

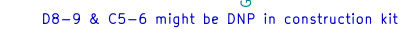
Button 1 (internal)

long button, length: 8.35mm (from pin)

SW1
SKHHLQA010

GND — [Switch] — BUTTON1

SW1

[illegible]

IR (infrared) RX

The diagram shows an IR receiver module (U4: TSOP4838) connected to a microcontroller. The module includes a photodiode, a DEMOD pin, and an OUT pin. It is powered by VCC and GND. The OUT pin is connected to the IR_TSOP input of the microcontroller.



IR (infrared) TX

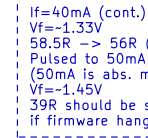
Diagram illustrating the circuit for IR (infrared) TX, showing two identical transmitter stages.

Components and Values:

- Resistors: R9, R10 (SMD, 24R); R1, R2 (THT, 24R)
- LEDs: D1, D2, D3, D4 (LTE-302 alternatives: QEE113, TSS2600, GL4800E0000F)
- Transistors: Q1, Q2 (ZVN4210)
- Capacitors: C1, C2 (BS5138, B5H108, B5S806)

Connections:

- VIN is connected to the input of both stages.
- The output of the first stage is labeled IR_LED.
- The output of the second stage is labeled IR_LED_1.
- Both stages share a common ground (GND).



Sensors

01x05 male 90°

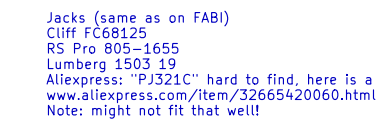
- 5 SDA
- 4 GND
- 3 VCC
- 2 SCL
- 1 SENSOR_DRDY_IRQ

J5



Button 3 (external)

Jacks (same as on FABI)
Cliff FC68125
RS Pro 805-1655
Lumberg 1503 19
Aliexpress: "PJ321C" hard to find, here is a link:
www.aliexpress.com/item/32665420060.html
Note: might not fit that well!



BUZZER

R7 220R THT

R8 220R SMD

BZ1 KCG0603

GND

EITHER

Mechanical

- LOG01
Logo_FM
- LOG02
Logo_KICAD
- LOG03
Logo_CE
- LOG04
Logo_WEEE
- H1
MountingHole
- H2
MountingHole

- FID1
Fiducial
- FID2
Fiducial

Pressure sensor

Alternative: DNP MPVX sensor
and use the pin header for an external sensor (e.g. hall sensor for FLipPad)

U1

VCC

MPVX7007GP

Vcc

GND

Vout

ADC_MPX

GND

EITHER

place the sensor board with the pressure sensor here
TODO: design sensor board with Honeywell MPR series

Conn_01x04_Male

J7

1

2

3

4

GND

SCL

SDA

VCC



17

Neopixel

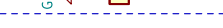
VIN → J6-1
NEOPIXEL → J6-2
GND → J6-3

VIN → J7-1
NEOPIXEL → J7-2
GND → J7-3

Note: place only if necessary (e.g. NP ring in case)

VIN 1
NEOPIXEL 2
GND 3

J6 Conn_01x03



- * FlipMouse
 - * Sillicon tube, 2x4mm, ~5cm length
 - * Luerlock with M5 screw
 - * Sensor board PCB (see second KICAD project & BOM)
 - * TBA: screws according to case
 - * Mouthpieces
- * FlipPad
 - * Glide adapter PCB (see addons folder for KICAD project & BOM)

Both:

- * Neopixel Strip (one LED needed)
- * 3D printed case (depending on type)
- * HotShoe Adapter
- * USB cable with magnetic plug
- * Packaging

These parts should be placed in the .xls BOM file.

FLipPad
* Glide adapter PCB (see addons folder for KiCAD project & BOM)

These parts should be placed in the .xls BOM file.

- * !! new I2C address of EEPROM: 0b1010001 (prev: 0b1010000)
- * 3 LEDs are replaced by a Neopixel connector (pin D5)

- * Button 2 is connected to A1 too with JP1
- * 3V3 can be provided to plug.
- * D3 can be used to detect if there are 3V3 on button 2
- * Instead of MPX pressure sensor, a breakout for Honeywell MPR series (I2C) can be connected to J7

- * Program button is NC
- * 4 IR LEDs
- * AUX header is moved 4mm to the sensors