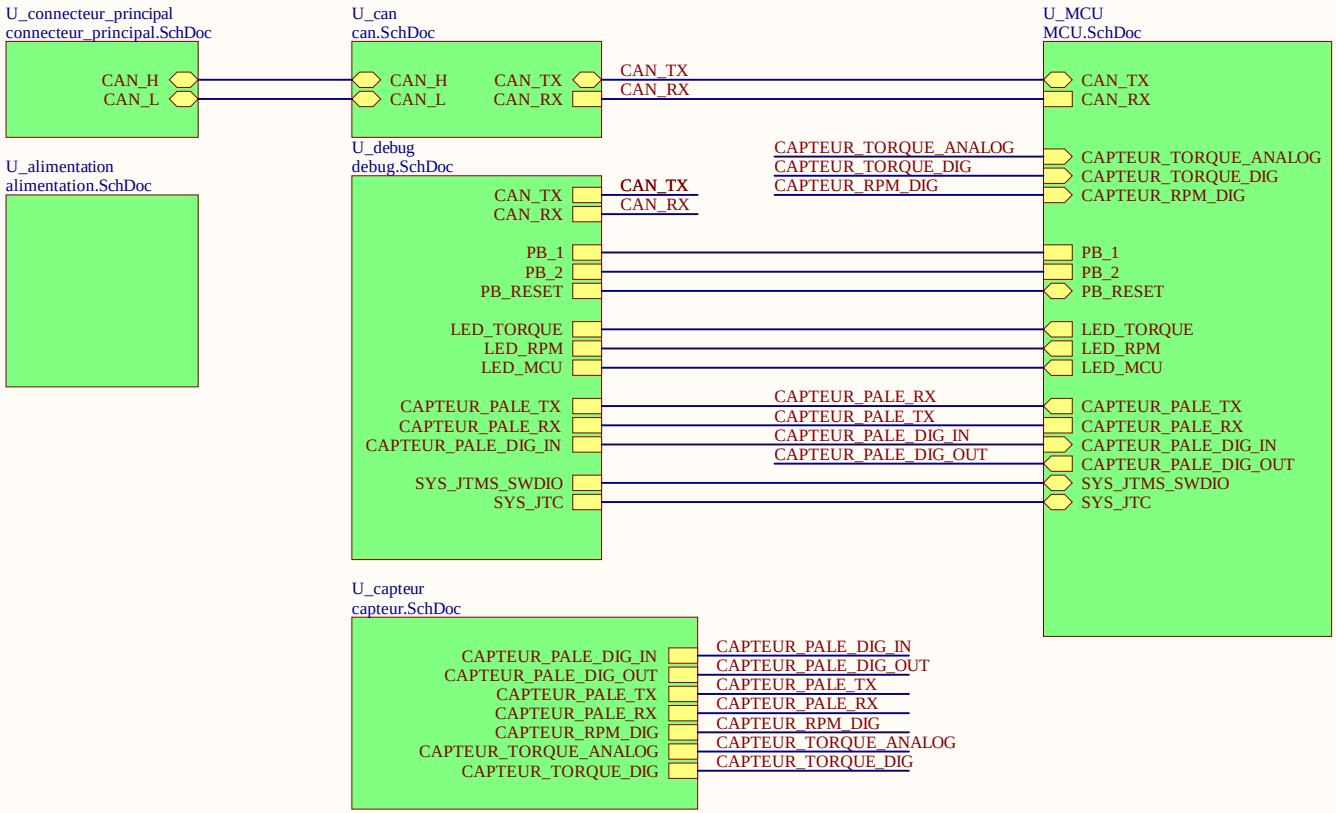


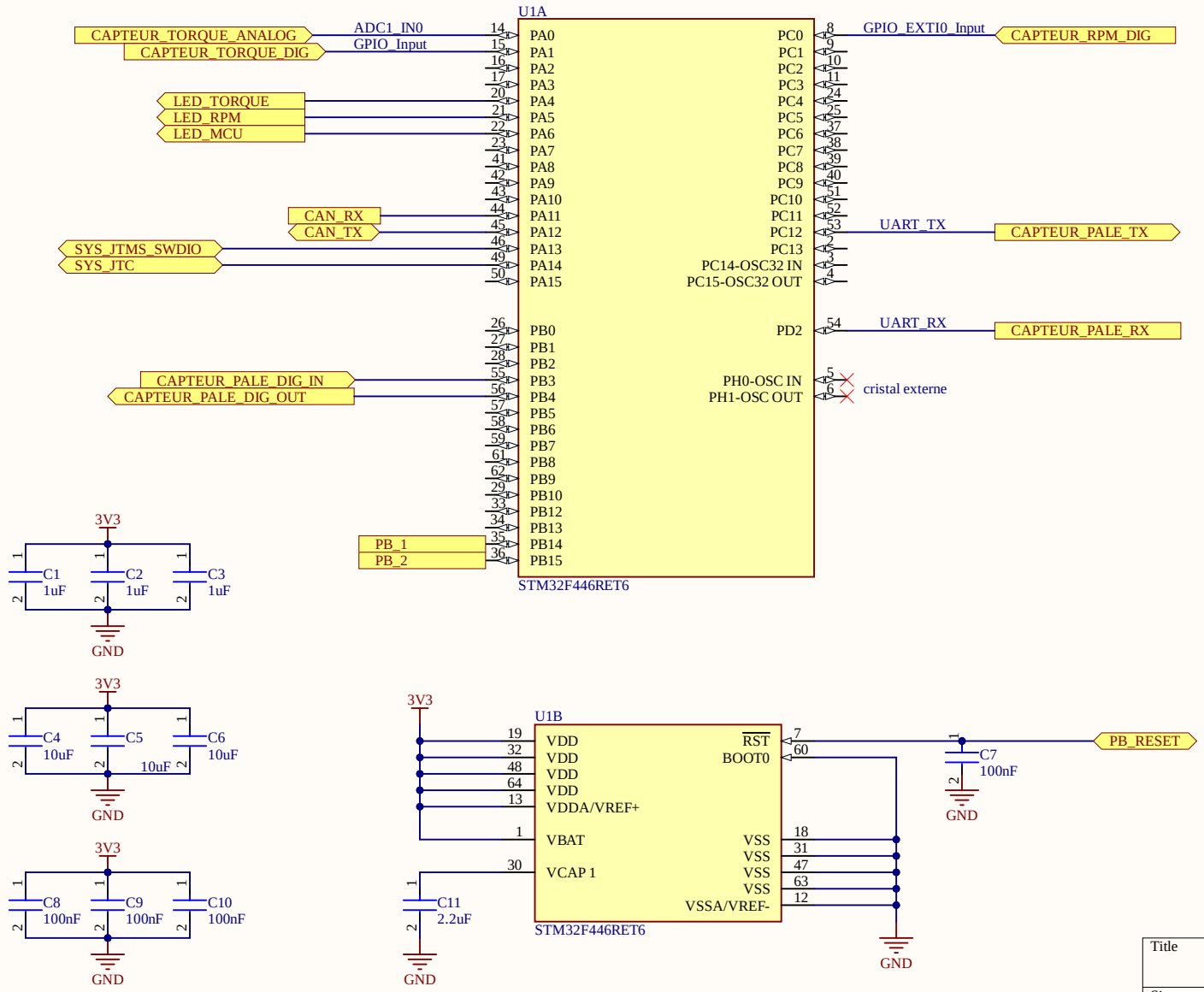
4x 6 pins + 3x 3 pins

4x 3 pins de large et 3x 2 pins de large

2 connecteurs arriere : boite élé + debug
le reste sort vers le haut

4 layers
can res de 120ohm entre canh et canl
meilleur placement filtrage
alimentation 5V 3V3 12V à partir du VBAT
mounting pad rayon 15mm

Title		
Size A4	Number	Revision
Date: 4-16-2024		Sheet of
File: C:\Users\..\top_level.SchDoc		Drawn By:


U1A
CAPTEUR_TORQUE_ANALOG
CAPTEUR_TORQUE_DIG
ADC1_IN0
GPIO_Input
LED_TORQUE
LED_RPM
LED_MCU
CAN_RX
CAN_TX
SYS_JTMS_SWDIO
SYS_JTC
CAPTEUR_PALE_DIG_IN
CAPTEUR_PALE_DIG_OUT
PB_1
PB_2
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB12
PB13
PB14
PB15
PC0
PC1
PC2
PC3
PC4
PC5
PC6
PC7
PC8
PC9
PC10
PC11
PC12
PC13
PC14-OSC32 IN
PC15-OSC32 OUT
PD2
PH0-OSC IN
PH1-OSC OUT
GPIO_EXTI0_Input
CAPTEUR_RPM_DIG
UART_TX
CAPTEUR_PALE_TX
UART_RX
CAPTEUR_PALE_RX
cristal externe
STM32F446RET6
3V3
C1
1uF
C2
1uF
C3
1uF
GND
C4
10uF
C5
10uF
C6
10uF
C8
100nF
C9
100nF
C10
100nF
U1B
VDD
VDDA/VREF+
VBAT
VCAP 1
RST
BOOT0
VSS
VSSA/VREF-
C11
2.2uF
C7
100nF
PB_RESET
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Number
Revision
Date:
4-16-2024
Sheet of
File:
C:\Users\..\MCU.SchDoc
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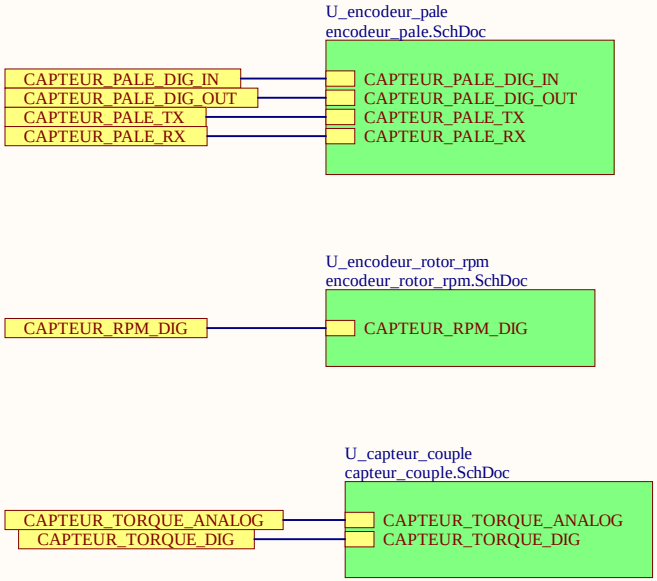

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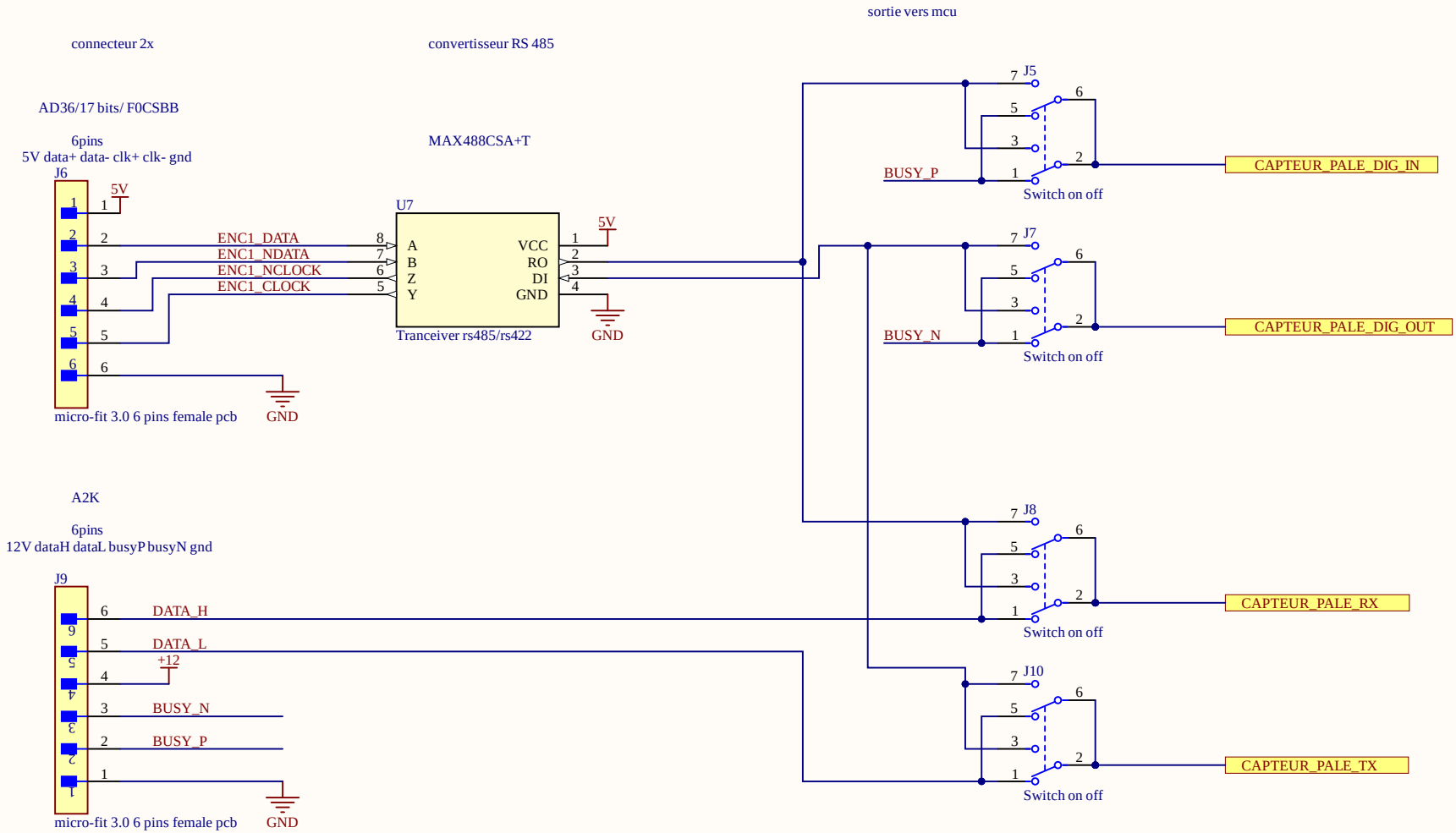


Title		
Size A4	Number	Revision
Date: 4-16-2024		Sheet of
File: C:\Users\..\encodeur_pale.SchDoc		Drawn By:

connecteur

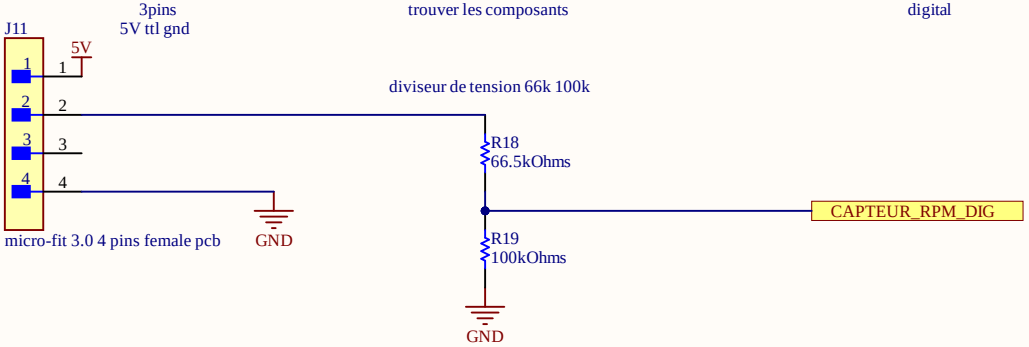
convertisseur TTL

sortie vers mcu

3pins
5V ttl gnd

trouver les composants

digital



https://forum.allaboutcircuits.com/threads/convert-digital-signal-from-ttl-5v-to-raspberry-pi-gpio-3-3v.166842/

ancien ship sur pcb chinook

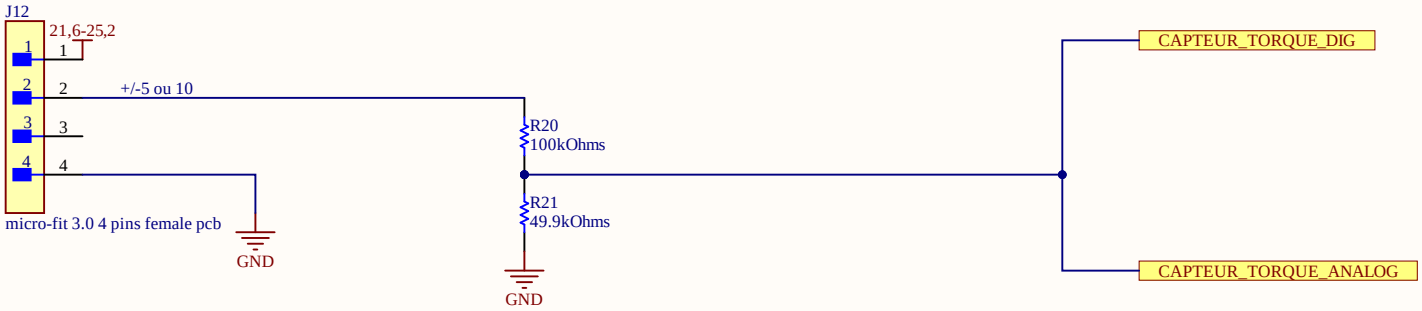
Logic Level Converter 5V to 3v3
https://www.ti.com/lit/ds/symlink/sn74cb3t3384.pdf?ts=1709400255768&ref_url=https%253A%252F%252Fwww.ti.com%252Fproduct%252FSN74CB3T3384%253FHQS%253Dti-null-null-verifimanuf_manuf-manu-pf-octopart-wwe

Title		
Size A4	Number	Revision
Date: 4-16-2024		Sheet of
File: C:\Users\..\encodeur_rotor_rpm.SchDoc		Drawn By:

connecteur

ADC

sortie vers mcu



trouver les composants

https://www.digikey.ca/en/products/filter/data-acquisition/analog-to-digital-converters-adc/700

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Date: 4-16-2024		Sheet of
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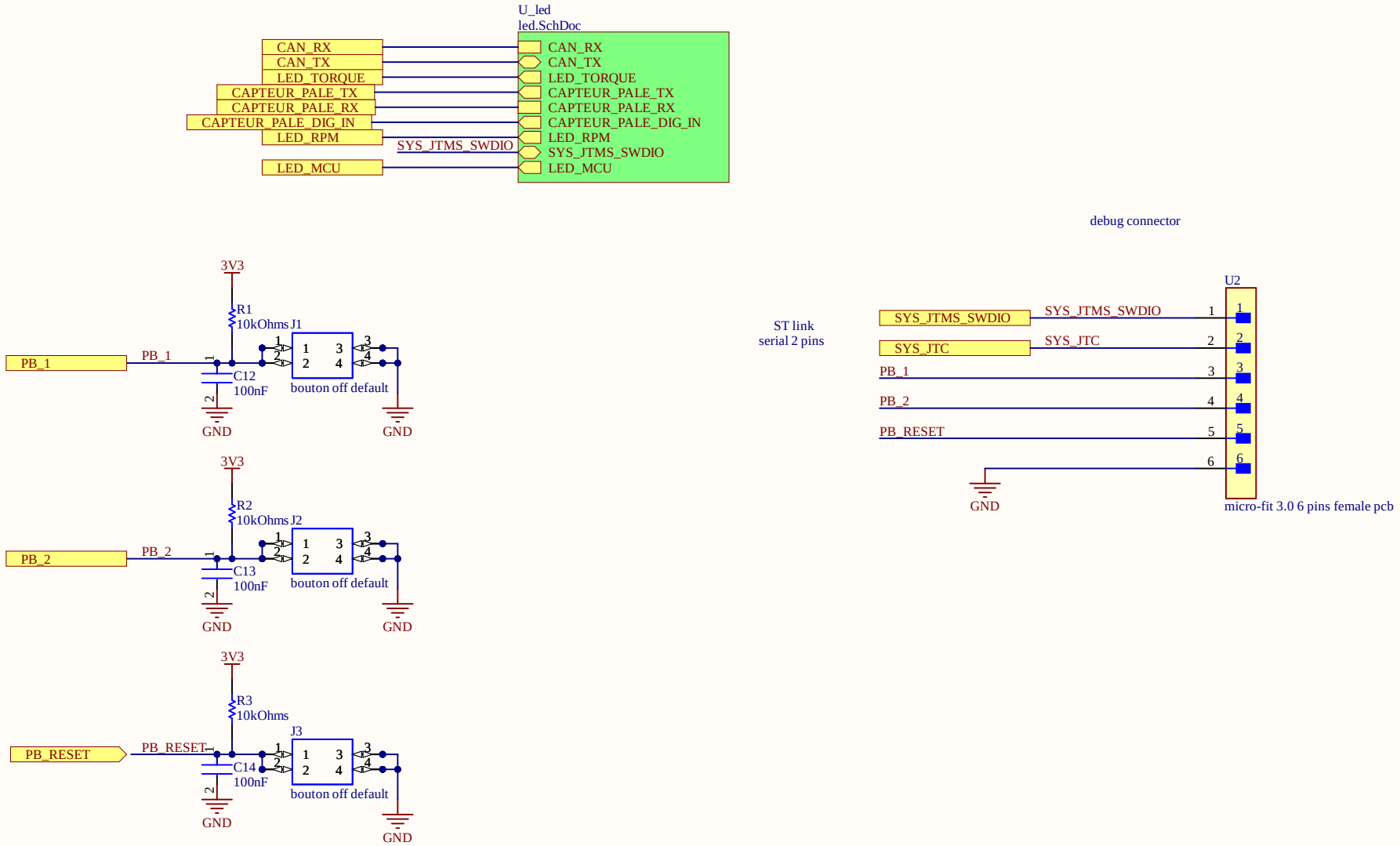

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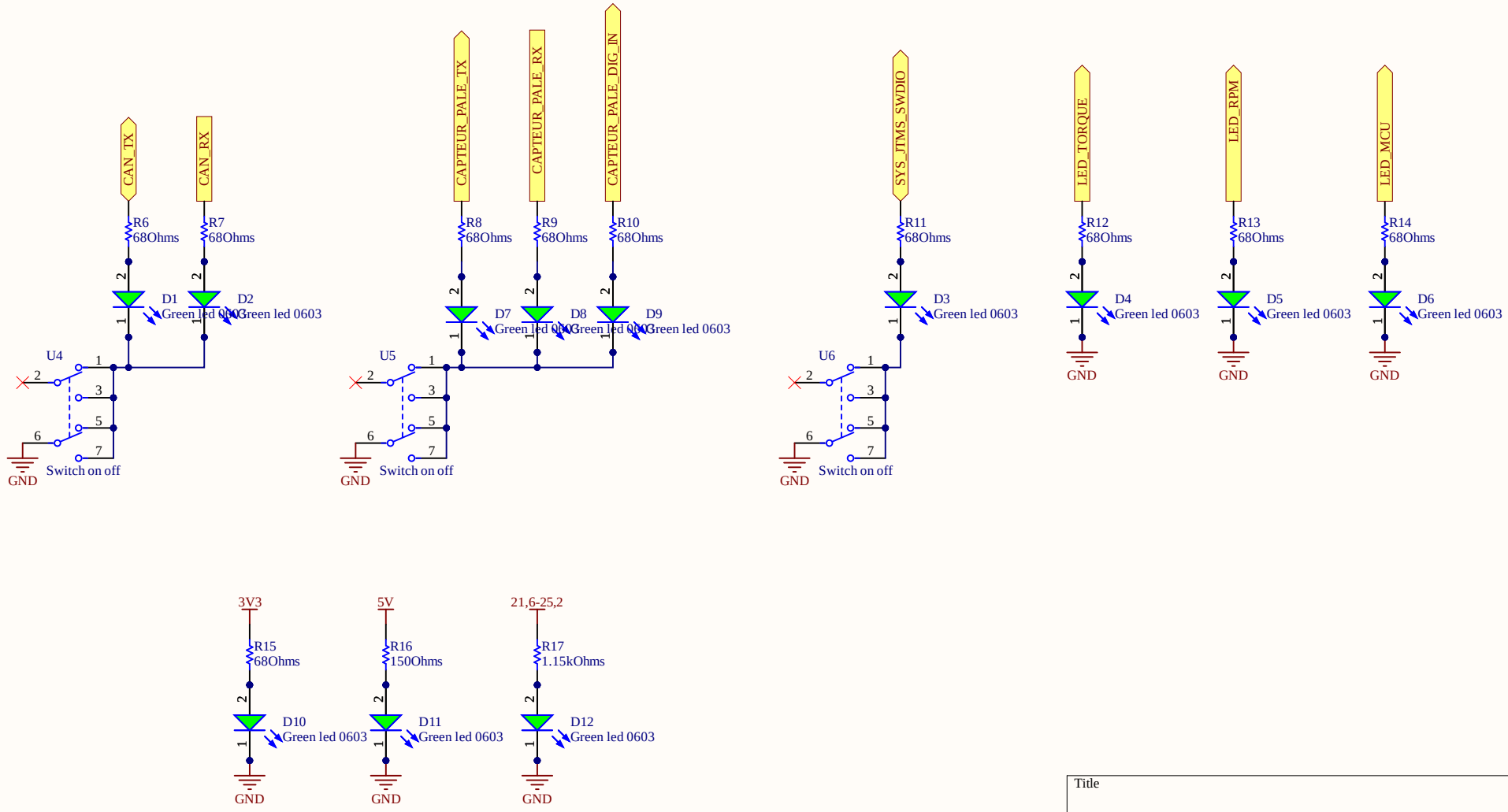
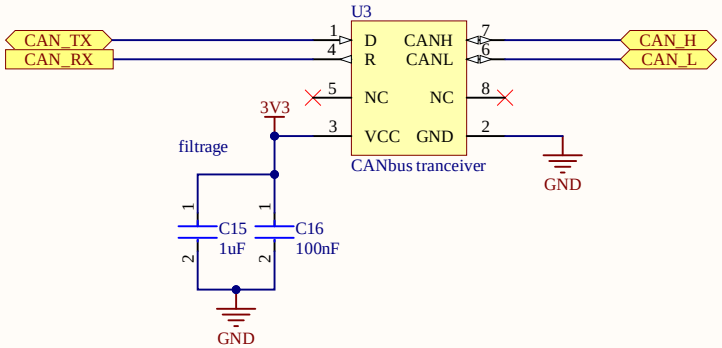


Title		
Size A4	Number	Revision
Date: 4-16-2024		Sheet of
File: C:\Users\..\led.SchDoc		Drawn By:

sortie vers mcu

convertisseur can

connecteur principal



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Size A4	Number		Revision
Date:	4-16-2024	Sheet of	
File:	C:\Users\..\can.SchDoc	Drawn By:	

connecteur principal vers power port

12V pour encodeur a2k
5V to 12V ampli-op

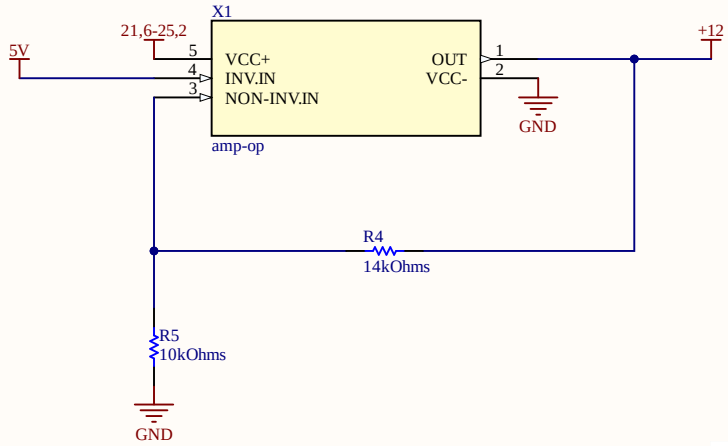
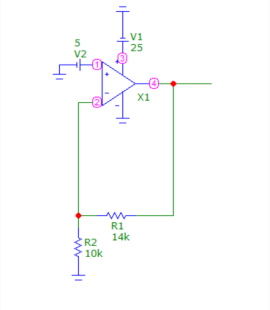


image de la simulation microcap



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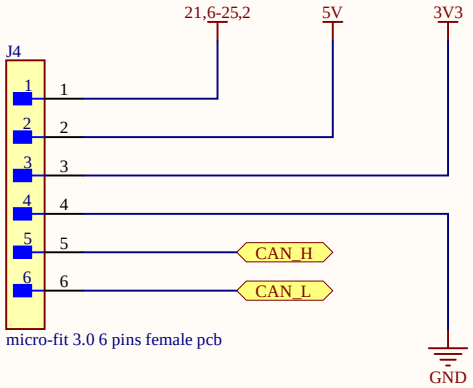
microfit connector 6 pin female



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Board Stack Report