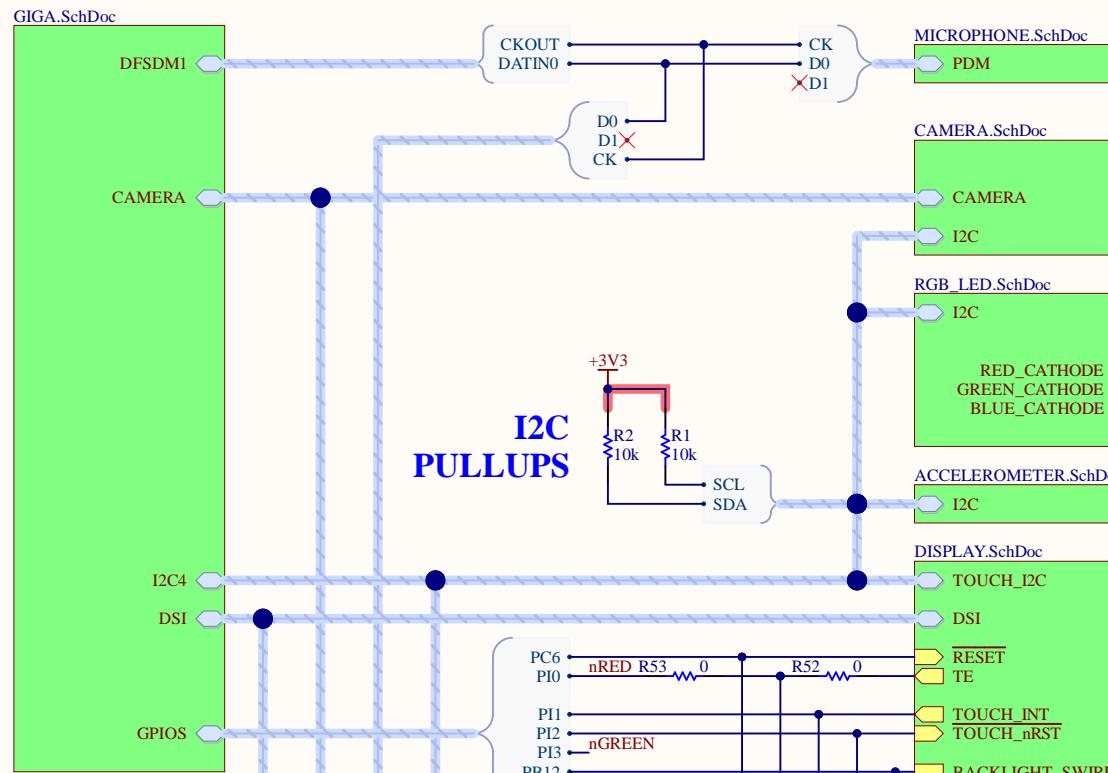


# GIGA



# MICROPHONE

# CAMERA

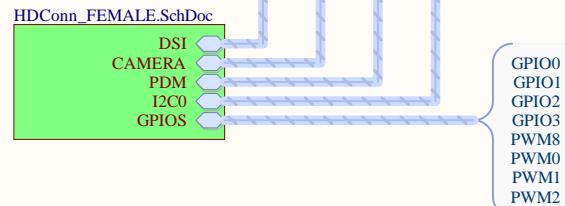
# RGB

*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

# PORTENTA



A

A

B

B

C

C

D

D

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Title: TOP

ID: ASX00039

Revision: V0.5

Date: 8/31/2023

Time: 8:15:44 AM

Sheet 1 of 8

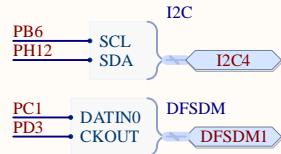
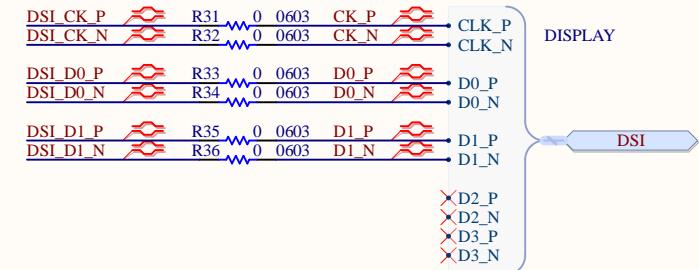
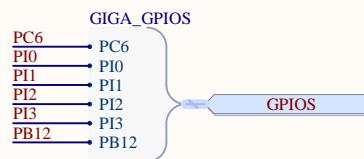
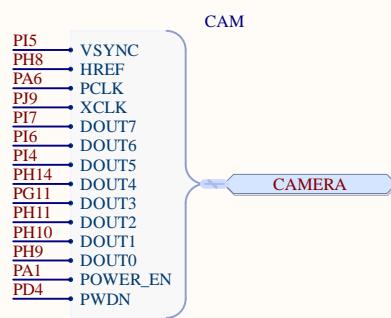
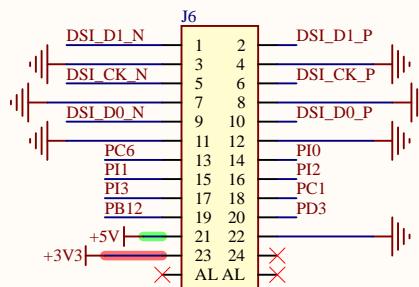
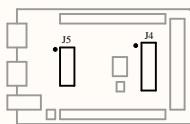
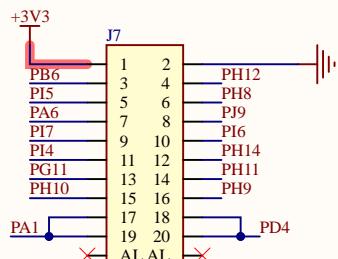
File: TOP.SchDoc

Author: Silvio Navaretti



A

**ON GIGA CAMERA SHARES:  
I2C4 WITH JDIGITAL**



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**Title: GIGA HEADERS**

**ID: ASX00039**

**Revision: V0.5**

**Date: 8/31/2023**

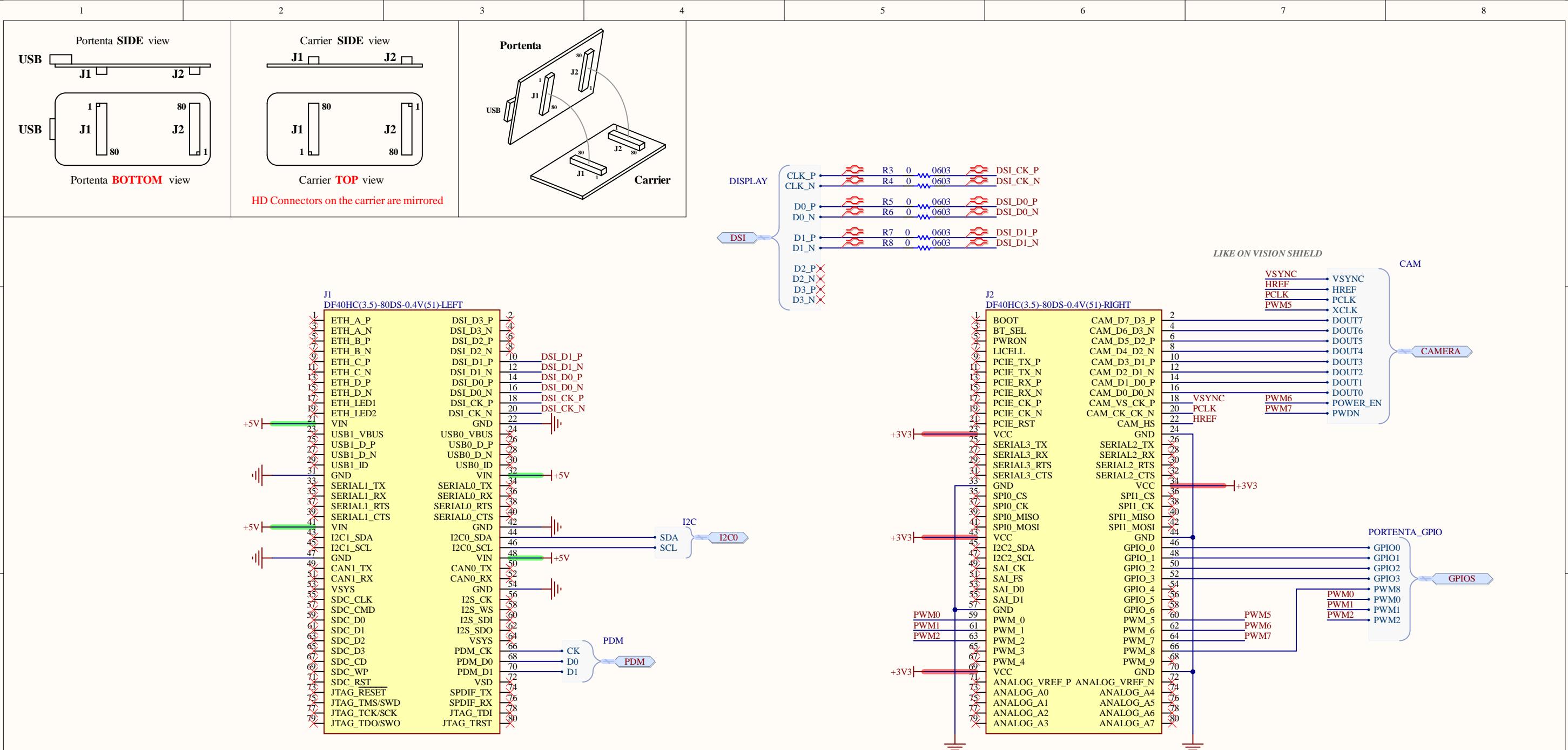
**Time: 8:15:53 AM**

**Sheet 2 of 8**

**File: GIGA.SchDoc**

**Author: Silvio Navaretti**





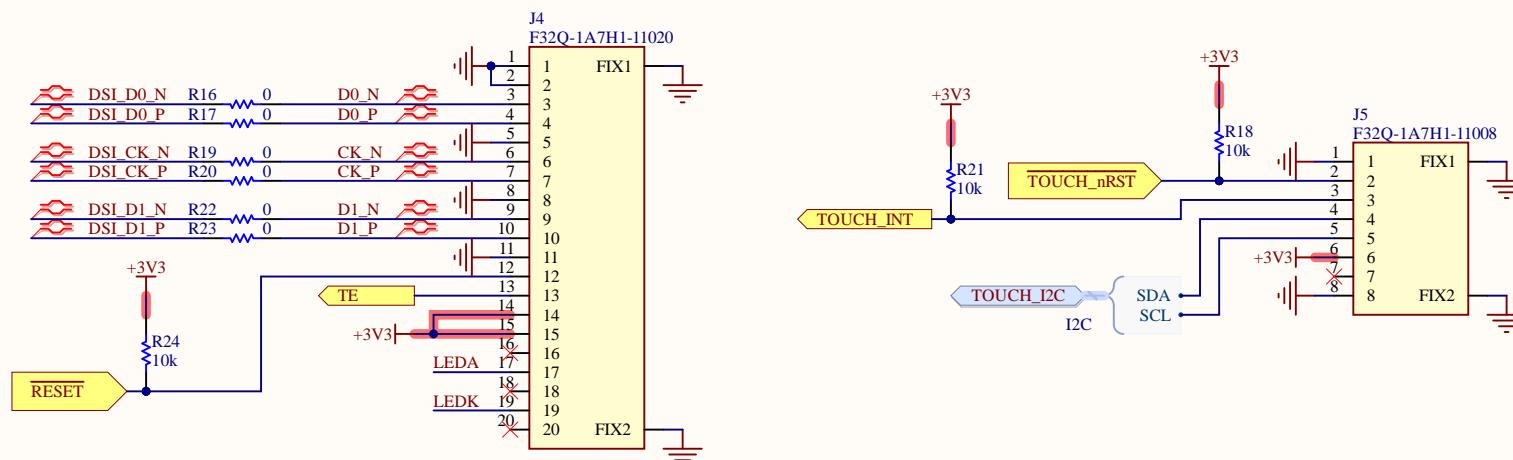
#### POWER NETS TABLE

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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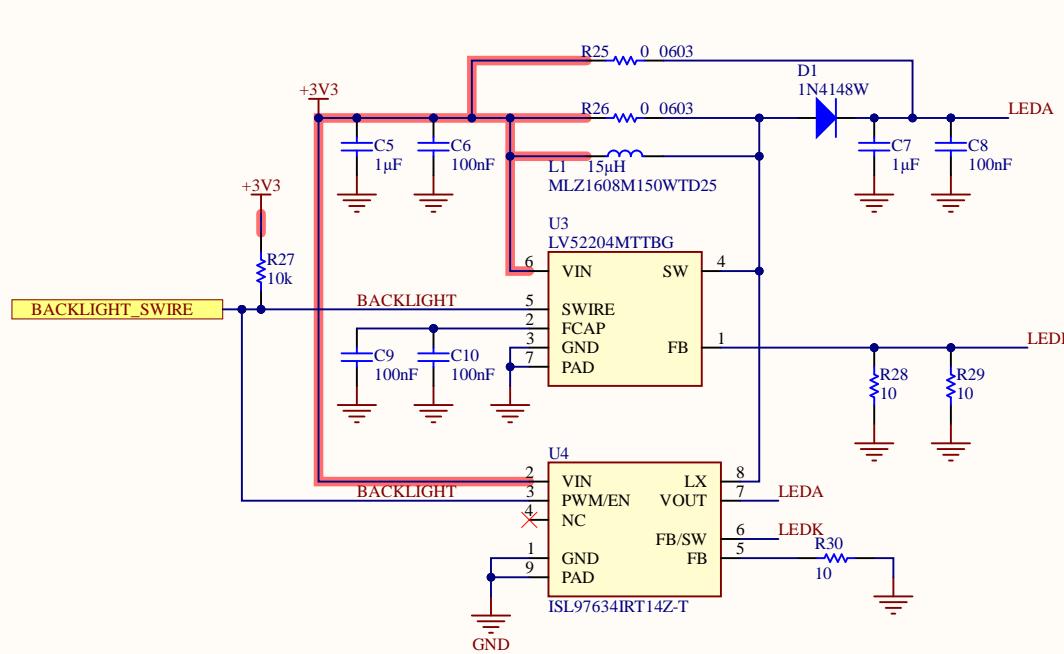
Title: <b>HD Connectors female</b>	
ID: <b>ASX00039</b>	Revision: <b>V0.5</b>
Date: <b>8/31/2023</b>	Time: <b>8:16:05 AM</b>
Sheet <b>3</b> of <b>8</b>	
File: <b>HDConn_FEMALE.SchDoc</b>	Author: <b>Silvio Navaretti</b>
RevAuthor: <b>Silvio Navaretti</b>	



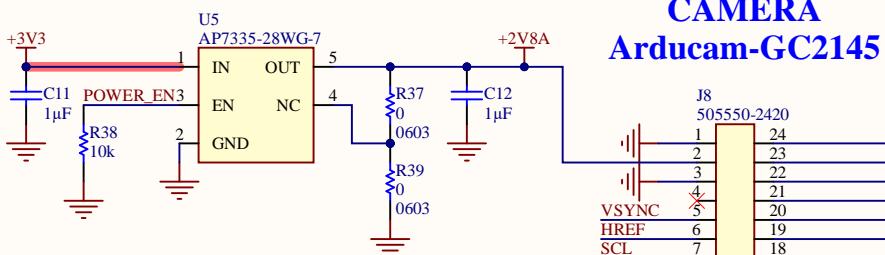


Pinout is inverted (pin 8 is pin 1, pin 7 is pin 2 etc) since the connector has been moved on the other side of the board with respect to the display.

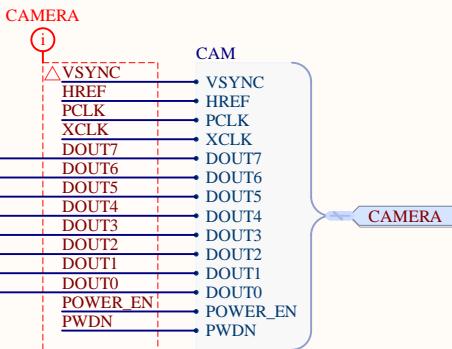
NO.	SYMBOL	DESCRIPTION	I/O
1	GND	Ground	P
2	NC	OPEN.	-
3	VDD	Supply voltage (3.3V)	P
4	SCL	I2C clock input	I
5	SDA	I2C data input and output	I
6	INT	External interrupt to the host	I
7	RST	External Reset. Low is active	I
8	GND	Ground	P



## CAMERA 2V8 LDO



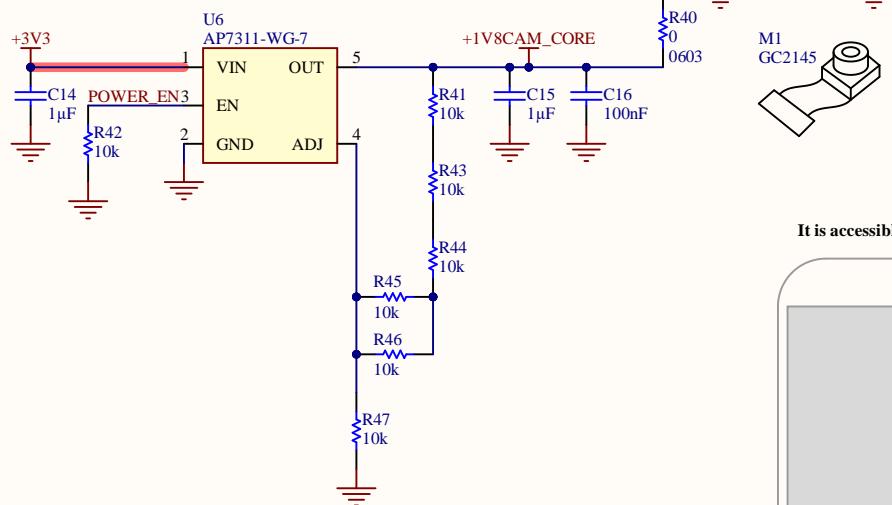
## CAMERA Arducam-GC2145



Arducam-GC2145 camera module pinout

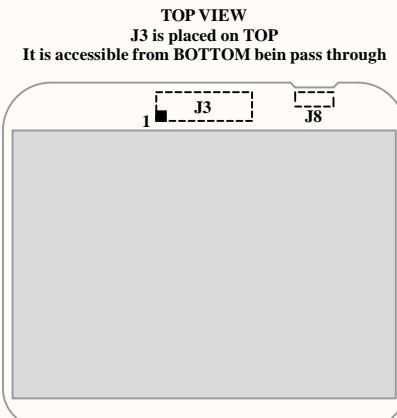
CONNECTOR PIN DESCRIPTION	
NO.	定义
1	AGND
2	AVDD2.8V
3	GND
4	NC
5	FVLD
6	LVLD
7	SCL
8	SDA
9	NC
10	DGND
11	IOVDD1.8V
12	DVDD1.8V
13	DGND
14	MCLK
15	DGND
16	PCLK
17	D0
18	D1
19	D2
20	D3
21	D4
22	D5
23	D6
24	D7

## 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

J3 21TW-247	
66	POWER_EN
66	J3
64	1
62	2
60	3
58	4
56	5
54	6
SCL1	7
3V3	8
+3V3	9
	10
	11
	12
	13
	14
	15
	16
	17
	18
	19
	20

### GIGA PINS ON SILK

J3 21TW-247	
1	POWER_EN
2	PWDN
3	1
4	2
5	3
6	4
7	5
8	6
9	7
10	8
11	9
12	10
13	11
14	12
15	13
16	14
17	15
18	16
19	17
20	18

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Title: CAMERA

ID: ASX00039

Revision: V0.5

Date: 8/31/2023

Time: 8:16:15 AM

Sheet 5 of 8

File: CAMERA.SchDoc

Author: Silvio Navaretti

RevAuthor: Silvio Navaretti



A

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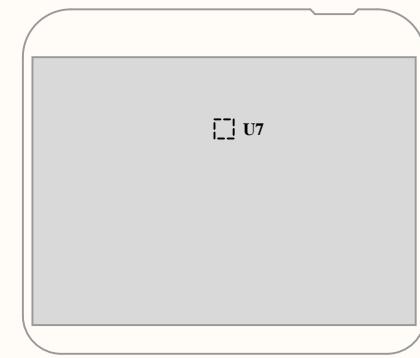
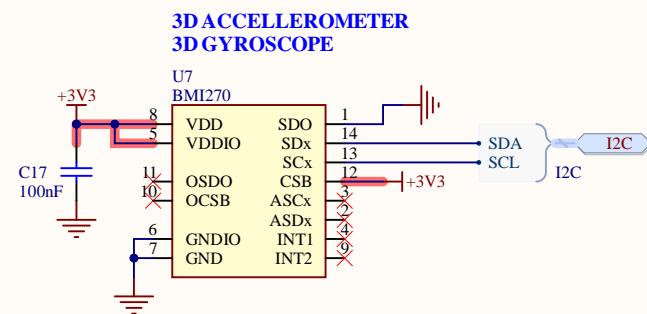
D

A

B

C

D



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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



A

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C

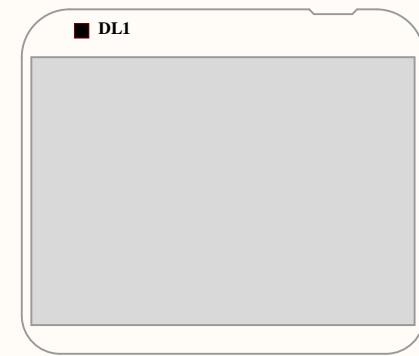
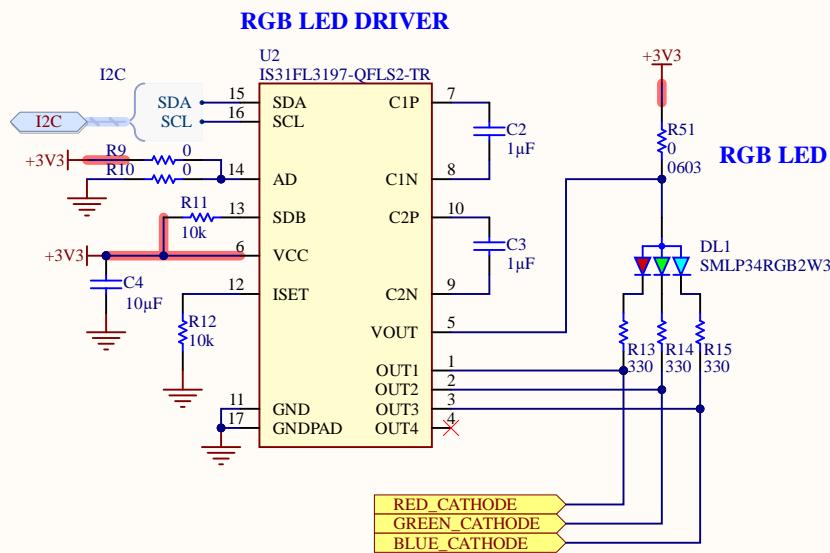
D

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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**



A

B

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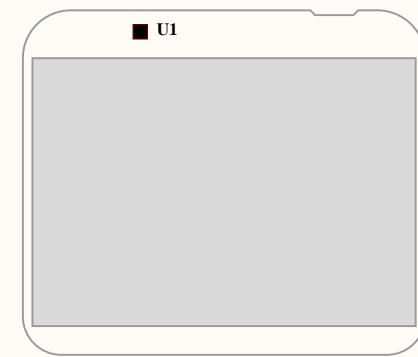
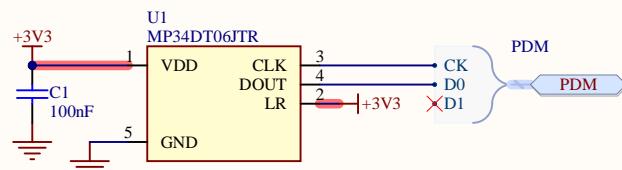
A

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## 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

