

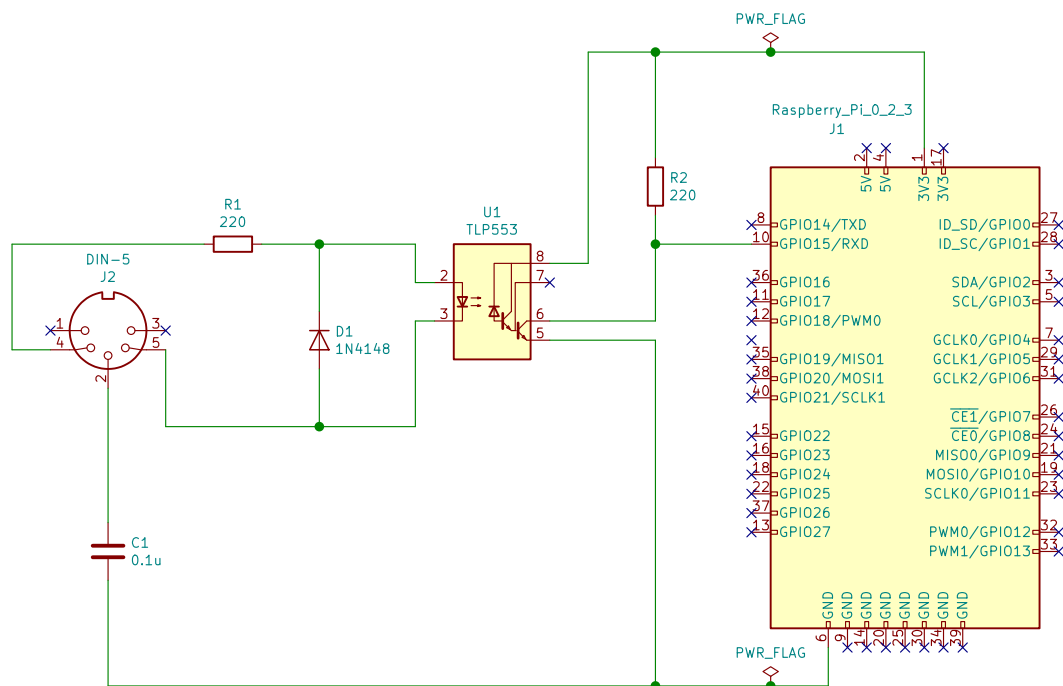
6N138, a high-speed photocoupler, is typically used as a part of MIDI IN.
Note that 6N138 is updated to 6N139, TLP553, and so on.

There are 6N137 which marks much more speed than 6N138.
However as a part of MIDI IN, 6N137 seems to need more power to transmit than the MIDI specification.

R2, the value of 220 ohms, needs lower resistance than the value driving with 5 volts (typically 470 ohms in 5 volts).

Some type of MIDI receiver made of a microcontroller seems to output MIDI THRU from its pin. It's a good idea to hold square wave without a Schmitt-trigger buffer.
Although, the delay time of MIDI THRU will depend on the inner process of the MIDI receiver.

1N4148 is an alternative to 1N914.



**Only for The Purpose of Research and Development:
Never Connect with Your Instrument.
This Circuit May Damage Your Instrument.**

This schematic is exempt from warranty, responsibility,
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