

Controller

User Port

Can be used for addons

| Pin | Signal | Pin | Signal |
|-----|--------|-----|--------|
| PC2 | 3 | PC3 | 4 |
| SDA | 5 | PC4 | 6 |
| SCL | 7 | PC5 | 8 |
| PD7 | 9 | PC6 | 10 |
| PD6 | 11 | PC7 | 12 |
| PD5 | 13 | | 14 |

Input Buttons

Sheet: Sheet5E9463DA
File: input_buttons.sch

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graph LR
    SDA --> InputButtons[ ]
    SCL --> InputButtons
  
```

Diagram illustrating the pin connections for the ATtiny85 microcontroller (U2) in a breadboard setup. The connections are as follows:

- Pin 1:** Connected to GND.
- Pin 2:** Connected to MOSI.
- Pin 3:** Connected to MISO.
- Pin 4:** Connected to SCK.
- Pin 5:** Connected to SS.
- Pin 6:** Connected to PB0_(MOSI/DI/SDA/AIN0/OC0A/OC1A/AREF/PCINT0).
- Pin 7:** Connected to VIN.
- Pin 8:** Connected to GND.

The ATtiny85 chip is labeled U2. The diagram also shows the internal connections for the ATtiny85, including the GND and VCC pins.

ISP Interface

The diagram illustrates the ISP (In-System Programming) interface for the SL_02x03_ISP chip. The chip is shown with its pins connected to a +5V supply and GND. The connections are as follows:

- MISO** (Master In Slave Out) is connected to pin 1.
- SCK** (Serial Clock) is connected to pin 3.
- RESET** is connected to pin 5.
- VCC** (Power) is connected to pin 2.
- MOSI** (Master Out Slave In) is connected to pin 4.
- GND** (Ground) is connected to pin 6.

UART Interface

The diagram illustrates the UART interface connections between an X2 module and an SL_01x04 UART chip. The X2 module is represented by a box with four pins on its right side, labeled 1, 2, 3, and 4. The SL_01x04 UART chip is represented by a box with four pins on its left side, labeled Vout, GND, RX, and TX. The connections are as follows:

- Pin 1 of the X2 module is connected to the Vout pin of the SL_01x04 UART chip.
- Pin 2 of the X2 module is connected to the GND pin of the SL_01x04 UART chip.
- Pin 3 of the X2 module is connected to the RX pin of the SL_01x04 UART chip.
- Pin 4 of the X2 module is connected to the TX pin of the SL_01x04 UART chip.

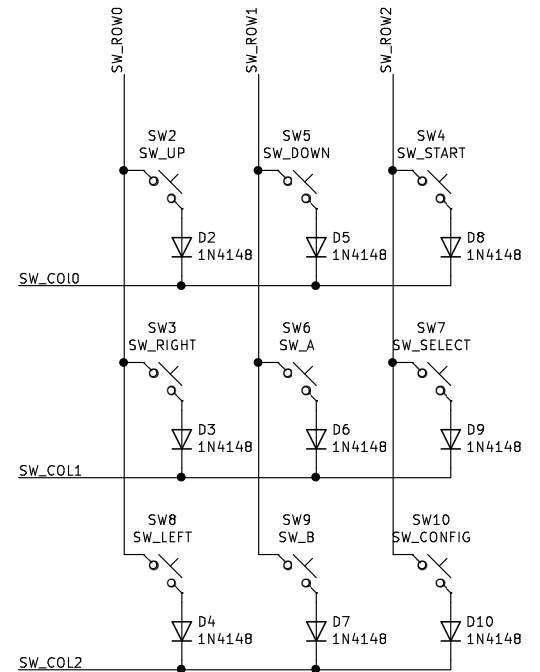
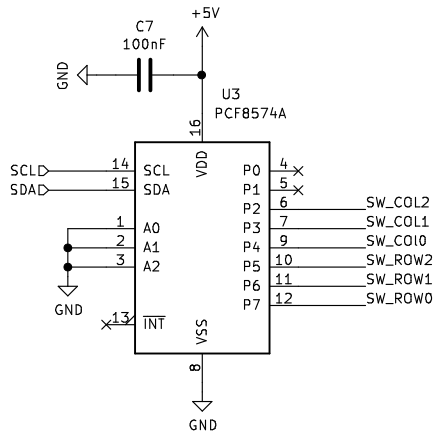
A +5V power supply is connected to the GND pin of the SL_01x04 UART chip. The TX pin of the SL_01x04 UART chip is also connected to a GND symbol.

Power Supply

The diagram illustrates the power supply circuit for the USB module. It starts with a USB_B connector (J1) where the VBUS pin (pin 1) is connected to a 500mA fuse (F1). The output of the fuse goes through a switch (SW1) labeled SW_Push_SPDT. The switch has three terminals: a common terminal connected to a +5V supply, a normally open terminal connected to a 220R resistor (R4), and a normally closed terminal connected to a red LED (D1) with a 20mA current rating. The other end of the resistor and the LED are connected to GND. The USB connector also shows pins 2 (D-), 3 (D+), 4 (GND), and 5 (Shield) connected to their respective ground or shield lines.

Rev: v1.0
Id: 1/2

| I2C Slave Address Range | | | | | |
|-------------------------|----|----|---------|----------|--|
| A2 | A1 | A0 | PCF8574 | PCF8574A | |
| 0 | 0 | 0 | 0x20 | 0x38 | |
| 0 | 0 | 1 | 0x21 | 0x39 | |
| 0 | 1 | 0 | 0x22 | 0x3A | |
| 0 | 1 | 1 | 0x23 | 0x3B | |
| 1 | 0 | 0 | 0x24 | 0x3C | |
| 1 | 0 | 1 | 0x25 | 0x3D | |
| 1 | 1 | 0 | 0x26 | 0x3E | |
| 1 | 1 | 1 | 0x27 | 0x3F | |



Handheld Console based on an Atmega32

Sheet: /Sheet5E9463DA/
File: input_buttons.sch

Title: avr boy

Size: A4 Date:
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Rev:
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