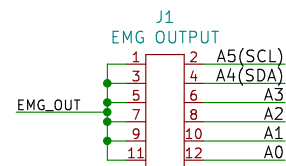
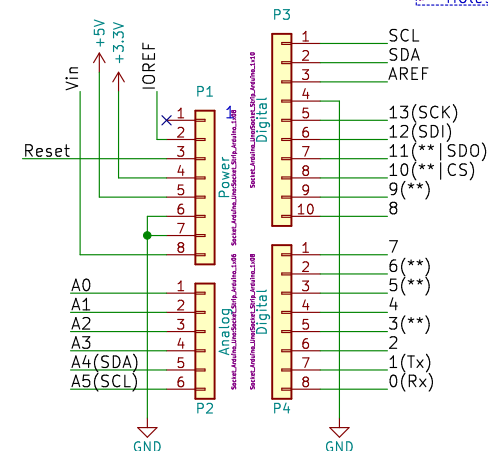


Sheet: -5V Source

File: Minus5Source.sch



Shield for Arduino that uses the same pin disposition like "Uno" board Rev 3.



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**FANTM**

Sheet: /

File: DEVLPR.sch

**Title: DEVLPR**

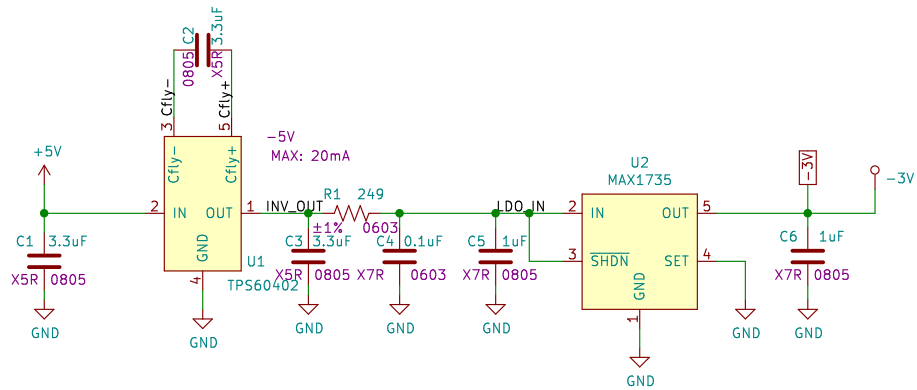
Size: A4 Date: 2021-03-31

KiCad E.D.A. kicad (5.1.8)-1

**Rev: dev.a.1**

Id: 1/3





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 Author: Ezra Boley

**FANTM**

Sheet: / -5V Source/  
 File: Minus5Source.sch

**Title: DEVLPR**

Size: A4 Date: 2021-03-31

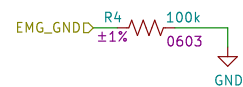
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**Rev: dev.a.1**

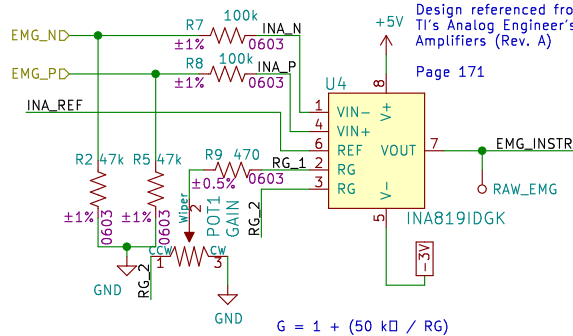
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# INSTRUMENTATION AMPLIFIER



# AC COUPLED INSTRUMENTATION AMPLIFIER (INA)

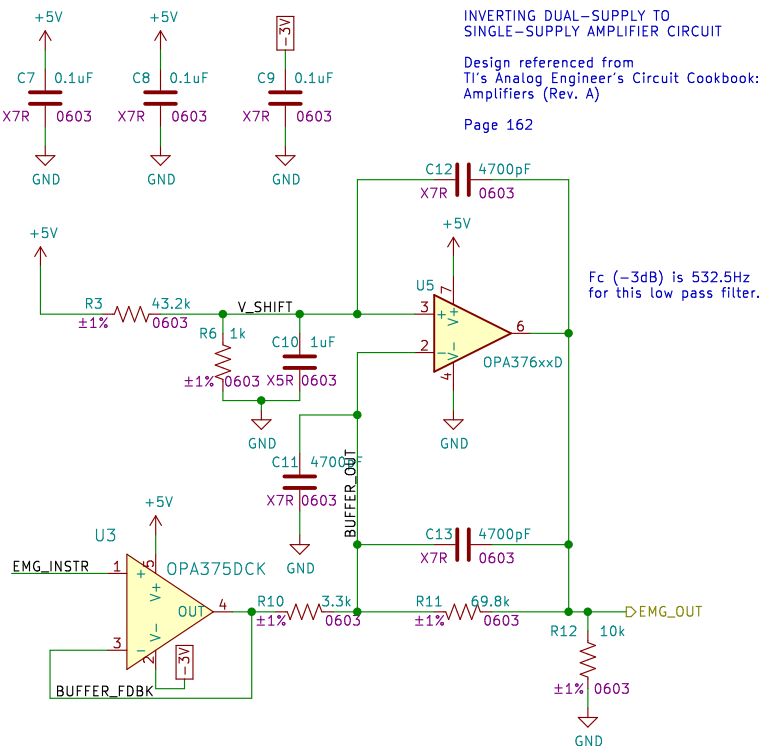
Design referenced from  
TI's Analog Engineer's Circuit Cookbook:  
Amplifiers (Rev. A)  
Page 171



$$G = 1 + (50 \text{ k}\Omega / R_G)$$

# INVERTING DUAL-SUPPLY TO SINGLE-SUPPLY AMPLIFIER CIRCUIT

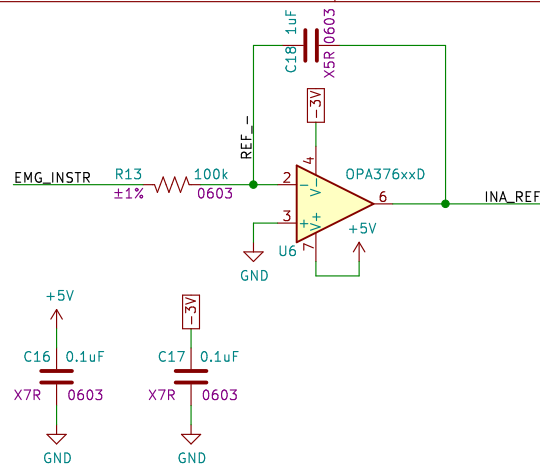
Design referenced from  
TI's Analog Engineer's Circuit Cookbook:  
Amplifiers (Rev. A)  
Page 162



$F_c$  (-3dB) is 532.5Hz  
for this low pass filter.

# AC COUPLED INSTRUMENTATION AMPLIFIER (REF)

Design referenced from  
TI's Analog Engineer's Circuit Cookbook:  
Amplifiers (Rev. A)  
Page 171



$F_c$  (-3dB) is 1.6Hz  
for this high pass filter.

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Author: Ezra Boley

**FANTM**

Sheet: /EMG Amplifiers/  
File: emg\_amplifier.sch

**Title: DEVLPR**

Size: A4  
KiCad E.D.A. kicad (5.1.8)-1



Rev: dev.a.1  
Id: 3/3