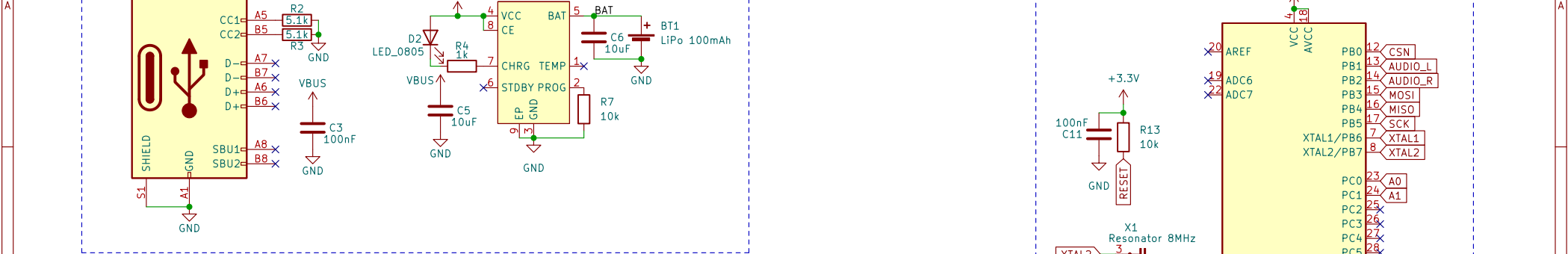
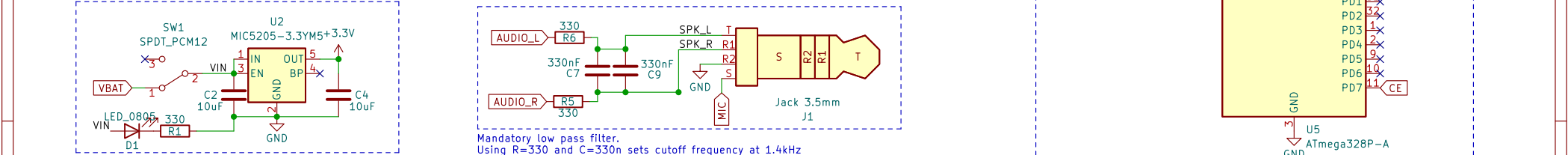


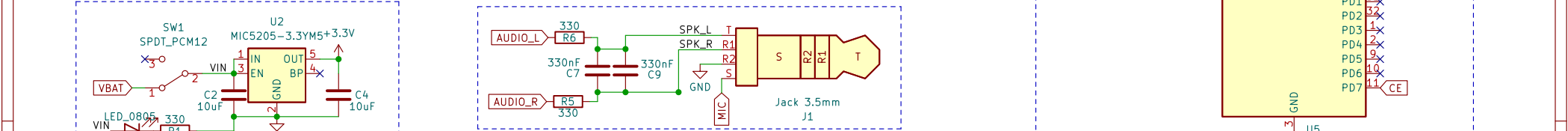
1	2	3	4	5	6
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Voltage regulator

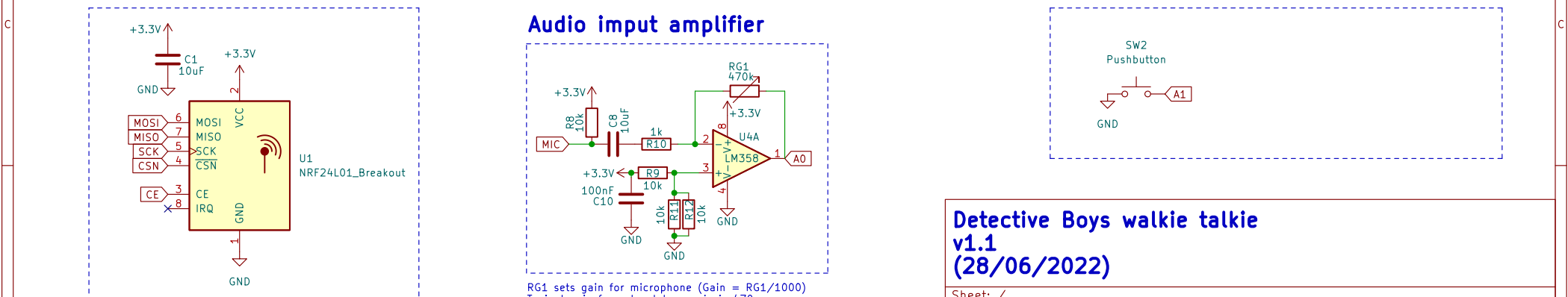


**Voltage regulator** **Audio output**

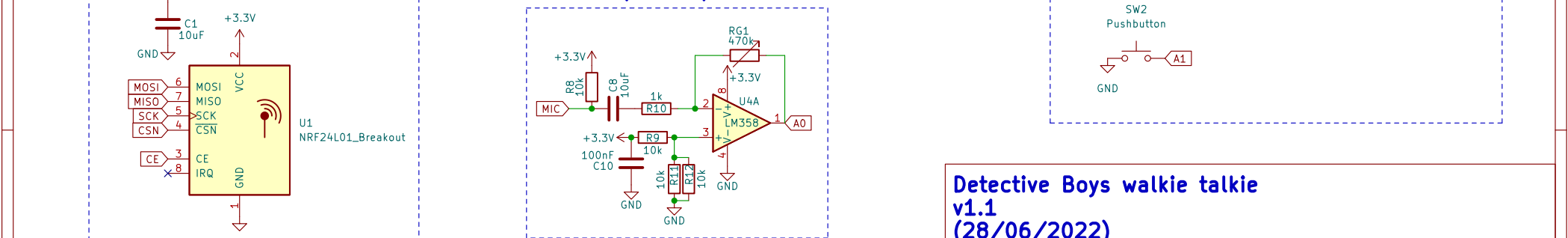


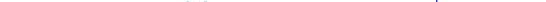
Mandatory low pass filter.  
Using  $R=330$  and  $C=330n$  sets cutoff frequency at 1.4kHz  
Filters pwm high frequency and allows human voice frequencies

<b>Radio communication</b>	<b>I/O</b>
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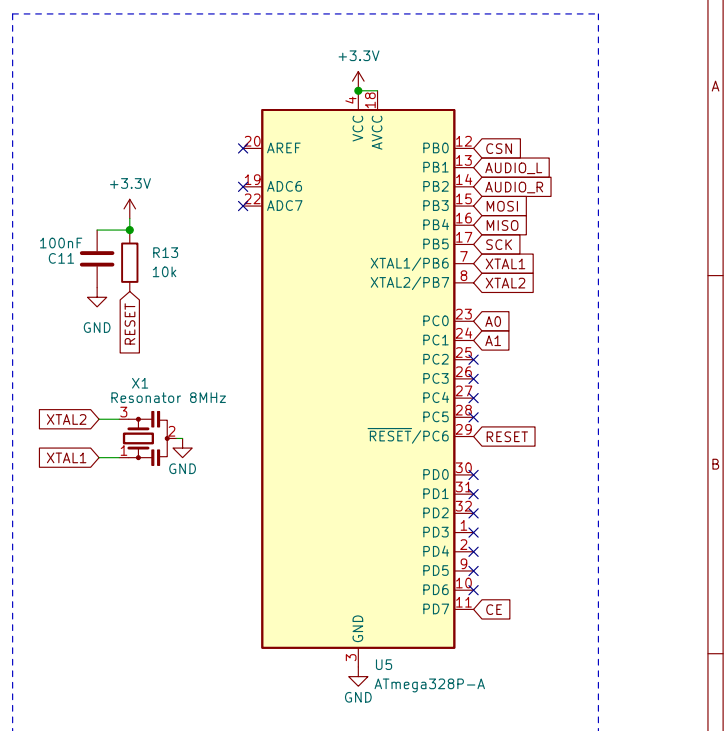


**Audio input amplifier**



	<p>RG1 sets gain for microphone (Gain = <math>RG1/1000</math>)          Typical gain for a headphone mic is 470          For capsule microphone values might be lower around 100</p>	<p>Sheet: /          File: DETECTIVE BOYS BADGE.kicad_sch</p>
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Microcontroller  
ATMEGA328P 3.3v 8MHz



## 1/0



Detective Boys walkie talkie  
v1.1  
(28/06/2022)

Sheet: /  
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<b>Title:</b>
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KiCad E.D.A. kicad (6.0.0)		Id: 1/1