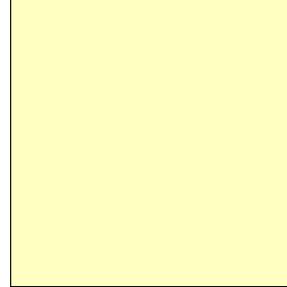


# Reference Mixed-Signal PCB

A

## [1] Power

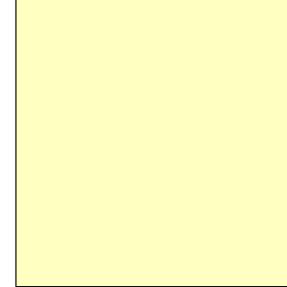
Power



File: Power.kicad\_sch

## [2] MCU

MCU

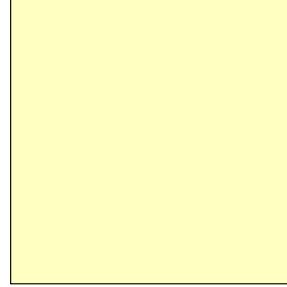


File: MCU.kicad\_sch

B

## [3] ADC

ADC

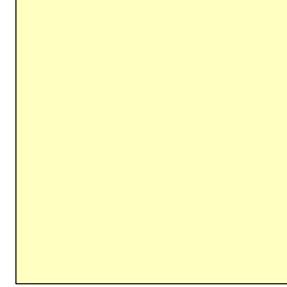


File: ADC.kicad\_sch

C

## [4] DAC

DAC



File: DAC.kicad\_sch

D

### Mounting Holes (M3)

- H1  
MountingHole
- H2  
MountingHole
- H3  
MountingHole
- H4  
MountingHole

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EMAIL: Mwafak\_sh@hotmail.com  
COMPANY: INVENTIVETRONICS

Sheet: /  
File: Reference-MixSigPCB.kicad\_sch

**Title: Reference Mixed-Signal PCB**

Size: A4 Date: 2023-09-06  
KiCad E.D.A. kicad 7.0.2-0

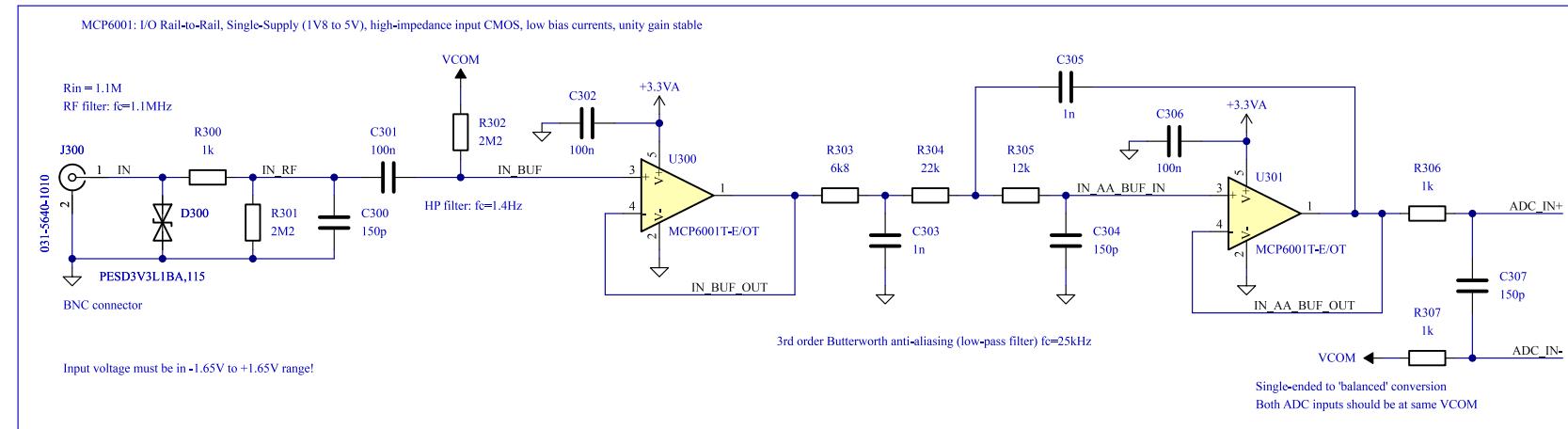
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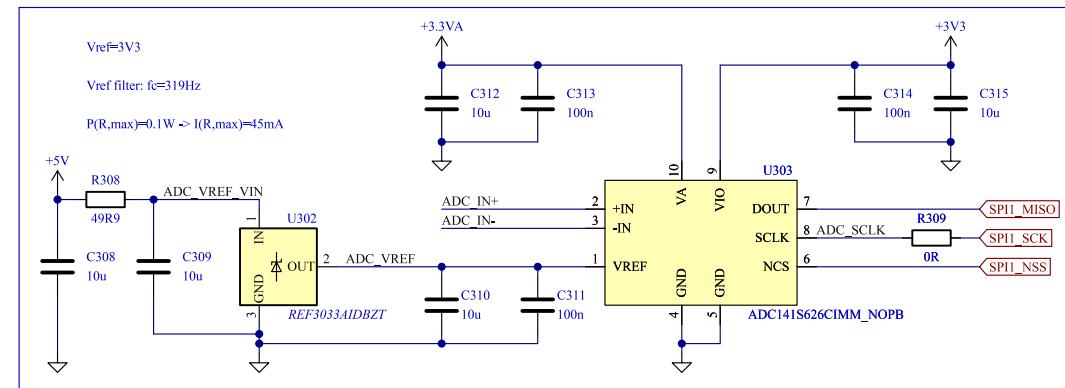
Rev: 0.1  
Id: 1/5

### [3] ADC & Analogue Front-End

#### Analogue Front-End



#### 14-Bit S/H ADC



C307 filtering not decoupling  
does not have to be entirely close to the IC

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Sheet: /ADC/  
File: ADC.kicad\_sch

**Title: Reference Mixed-Signal PCB**

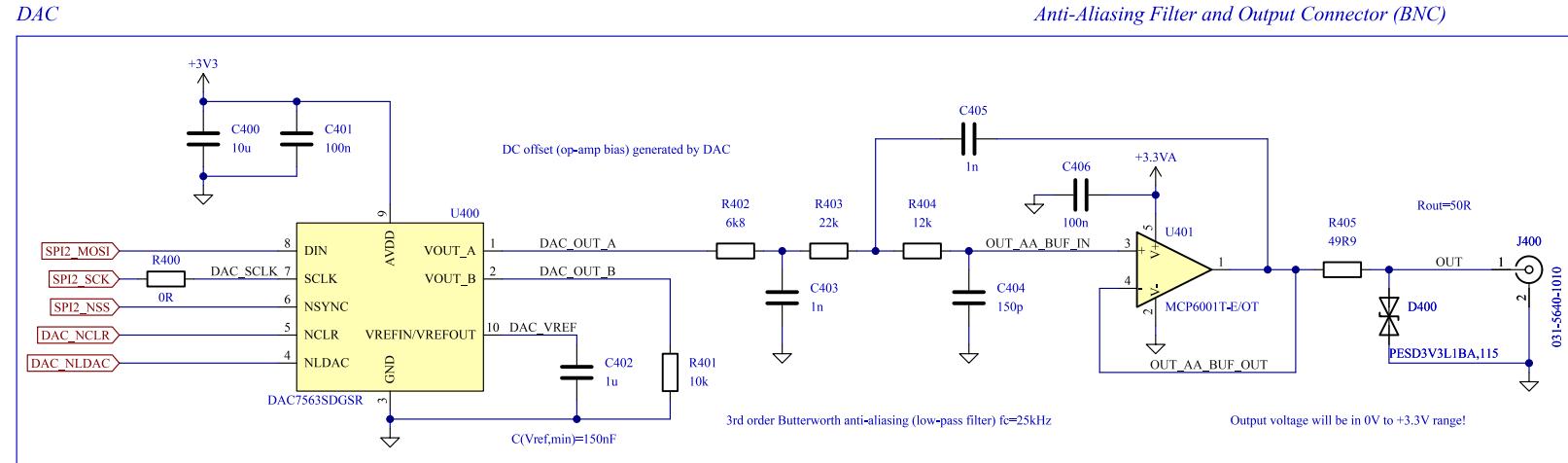
Size: A4	Date: 2023-09-06
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Id: 2/5

## [4] DAC & Analogue Output Circuitry



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File: DAC.kicad\_sch

**Title: Reference Mixed-Signal PCB**

Size: A4 Date: 2023-09-06  
KiCad E.D.A. kicad 7.0.2-0

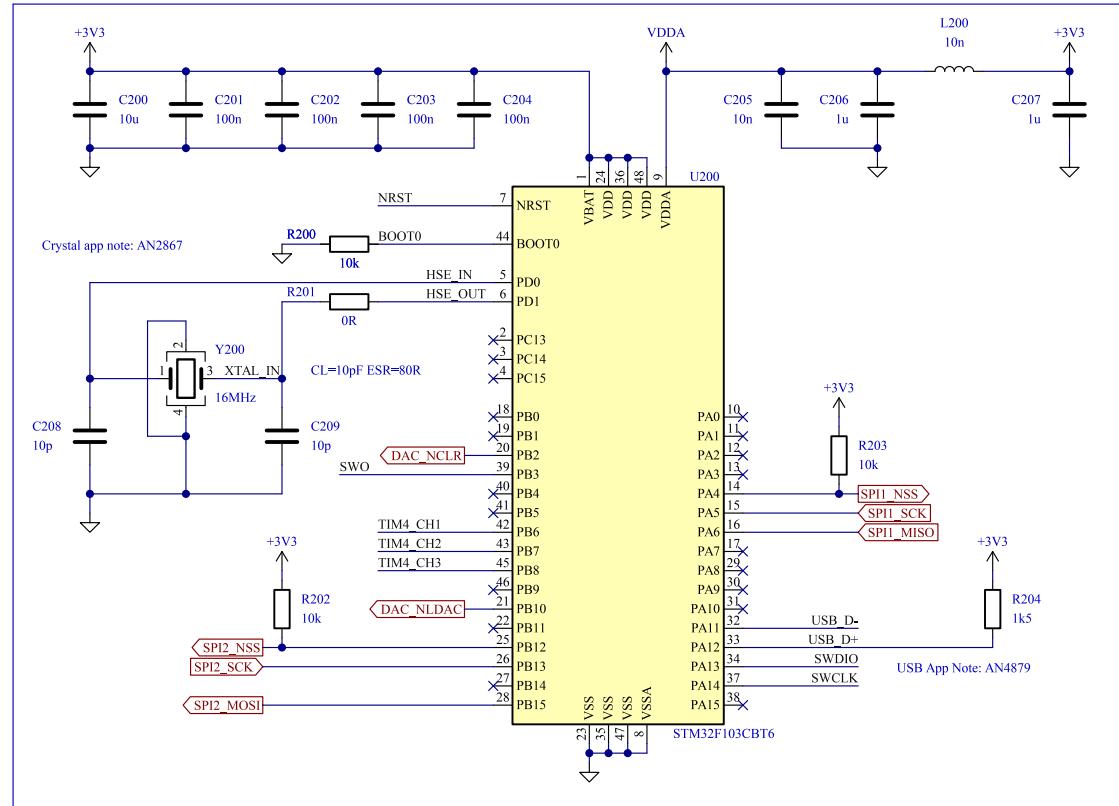
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Id: 3/5

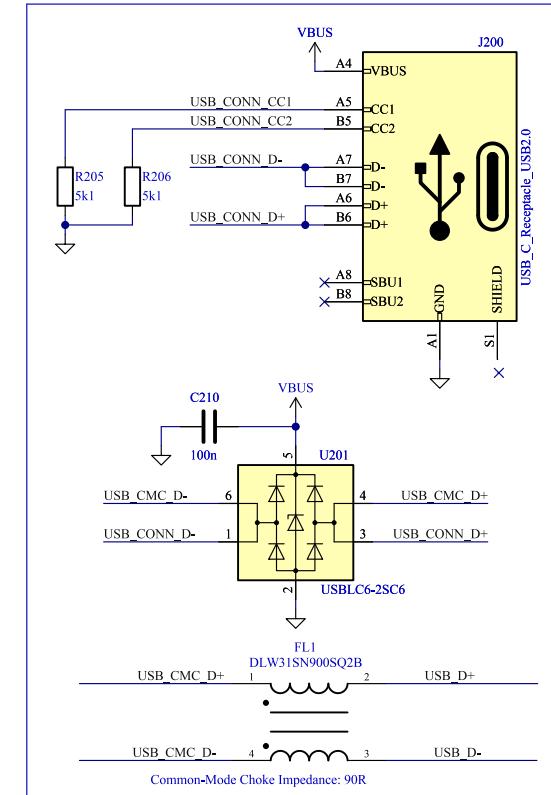


## [2] Microcontroller & USB

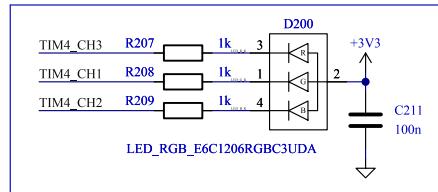
MCU (STM32F1)



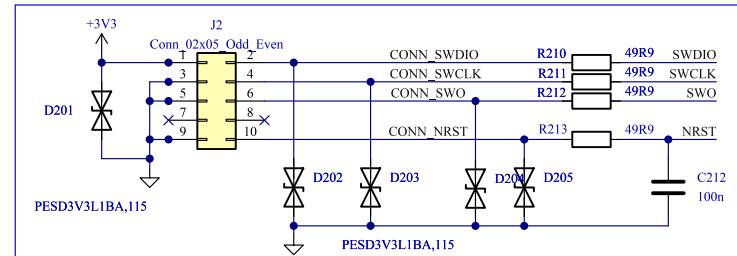
USB Type C



RGB LED



SWD Header



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Sheet: /MCU/  
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Title: Reference Mixed-Signal PCB

Size: A4 Date: 2023-09-06  
KiCad E.D.A. kicad 7.0.2-0

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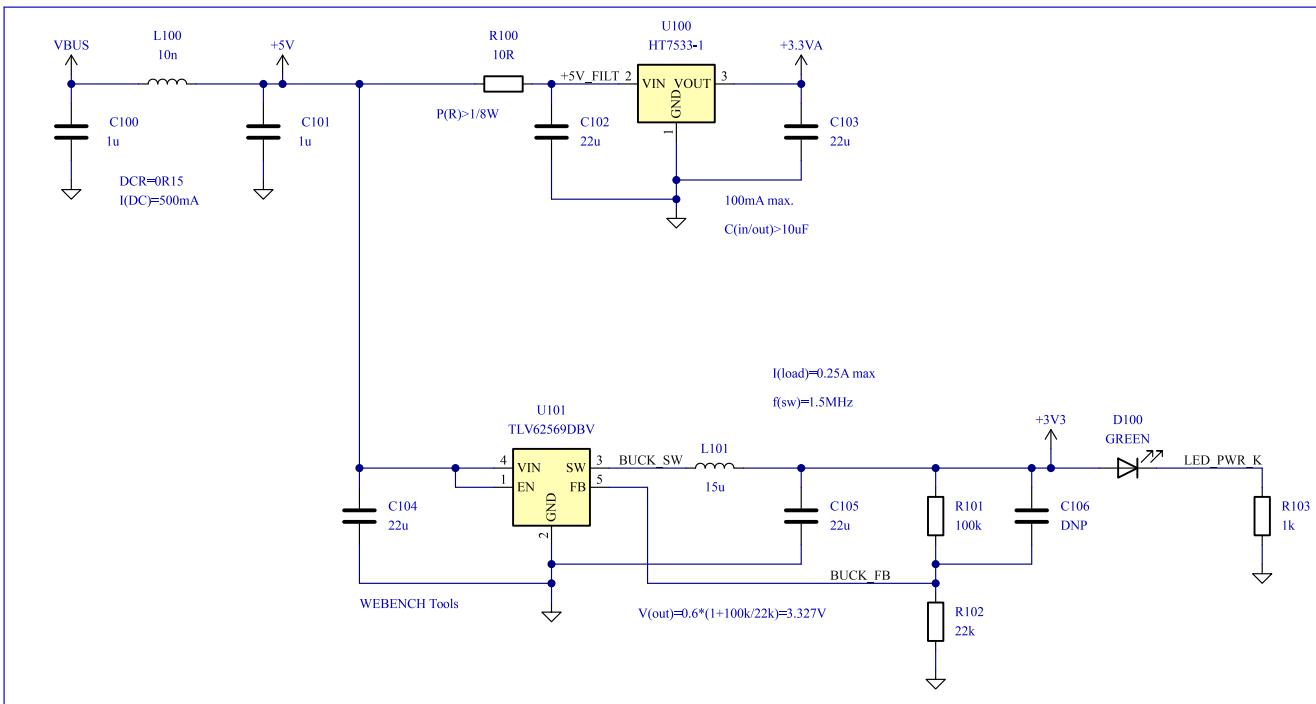


Rev: 0.1

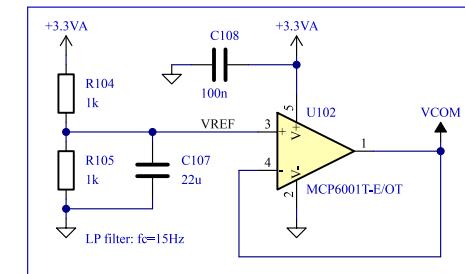
Id: 4/5

# [1] Power

*Input Filtering & Analogue and Digital Supplies*



*Bias Generator*



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File: Power.kicad\_sch

**Title: Reference Mixed-Signal PCB**

Size: A4 Date: 2023-09-06  
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Rev: 0.1  
Id: 5/5