

Raspberry Pi Pico
U1
SC0915

H1
MountingHole

H2
MountingHole

SA01 1 UART0_TX/I2C0_SDA/SPIO_RX/GP0
SA02 2 UART0_RX/I2C0_SCL/GPIO_CSn/GP1
GND 3
4 I2C1_SDA/SPIO_SCK/GP2
5 I2C1_SCL/SPIO_TX/GP3
SDA 6 UART1_TX/I2C0_SDA/SPIO_RX/GP4
SCL 7 UART1_RX/I2C0_SCL/SPIO_CSn/GP5
GND 8
9 I2C1_SDA/SPIO_SCK/GP6
10 I2C1_SCL/SPIO_TX/GP7
11 UART1_TX/I2C0_SDA/SPIO_RX/GP8
12 UART1_RX/I2C0_SCL/SPIO_CSn/GP9
GND 13
14 I2C1_SDA/SPIO_SCK/GP10
15 I2C1_SCL/SPIO_TX/GP11
16 UART0_TX/I2C0_SDA/GPI1_RX/GP12
17 UART0_RX/I2C0_SCL/SPIO_CSn/GP13
GND 18
19 I2C1_SDA/SPIO_SCK/GP14
20 I2C1_SCL/SPIO_TX/GP15

VBUS 40
VSY5 39
GND 38
3V3_EN 37
3V3OUT 36
ADC_VREF 35
ADC2/GP28 34
AGND/GND 33
I2C1_SCL/ADC1/GP27 32
I2C1_SDA/ADC0/GP26 31
RUN 30
GP22 29
LED_DATA_1 28
GND 27
I2C0_SCL/GP21 26
I2C0_SDA/GP20 25
I2C1_SCL/SPIO_TX/GP19 24
I2C1_SDA/SPIO_SCK/GP18 23
GND 22
UART0_RX/I2C0_SCL/SPIO_CSn/GP17 21
UART0_TX/I2C0_SDA/SPIO_RX/GP16 20

D1 SWCLK
D2 GND
D3 SWDIO
GND

D1
D_Schottky
+BATT

Gamepad Controls

SW1 Left
SW2 Up
SW3 Right
SW4 Down
SW5 B
SW6 A
GND

Left LEDs

Right LEDs

D7 LED R1 R470
D8 LED R2 R470
D9 LED R3 R470
D10 LED R4 R470
D11 LED R5 R470
D12 LED R6 R470
D13 LED R7 R470
D14 LED R8 R470
D15 LED R9 R470
D16 LED R10 R470

WS2812b LEDs and decoupling caps

+3V3 C1 C 0.1uF
GND
LED_DATA_1 R11 R470
DIN VDD VSS GND
DOUT WS2812B
D2 WS2812B
+3V3 C2 C 0.1uF
GND
DIN VDD VSS GND
DOUT WS2812B
D3 WS2812B
+3V3 C3 C 0.1uF
GND
DIN VDD VSS GND
DOUT WS2812B
D4 WS2812B
+3V3 C4 C 0.1uF
GND
DIN VDD VSS GND
DOUT WS2812B
D5 WS2812B
+3V3 C5 C 0.1uF
GND
DIN VDD VSS GND
DOUT WS2812B
D6 WS2812B

Add-on output (V1.69BIS)

J1 SA0
+3V3 1
GND 2
SDA 3
SA02 6
SA01 5
SCL 4

Battery Pack (1.8-5.5V)

+BATT
BT1 Battery
GND

GalaxyAllie

Sheet: /
File: molly-the-mermaid.kicad_sch

Title: Molly the Mermaid

Size: A4	Date:
KiCad E.D.A. kicad (6.0.0)	Rev: 1.4
	Id: 1/1