



## Engineering Note

<b>Title:</b>	RBX-PCB-EX02-C1 to C2 Extruder PCB mod sheet		
<b>Project:</b>	CEL Robox	<b>No.</b>	RBX-PCB-EX02-C1
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### Introduction

During testing of the rev C1 assembly the following changes have been found necessary for a more robust, noise filtering, solution:

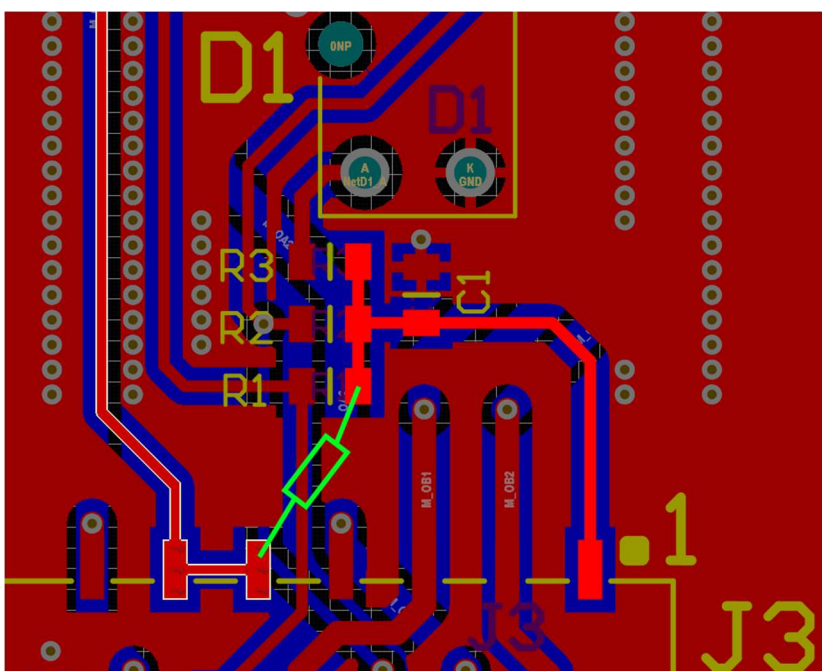
1. 10K resistor fitted between 3V3 and GND\_SWITCH
2. SN74LVC1G17DBVR schmitt buffer added between the optical sensor output and the connector

### Parts required

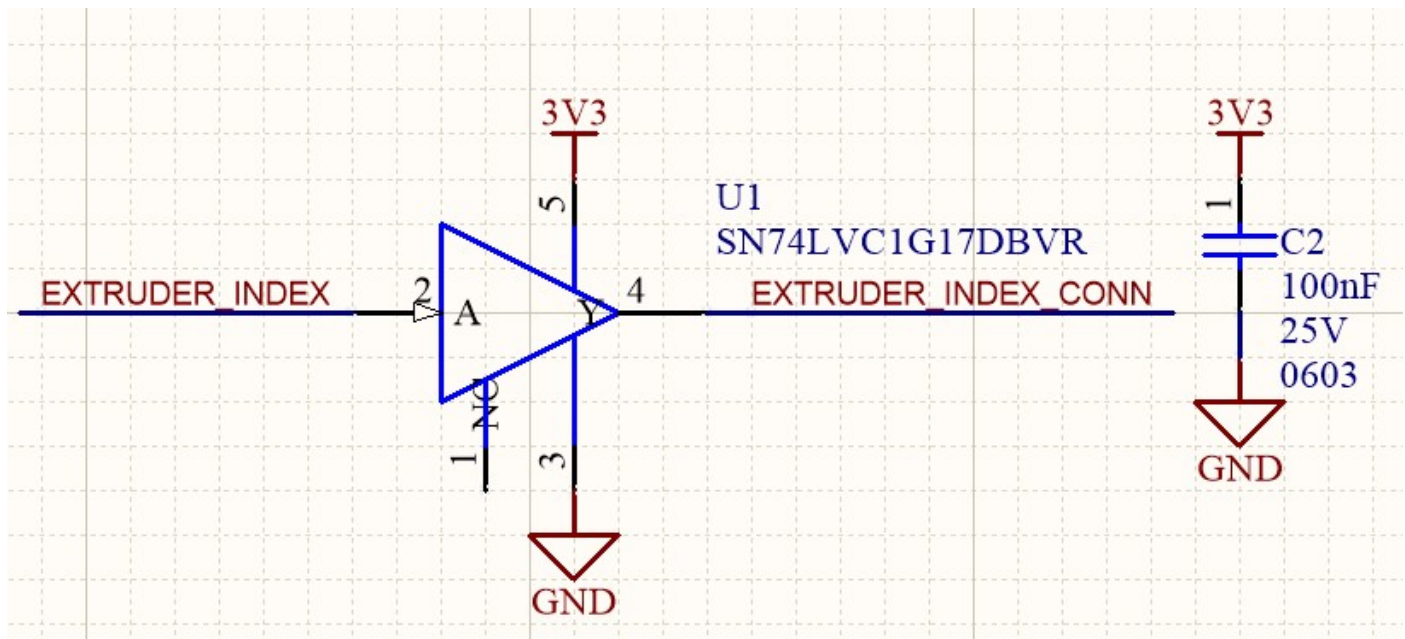
1. Procure:
  - a. ERJ3EKF1003V x 1 (or similar 10K resistor)
  - b. SN74LVC1G17DBVR x 1
  - c. 06033C104KAT2A x 1 (or similar 100nF capacitor)

### Implementing modifications

1. Add resistor: directly solder to R1 pin 1, and wire link the other end to J3 pin 9:



2. Add SN74LVC1G17DBVR and decoupling cap:



- Cut track on underside of board
- Fit SN74LVC1G17DBVR upside down next to R2 (note pin 1 is not connected), wire link as shown below. Ideally add decoupling cap across the device directly between pins 3 and 5, but C1 already in place will do the job adequately.

