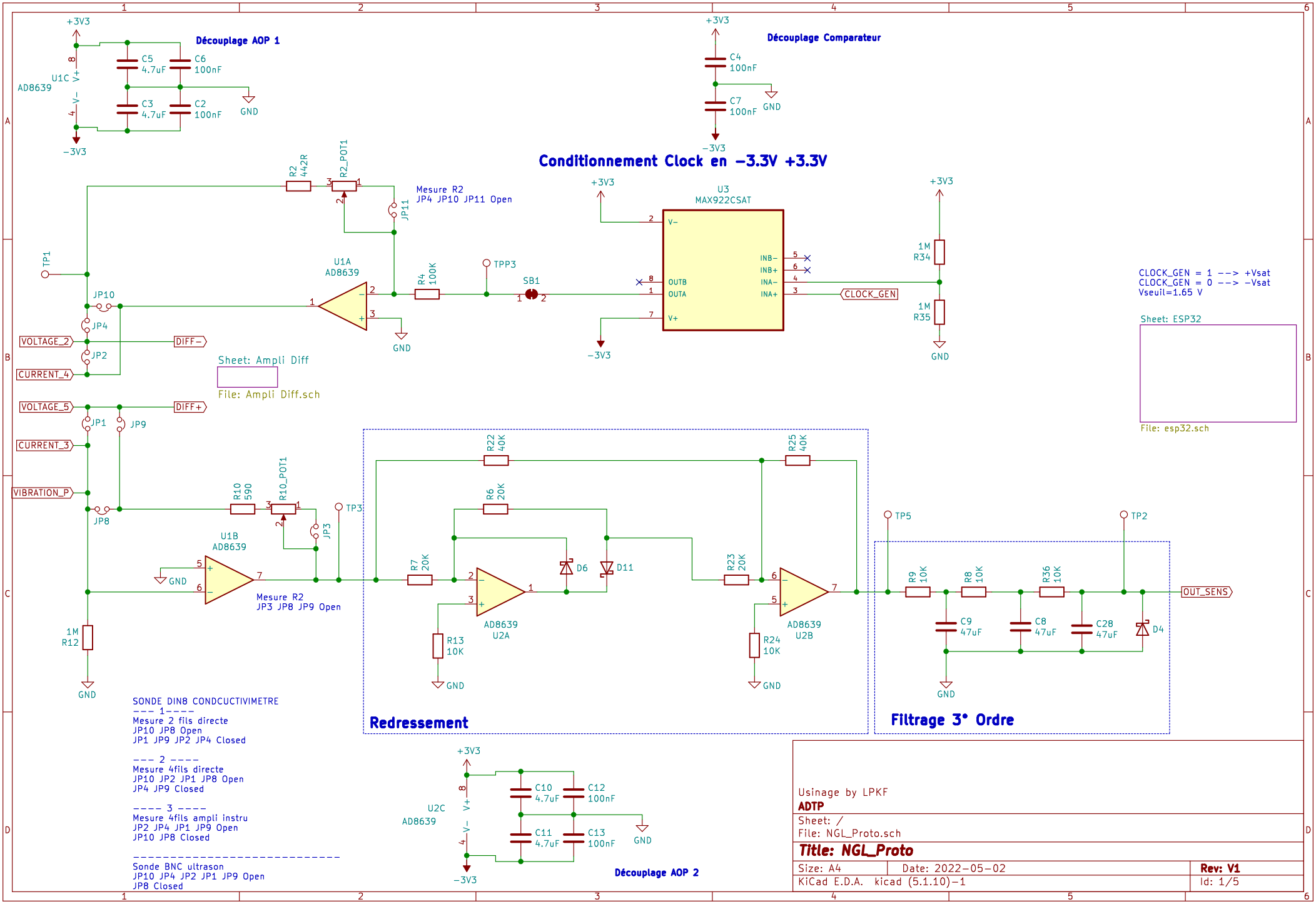
Découplage AOP 1
U1C
AD8639
+3V3
−3V3
GND
C5 4.7uF
C6 100nF
C3 4.7uF
C2 100nF
Découplage Comparateur
C4 100nF
C7 100nF
Conditionnement Clock en −3.3V +3.3V
R2 442R
R2_POT1
Mesure R2
JP4 JP10 JP11 Open
JP11
TP1
JP10
JP4
JP2
VOLTAGE_2
CURRENT_4
DIFF−
U1A
AD8639
R4 100K
TPP3
SB1
U3
MAX922CSAT
V−
V+
OUTB
OUTA
INB−
INB+
INA−
INA+
CLOCK_GEN
1M R34
1M R35
CLOCK_GEN = 1 --> +Vsat
CLOCK_GEN = 0 --> −Vsat
Vseuil=1.65 V
Sheet: ESP32
File: esp32.sch
Sheet: Ampli Diff
File: Ampli Diff.sch
VOLTAGE_5
DIFF+
JP1
JP9
CURRENT_3
VIBRATION_P
JP8
R10 590
R10_POT1
JP3
TP3
U1B
AD8639
Mesure R2
JP3 JP8 JP9 Open
1M R12
R22 40K
R25 40K
R6 20K
R7 20K
D6
D11
R23 20K
R13 10K
R24 10K
AD8639 U2A
AD8639 U2B
Redressement
TP5
TP2
R9 10K
R8 10K
R36 10K
C9 47uF
C8 47uF
C28 47uF
D4
OUT_SENS
Filtrage 3° Ordre
SONDE DIN8 CONDCUCTIVIMETRE
--- 1----
Mesure 2 fils directe
JP10 JP8 Open
JP1 JP9 JP2 JP4 Closed
--- 2 ----
Mesure 4fils directe
JP10 JP2 JP1 JP8 Open
JP4 JP9 Closed
---- 3 ----
Mesure 4fils ampli instru
JP2 JP4 JP1 JP9 Open
JP10 JP8 Closed
Sonde BNC ultrason
JP10 JP4 JP2 JP1 JP9 Open
JP8 Closed
U2C
AD8639
C10 4.7uF
C12 100nF
C11 4.7uF
C13 100nF
Découplage AOP 2
Usinage by LPKF
ADTP
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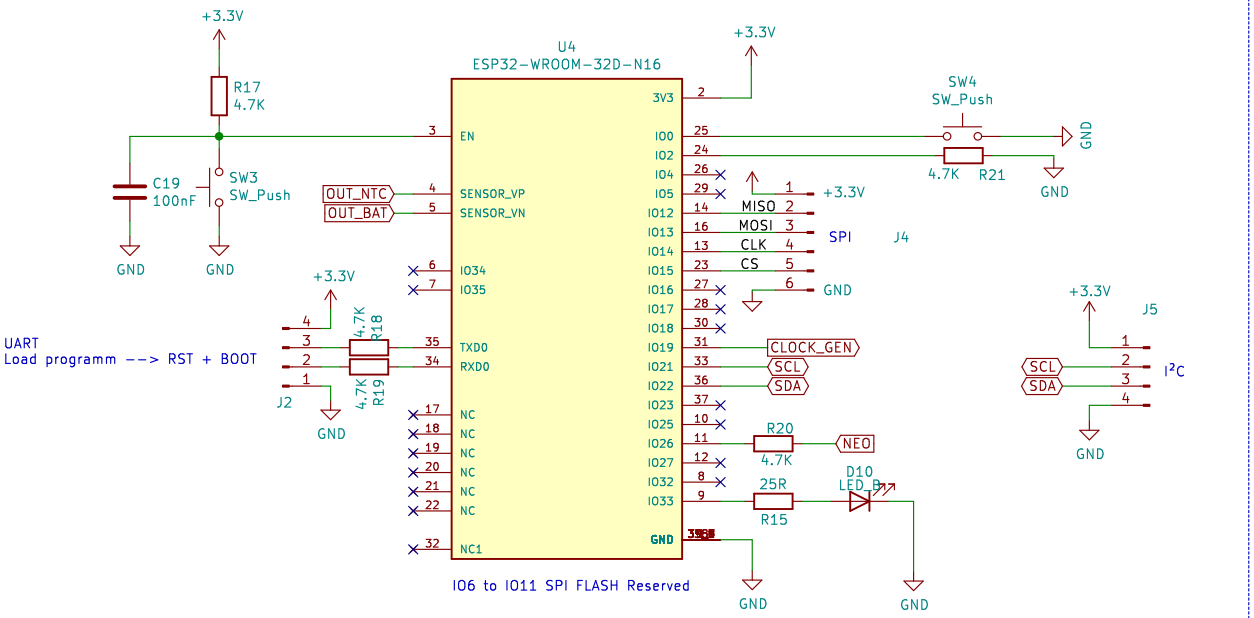
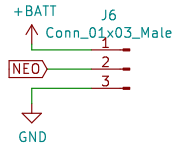
Title: NGL_Proto
Size: A4
Date: 2022-05-02
Rev: V1
KiCad E.D.A. kicad (5.1.10)-1
Id: 1/5

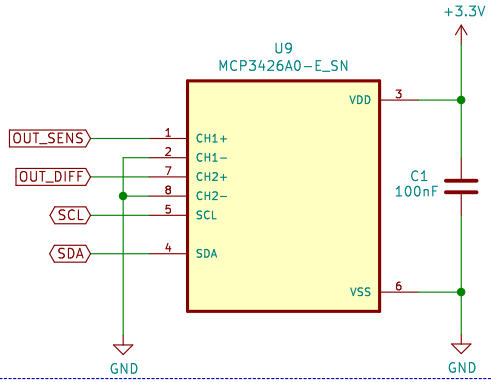
µContrôleur ESP32



Spare NEO PIXEL



ADC 16 Bits _ 15 SPS _ I²C



BUMPERS

B1 B2 B4 B3

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Usinage by LPKF

ADTP

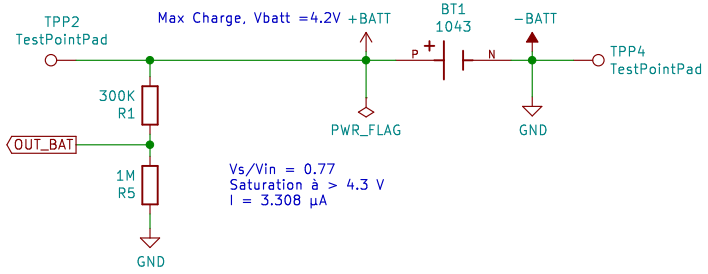
Sheet: /ESP32/

File: esp32.sch

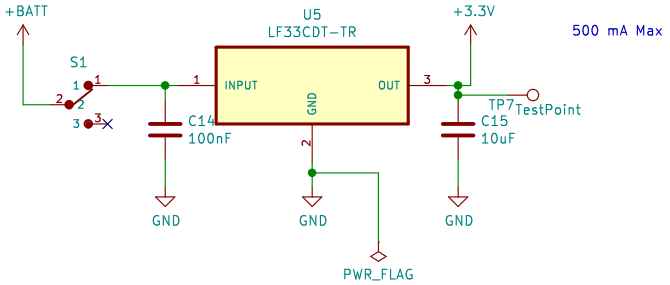
Title: NGL_Proto

Size: A4	Date: 2022-05-02	**Rev: V1**
KiCad E.D.A. kicad (5.1.10)-1		Id: 2/5

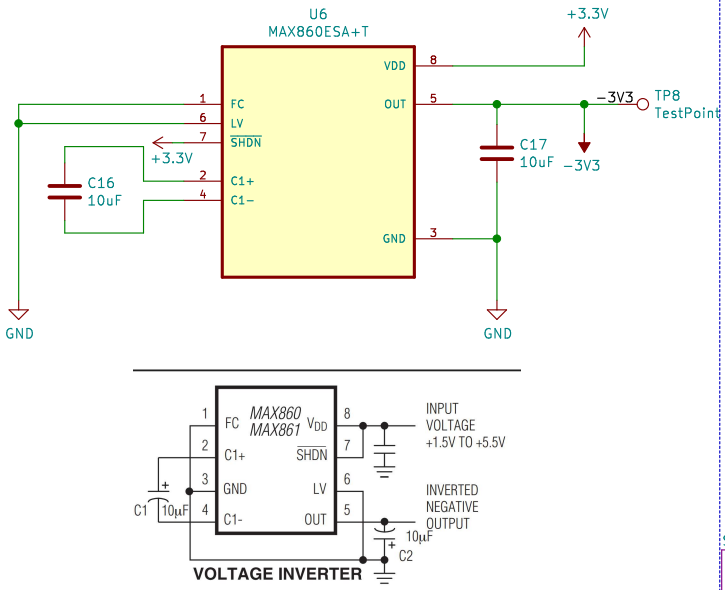
Porte pile 18650 + Pont div Sens



LDO 3.7 V --> 3.3 V



Inverseur 50 mA



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ADTP

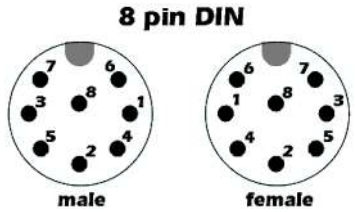
Sheet: /ESP32/Alim/

File: Alim.sch

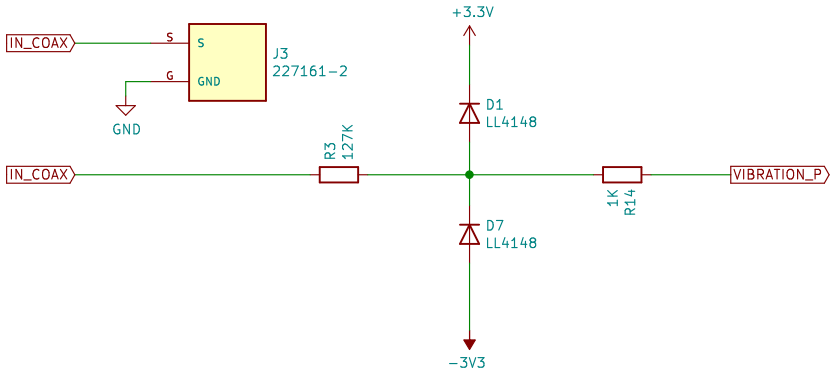
Title: NGL_Proto

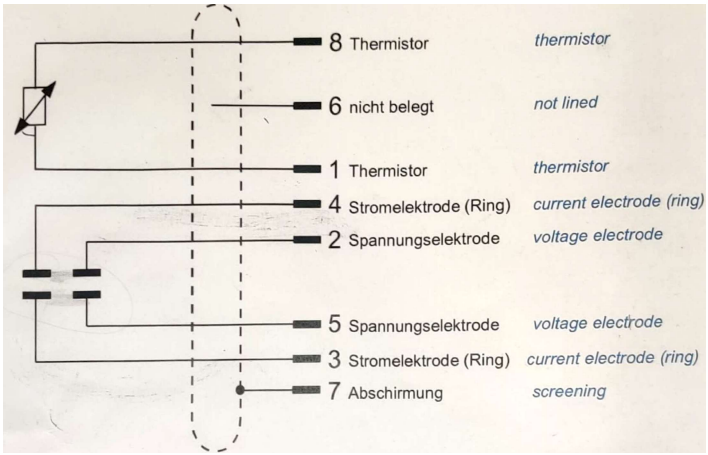
Size: A4	Date: 2022-05-02	**Rev: V1**
KiCad E.D.A. kicad (5.1.10)-1		Id: 3/5

Connecteur Male sur PCB

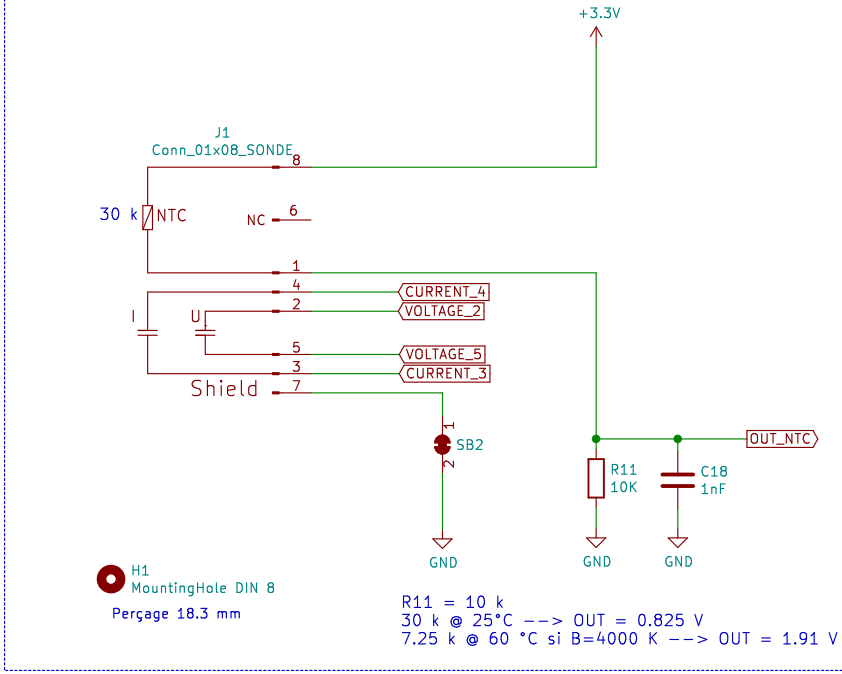


Connecteur signal d'entrée COAX + Protection





Connecteur Signal d'entrée 8 DIN + NTC



Usinage by LPKF !

ADTP

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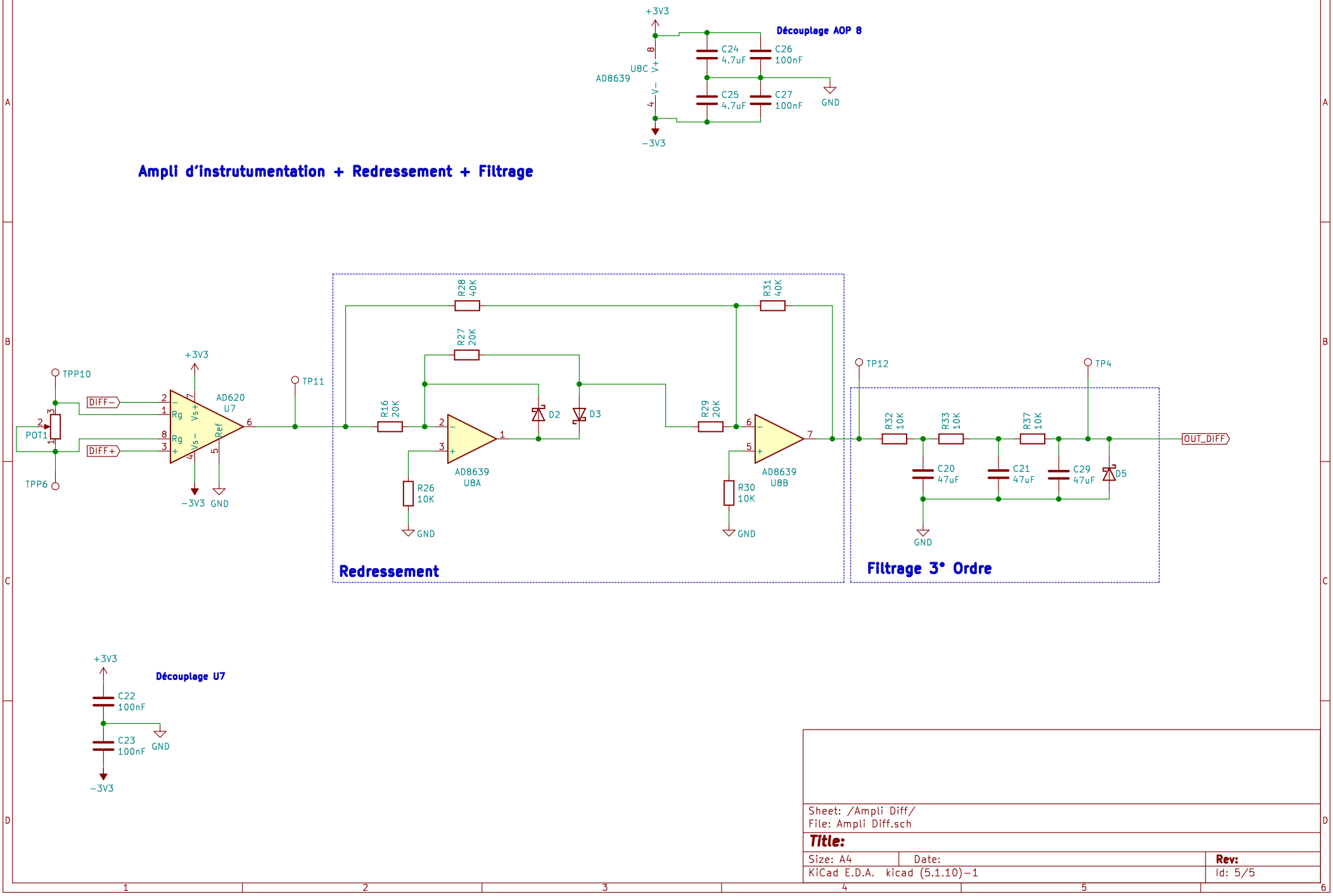
KiCad E.D.A. kicad (5.1.10)-1		Id: 4/5


Découplage AOP 8
+3V3
U8C
AD8639
C24
4.7uF
C26
100nF
C25
4.7uF
C27
100nF
GND
−3V3
Ampli d'instrutumentation + Redressement + Filtrage
TPP10
POT1
TPP6
DIFF−
DIFF+
AD620
U7
TP11
R28
40K
R27
20K
R16
20K
D2
D3
R26
10K
AD8639
U8A
R31
40K
R29
20K
R30
10K
AD8639
U8B
Redressement
TP12
TP4
R32
10K
R33
10K
R37
10K
C20
47uF
C21
47uF
C29
47uF
D5
OUT_DIFF
Filtrage 3° Ordre
Découplage U7
C22
100nF
C23
100nF
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Size: A4
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Rev:
KiCad E.D.A. kicad (5.1.10)−1
Id: 5/5