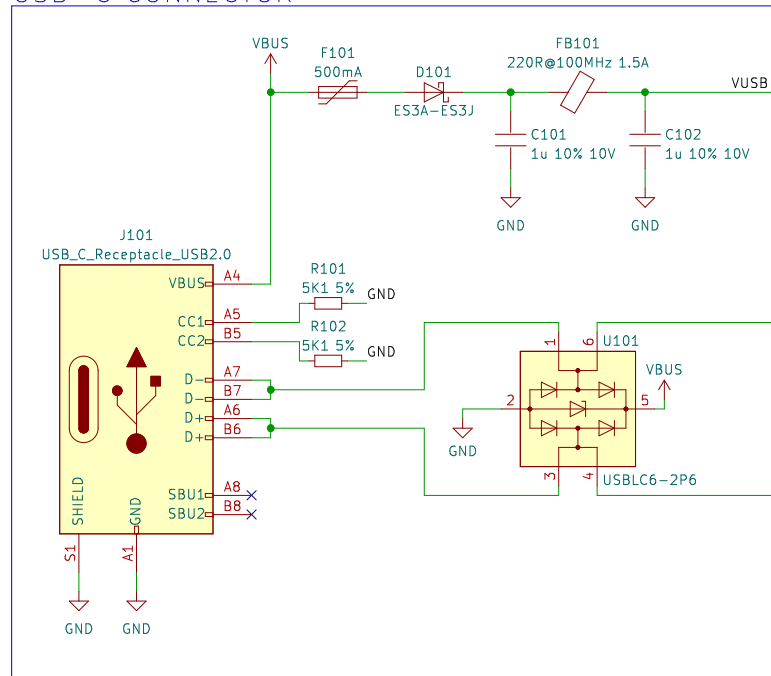
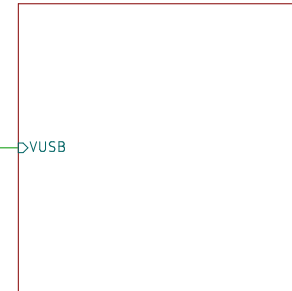


USB-C CONNECTOR

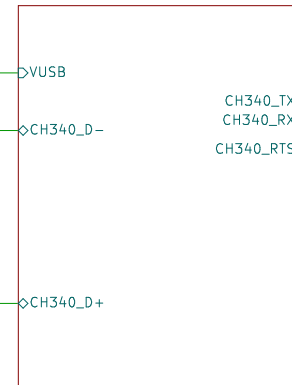


ATEGO_NANO_POWER



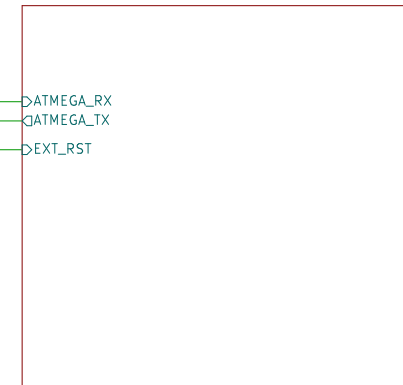
File: ATEGO_NANO_POWER.kicad_sch

INTERFACE_USB_CH340E



File: INTERFACE_USB_CH340E.kicad_sch

MCU_ATMEGA328P-AU



File: MCU_ATMEGA328P-AU.kicad_sch

sudojunkie

Sheet:

File: Atego_Nano.kicad_sch

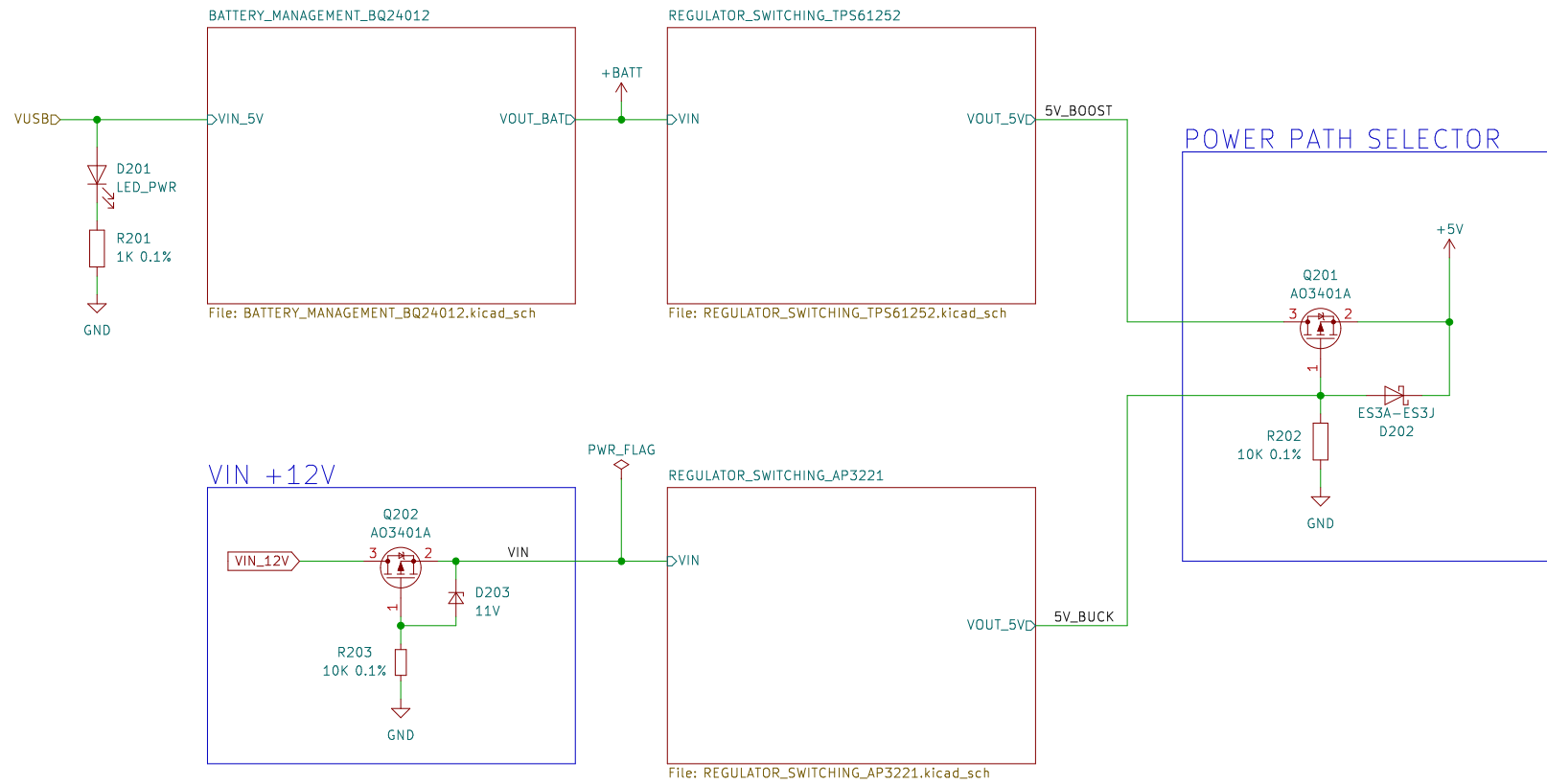
Title: Atego Nano

Size: A4 Date: 2023-06-28

KiCad E.D.A. eeschema (7.0.0)

Rev: 1.1

Id: 1/7



sudo-junkie

Sheet:

File: ATEGO_NANO_POWER.kicad_sch

Title: Atego Nano

Size: A4

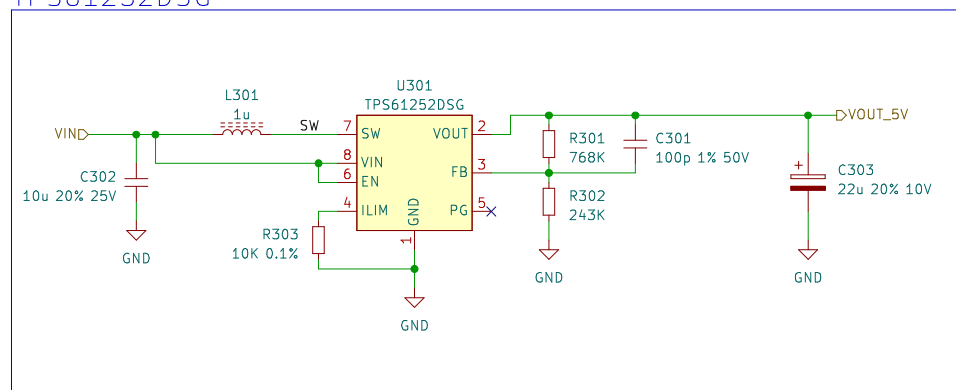
Date: 2023-06-28

Rev: 1.1

KiCad E.D.A. eeschema (7.0.0)

Id: 2/7

TPS61252DSG



sudo-junkie

Sheet:

File: REGULATOR_SWITCHING_TPS61252.kicad_sch

Title: Atego Nano

Size: A4

Date: 2023-06-28

Rev: 1.1

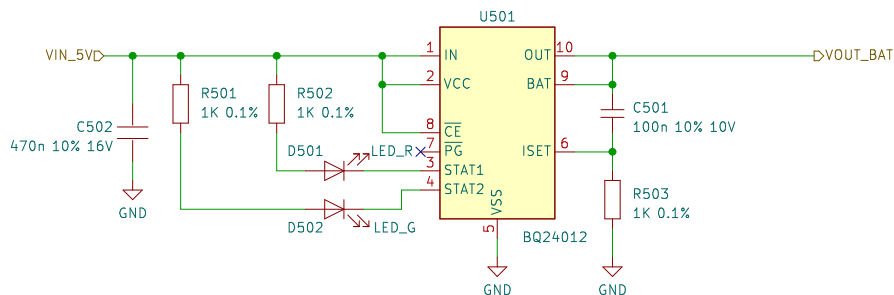
KiCad E.D.A. eeschema (7.0.0)

Id: 3/7

The schematic diagram illustrates a DC-DC buck converter circuit. The input voltage is labeled V_{IND} . A capacitor $C402$ (10uF, 20%, 25V) is connected between the input and ground. The input of the AP3211K IC (U401) is connected to the input line. The IC has pins for IN (5), EN (4), SW (6), BS (1), and FB (3). The SW pin is connected to the SW node, which is also connected to the BS pin. A diode $D401$ (ES3A-ES3J) is connected between the SW node and ground. A capacitor $C401$ (10nF, 10%, 10V) is connected between the SW node and the FB pin. The output of the converter is taken from the SW node, which is also connected to the FB pin. The output is filtered by an inductor $L401$ (4uH, 7%) and a capacitor $C403$ (22uF, 20%, 10V). The output voltage is labeled $DVOUT_5V$. The feedback network consists of two resistors, $R401$ (180K, 0.1%) and $R402$ (33K), connected between the output and the FB pin.

Id: 4/7

BQ24012



$$I_{OUT} = \frac{(V_{SET} - V_{ISET})}{R_{ISET}}$$

PARAMETERS		PARAMETER NAME	MIN	MAX	UNIT
Vcc	Output current range	Voltage of VCC pin, V _{VCC} = 1.5V	0.40	1.50	V
		V _{CC} = 4.5V, V _{OUT} = 0.0V	0.40	1.50	V
		V _{CC} = 4.5V, V _{OUT} = 4.2V	0.40	1.50	V
I _{OUT}	Output current range	V _{CC} = 4.5V, V _{OUT} = 0.0V, V _{SET} = 0.0V, V _{ISET} = 0.0V	0.00	0.00	A
		V _{CC} = 4.5V, V _{OUT} = 0.0V, V _{SET} = 0.0V, V _{ISET} = 0.0V	0.00	0.00	A
		V _{CC} = 4.5V, V _{OUT} = 0.0V, V _{SET} = 0.0V, V _{ISET} = 0.0V	0.00	0.00	A

sudojunkie

Sheet:

File: BATTERY_MANAGEMENT_BQ24012.kicad_sch

Title: Atego Nano

Size: A4

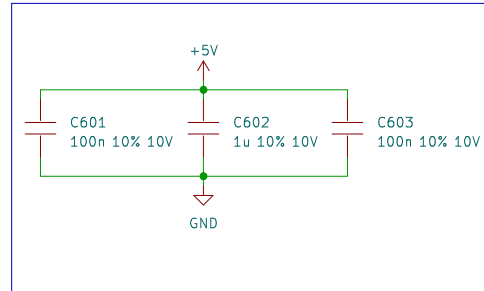
Date: 2023-06-28

Rev: 1.1

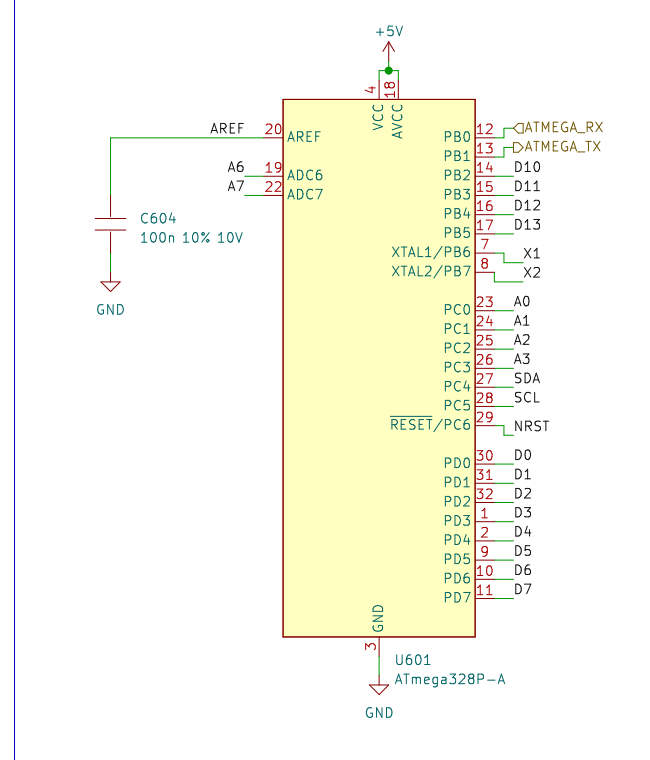
KiCad E.D.A. eeschema (7.0.0)

Id: 5/7

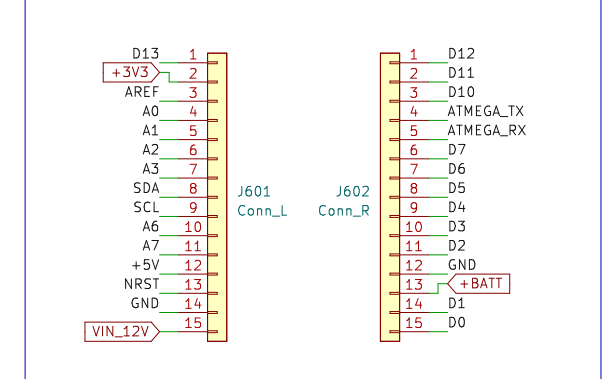
POWER & DECOUPLING



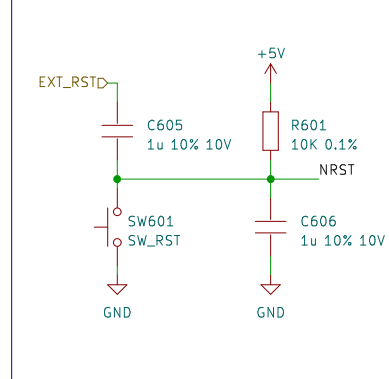
ATMEGA328P-A



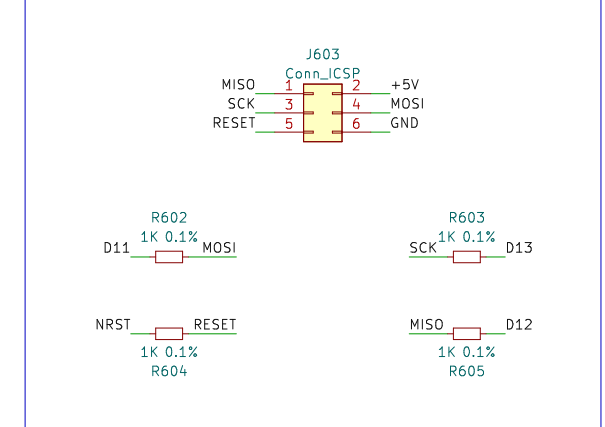
GPIO HEADERS



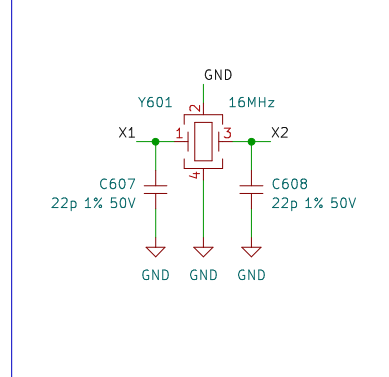
RESET CIRCUIT



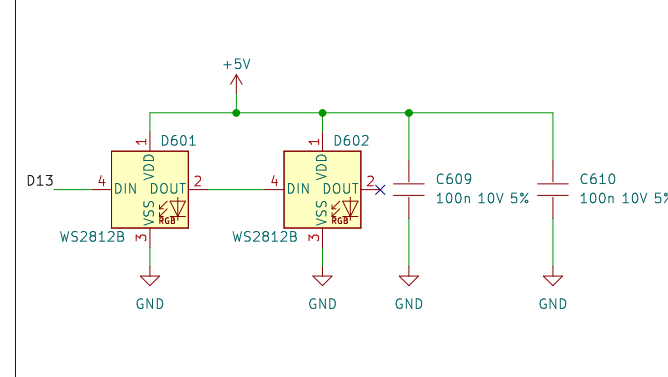
ICSP HEADER



CRYSTAL OSCILLATOR



USER LEDs



sudo-junkie

Sheet:

File: MCU_ATMEGA328P-AU.kicad_sch

Title: Atego Nano

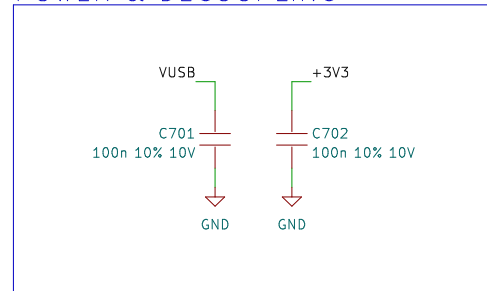
Size: A4 Date: 2023-06-28

KiCad E.D.A. eeschema (7.0.0)

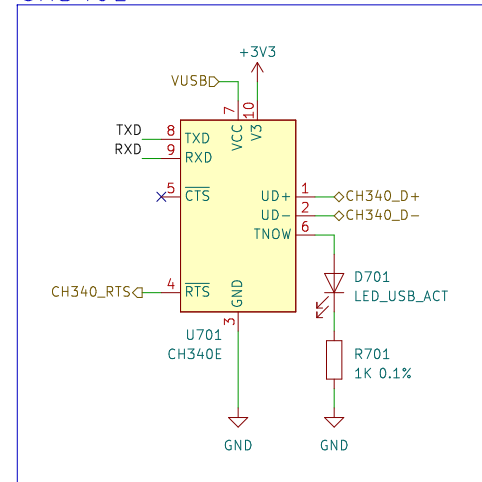
Rev: 1.1

Id: 6/7

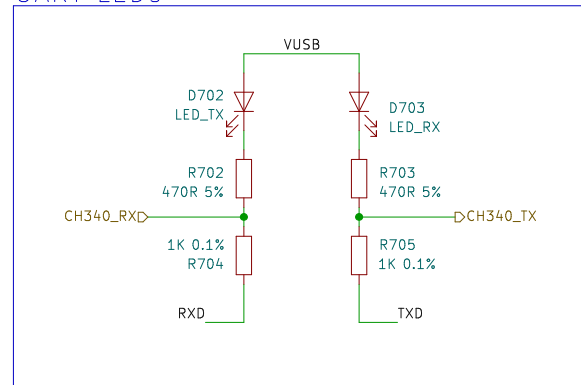
POWER & DECOUPLING



CH340E



UART LEDs



sudo-junkie

Sheet:

File: INTERFACE_USB_CH340E.kicad_sch

Title: Atego Nano

Size: A4 Date: 2023-06-28

KiCad E.D.A. eeschema (7.0.0)

Rev: 1.1

Id: 7/7