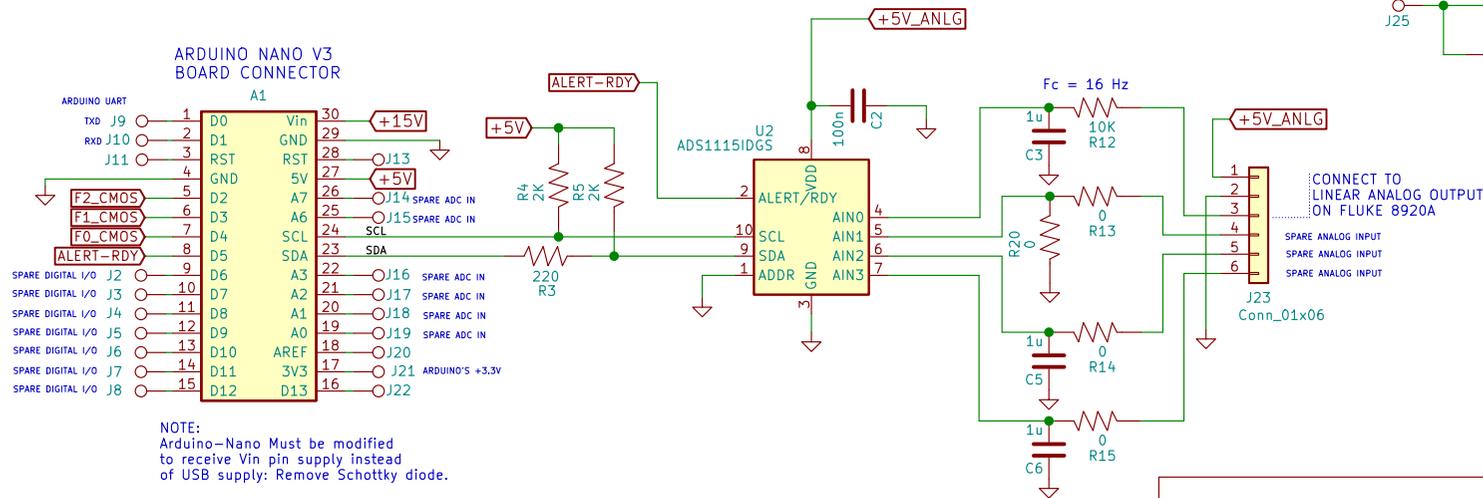# INTERFACE USB pour FLUKE HP8920A
Bertrand, Électro-Bidouilleur

+5V

U1B
LM339

R6 47K

15K R9

F2_CMOS

-15V

10K R1

POWER ON

D1

2.7K R16

+15V

C7 100n

C8 100uF-25V

U3 LM1117-5
VI VO
GND

C9 100uF, 10V

+5V_ANLG

220 R19

MINIMUM LOAD

J1
Conn_01x08

1 +15V
2 -15V
3 J12 V IN
4 F2
5 F0
6
7
8 F1

CONNECT TO J501
ON FLUKE 8920A

+5V

U1A
LM339

15K R10

F0_CMOS

47K R7

C1 100n

10K R2

+5V

U1D
LM339

15K R11

F1_CMOS

47K R8

+5V

C10 100n

U1C
LM339

R17 0

J24
J25

11
10
3
12
13 J26

SPARE COMPARATOR

R18 0

-15V

C11 100n

ARDUINO NANO V3
BOARD CONNECTOR

A1

ARDUINO UART
TXD J9 1 D0   Vin 30 +15V
RXD J10 2 D1   GND 29
    J11 3 RST   RST 28
        4 GND   5V   27 +5V
F2_CMOS 5 D2   A7   26 J13
F1_CMOS 6 D3   A6   25 J14 SPARE ADC IN
F0_CMOS 7 D4   SCL 24 SCL J15 SPARE ADC IN
ALERT-RDY 8 D5   SDA 23 SDA
SPARE DIGITAL I/O J2 9 D6 A3 22 J16 SPARE ADC IN
SPARE DIGITAL I/O J3 10 D7 A2 21 J17 SPARE ADC IN
SPARE DIGITAL I/O J4 11 D8 A1 20 J18 SPARE ADC IN
SPARE DIGITAL I/O J5 12 D9 A0 19 J19 SPARE ADC IN
SPARE DIGITAL I/O J6 13 D10 AREF 18 J20
SPARE DIGITAL I/O J7 14 D11 3V3 17 J21 ARDUINO'S +3.3V
SPARE DIGITAL I/O J8 15 D12 D13 16 J22

ALERT-RDY

+5V_ANLG

100n C2

+5V

R4 2K

R5 2K

220 R3

U2
ADS1115IDGS

2 ALERT/RDY VDD 8
10 SCL   AIN0 4
9 SDA   AIN1 5
1 ADDR   AIN2 6
   GND   AIN3 7
   3

Fc = 16 Hz

1u C3

10K R12

R20 0

R13 0

1u C5

R14 0

1u C6

R15 0

+5V_ANLG

J23
Conn_01x06

1
2
3
4
5
6

CONNECT TO
LINEAR ANALOG OUTPUT
ON FLUKE 8920A

SPARE ANALOG INPUT
SPARE ANALOG INPUT
SPARE ANALOG INPUT

J31
Conn_02x04_Odd_Even

J27 1 2 J32
J28 3 4 J33
J29 5 6 J34
J30 7 8 J35

NOTE:
Arduino-Nano Must be modified
to receive Vin pin supply instead
of USB supply: Remove Schottky diode.

MOUNTING HOLES

H1 H2 H3 H4

NOTES:
+15V AND -15V SUPPLIED BY FLUKE 8920A'S J501 CONNECTOR.
+5V SUPPLIED BY ARDUINO NANO'S ONBOARD VOLTAGE REGULATOR.
+5V_ANALOG PRODUCED ONBOARD, OFF OF +15V.

VERSION 1.0

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Title:

Size: A4   Date: Rev:
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