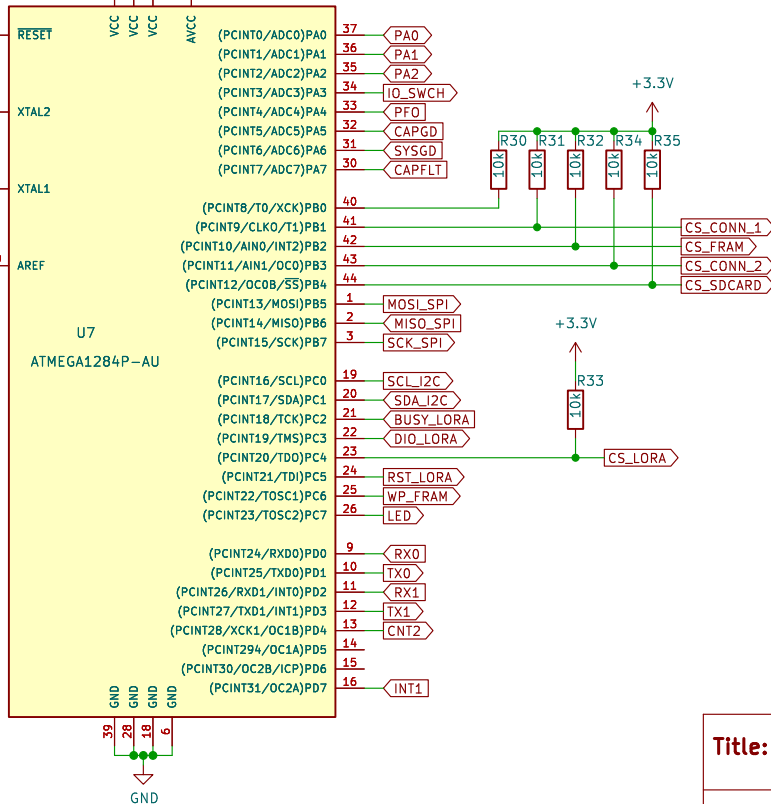
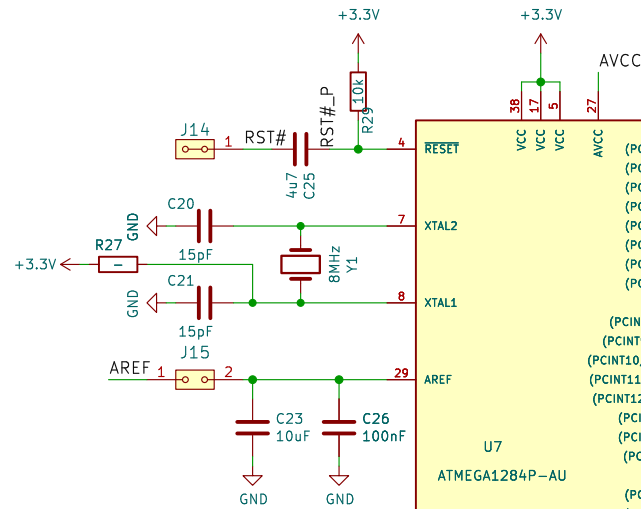
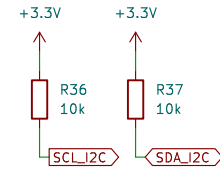
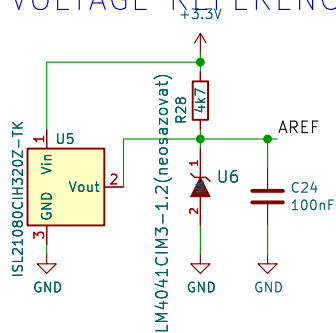


## I2C PULL UPS



PB0 -  
PB1 - CS\_CONN\_1  
PB2 - CS\_FRAM  
PB3 - CS\_CONN\_2  
PB4 - CS\_SDCARD  
PB5 - MOSI\_SPI  
PB6 - MISO\_SPI  
PB7 - SCK\_SPI

## VOLTAGE REFERENCE



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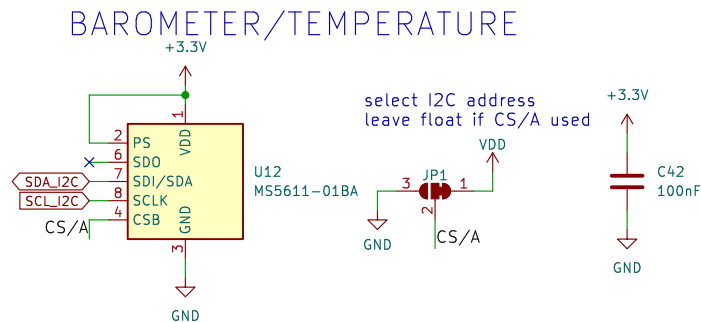
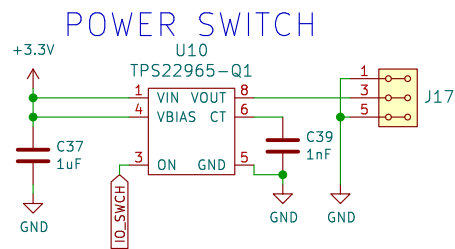
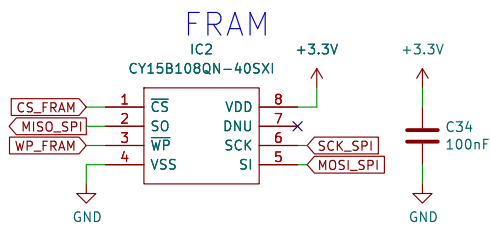
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Size: A4

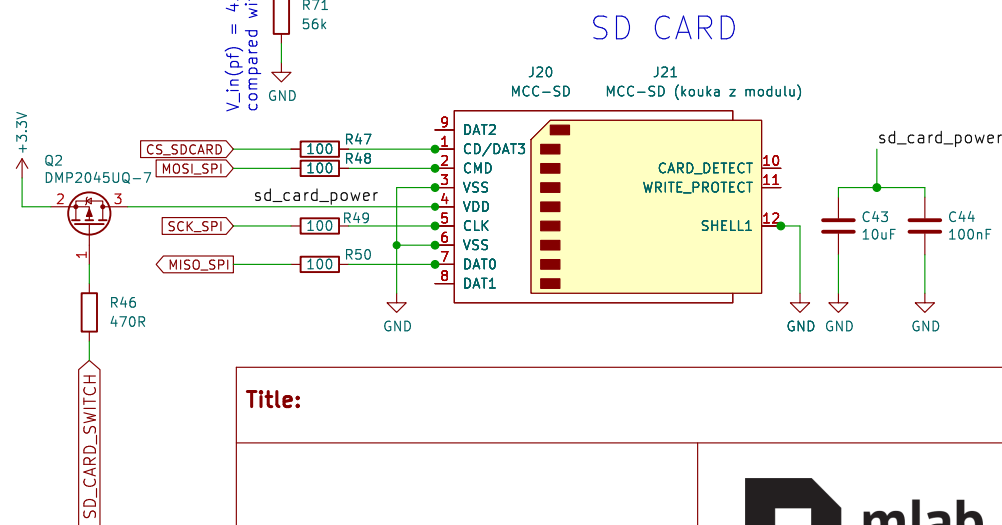
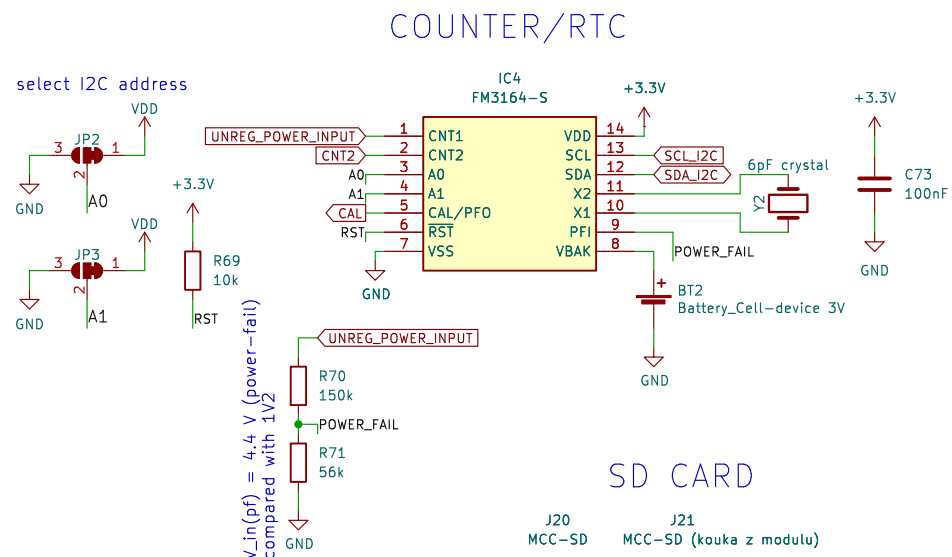
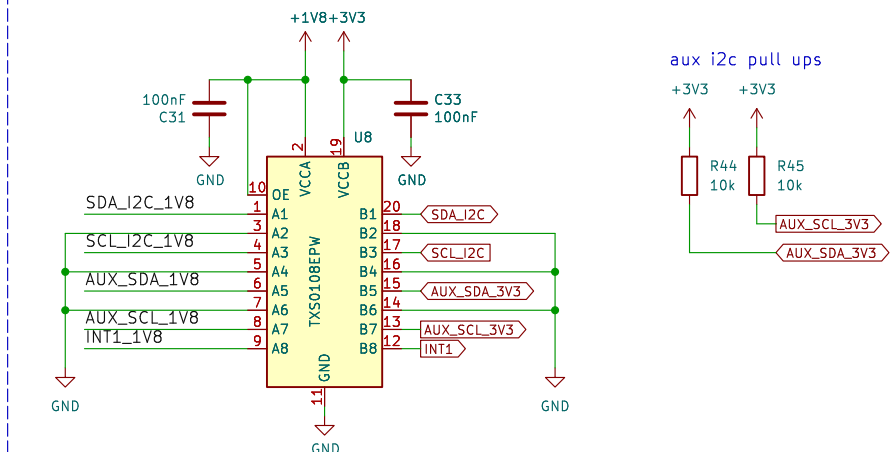
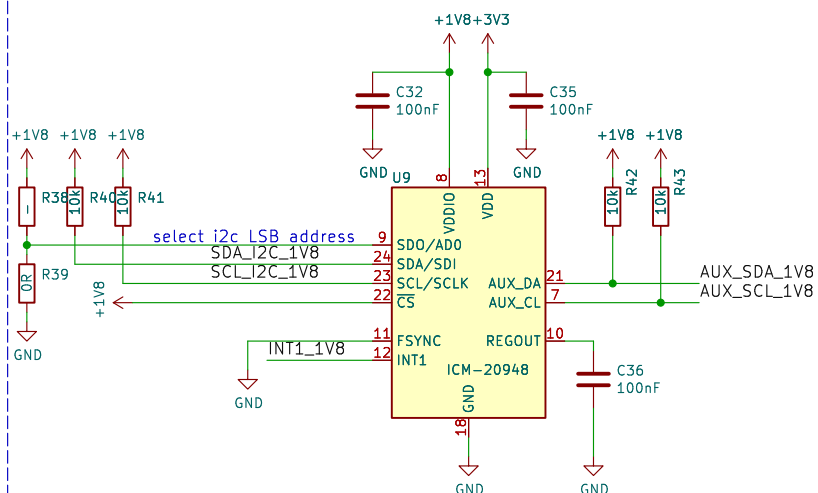
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## INERTIAL MEASUREMENT UNIT



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Author:

Size: A4

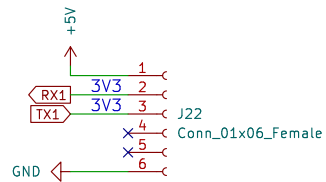
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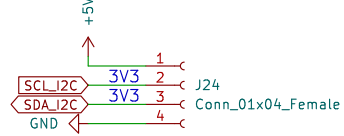


## PIXHAWK STANDARD HEADERS

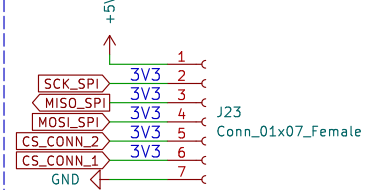
### UART CONN.



### I2C CONN.

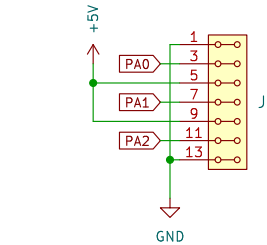


### SPI CONN.

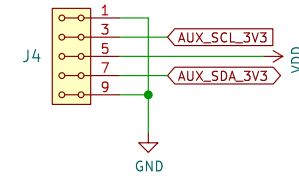


## PIN HEADERS

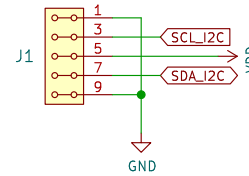
### ANALOG CONN



### AUX\_I2C CONN



### I2C CONN



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Author:

Size: A4

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Date:



**SUPERCAP MANAGEMENT**

Supercap charge current = 0 A  
if load current = 1 A  
 $R_s = 25 \text{ m}\Omega / I_{\text{load}}$

$V_{\text{in}}(\text{pf}) = 4.4 \text{ V (power-fail)}$

Na IMON lze merit  $I_{\text{load}}$ , ale musí tam být follower

$V_{\text{load}} = 4.984 \text{ V}$

$V_{\text{chg}} = 2.56 \text{ V}$  (charge voltage)

$I_{\text{chg}} = 1 \text{ A}$  (charge current)

**BUCK-BOOST CONVERTOR**  
1V6 – 5v5 IN  
3V3 OUT

**BUCK-BOOST CONVERTOR**  
1V6 – 5v5 IN  
5V OUT

**LDO**  
3V3 IN  
1V8 OUT

Title:		
Author:		
Size: A4	Page: 6/6	Date:

[illegible][illegible]

**SUPERCAP MANAGEMENT**

Supercap charge current = 0 A  
if load current = 1 A  
 $R_s = 25 \text{ m}\Omega / I_{\text{load}}$

$V_{\text{in}}(\text{pf}) = 4.4 \text{ V (power-fail)}$

Na IMON lze merit  $I_{\text{load}}$ , ale musí tam být follower

$V_{\text{load}} = 4.984 \text{ V}$

$V_{\text{chg}} = 2.56 \text{ V}$  (charge voltage)

$I_{\text{chg}} = 1 \text{ A}$  (charge current)

**BUCK-BOOST CONVERTOR**  
1V6 – 5v5 IN  
3V3 OUT

**BUCK-BOOST CONVERTOR**  
1V6 – 5v5 IN  
5V OUT

**LDO**  
3V3 IN  
1V8 OUT

Title:		
Author:		
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**SUPERCAP MANAGEMENT**

Supercap charge current = 0 A  
if load current = 1 A  
 $R_s = 25 \text{ m}\Omega / I_{\text{load}}$

$V_{\text{in}}(\text{pf}) = 4.4 \text{ V (power-fail)}$

Na IMON lze merit  $I_{\text{load}}$ , ale musí tam být follower

$V_{\text{load}} = 4.984 \text{ V}$

$V_{\text{chg}} = 2.56 \text{ V}$  (charge voltage)

$I_{\text{chg}} = 1 \text{ A}$  (charge current)

**BUCK-BOOST CONVERTOR**  
1V6 – 5v5 IN  
3V3 OUT

**BUCK-BOOST CONVERTOR**  
1V6 – 5v5 IN  
5V OUT

**LDO**  
3V3 IN  
1V8 OUT

Title:		
Author:		
Size: A4	Page: 6/6	Date:

[illegible]

**SUPERCAP MANAGEMENT**

Supercap charge current = 0 A  
if load current = 1 A  
 $R_s = 25 \text{ m}\Omega / I_{\text{load}}$

V<sub>in</sub>(pf) = 4.4 V (power-fail)

I<sub>chg</sub> = 1 A (charge current)

V<sub>load</sub> = 4.984 V

V<sub>chg</sub> = 2.56 V (charge voltage)

LDO  
3V3 IN  
1V8 OUT

BUCK-BOOST CONVERTOR  
1V6 – 5v5 IN  
3V3 OUT

BUCK-BOOST CONVERTOR  
1V6 – 5v5 IN  
5V OUT

Title:

Author:

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**SUPERCAP MANAGEMENT**

Supercap charge current = 0 A  
if load current = 1 A  
 $R_s = 25 \text{ m}\Omega / I_{\text{load}}$

V<sub>in(pf)</sub> = 4.4 V (power-fail)  
L<sub>chg</sub> = 1 A (charge current)  
Na IMON lze merit L<sub>Load</sub>, ale musí tam být follower

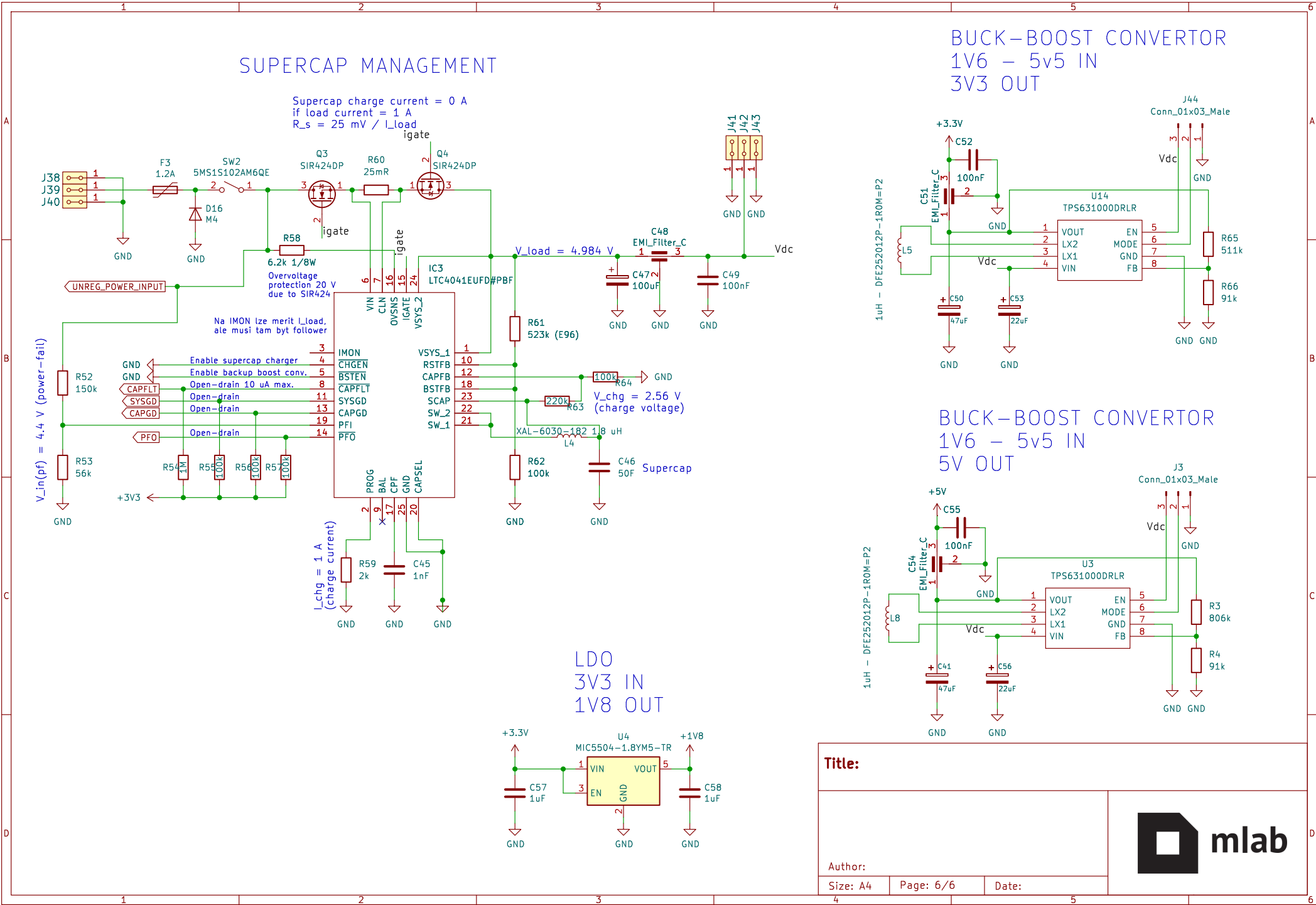
V<sub>load</sub> = 4.984 V  
V<sub>chg</sub> = 2.56 V (charge voltage)  
XAL-6030-182 18 uH  
C46 50F Supercap

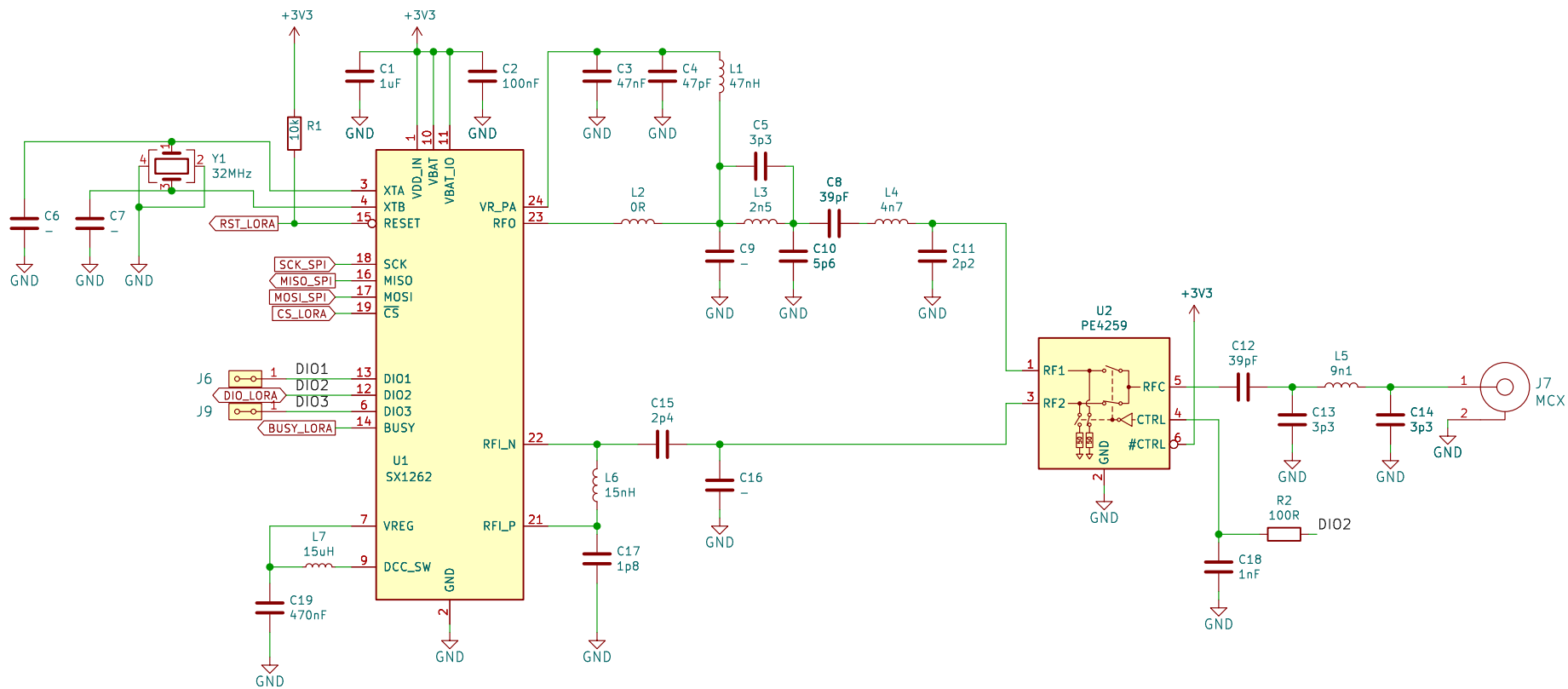
**LDO**  
3V3 IN  
1V8 OUT

**BUCK-BOOST CONVERTOR**  
1V6 – 5v5 IN  
3V3 OUT

**BUCK-BOOST CONVERTOR**  
1V6 – 5v5 IN  
5V OUT

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Author:

Size: A4

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