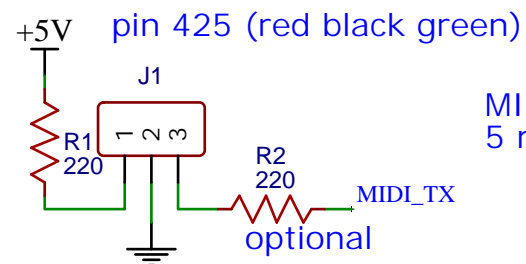
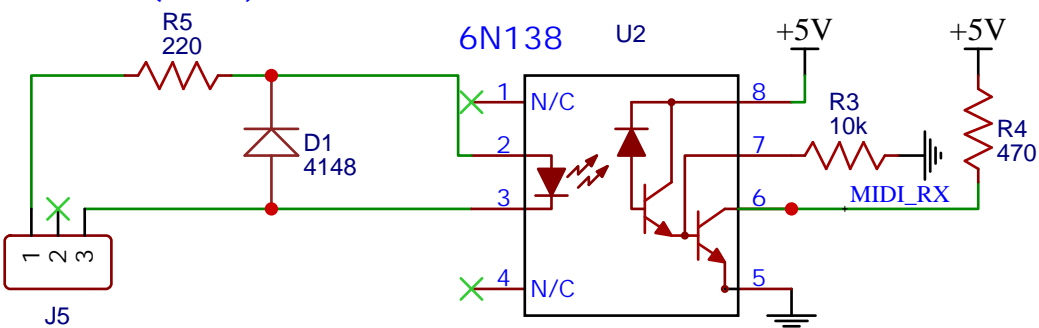


## MIDI out (DIN5)

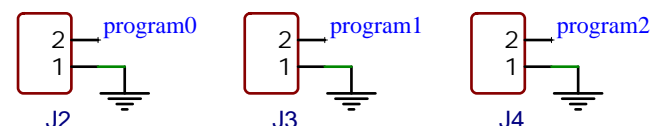


## MIDI in (DIN5)

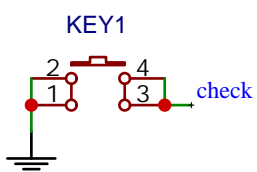


pin 425

## Program footswitches



## Check connectivity button



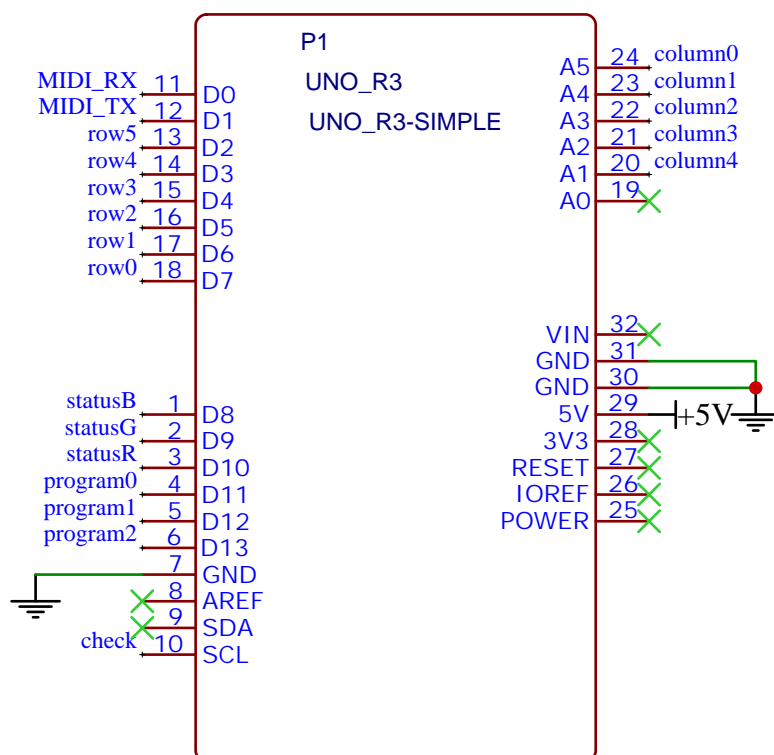
## RGB status LED



Licence

CC0 1.0 Universal <http://creativecommons.org/publicdomain/zero/1.0>

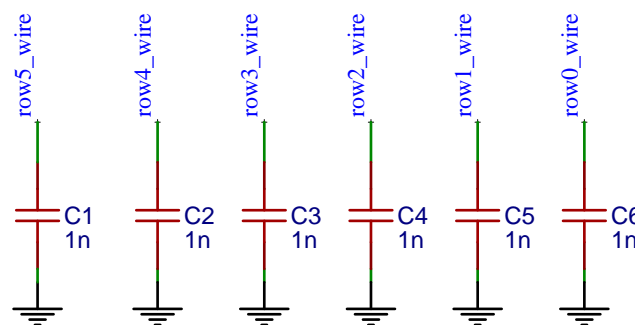
## Arduino core



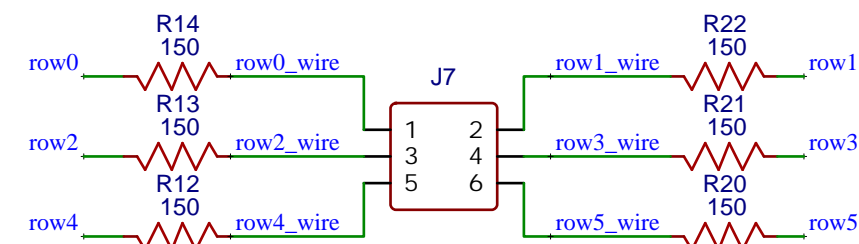
Absolute maximum ratings  
200 mA total I/O current  
40 mA per pin current  
0.1 W for 0603 resistor (20mA @ 5V)

Green SMD LED  
3.2 V threshold  
20 mA nominal current  
6 mA target to be safe  
(5 columns + status LED)

## EMC output filtering (optional)



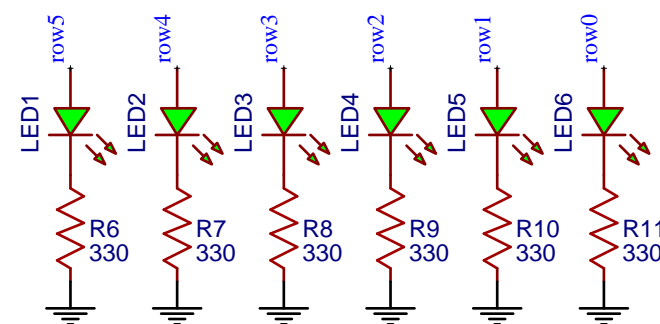
## Pedal key rows (outputs)



## Resistors at this side to protect outputs

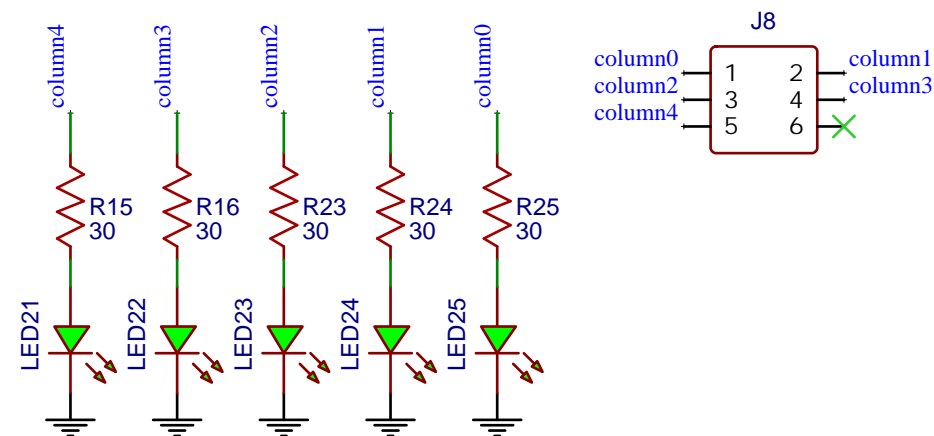
In case of short circuit, 5V over 150 ohm dissipates 166mW, but chip resistors typically fail open. Without God's blessing, I wouldn't live, anyway.

Worst case two keys are pressed at the same time, and VIH threshold (0.6Vcc =) 3V. In theory, the 3.2V green LED threshold should be enough.



1.8V/6mA = 300 ohm

## Pedal key columns (inputs)



TITLE:

PedalShield

REV: 1.0.0



Company: Sjoerd Op 't Land

Sheet: 1/1

Date: 2021-08-05 Drawn By: Sjoerd Op 't Land