Microcontroller

U1
ATTINY814-SSN

UPDI	10	PA0/RESET#/UPDI
TXD	11	PA1
RXD	12	PA2
	13	PA3/EXTCLK
	2	PA4
	3	PA5
	4	PA6
	5	PA7

VCC
VDD 1

PB0 9
PB1 8
TOSC2/PB2 7
TOSC1/PB3 6
GND 14

X1
32.768KHz

C4
18p

C3
18p

C1
100n

C2
10u

VCC   VCC

GND   GND   GND   GND

Buffer Battery

B+

B1
CR1220
CR1225

GND

USB to Serial Converter and PyUPDI Programming Interface

RXD

UPDI

+5V

R1
1k

+5V

U2
CH340N

5	VCC	RTS#	4
6	TXD	GND	3
7	RXD	UD-	2
8	V3	UD+	1

USB1
USB-Plug

+5V
D-
D+
GND

SW1
K3-2380S-E1

B 3   A 1
B 4   A 6

TXD

C5
100n

C6
100n

GND GND   GND GND

Power Path Control

VCC

Q1
DMP1045U-7

B+

D1
5817

+5V

R2
10k

GND

C3/C4 must match the load capacitance of the crystal!

The CH340N can be replaced by a CH330N.

Use the switch to select UART or SerialUPDI mode.

TITLE:
USB RTC

REV: 1.1

Company: wagiminator

Sheet: 1/1

EasyEDA   Date: 2021-06-29   Drawn By: Stefan Wagner