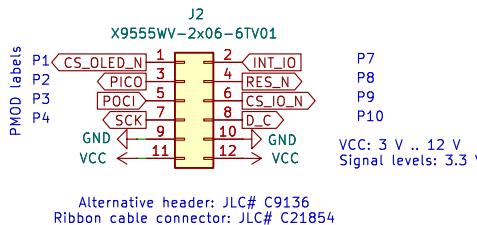
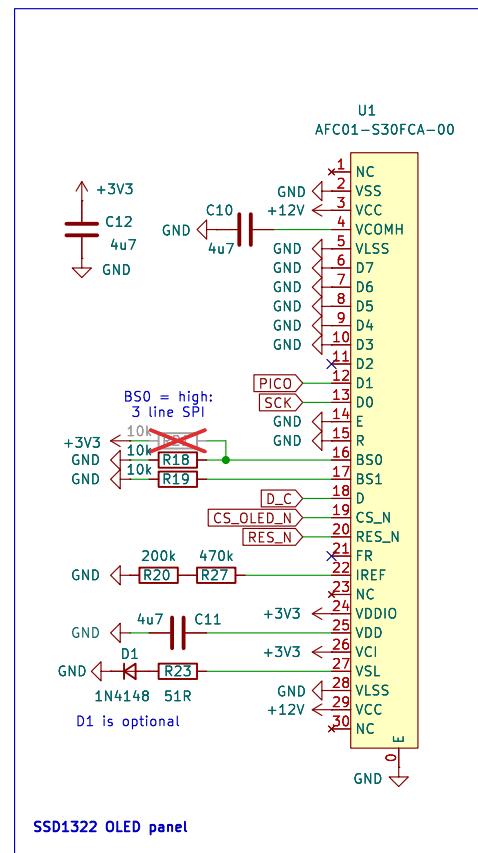


A

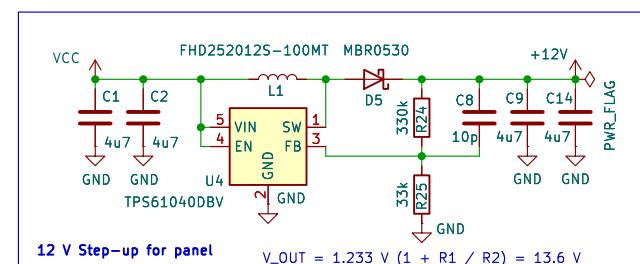
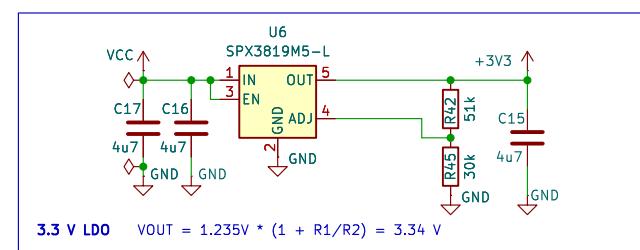
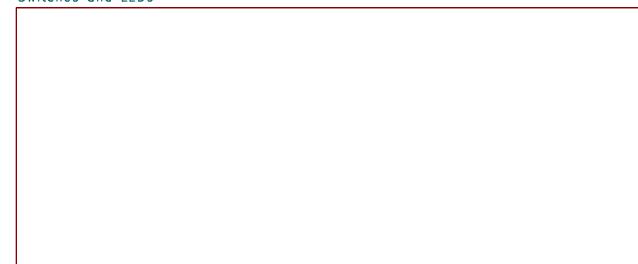


PICO = peripheral in controller out.
POCI = peripheral out controller in.

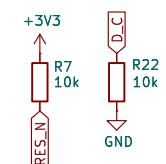
Caveat:
* when using a direct connection to a PMOD host like CMODA7 for testing, the 2 connector columns are swapped
* Use IDC ribbon cable to get a 1:1 connection to a PMOD host without swapped rows.



Switches and LEDs



C



D

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Sheet: /
File: ui_board_1u.kicad_sch

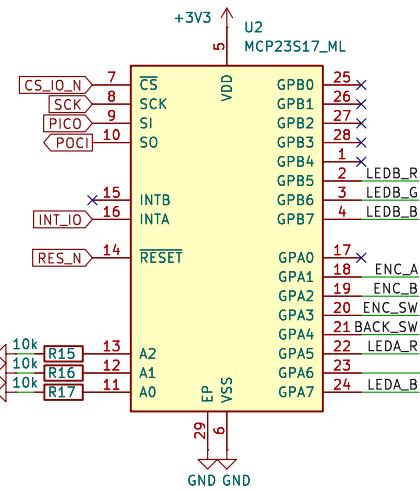
Title: ui_board_1u – User interface board

Size: A4 Date: 2025-12-07
KiCad E.D.A. 9.0.0-rc3-dirty

H1 D2.7	H2 D2.7	H3 D2.7	H4 D2.7
H5 D2.7	H6 D2.7	H7 D2.7	H8 D2.7

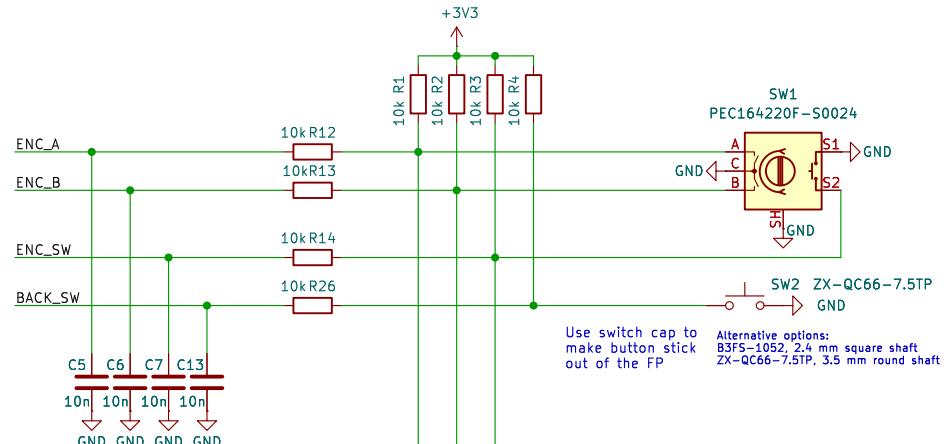
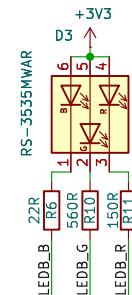
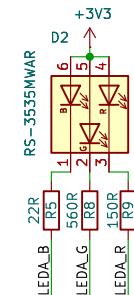
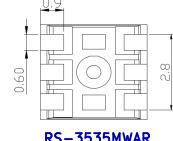
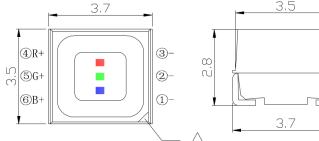
Rev: –
Id: 1/2

+3V3
C4
4u7

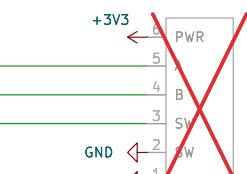


SW4
MS-22C01-G010
LEDA_G 2 0 5
LEDA_R 1 6
3 0 4
GND
green power LED
always ON

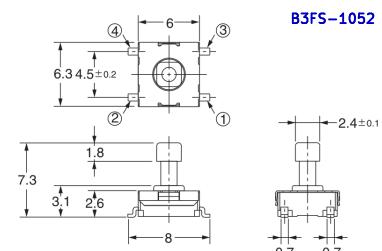
RS-3535MWAR	R	G	B
Lum @ 20 mA [mcd]	950	2200	500
Lum target [mcd]	400	400	400
I target [mA]	8.0	1.8	1.30
V FWD [V]	2.0	2.3	3.0
R [Ohm]	162.5	555.6	25.4
R chosen [Ohm]	150	560	22



Use switch cap to make button stick out of the FP
Alternative options:
B3FS-1052, 2.4 mm square shaft
ZX-QC66-7.5TP, 3.5 mm round shaft



SW3
291V1022F832AB
Alternative encoder



Betz Engineering

Sheet: /Switches and LEDs/
File: switches.kicad_sch

Title: ui_board_1u – User interface board

Size: A4 Date: 2025-12-07

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

Rev: –
Id: 2/2