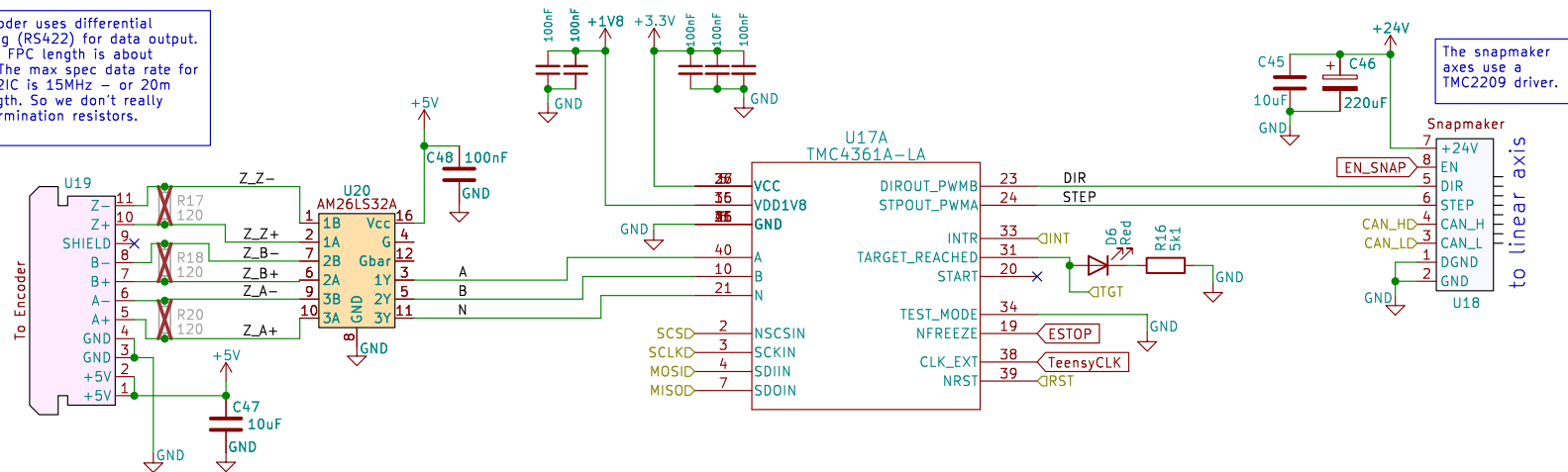


<b>Medjed Stage Controller Board</b> To be used with Teensy 4.1 board	
Sheet: / File: medjed-mainboard.kicad_sch	
<b>Title:</b> github.com/openMLA/Medjed	
Size: A4	Date: 07-05-2023
KiCad E.D.A. kicad 7.0.1	Rev: 0.1.2 Id: 1/4

# Encoder & Tape link

The Encoder uses differential signalling (RS422) for data output. The max FPC length is about ~75cm. The max spec data rate for the RLC21C is 15MHz – or 20m wavelength. So we don't really NEED termination resistors.



Sheet: /Axis X/  
File: enc\_axis.kicad\_sch

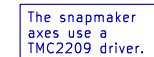
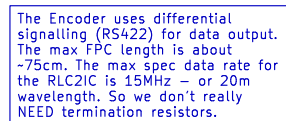
## Title:

Size: A4  
KiCad E.D.A. kicad 7.0.1

Date:

Rev:

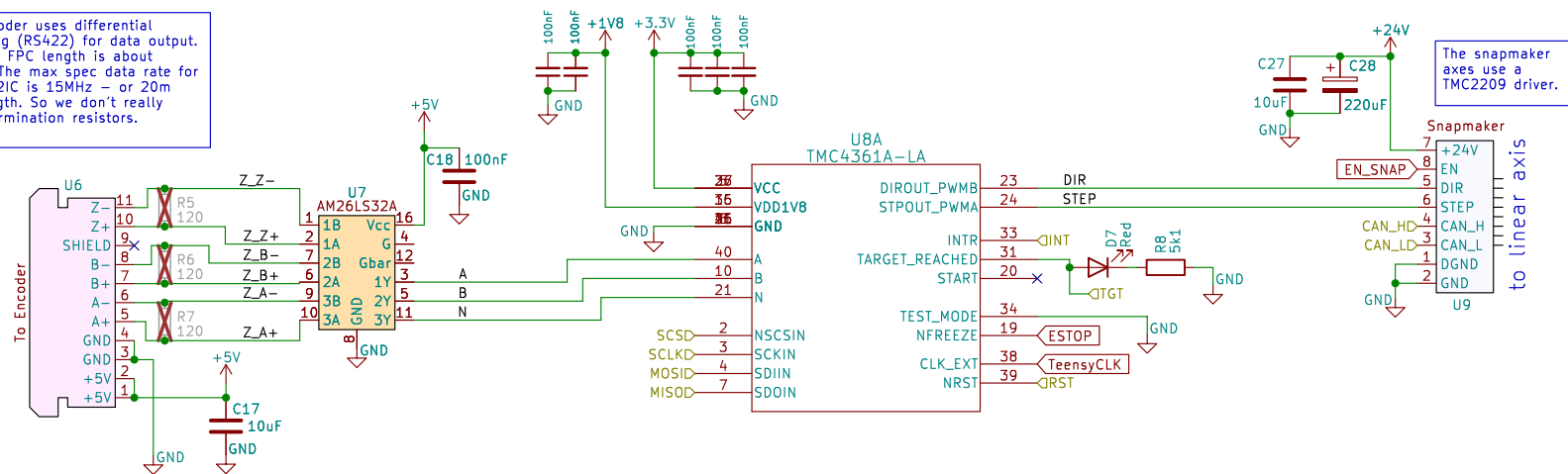
Id: 2/4



Rev:  
Id: 3/4

# Encoder & Tape link

The Encoder uses differential signalling (RS422) for data output. The max FPC length is about ~75cm. The max spec data rate for the RLC21C is 15MHz – or 20m wavelength. So we don't really NEED termination resistors.



The snapmaker axes use a TMC2209 driver.

Sheet: /Axis Z/  
File: enc\_axis.kicad\_sch

## Title:

Size: A4

Date:

KiCad E.D.A. kicad 7.0.1

Rev:

Id: 4/4