

Reference Designs ARE PROVIDED "AS IS" AND "WITH ALL FAULTS. Arduino SA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING PRODUCTS, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Arduino SA may make changes to specifications and product descriptions at any time, without notice. The Customer must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Arduino SA reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The product information on the Web Site or Materials is subject to change without notice.

Do not finalize a design with this info. ARDUINO and other Arduino brands and logos and Trademarks of Arduino SA. All Arduino SA Trademarks cannot be used without owner's formal permission.

### Title: TOP

ID: ABX00051

Revision: V1.4

Date: 11/11/2022

Time: 3:06:59 PM

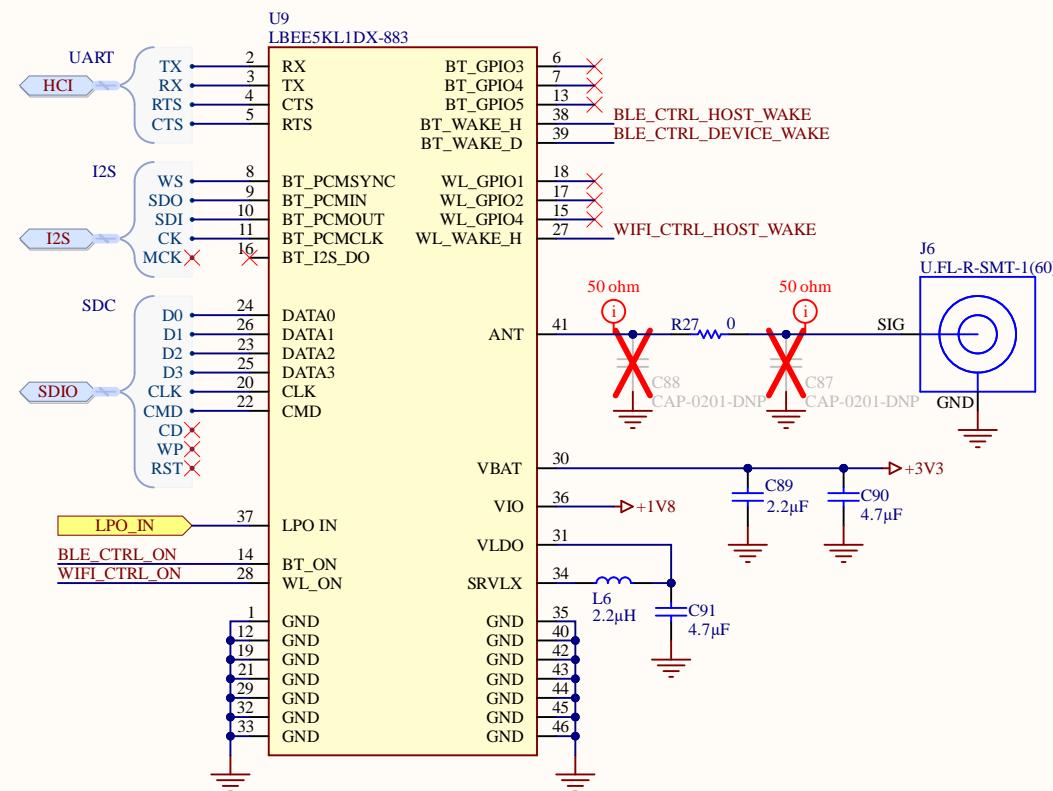
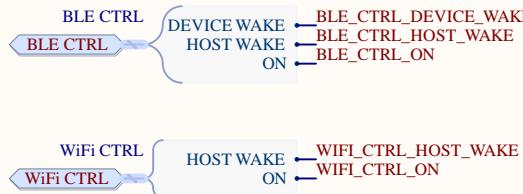
Sheet 1 of 8

File: TOP.SchDoc

Author: Silvio Navaretti



A



B

C

D

Reference Designs ARE PROVIDED "AS IS" AND "WITH ALL FAULTS. Arduino SA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING PRODUCTS, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Arduino SA may make changes to specifications and product descriptions at any time, without notice. The Customer must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Arduino SA reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The product information on the Web Site or Materials is subject to change without notice.

Do not finalize a design with this info. ARDUINO and other Arduino brands and logos and Trademarks of Arduino SA. All Arduino SA Trademarks cannot be used without owner's formal permission.

Title: **WIFI / BLE**

ID: **ABX00051**

Revision: **V1.4**

Date: **11/11/2022**

Time: **3:07:04 PM**

Sheet **2** of **8**

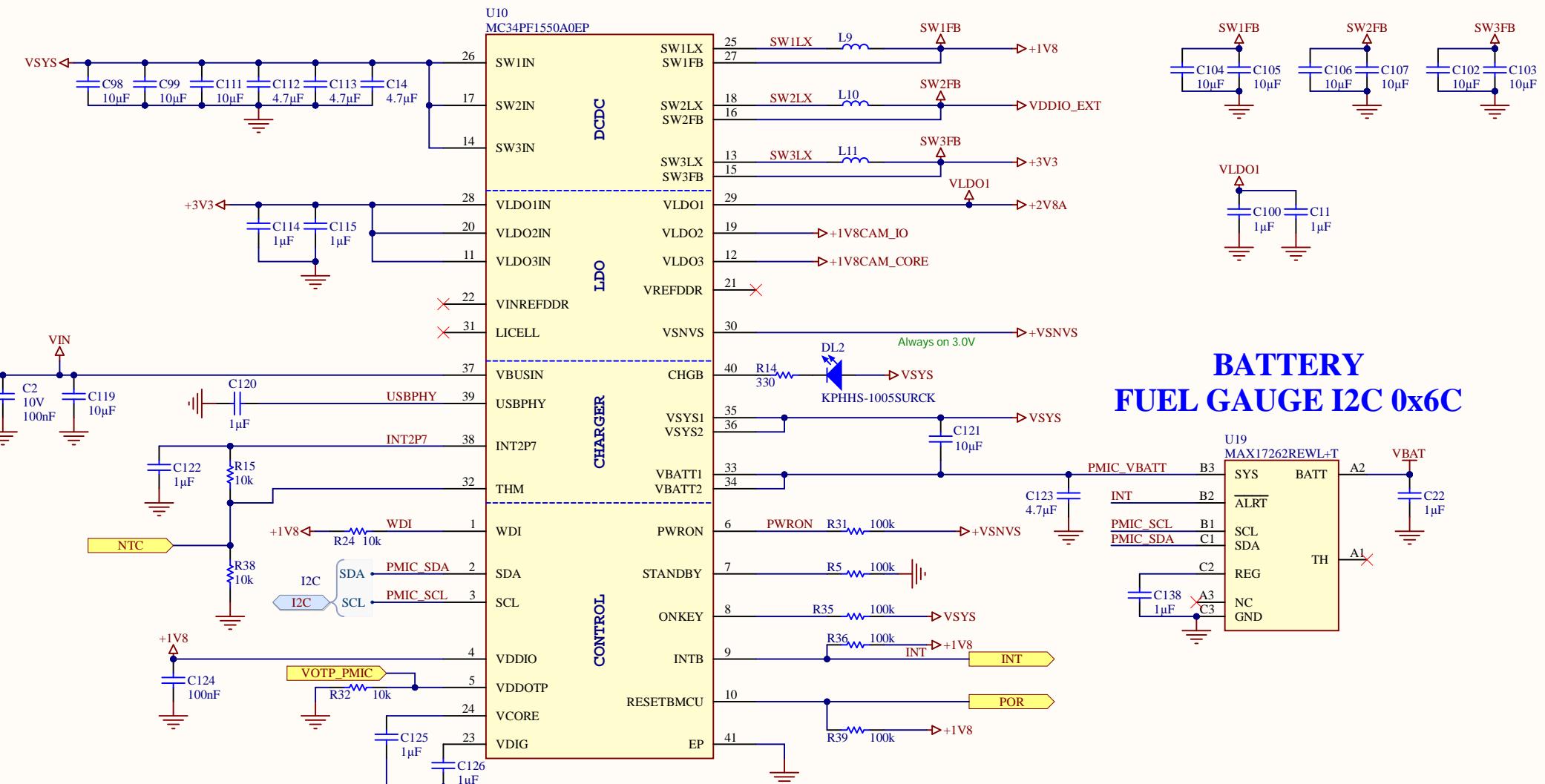
File: **Wifi.SchDoc**

Author: **Arturo Guadalupe**

RevAuthor: **Silvio Navaretti**



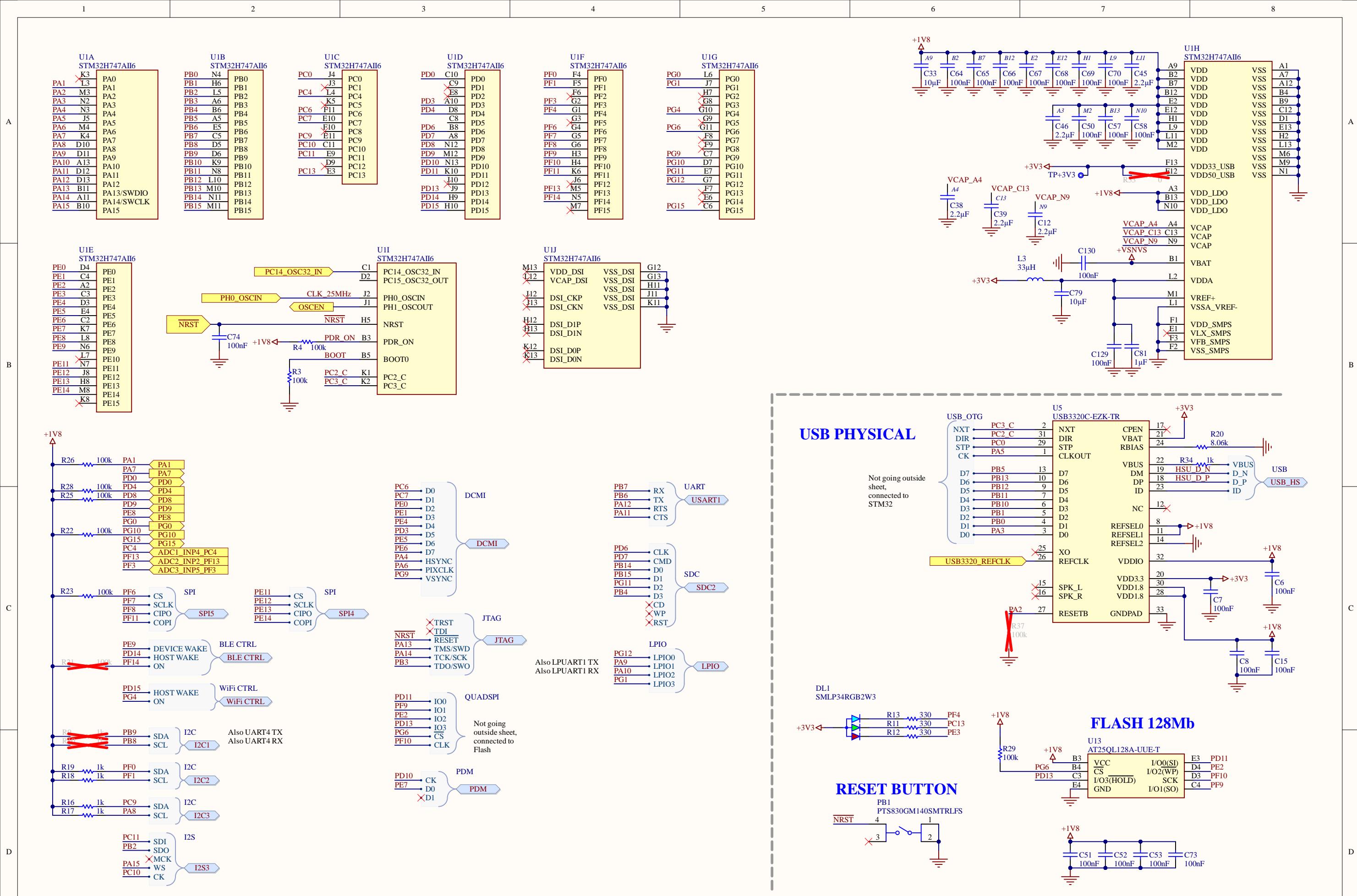
A

**PMIC I<sub>2</sub>C 0x08**

B

C

D

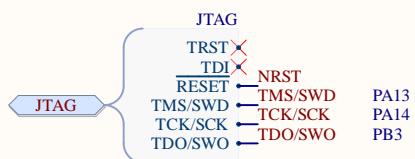
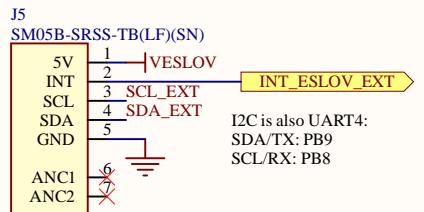


Reference Designs ARE PROVIDED "AS IS" AND "WITH ALL FAULTS. Arduino SA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING PRODUCTS, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.  
Arduino SA may change to specifications and product descriptions at any time, without notice. The Customer must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined".  
Arduino SA reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The product information on the Web Site or Materials is subject to change without notice.  
Do not finalize a design with this info. ARDUINO and other Arduino brands and logos and Trademarks of Arduino SA. All Arduino SA Trademarks cannot be used without owner's formal permission.

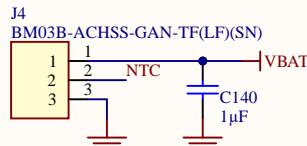
Title: STM32H747			
ID: ABX00051	Revision: V1.4		
Date: 11/11/2022	Time: 3:07:15 PM	Sheet 4 of 8	
File: STM32H747.SchDoc	Author: Silvio Navaretti	RevAuthor: Silvio Navaretti	



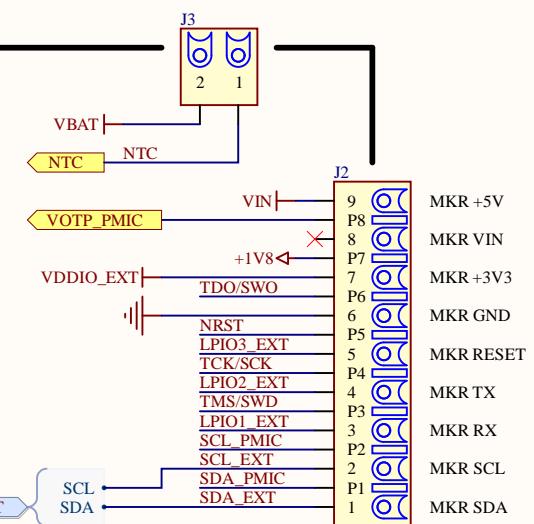
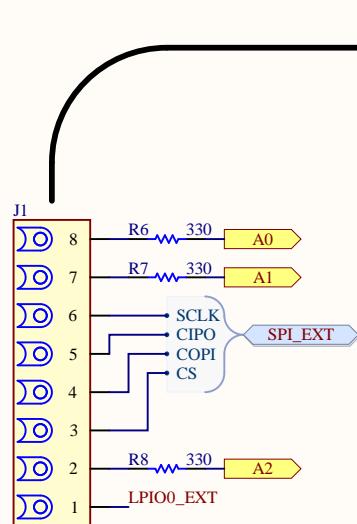
## ESLOV CONNECTOR



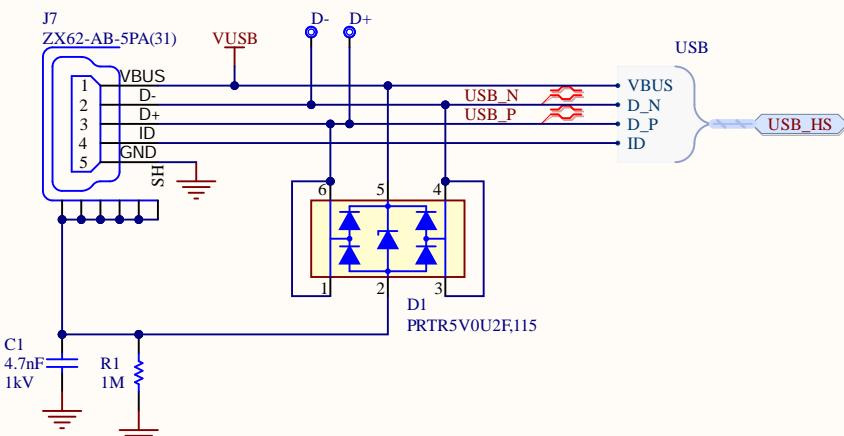
## BATTERY CONNECTOR



MKR AREF  
MKR A0  
MKR A1  
MKR A2  
MKR A3  
MKR A4  
MKR A5  
MKR A6



## USB CONNECTOR



Reference Designs ARE PROVIDED "AS IS" AND "WITH ALL FAULTS. Arduino SA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING PRODUCTS, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Arduino SA may make changes to specifications and product descriptions at any time, without notice. The Customer must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Arduino SA reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The product information on the Web Site or Materials is subject to change without notice.

Do not finalize a design with this info. ARDUINO and other Arduino brands and logos and Trademarks of Arduino SA. All Arduino SA Trademarks cannot be used without owner's formal permission.

Title: CONNECTORS

ID: ABX00051

Revision: V1.4

Date: 11/11/2022

Time: 3:07:20 PM

Sheet 5 of 8

File: Connectors.SchDoc

Author: Silvio Navaretti



A

B

C

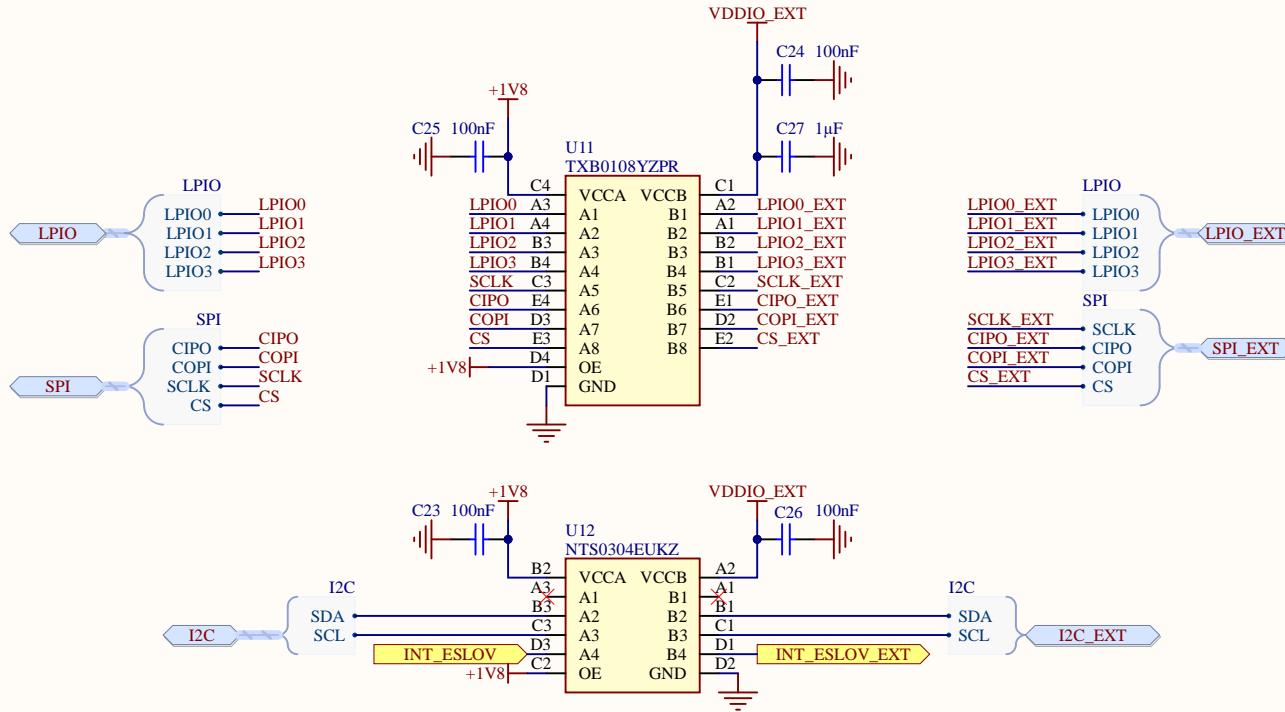
D

A

B

C

D



Reference Designs ARE PROVIDED "AS IS" AND "WITH ALL FAULTS. Arduino SA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING PRODUCTS, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Arduino SA may make changes to specifications and product descriptions at any time, without notice. The Customer must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Arduino SA reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The product information on the Web Site or Materials is subject to change without notice.

Do not finalize a design with this info. ARDUINO and other Arduino brands and logos and Trademarks of Arduino SA. All Arduino SA Trademarks cannot be used without owner's formal permission.

#### Title: LEVEL SHIFTERS

ID: ABX00051

Revision: V1.4

Date: 11/11/2022

Time: 3:07:25 PM

Sheet 6 of 8

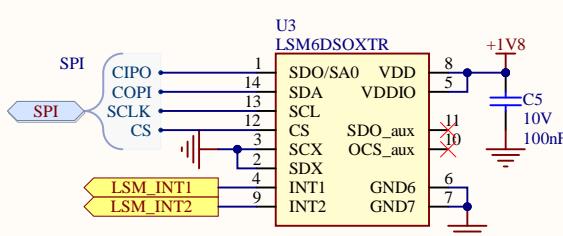
File: LevelShifters.SchDoc

Author: Francesca Cenna

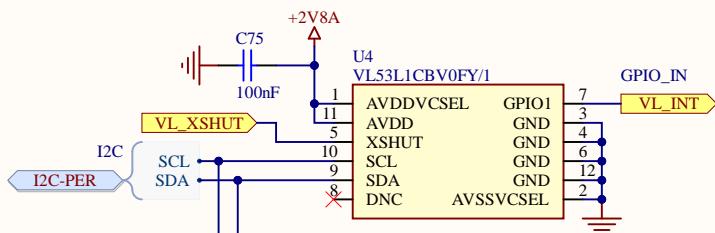
RevAuthor: Silvio Navaretti



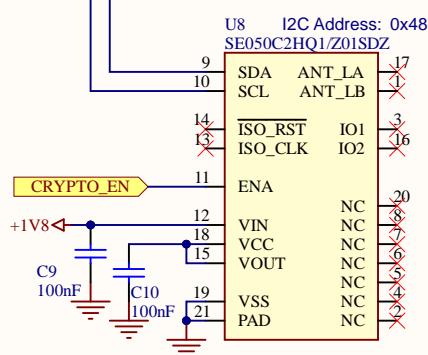
## ACCELEROMETER



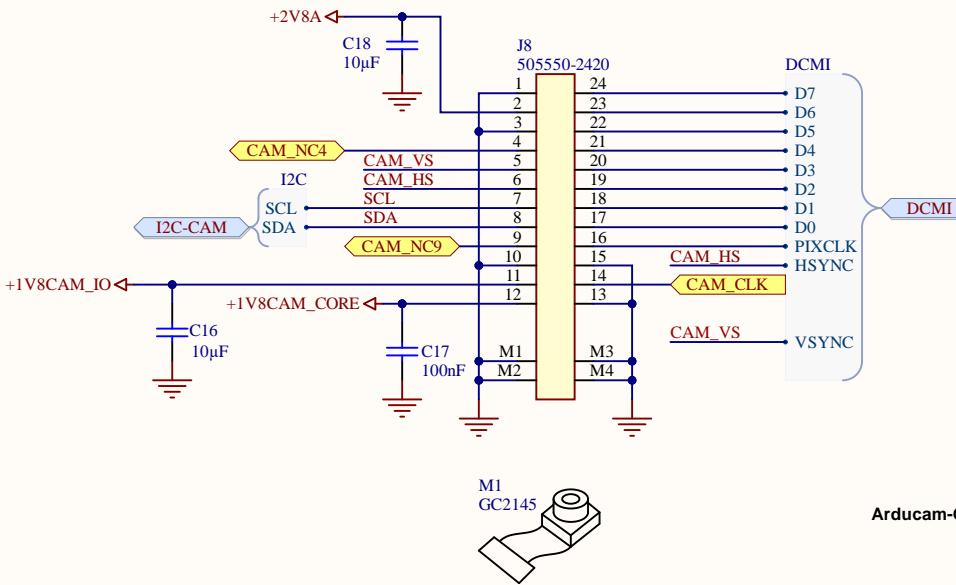
## TIME OF FLIGHT I2C 0x52



## SECURE ELEMENT I2C 0x48



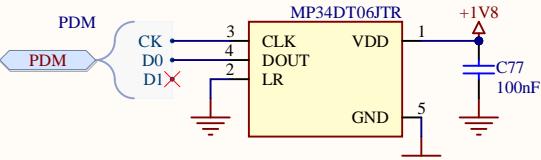
## CAMERA



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

Arducam-GC2145 camera module pinout

## MICROPHONE



Reference Designs ARE PROVIDED "AS IS" AND "WITH ALL FAULTS. Arduino SA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING PRODUCTS, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Arduino SA may make changes to specifications and product descriptions at any time, without notice. The Customer must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Arduino SA reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The product information on the Web Site or Materials is subject to change without notice.

Do not finalize a design with this info. ARDUINO and other Arduino brands and logos and Trademarks of Arduino SA. All Arduino SA Trademarks cannot be used without owner's formal permission.

Title: MISCELLANEOUS

ID: ABX00051

Revision: V1.4

Date: 11/11/2022

Time: 3:07:30 PM

Sheet 7 of 8

File: Misc.SchDoc

Author: Silvio Navaretti



A

A

B

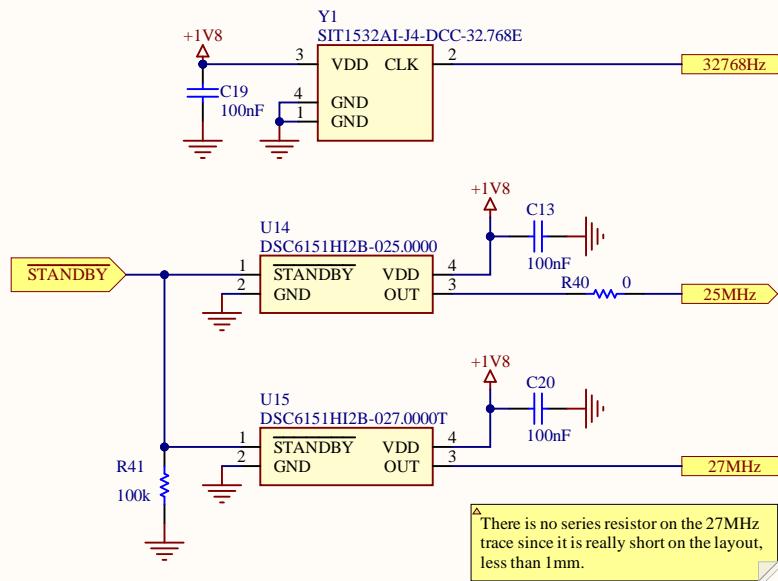
B

C

C

D

D



Reference Designs ARE PROVIDED "AS IS" AND "WITH ALL FAULTS. Arduino SA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, REGARDING PRODUCTS, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Arduino SA may make changes to specifications and product descriptions at any time, without notice. The Customer must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined". Arduino SA reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The product information on the Web Site or Materials is subject to change without notice.

Do not finalize a design with this info. ARDUINO and other Arduino brands and logos and Trademarks of Arduino SA. All Arduino SA Trademarks cannot be used without owner's formal permission.

### Title: OSCILLATORS

ID: ABX00051

Revision: V1.4

Date: 11/11/2022 Time: 3:07:36 PM Sheet 8 of 8

File: Oscillators.SchDoc

Author: Silvio Navaretti

