MKS-DLS32
IO Expander Boards
Plus onboard RS485
Build-Brighton-CNC
v0.7 (01/02/2023)

Output Pin Map:
RL1 GPIO_25
RL2 GPIO_26
RL3 GPIO_5
RL4 I2SO_7
TXD GPIO_4
RXD GPIO_33
DE GPIO.27

5V/12V Selector

NB: tab on the MKS board EXP connectors
is flipped 180 compared to tab on this board,
but pin numbers are the same

1: I2SO.7 (O)   2: n/c
3: GPIO.5 (O)   4: GPIO.27 (O)
5: GPIO.26 (O)   6: n/c - patch to I2C_SCL (GPIO.4) on MKS board
7: GPIO.25 (O)   8: GPIO.33 (I/O)
9: GND   10: +5V

12V In

Output to Relay Board

10µF C6

100nF

R13 1K   A   R12 120   B   R14 1K

SP485CS

Switch Inputs

GPIO_19
GPIO_32

EXP2

GPIO_18
GPIO_0
GPIO_23

R11 10K

GPIO_23   R4 1K
GPIO_18   R5 1K
GPIO_19   R6 1K

R9 1K   GPIO_0
R10 1K   GPIO_32

On MKS board, patch:
J2.4 (I2C_SDA) to EXP2.4 (GPIO.0)
U1.8 (LC) to EXP2.5 (GPIO.32)
for SW inputs 4 & 5 if needed

Input Pin Map:
SW1 GPIO_23
SW2 GPIO_18
SW3 GPIO_19
SW4 GPIO_0 (BOOT MODE)
SW5 GPIO_32

R1 10K   R2 10K   R3 10K   R7 10K   R8 10K

C1 100nF   C2 100nF   C3 100nF   C4 100nF   C5 100nF