

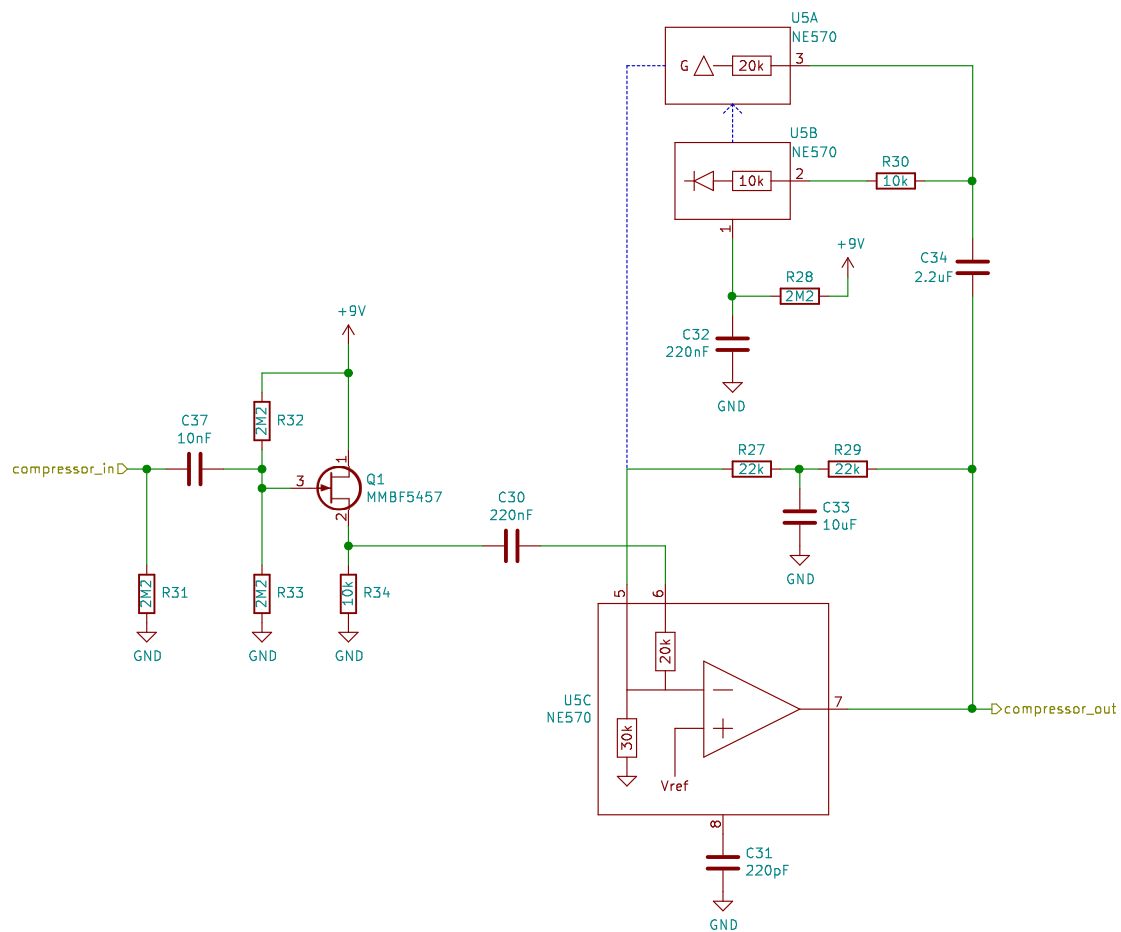
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Sheet: /  
File: bit\_crusher\_pedal.sch

**Title: Bit Crusher Pedal**

Size: A4  
Date: 2020-08-16  
KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Rev: 1  
Id: 1/8



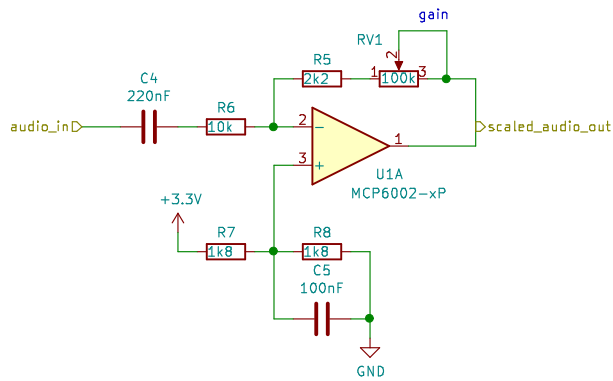
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 File: compressor.sch

**Title: Bit Crusher Pedal**

Size: A4 Date: 2020-08-16  
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**Rev: 1**  
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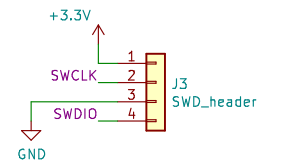
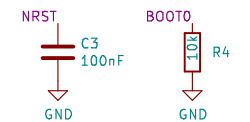
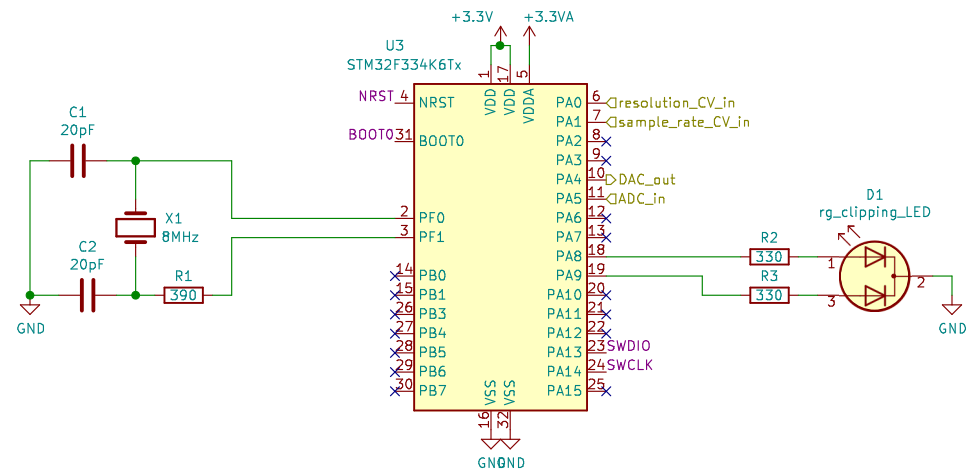
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Sheet: /variable\_gain\_amp/  
 File: variable\_gain\_amp.sch

**Title: Bit Crusher Pedal**

Size: A4      Date: 2020-08-16  
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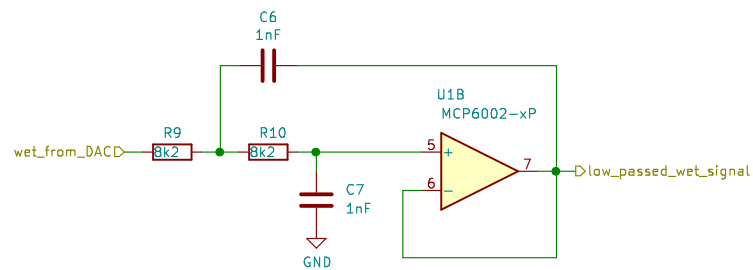
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**Title: Bit Crusher Pedal**

Size: A4 Date: 2020-08-16  
KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Rev: 1  
Id: 2/8

## 20kHz Low-pass filter



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Sheet: /low\_pass\_filter/  
File: low\_pass\_filter.sch

**Title: Bit Crusher Pedal**

Size: A4  
KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Date: 2020-08-16

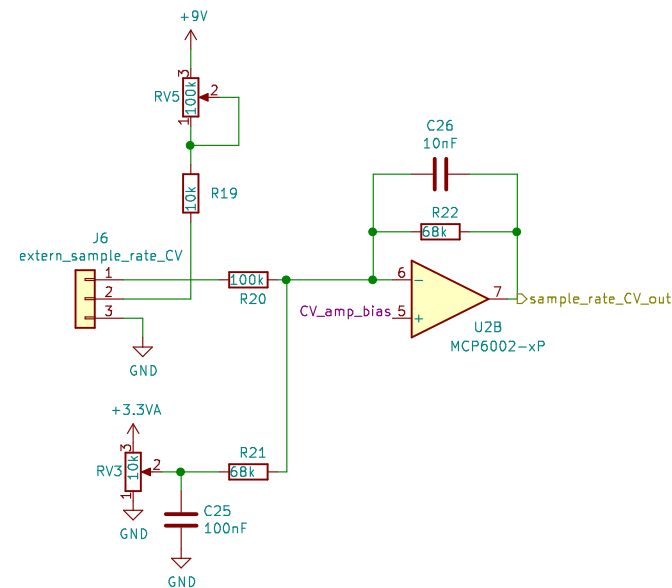
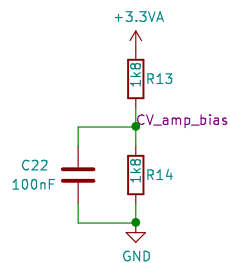
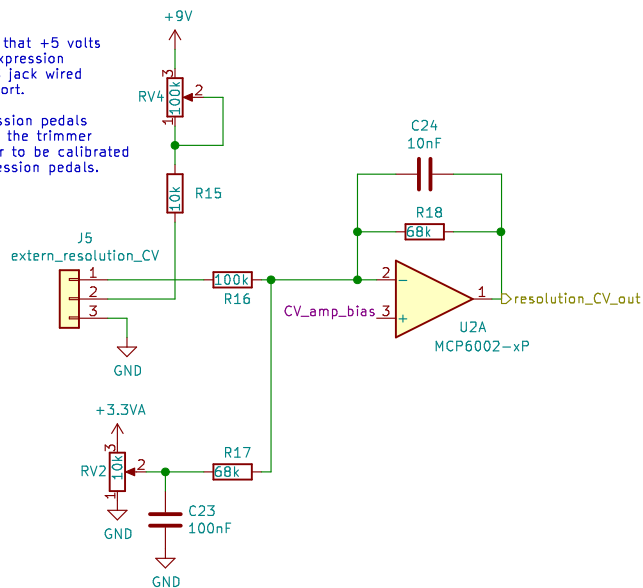
Rev: 1

Id: 5/8



Calibrate the trimpots so that +5 volts is developed across an expression pedal connected to a TRS jack wired to the associated CV in port.

Different brands of expression pedals have different value pots, the trimmer allows for the bit-crusher to be calibrated for various common expression pedals.



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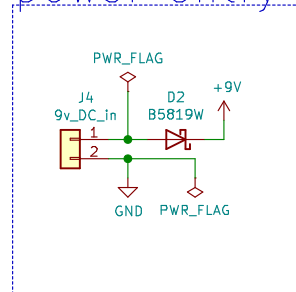
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File: control\_voltage\_generator.sch

**Title: Bit Crusher Pedal**

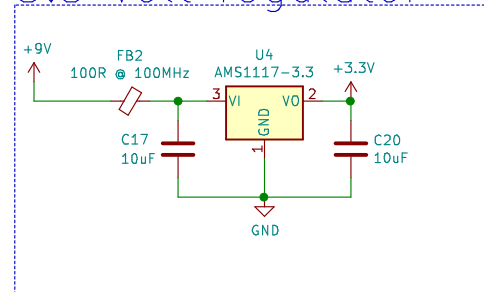
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**Rev: 1**  
Id: 8/8

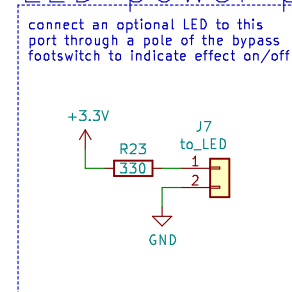
## power entry



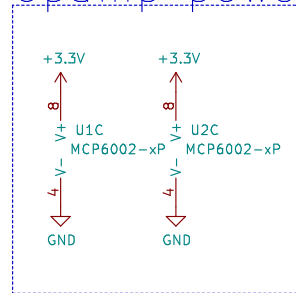
## 3.3 volt regulator



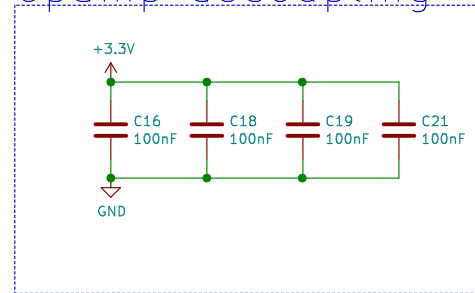
## LED power port



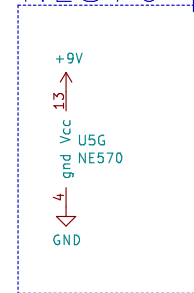
## opamp power



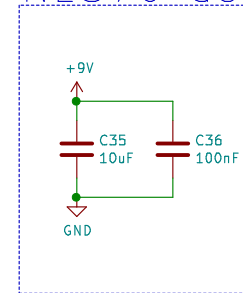
## opamp decoupling



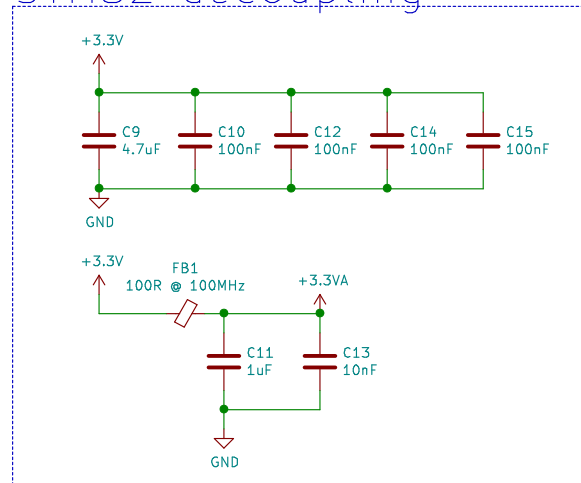
## NE570 power



## NE570 decoupling



## STM32 decoupling



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Sheet: /power\_supply/  
File: power\_supply.sch

**Title: Bit Crusher Pedal**

Size: A4 Date: 2020-08-16  
KiCad E.D.A. kicad 5.1.6-c6e7f7d87ubuntu18.04.1

Rev: 1  
Id: 3/8