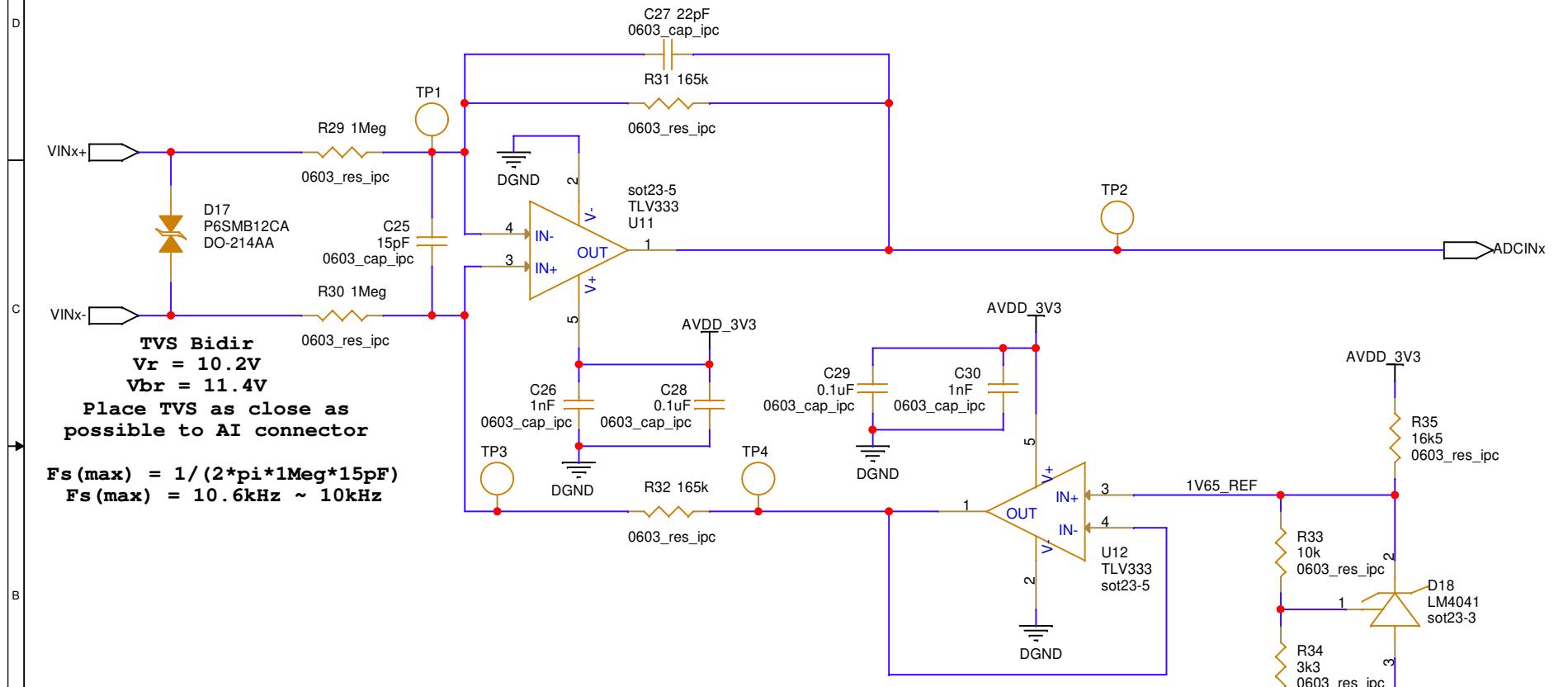


Analog input ±10V  
10 bits resolution



Resistors are 0603  $\pm 1\%$  1/10W unless otherwise noted  
Capacitor are 0603  $\pm 20\%$  16V unless otherwise noted

**Designed by :** Jean-Francois Bilodeau, B.E.Eng

CPI/CEP #6022173

925 Chemin ste-foy apt4, QC, CANADA

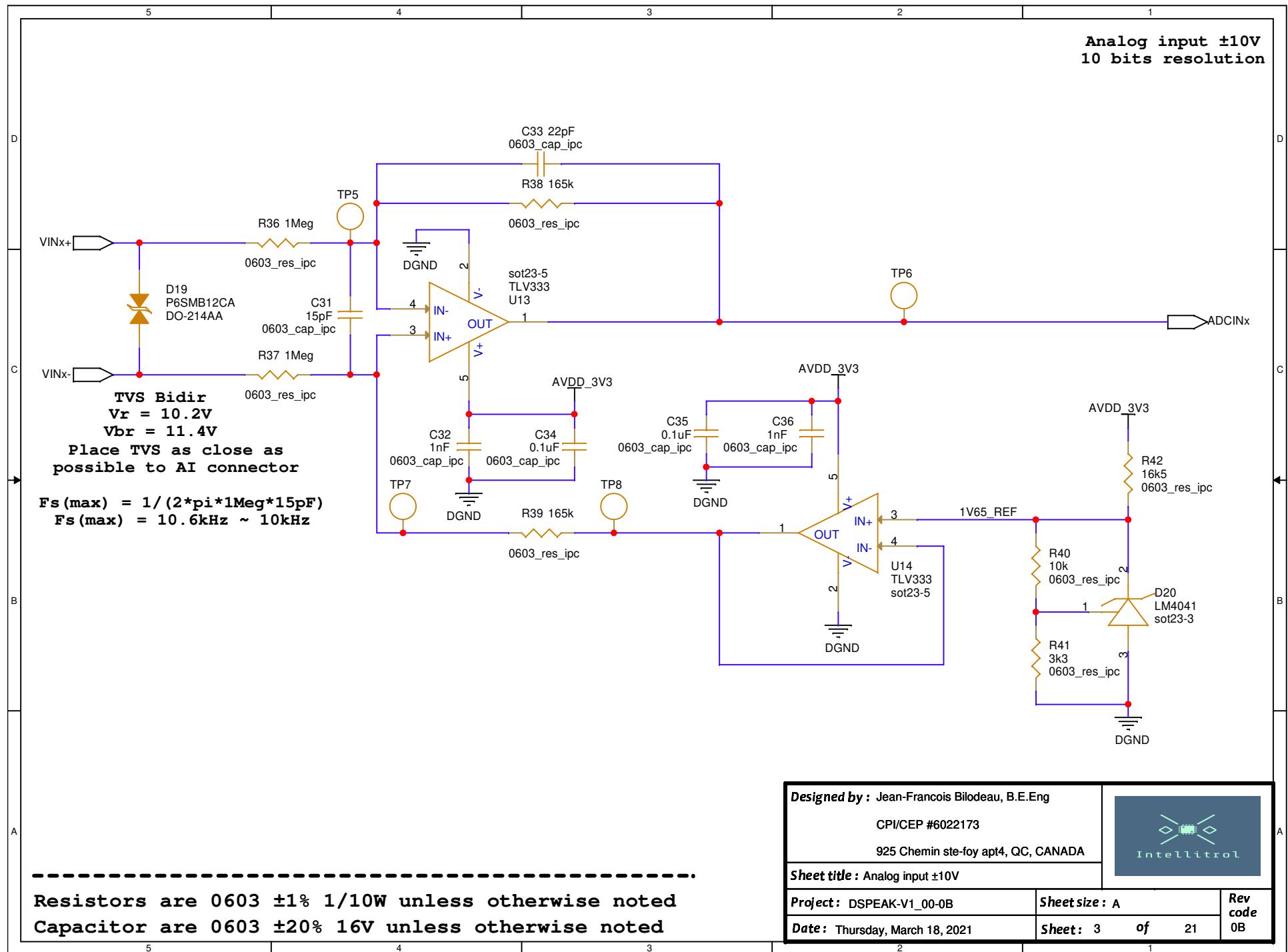
## **Sheet title : Analog input ±10V**

Project: DSPEAK-V1\_00-0B

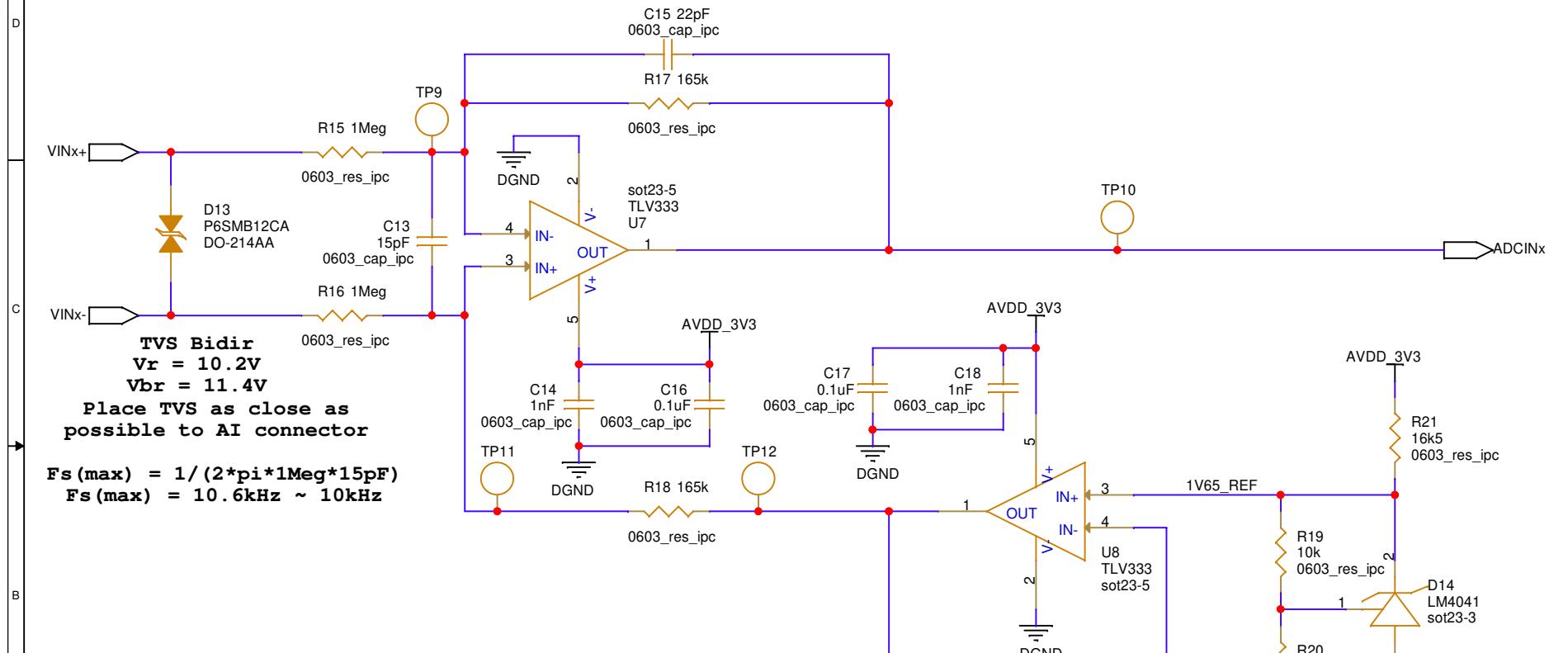
**Date:** Thursday, March 18, 2021

2

**Rev  
code  
0B**



Analog input ±10V  
10 bits resolution



V<sub>r</sub> = 10.2V  
V<sub>br</sub> = 11.4V  
Place TVS as close as possible to AI connector

$$F_s(\text{max}) = 1/(2\pi \cdot 1\text{MHz} \cdot 15\text{pF})$$

Resistors are 0603  $\pm 1\%$  1/10W unless otherwise noted  
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CPI/CEP #6022173

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## **Sheet title : Analog input ±10V**

Project: DSPEAK-V1\_00-0B

**Date:** Thursday, March 18, 2021

The Intellitrol logo consists of a stylized diamond shape composed of four arrows pointing inward toward a central square, with the word "Intellitrol" written below it.

Intellitrol

5

4

1

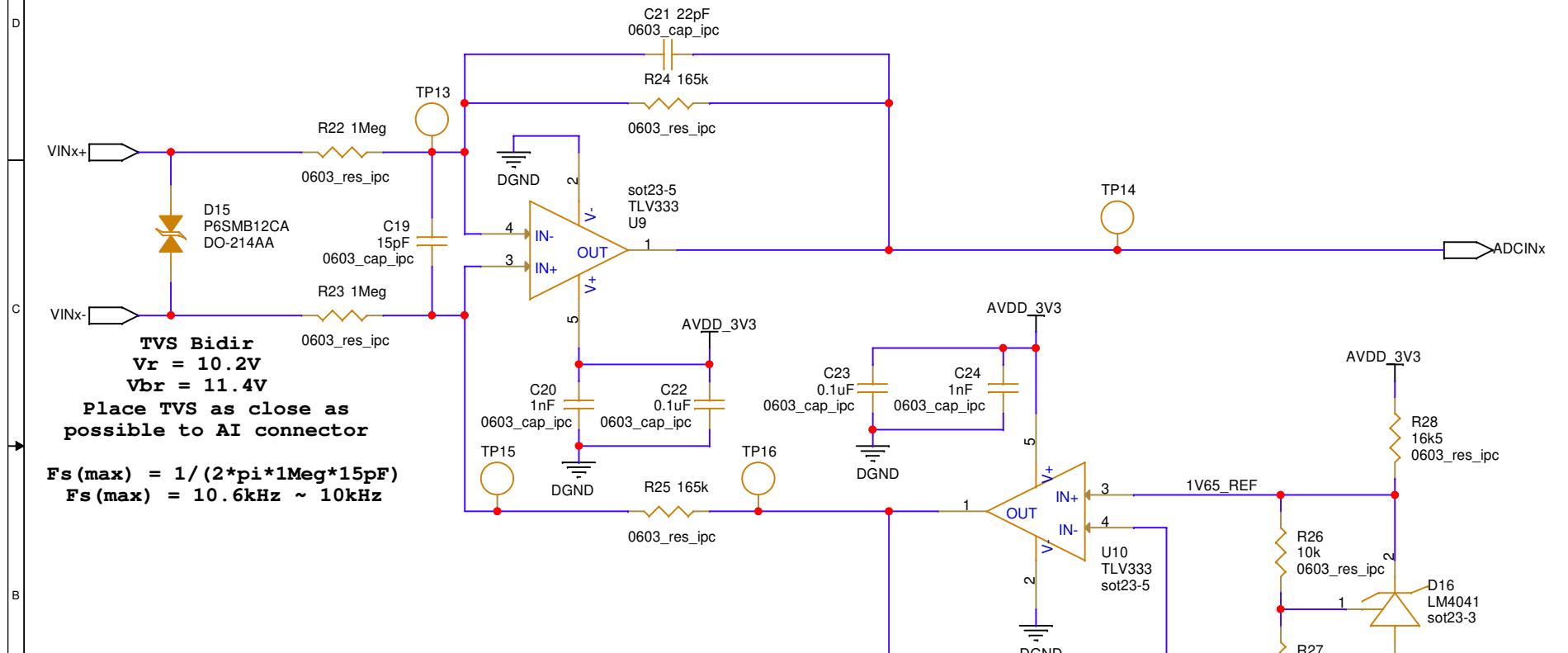
1

1

1

Rev  
code  
0B

Analog input ±10V  
10 bits resolution



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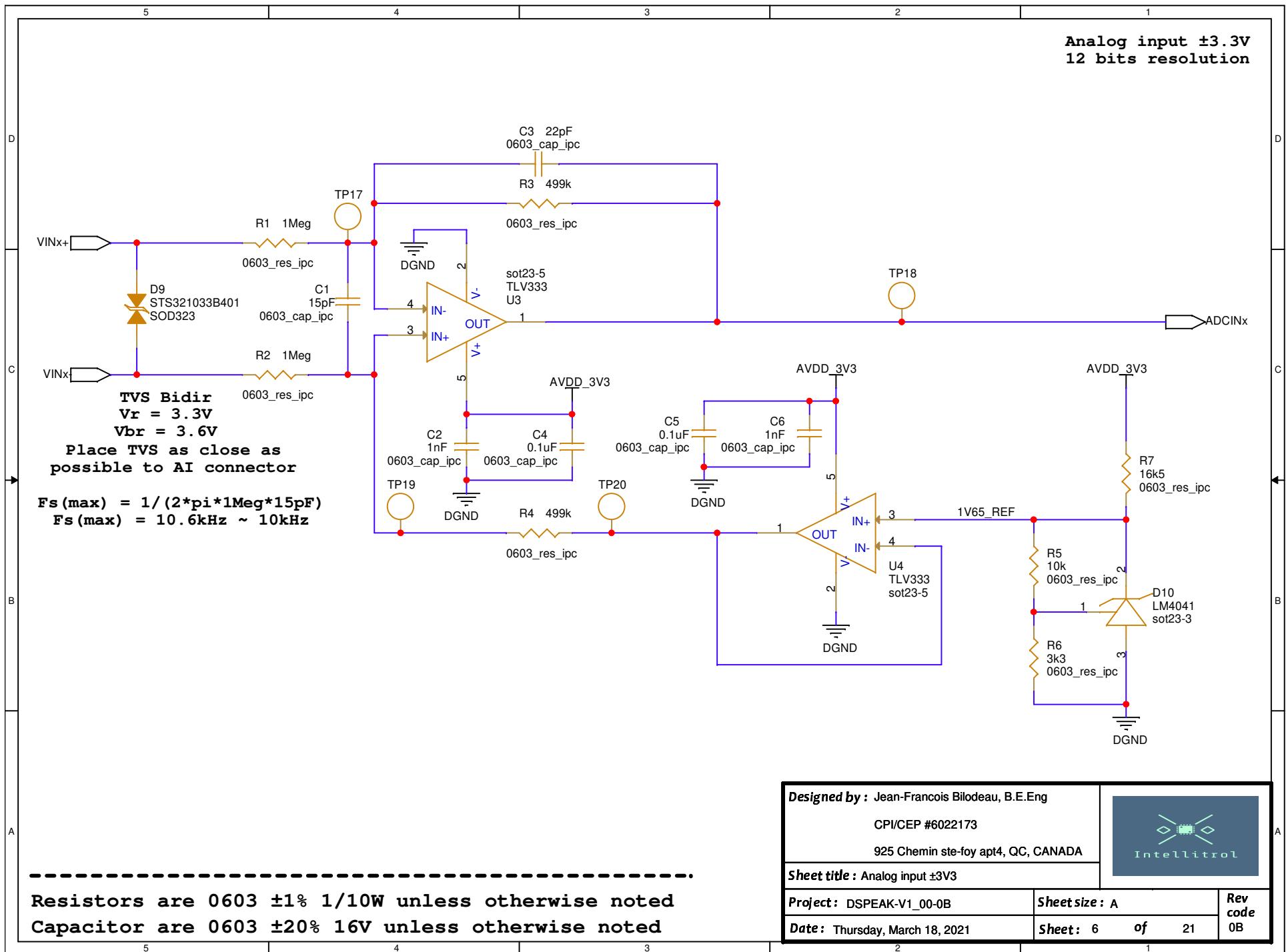
**Sheet title :** Analog input ±10V

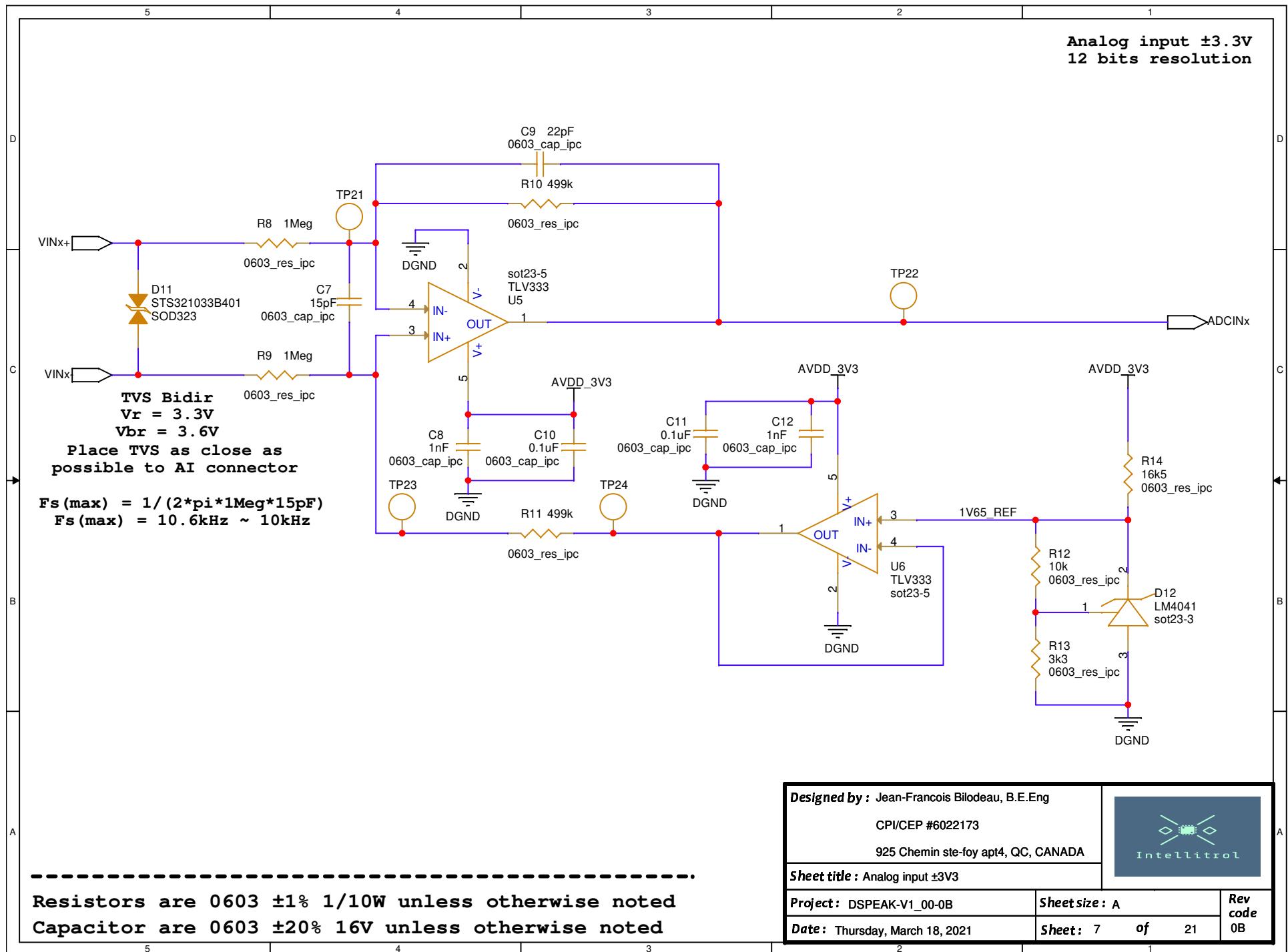
**Project:** DSPEAK-V1\_00-OB

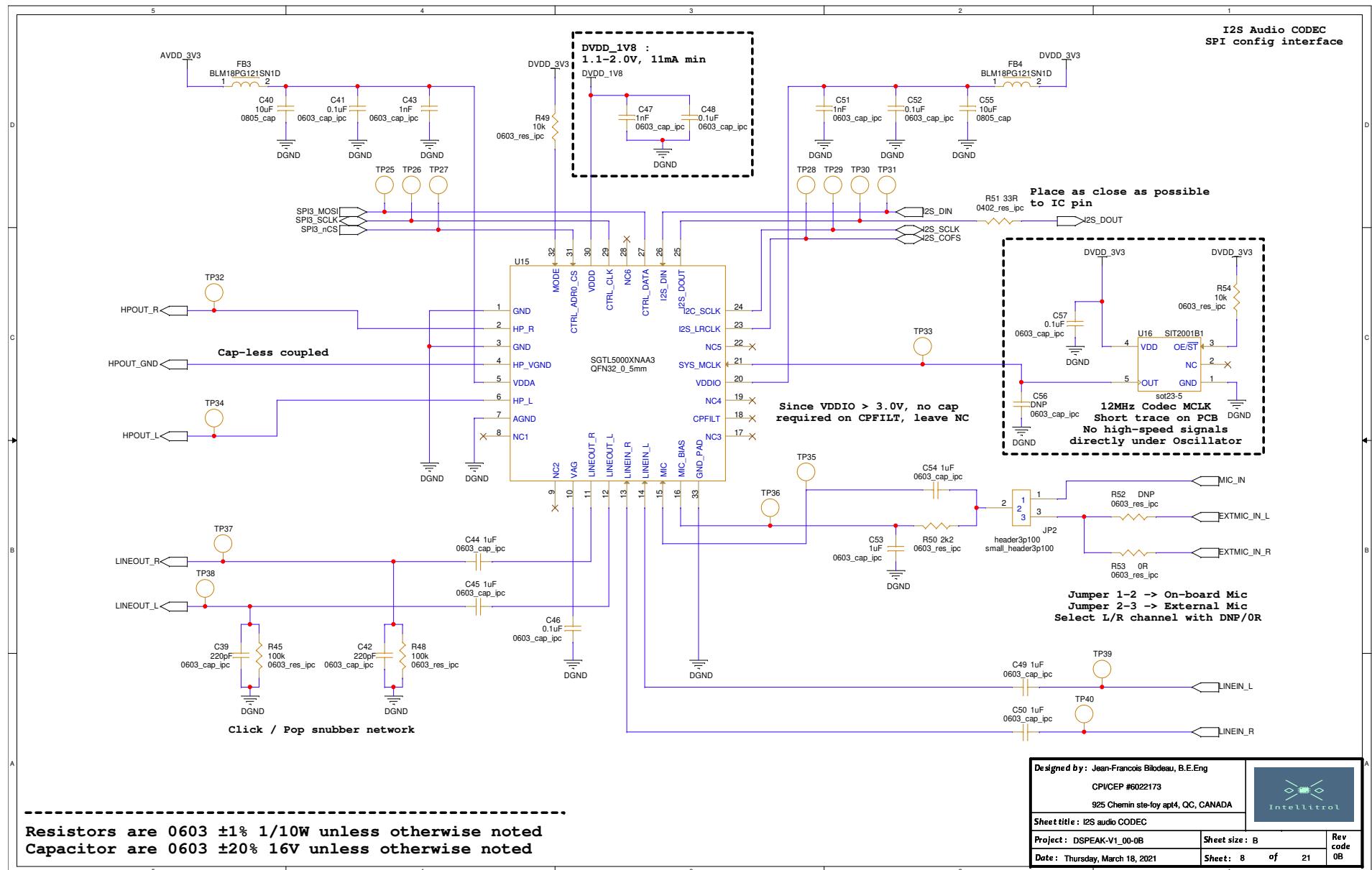
**Date:** Thursday, March 18, 2021



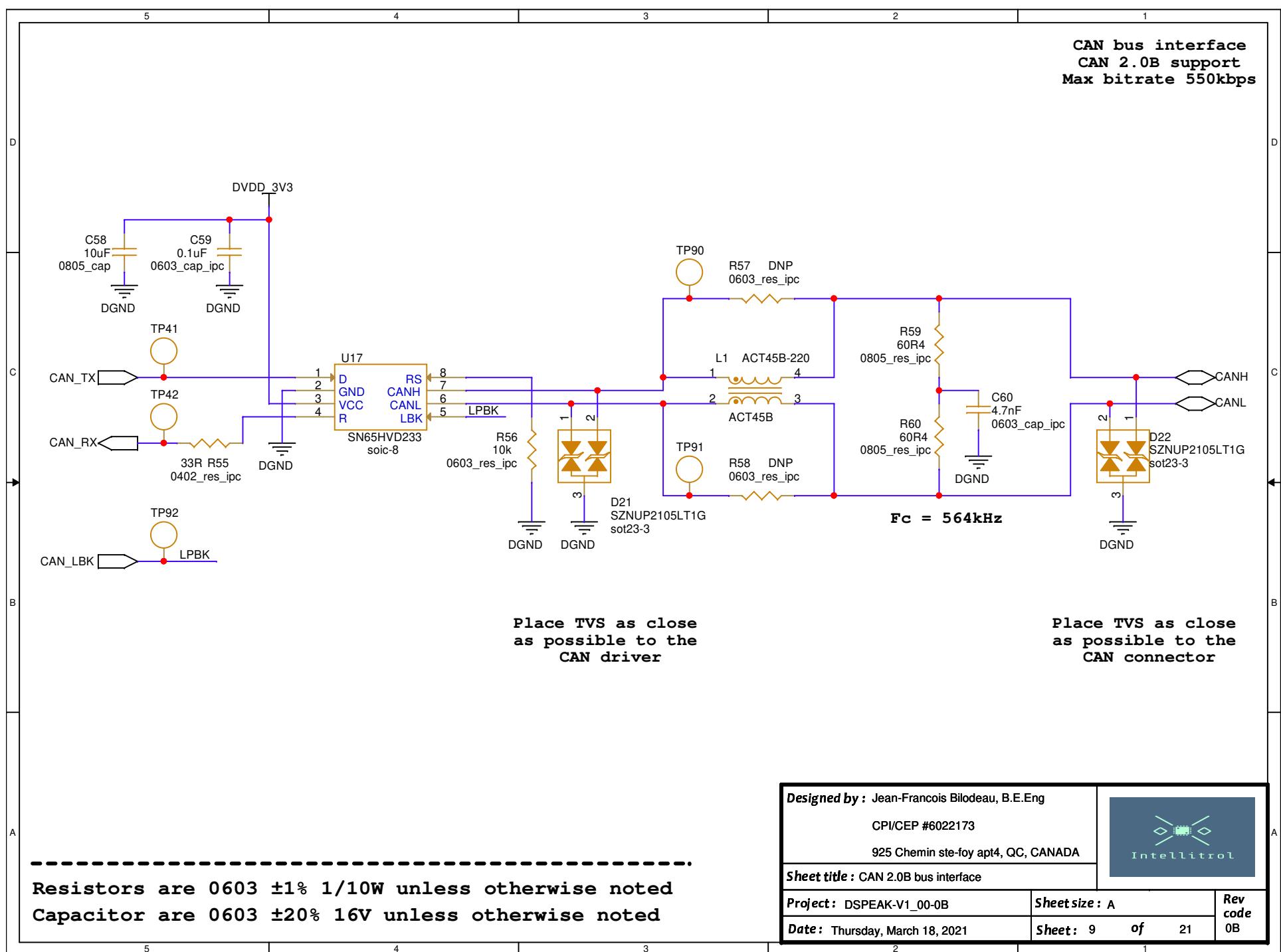
Rev  
code  
0B

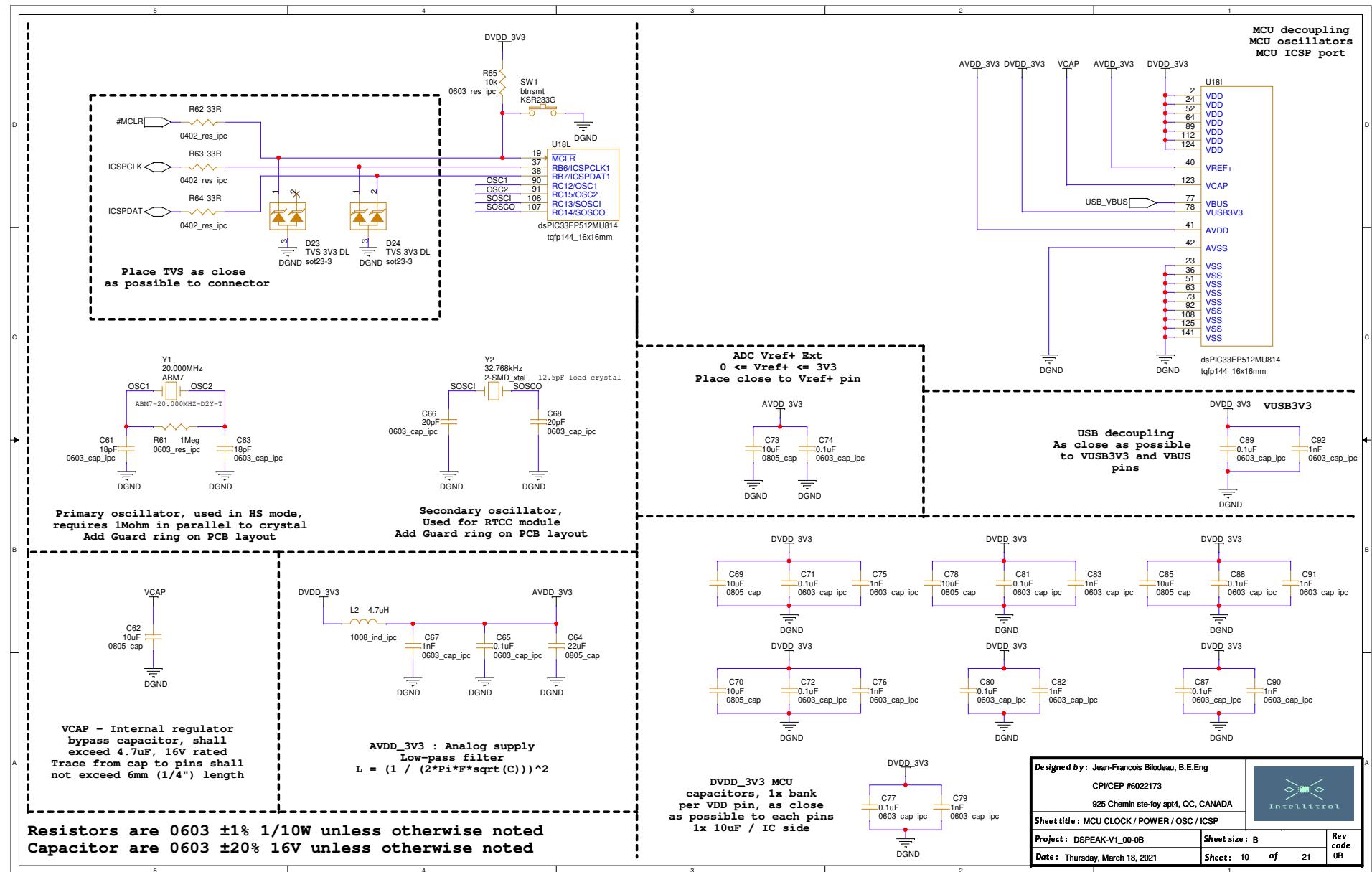


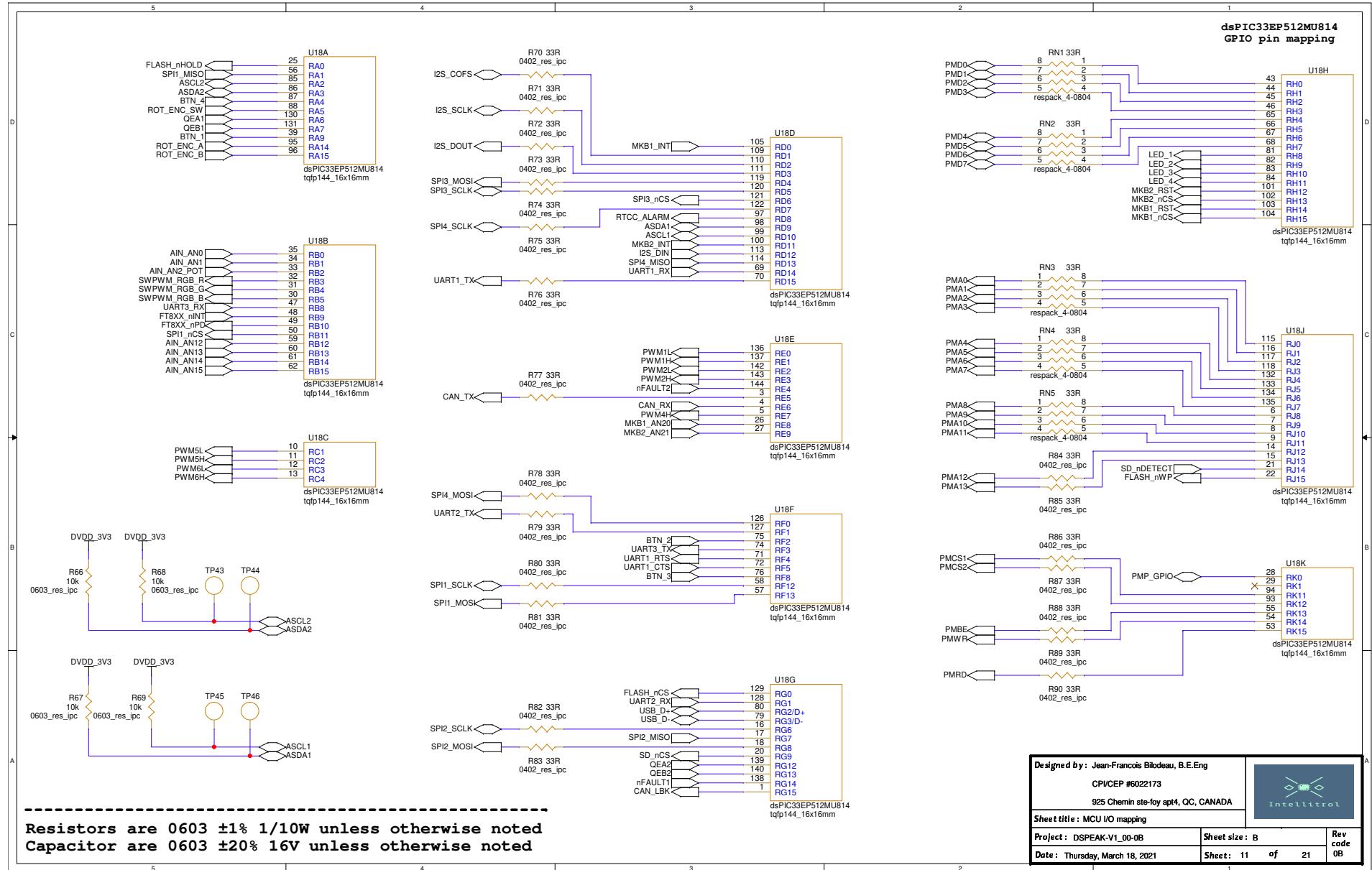




CAN bus interface  
CAN 2.0B support  
Max bitrate 550kbps







Resistors are 0603  $\pm 1\%$  1/10W unless otherwise noted  
Capacitor are 0603  $\pm 20\%$  16V unless otherwise noted

Designed by : Jean-François Bilodeau, B.E.Eng

CPI/CEP #60221

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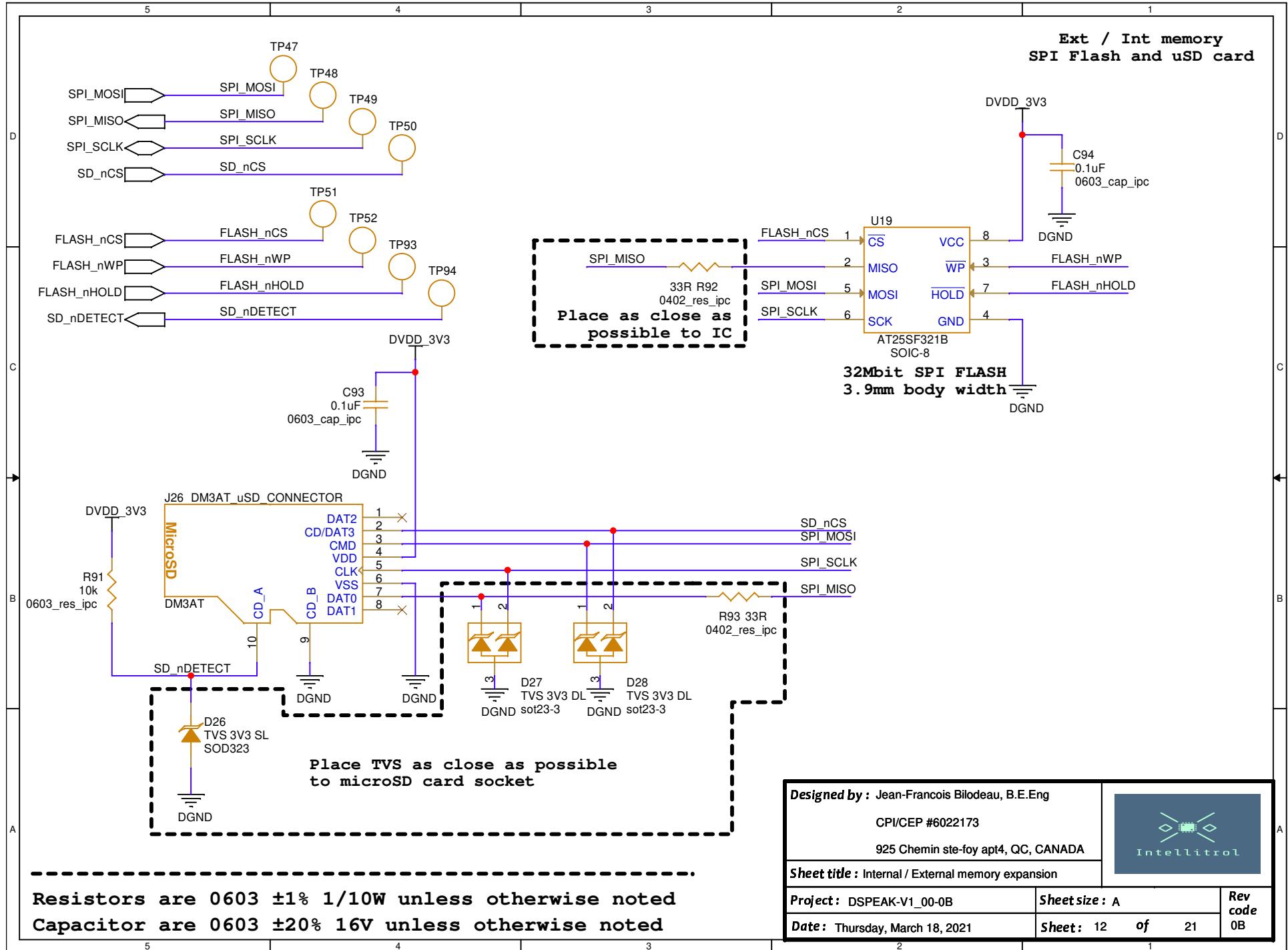
Sheet title : MCU I/O map

Project : DSPEAK-V1\_00

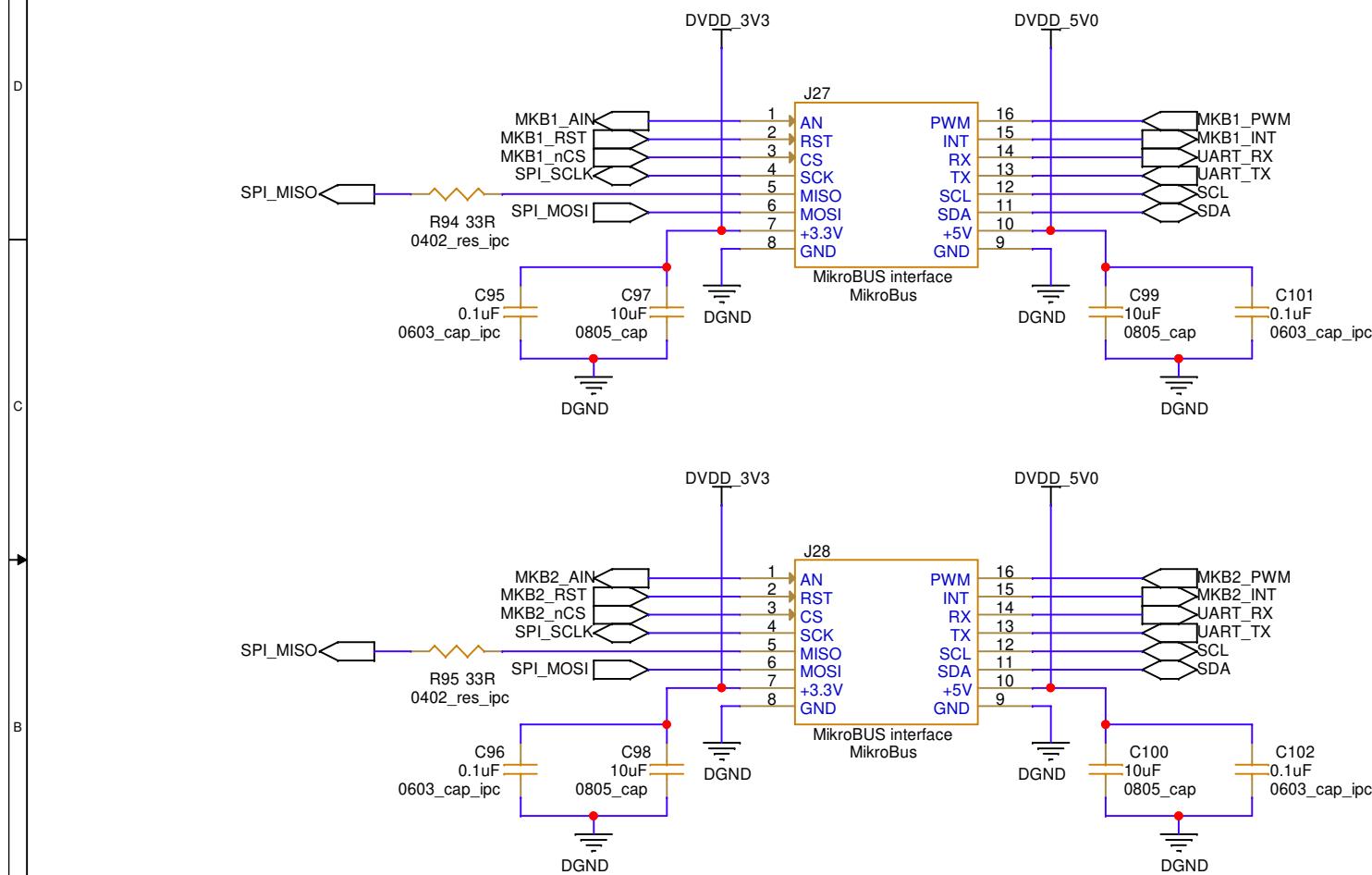
Date : Thursday, March 18, 2024

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—





MikroBus port  
Click Board compatible  
General purpose I/Os



Resistors are 0603 ±1% 1/10W unless otherwise noted  
Capacitor are 0603 ±20% 16V unless otherwise noted

Designed by : Jean-Francois Bilodeau, B.E.Eng

CPI/CEP #6022173

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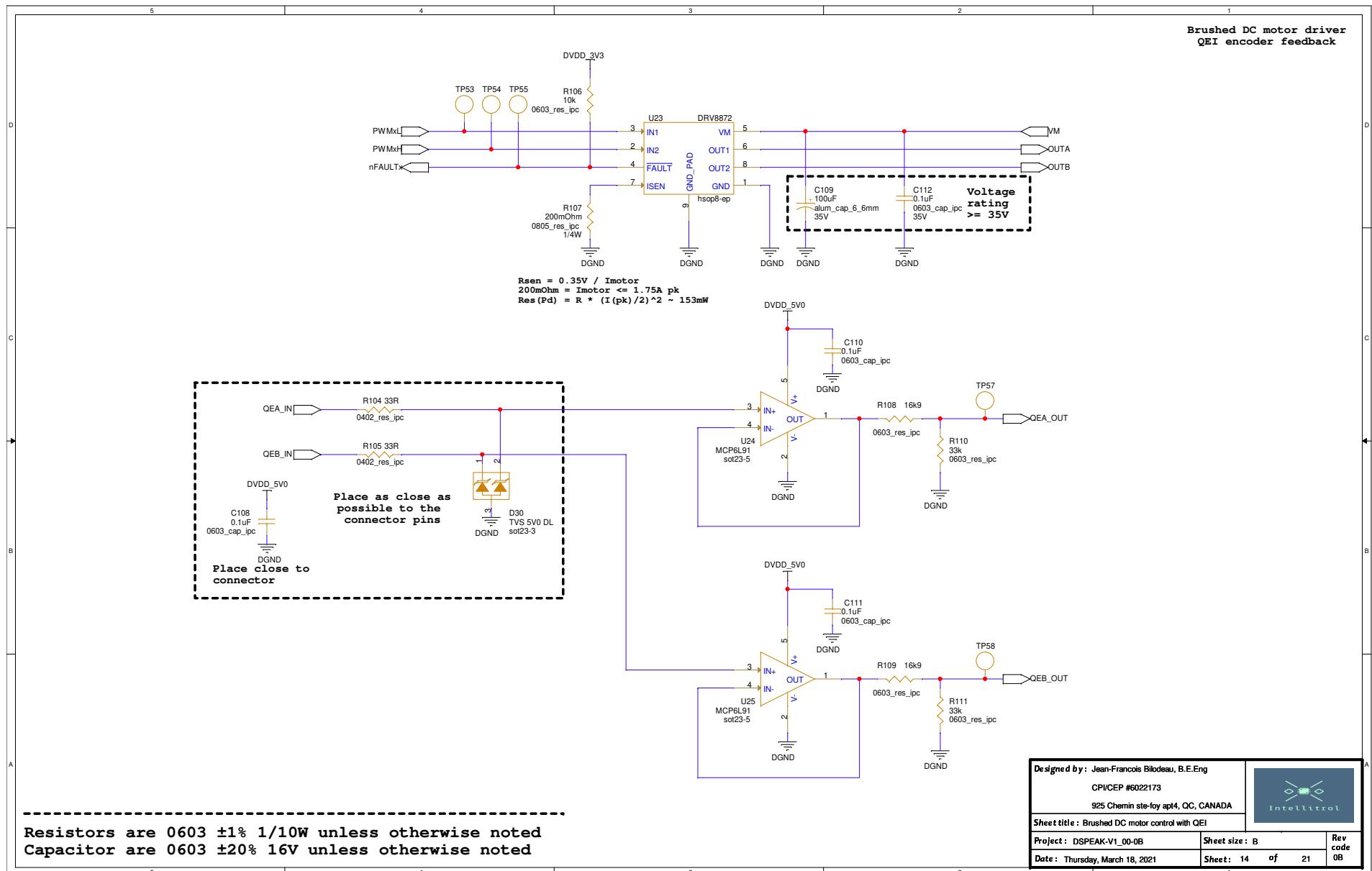
Sheet title : MikroBus expansion socket - dual

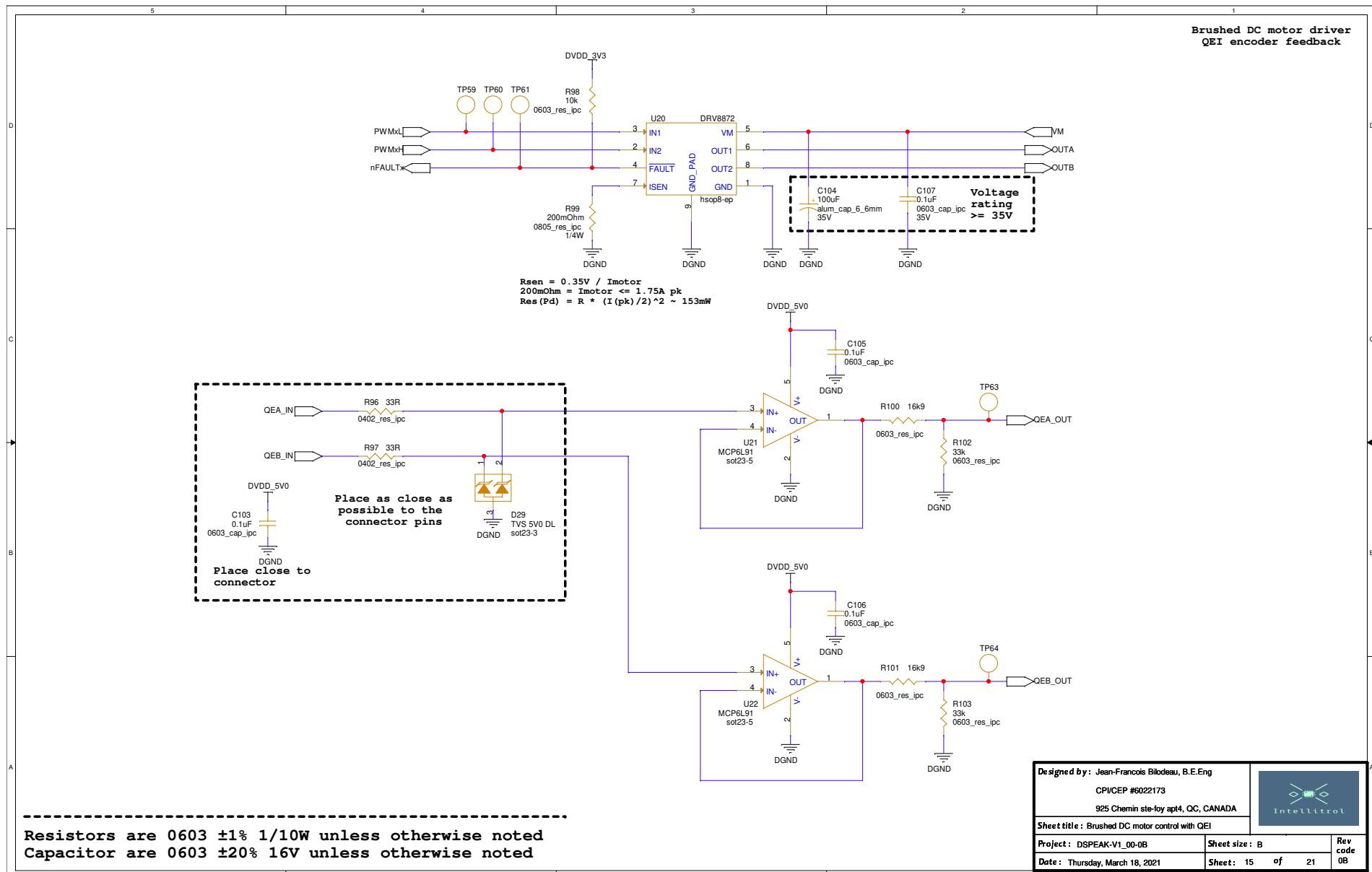
Project: DSPEAK-V1\_00-0B

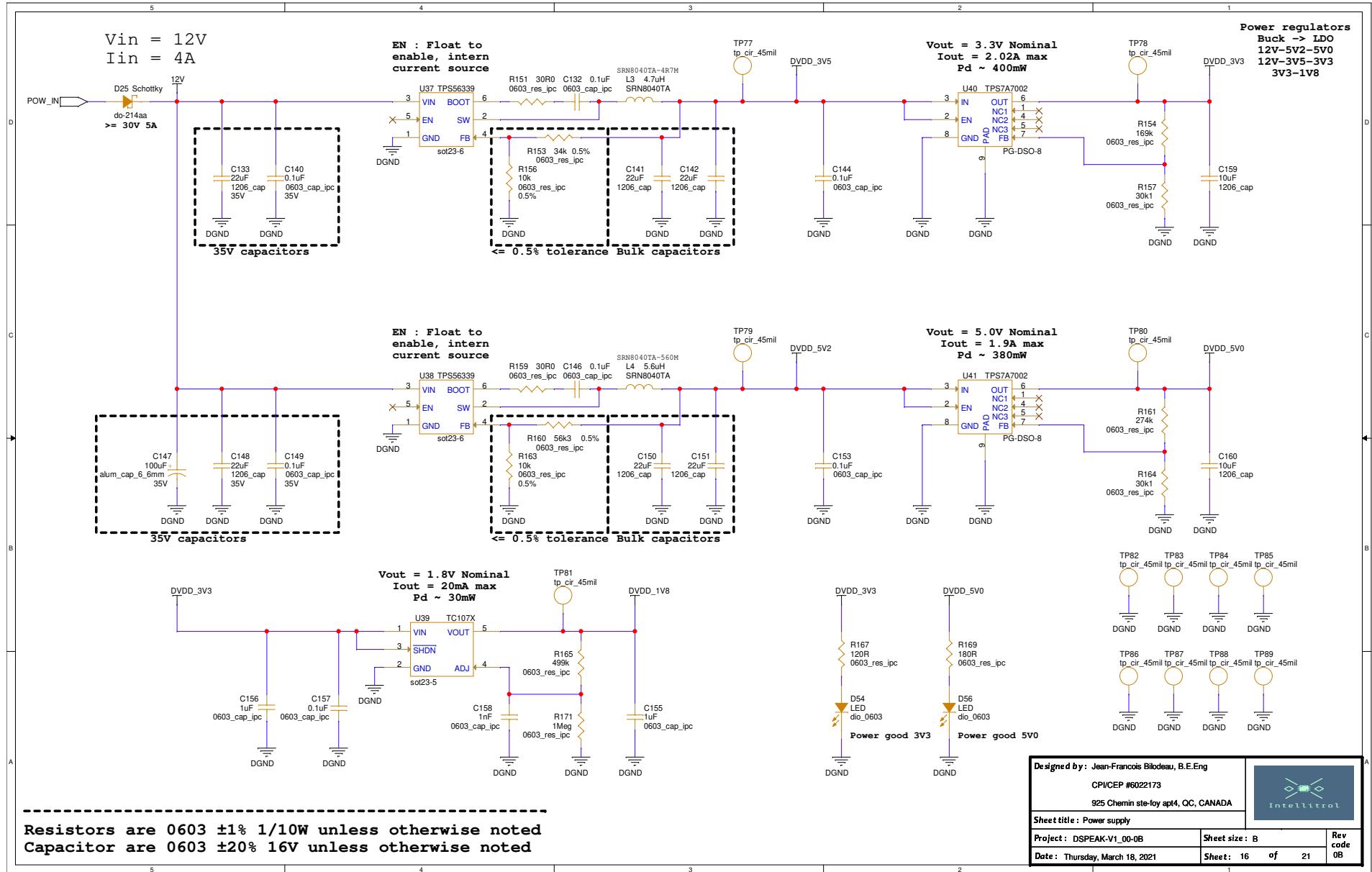
Date: Thursday, March 18, 2021

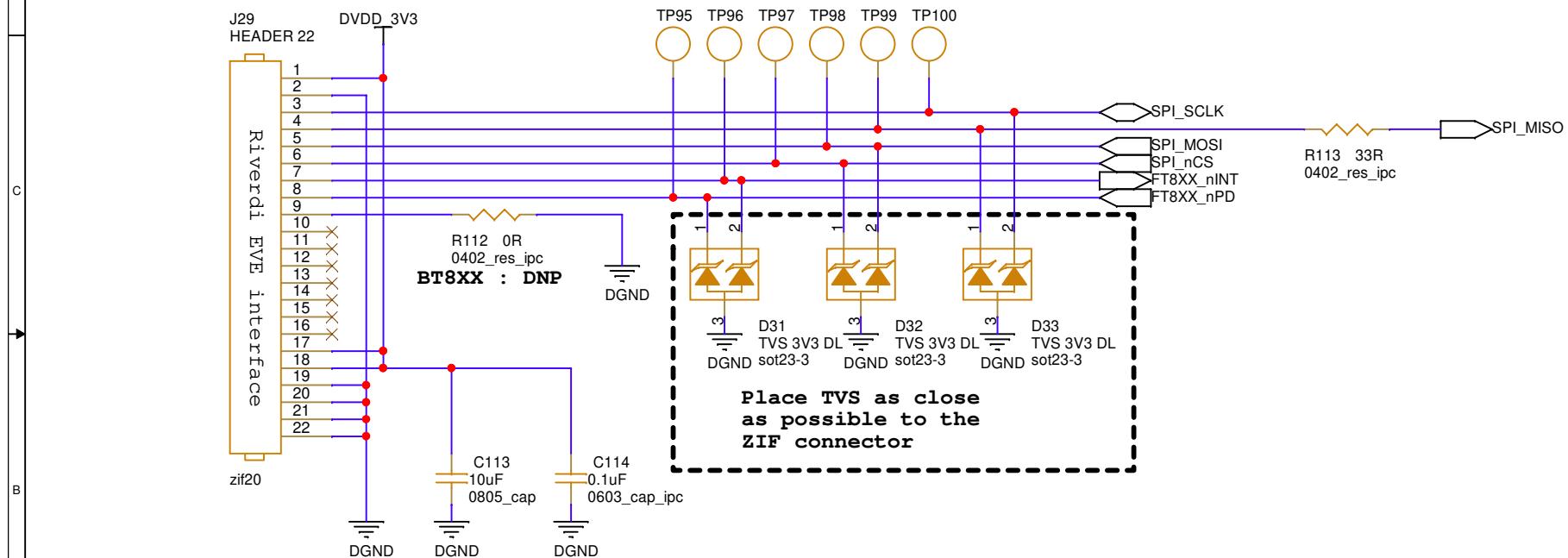


Rev code  
0B









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Designed by : Jean-Francois Bilodeau, B.E.Eng

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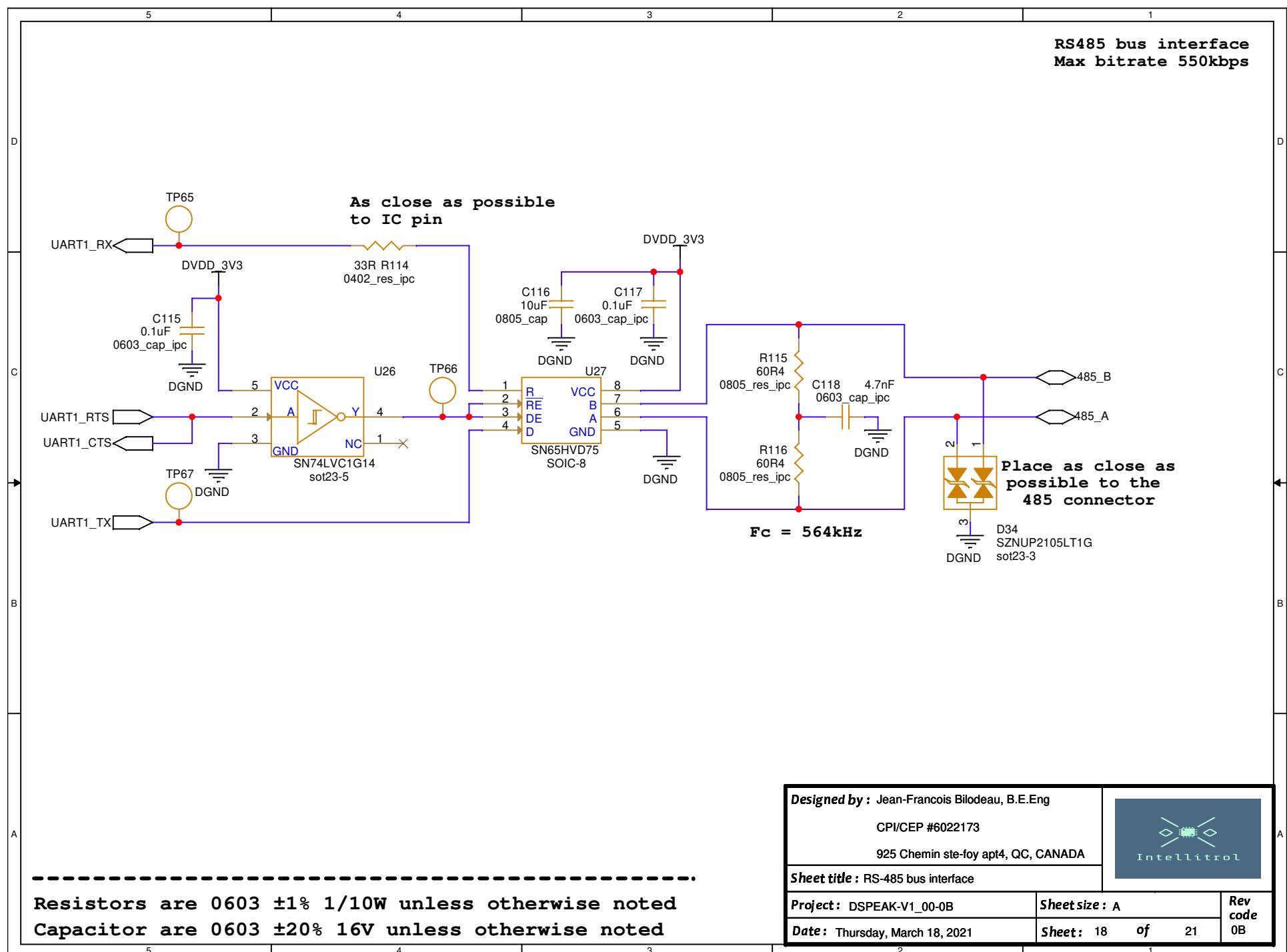
Sheet title : Riverdi TFT LCD EVE interface

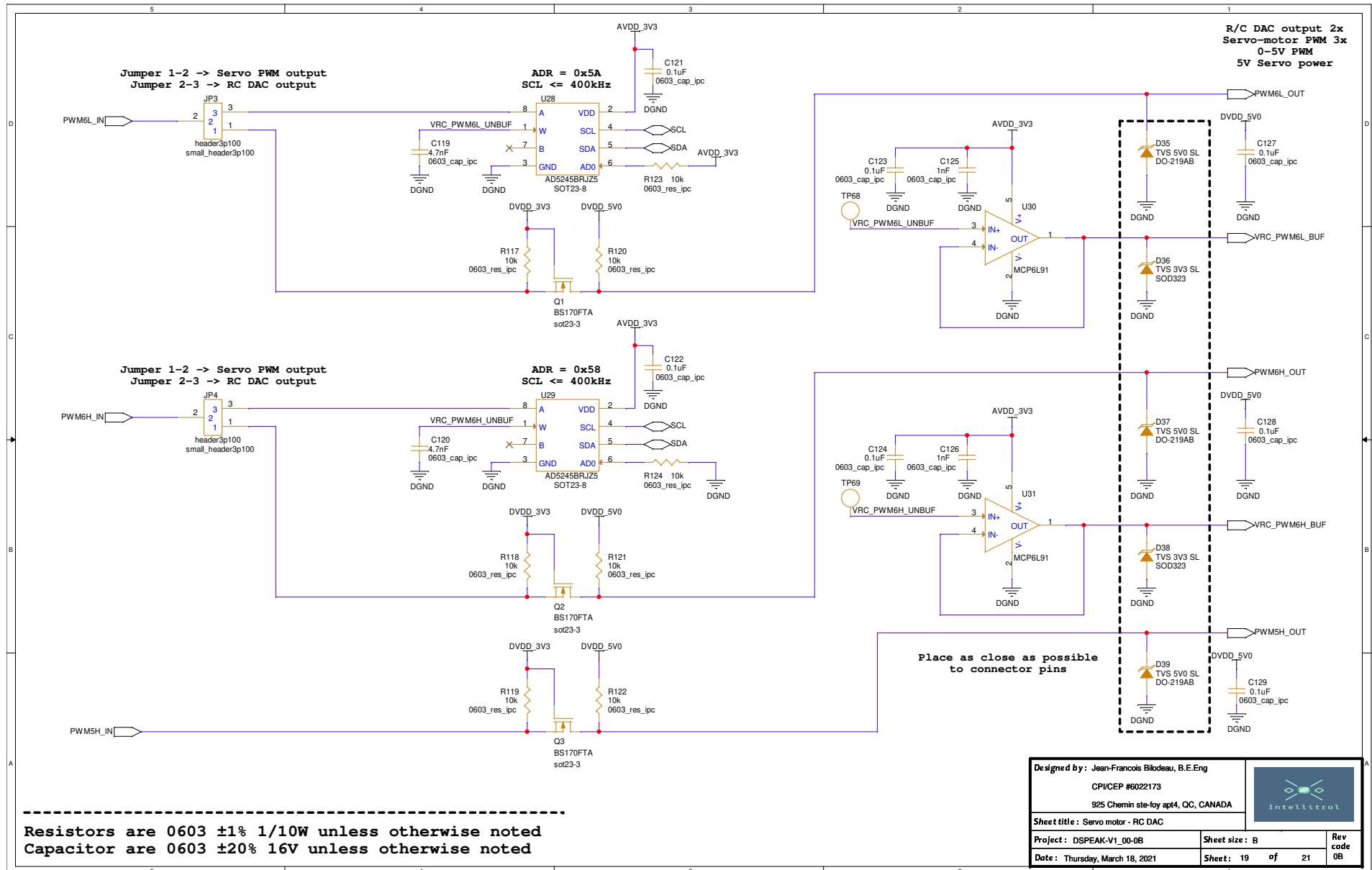
Project: DSPEAK-V1\_00-0B

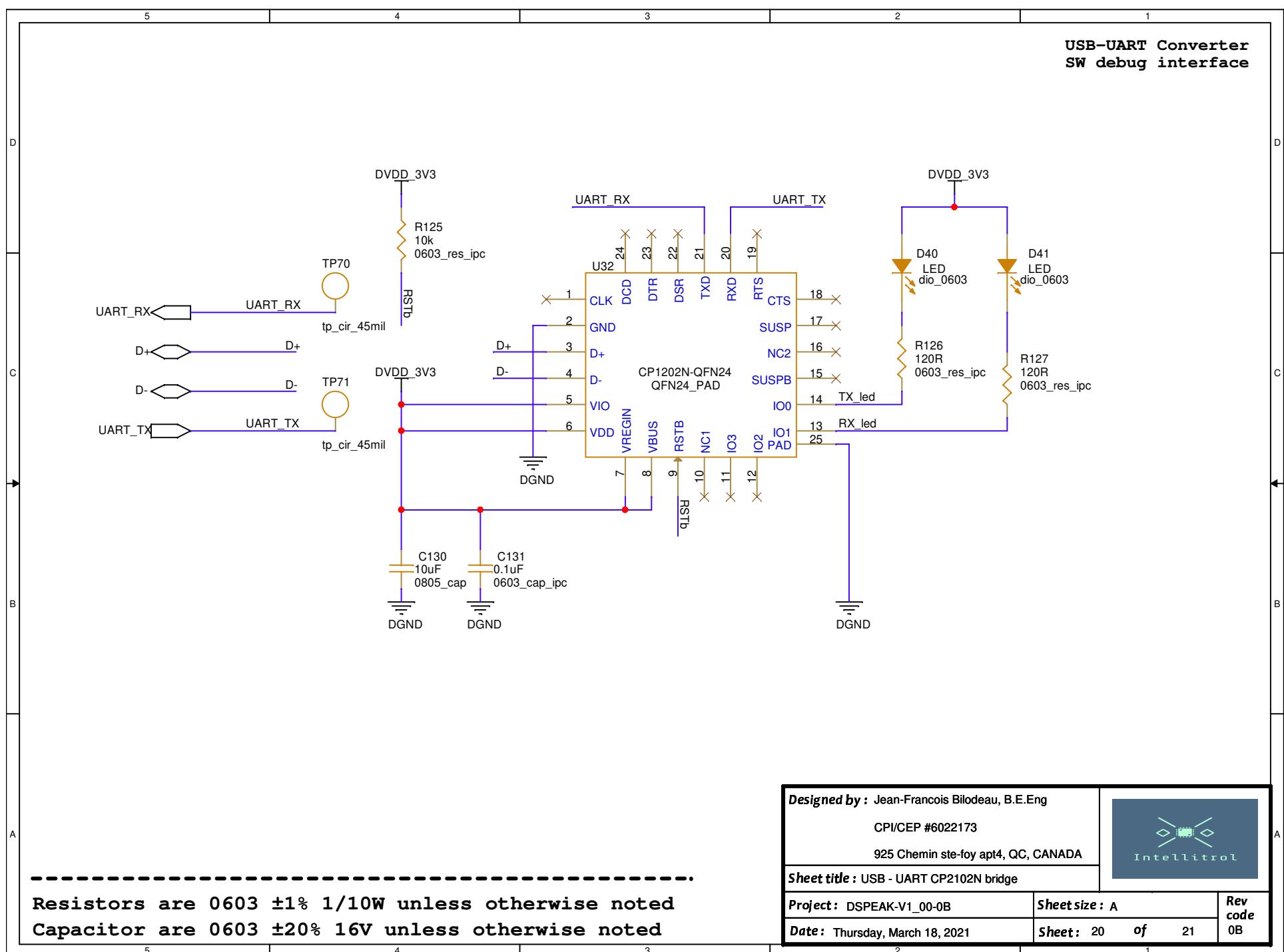
Date: Thursday, March 18, 2021



Rev code  
0B







Resistors are 0603  $\pm 1\%$  1/10W unless otherwise noted  
Capacitor are 0603  $\pm 20\%$  16V unless otherwise noted

Designed by : Jean-Francois Bilodeau, B.E.Eng

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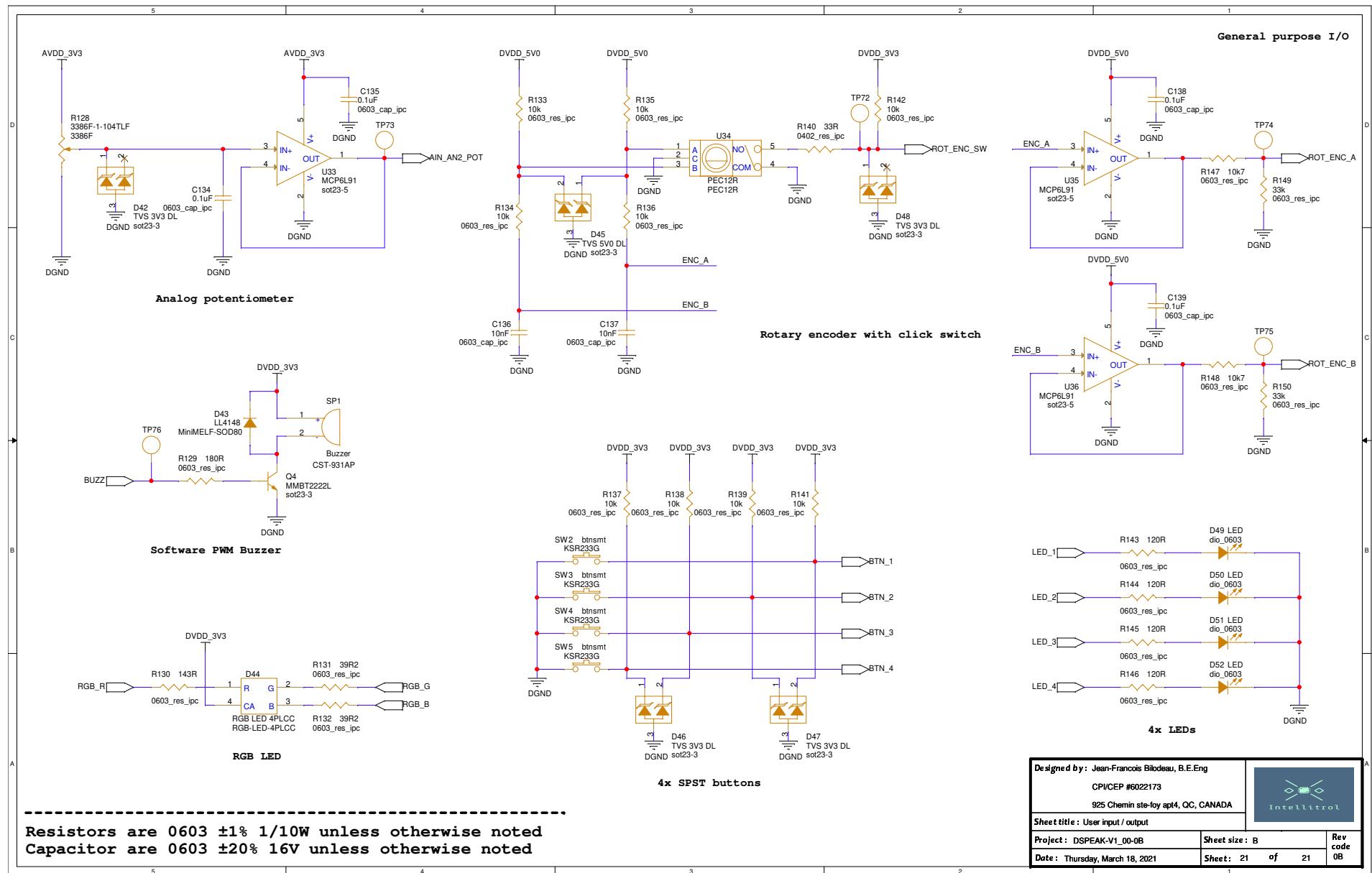
Sheet title : USB - UART CP2102N bridge

Project: DSPEAK-V1\_00-0B

Date: Thursday, March 18, 2021



Rev  
code  
0B



Designed by : Jean-François Bilodeau, B.E.Eng

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Sheet title : User input / output

Project : DSPEAK-V1.00-B8

Sheet size : B	Sheet : 21 of 21	Rev code 08
Date : Thursday, March 18, 2021		