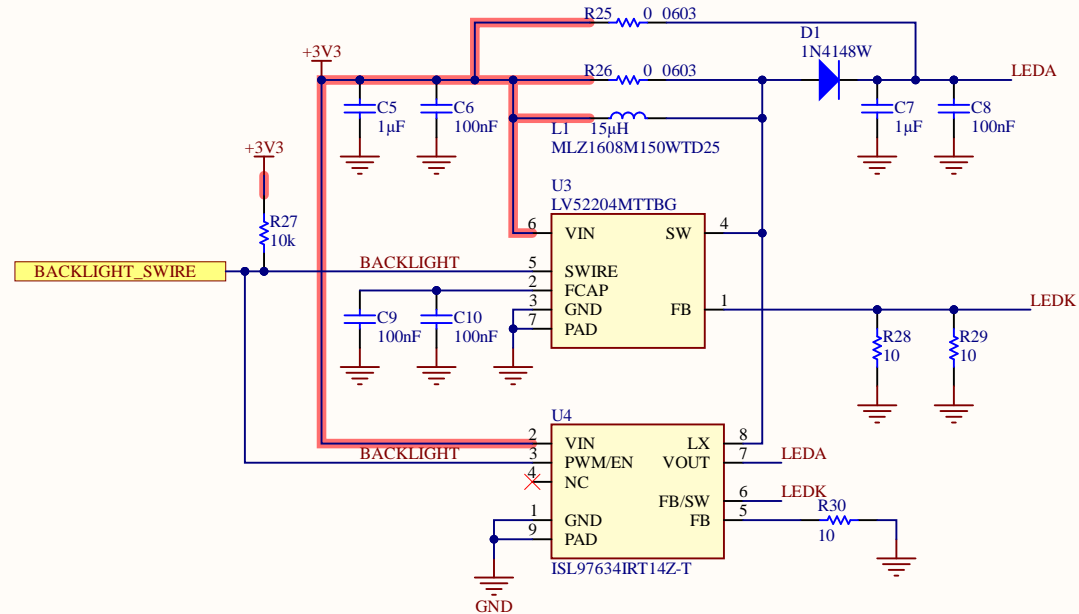
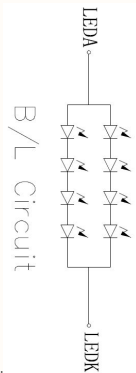
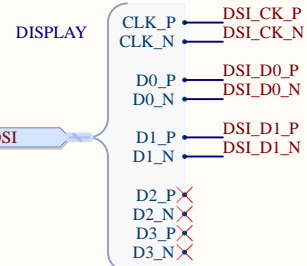


Pinout is inverted (pin 8 is pin 1, pin 7 is pin 2 etc) since the connector has been moved on the other side of the board with respect to the display.

NO.	SYMBOL	DISCRPTION	I/O
1	GND	Ground	P
2	NC	OPEN.	--
3	VDD	Supply voltage (3.3V)	P
4	SCL	I2C clock input	I
5	SDA	I2C data input and output	I
6	INT	External interrupt to the host	I
7	RST	External Reset, Low is active	I
8	GND	Ground	P

Pinout is inverted (pin 20 is pin 1, pin 19 is pin 2 etc) since the connector has been moved on the other side of the board with respect to the display.

NO.	SYMBOL	DISCRPTION	I/O
1	NC	-	-
2	LEDK	Cathode pin of backlight.	P
3	NC	-	-
4	LEDA	Anode pin of backlight.	P
5	NC	-	-
6	VCI	Supply voltage (3.3V).	P
7	IOVCC	Supply voltage for I/O system.	P
8	TE	Tearing effect output Leave the pin to open when not in use	O
9	RESET	The external reset input.	I
10	GND	Ground.	P
11	MIPI_DIP	MIPI DSI Differential Data pair.	I/O
12	MIPI_DIN	MIPI DSI Differential Data pair.	I/O
13	GND	Ground.	P
14	MIPI_CLP	MIPI DSI Differential Clock pair.	I
15	MIPI_CIN	MIPI DSI Differential Clock pair.	I
16	GND	Ground.	P
17	MIPI_DDP	MIPI DSI Differential Data pair.	I/O
18	MIPI_DDN	MIPI DSI Differential Data pair.	I/O
19	GND	Ground.	P
20	GND	Ground.	P



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Title: **DISPLAY**

ID: **ASX00039**

Date: **8/31/2023**

File: **DISPLAY.SchDoc**

Revision: **V0.5**

Time: **8:16:10 AM**

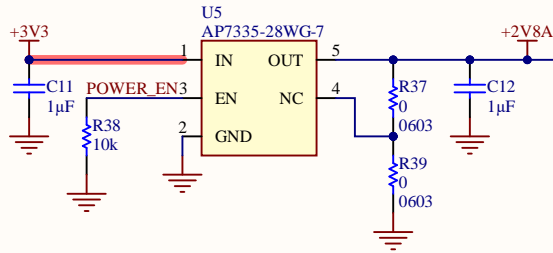
Sheet **4** of **8**

Author: **Silvio Navaretti**

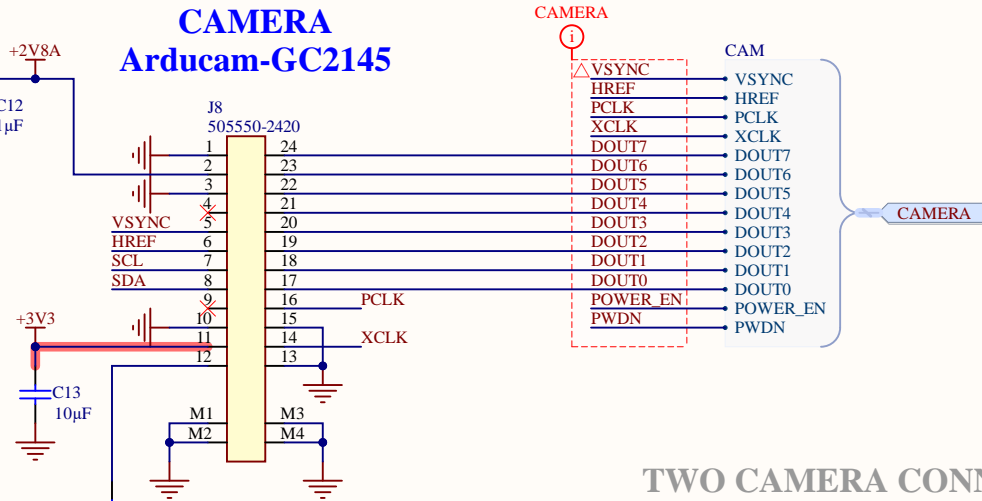


RevAuthor: **Silvio Navaretti**

CAMERA 2V8 LDO



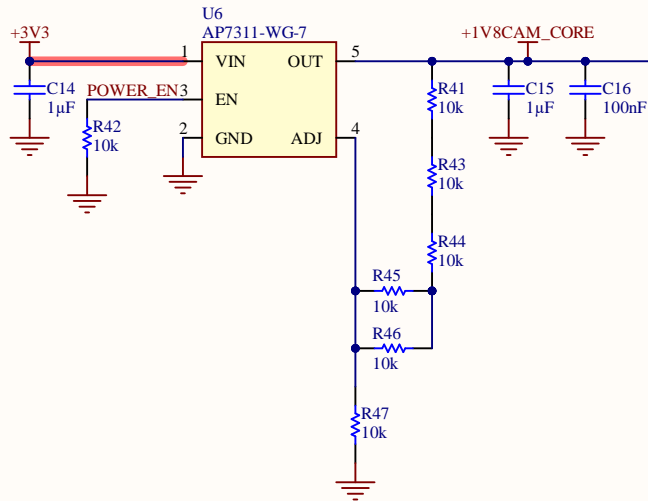
CAMERA Arducam-GC2145



Arducam-GC2145 camera module pinout

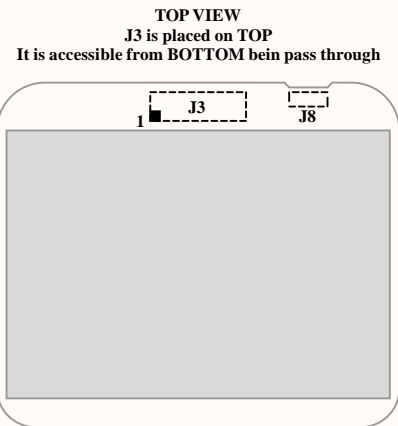
CONNECTOR PIN	DESCRIPTION	定义
1	AGND	
2	AVDD2.8V	
3	GND	
4	NC	
5	FVLD	
6	LVLd	
7	SCL	
8	SDA	
9	NC	
10	DGND	
11	IOVDD1.8V	
12	DVDD1.8V	
13	DGND	
14	MCLK	
15	DGND	
16	PCLK	
17	D0	
18	D1	
19	D2	
20	D3	
21	D4	
22	D5	
23	D6	
24	D7	

CAMERA 1V8 LDO

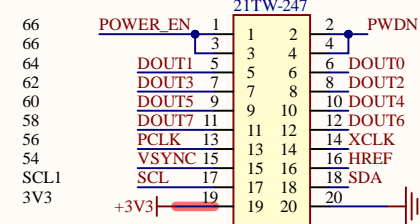


**TWO CAMERA CONNECTORS:
FLAT CABLE OR 2.54mm HEADER.
THEY CANNOT BE USED AT THE
SAME TIME**

CAMERA 2.54mm header



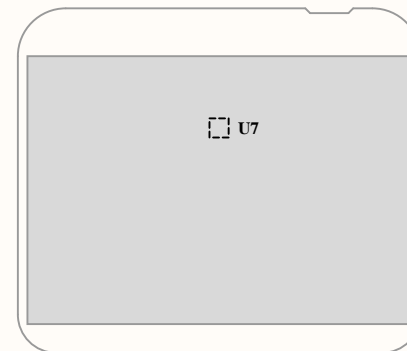
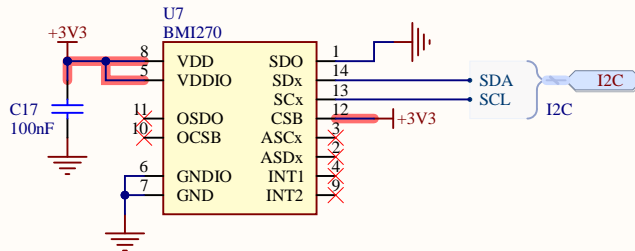
GIGA PINS ON SILK





GIGA PINS ON SILK

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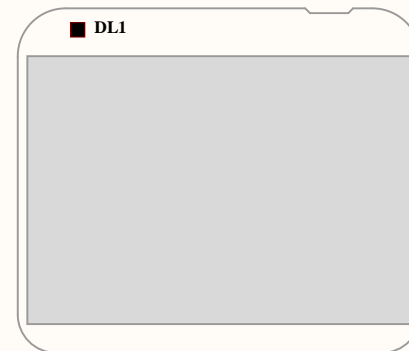
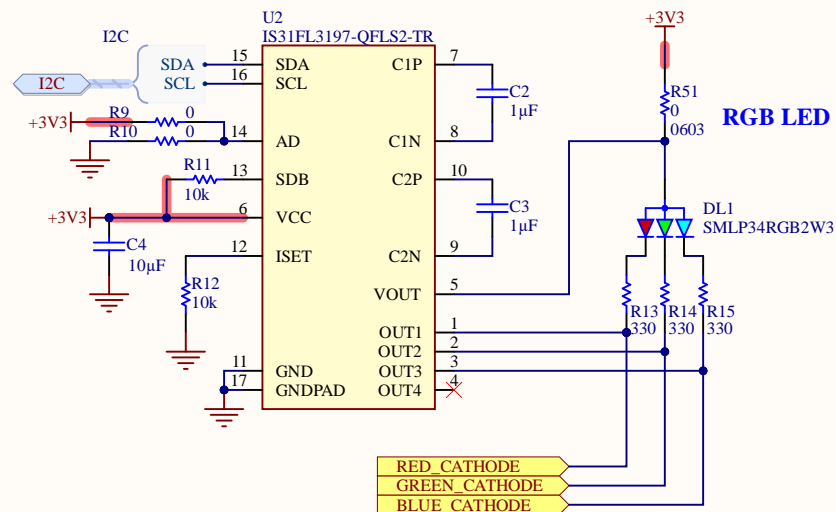
3D ACCELEROMETER 3D GYROSCOPE



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Title: ACCELEROMETER		 	
ID: ASX00039	Revision: V0.5		
Date: 8/31/2023	Time: 8:16:20 AM	Sheet 6 of 8	
File: ACCELEROMETER.SchDoc		Author: Silvio Navaretti	RevAuthor: Silvio Navaretti

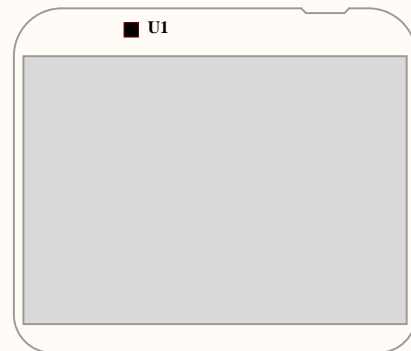
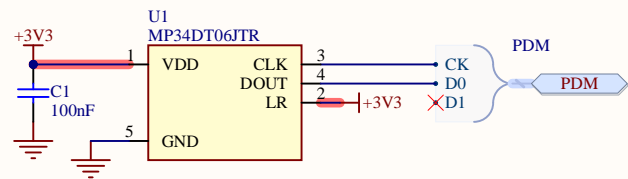
RGB LED DRIVER



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Title: RGB		 	
ID: ASX00039	Version: V0.5		
Date: 8/31/2023	Time: 8:16:25 AM	Sheet 7 of 8	
File: RGB_LED.SchDoc		Author: Silvio Navaretti	RevAuthor: Silvio Navaretti

MICROPHONE



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Title: MICROPHONE		 	
ID: ASX00039	Version: V0.5		
Date: 8/31/2023	Time: 8:16:30 AM	Sheet 8 of 8	
File: MICROPHONE.SchDoc	Author: Silvio Navaretti	RevAuthor: Silvio Navaretti	