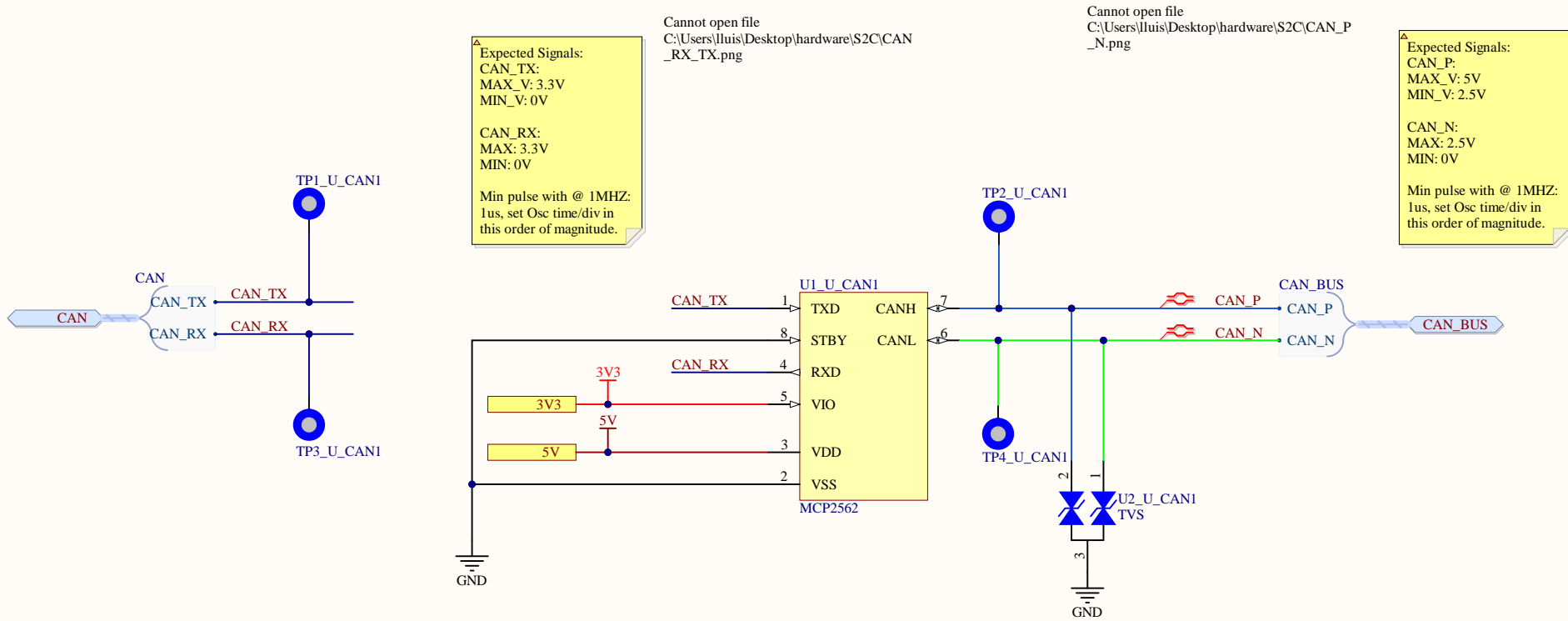


| | |
|---------------------------|------------------------|
| Project: S2C | Version: 1_2 |
| Page Title: Hierarchy | Page n: 1/6 |
| Author: Luís/Tiago/Duarte | Date: 1/11/2021 Car: * |



CAN bus 1 Mb/s interface



Expected Signals:
 CAN_TX:
 MAX_V: 3.3V
 MIN_V: 0V

 CAN_RX:
 MAX: 3.3V
 MIN: 0V

 Min pulse with @ 1MHZ:
 1us, set Osc time/div in
 this order of magnitude.

Cannot open file
 C:\Users\luis\Desktop\hardware\S2C\CAN
 _RX_TX.png

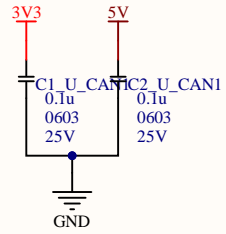
Cannot open file
 C:\Users\luis\Desktop\hardware\S2C\CAN_P
 _N.png

Expected Signals:
 CAN_P:
 MAX_V: 5V
 MIN_V: 2.5V

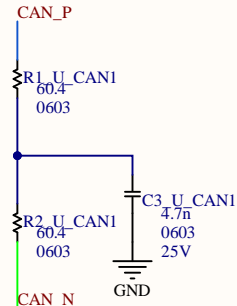
 CAN_N:
 MAX: 2.5V
 MIN: 0V

 Min pulse with @ 1MHZ:
 1us, set Osc time/div in
 this order of magnitude.

Decoupling capacitors



CAN terminator



| | |
|---------------------------|------------------------|
| Project: S2C | Version: 1_2 |
| Page Title: CAN | Page n: 2/6 |
| Author: Luis/Tiago/Duarte | Date: 12/7/2020 Car: * |



CAN bus 1 Mb/s interface

Cannot open file
C:\Users\luis\Desktop\hardware\S2C\CAN_RX_TX.png

Cannot open file
C:\Users\luis\Desktop\hardware\S2C\CAN_P_N.png

Expected Signals:
CAN_TX:
MAX_V: 3.3V
MIN_V: 0V

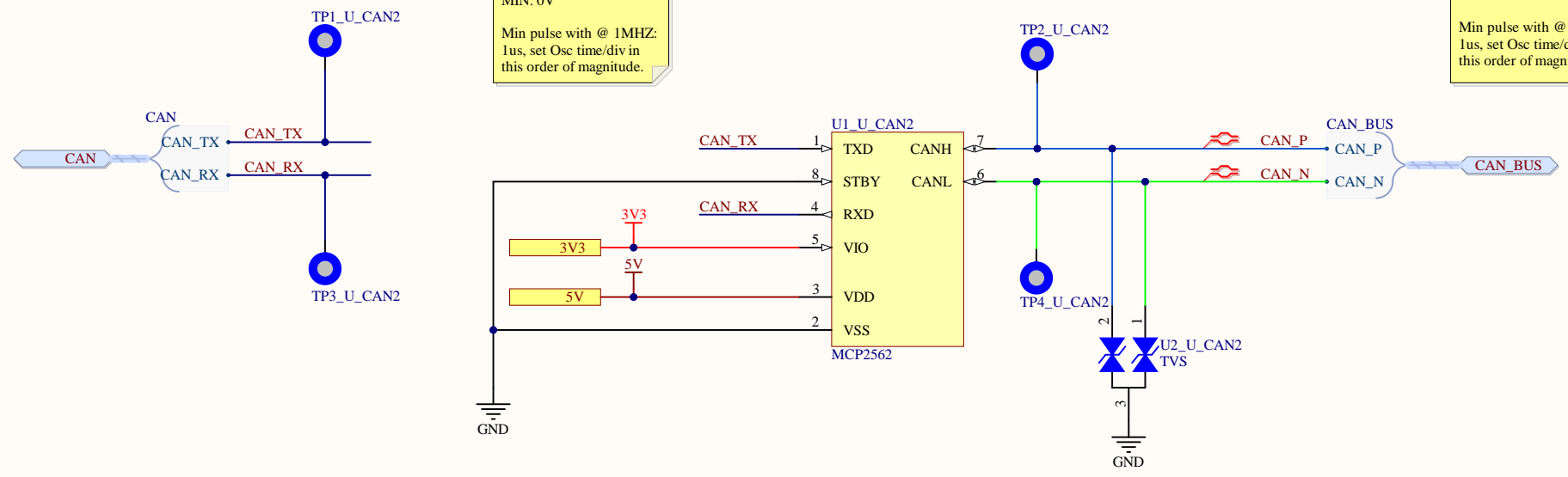
CAN_RX:
MAX: 3.3V
MIN: 0V

Min pulse with @ 1MHZ:
1us, set Osc time/div in
this order of magnitude.

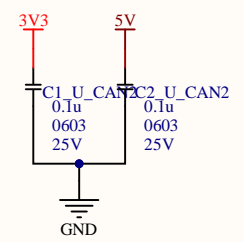
Expected Signals:
CAN_P:
MAX_V: 5V
MIN_V: 2.5V

CAN_N:
MAX: 2.5V
MIN: 0V

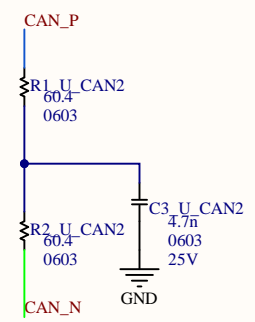
Min pulse with @ 1MHZ:
1us, set Osc time/div in
this order of magnitude.



Decoupling capacitors

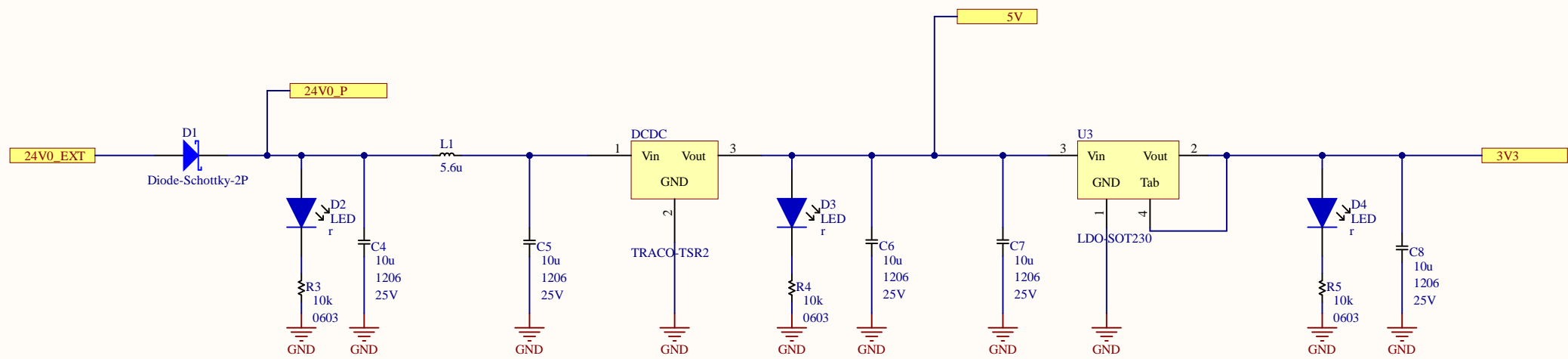


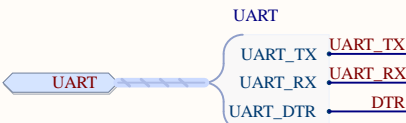
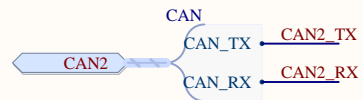
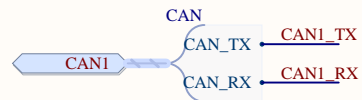
CAN terminator



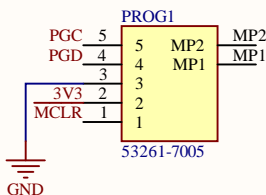
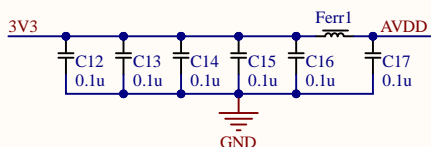
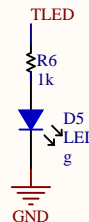
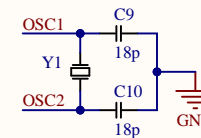
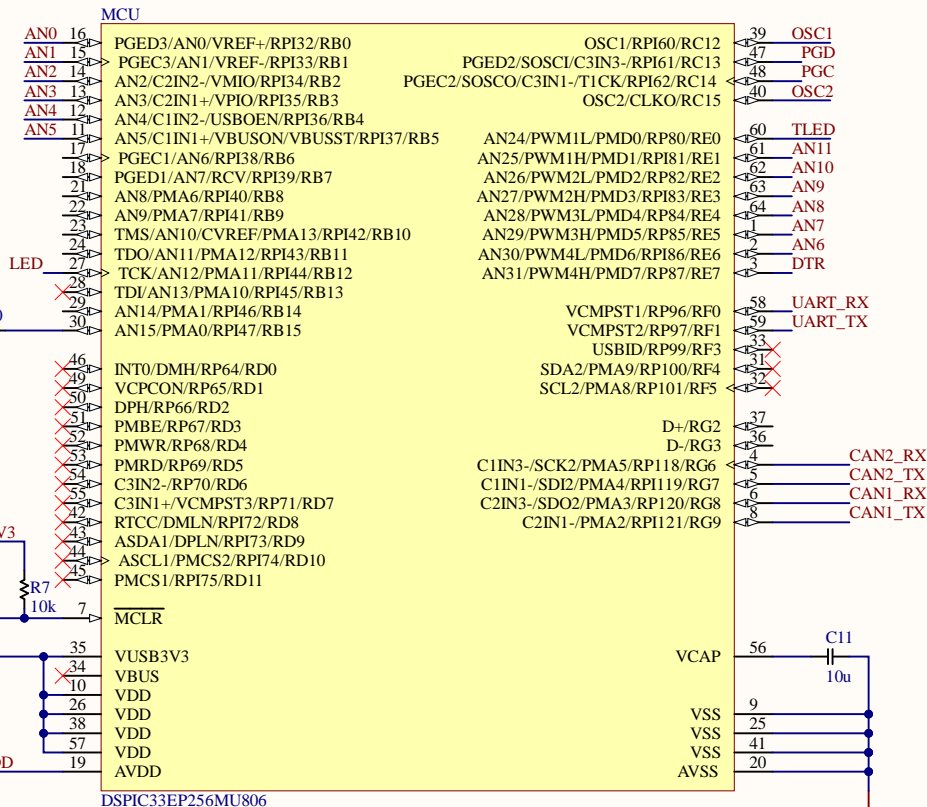
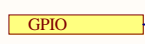
| | |
|---------------------------|------------------------|
| Project: S2C | Version: 1_2 |
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| Author: Luis/Tiago/Duarte | Date: 12/7/2020 Car: * |







DTR - Data terminal ready. It can be a GPIO



| | |
|-----------------------------|------------------------|
| Project: S2C | Version: 1_2 |
| Page Title: Microcontroller | Page n: 4/6 |
| Author: Luís/Tiago/Duarte | Date: 1/11/2021 Car: * |

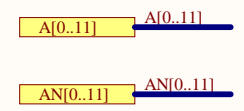
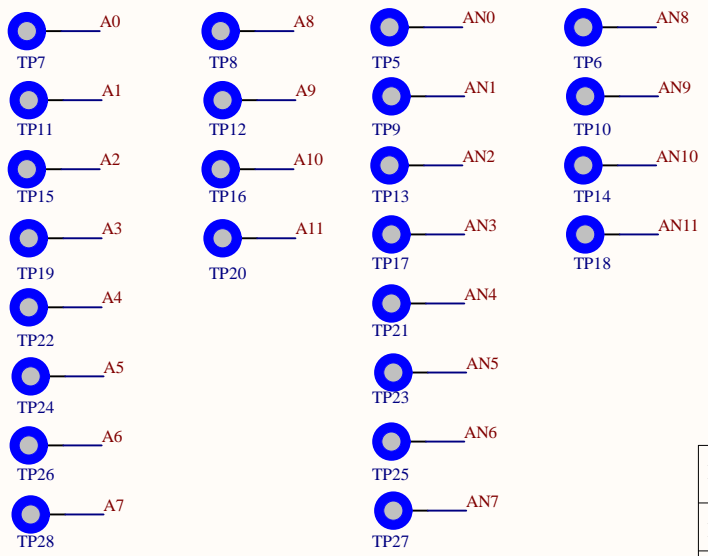
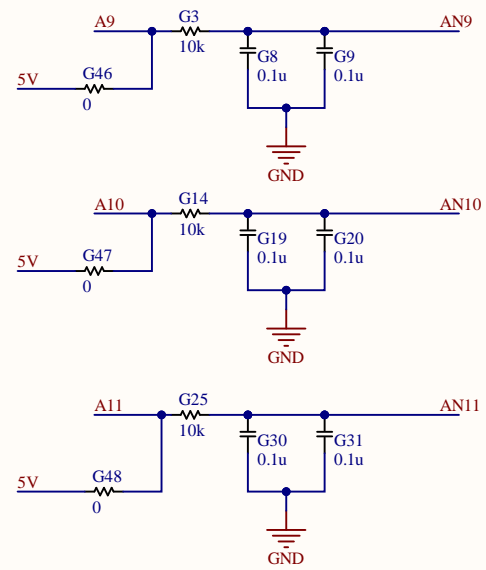
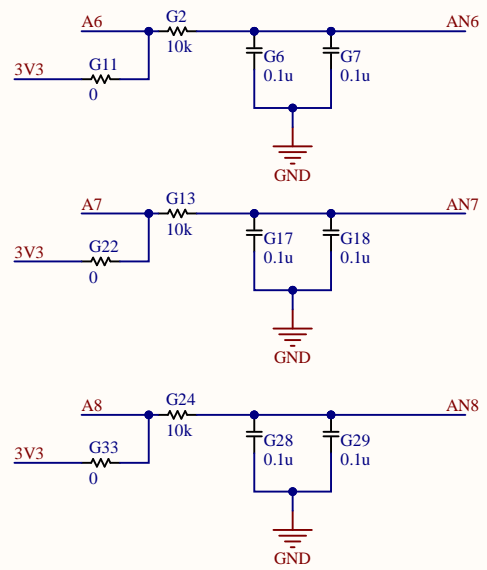
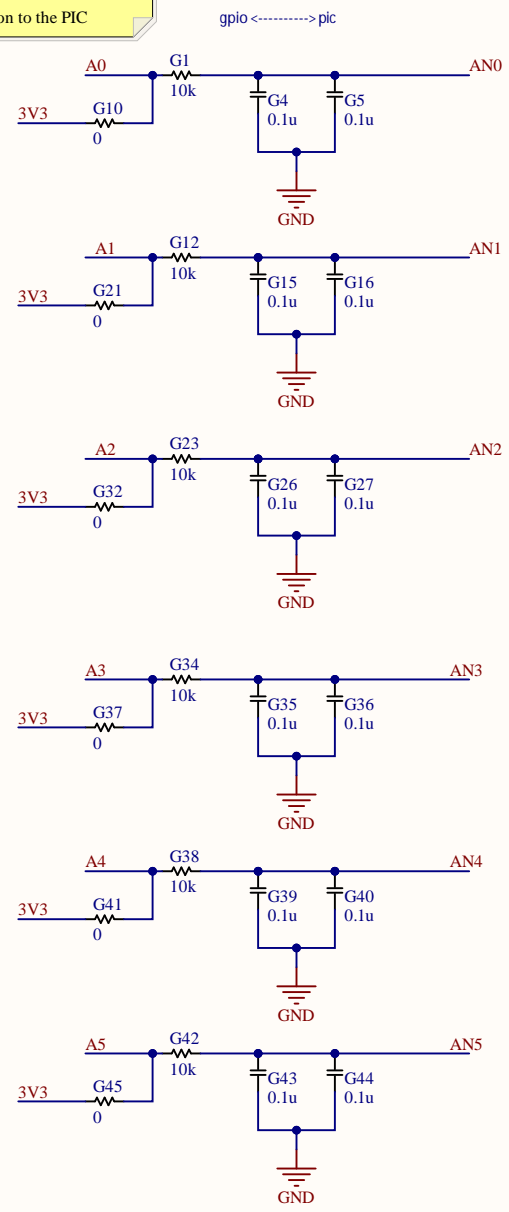


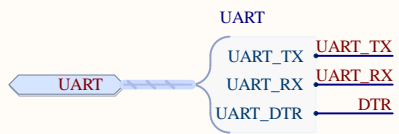
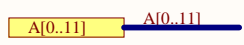
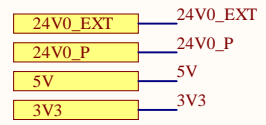
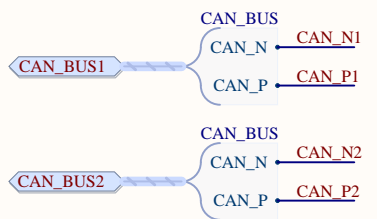
△ G is for a generic component

△ A- connection from outside the board
AN- connection to the PIC

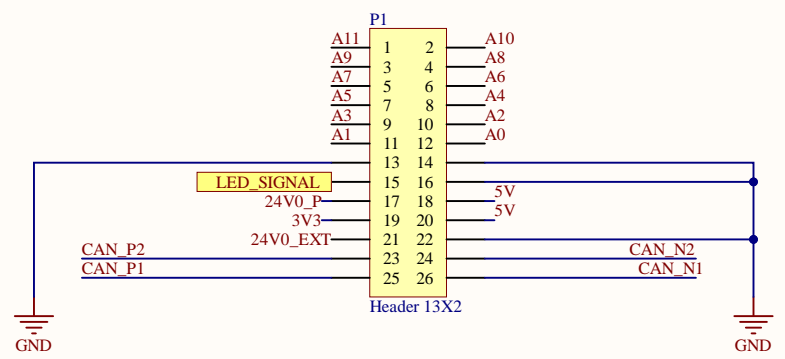
△ 9 channels with the option of pull down (by shortcircuiting one of the capacitors) and the option of pull up to 3.3V

△ 3 channels with the option of pull down (by shortcircuiting one of the capacitors) and 3 channels with the option of pull up to 5V.





3V3, 5V and 24V0_P are output's
24V0_EXT is an input



ADC0 and ADC1 are generic signals (doesn't have to be necessarily these two)

