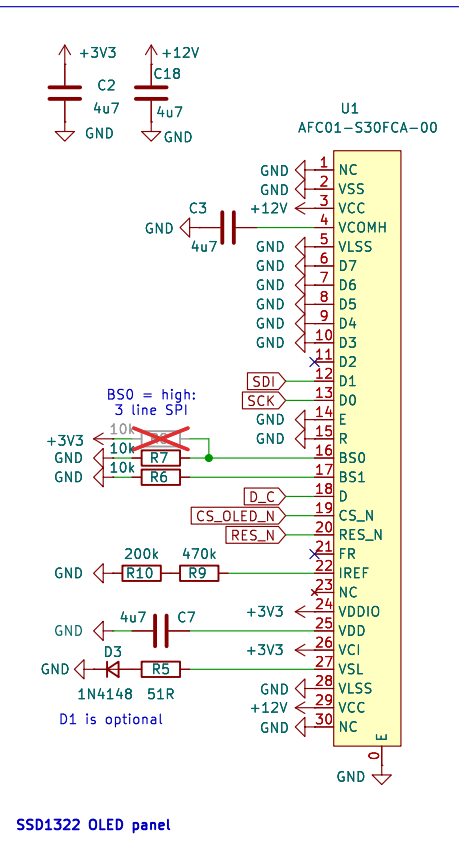


Use IDC ribbon-cable to get a 1:1 connection to a PMOD2A host

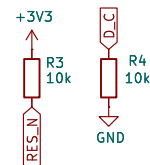
When plugging the display directly into a PMOD port, be aware the columns (even and odd pin numbers) will be swapped compared to the PMOD standard

For a matching cable, search for: FC-FD DC4 IDC 2.54mm pitch Male to Female connector

VCC: 3 V .. 12 V  
Signal levels: 3.3 V

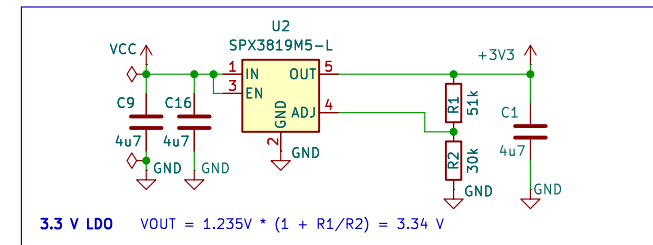


SSD1322 OLED panel

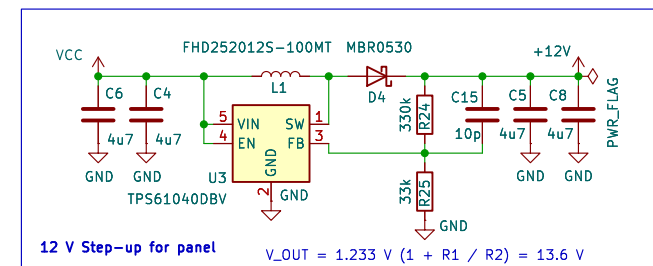


## Switches and LEDs

File: switches.kicad\_sch



3.3 V LDO  $V_{OUT} = 1.235V * (1 + R1/R2) = 3.34 V$



12 V Step-up for panel  $V_{OUT} = 1.233 V (1 + R1 / R2) = 13.6 V$



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Sheet: /  
File: ui\_board\_1u.kicad\_sch

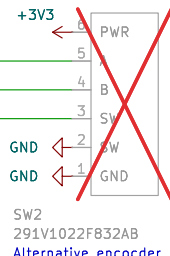
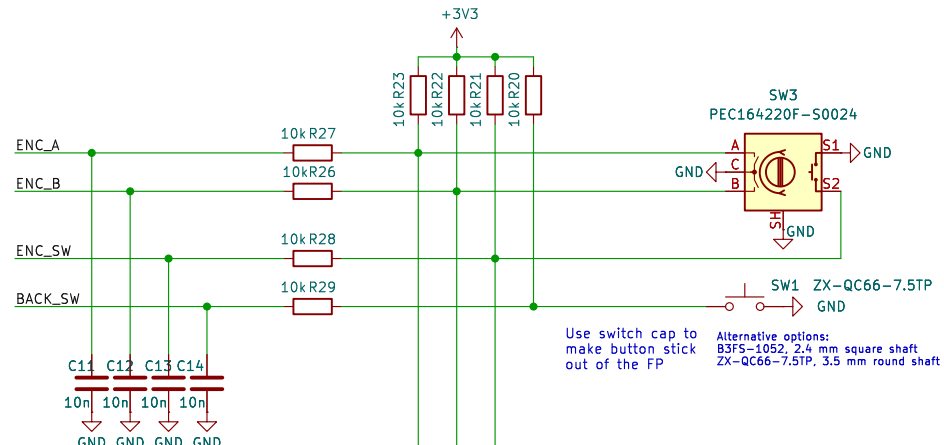
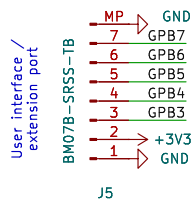
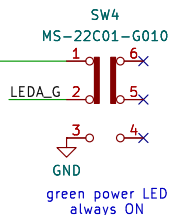
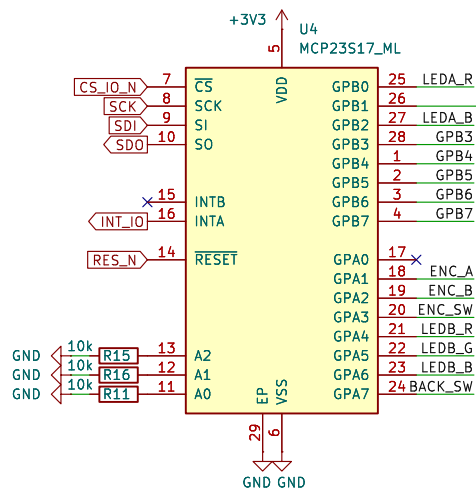
**Title: ui\_board\_1u – User interface board**

Size: A4 Date: 2025-12-17

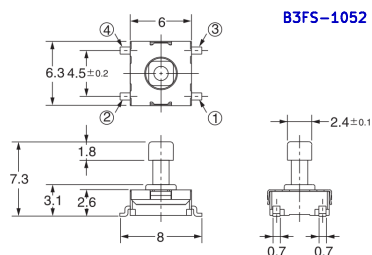
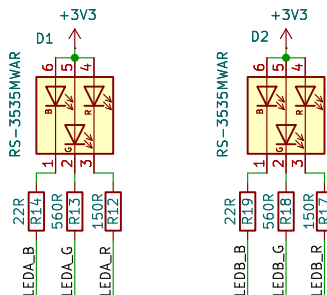
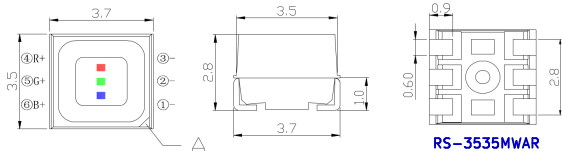
KiCad E.D.A. 9.0.0-rc3-dirty

H16 D2.7 H17 D2.7 H21 D2.7 H22 D2.7  
H1 D2.7 H12 D2.7 H32 D2.7 H40 D2.7

Rev: –  
Id: 1/2



RS-3535MMWR	R	G	B
Lum @ 20 mA [mcd]	950	2200	500
Lum target [mcd]	400	400	400
I target [mA]	8.0	1.8	13.0
V FWD [V]	2.0	2.3	3.0
R [Ohm]	162.5	555.6	25.4
R chosen [Ohm]	150	560	22



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Sheet: /Switches and LEDs/  
File: switches.kicad\_sch

**Title: ui\_board\_1u – User interface board**

Size: A4	Date: 2025-12-17
KiCad E.D.A. 9.0.0-rc3-dirty	Rev: – Id: 2/2