

uC

IO12<LED1

IO14<LED2

IO16<PB1

IO17<PB2

IO18<PB3

IO19<PB4

IO21<LCD_SDA

IO22<LCD_SCL

IO26<LED3

IO27<LED4

IO34<POT

File: uC.kicad_sch

Potentiometer

+3.3V

SW5

1

2

3

GND

POT

JP5

RV1

10K

LCD

LCD_SDA

LCD_SCL

I2C_SDA

I2C_SCL

File: LCD.kicad_sch

Peripherals

Push Buttons

+3.3V

SW3

JP3

PB1

10K

R9

GND

+3.3V

SW7

JP7

PB2

10K

R12

GND

+3.3V

SW4

JP4

PB3

10K

R10

GND

+3.3V

SW6

JP6

PB4

10K

R11

GND

LED

LED1

R13

100

JP8

D6

RED

GND

LED2

R14

82

JP9

D7

GREEN

GND

LED3

R15

22

JP10

D8

BLUE

GND

LED4

R16

15

JP11

D9

WHITE

GND

Notes

1. Typical LED Forward Voltages (Vf):
Red : 1.8V
Green : 2.2V
Blue : 3.0V
White : 3.3V

Forward current (If) = 15 mA.
R = (3.3V - Vf) / If

2. If POT is not being used, keep the Switch open so that it doesn't pass current.

References

Microcontroller Design

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LCD Display

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1

2

1

2



