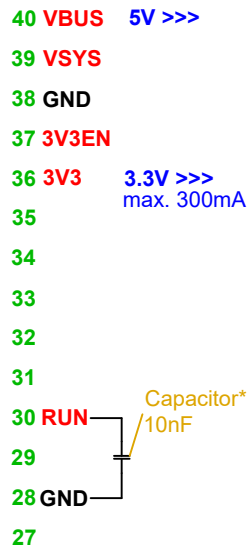
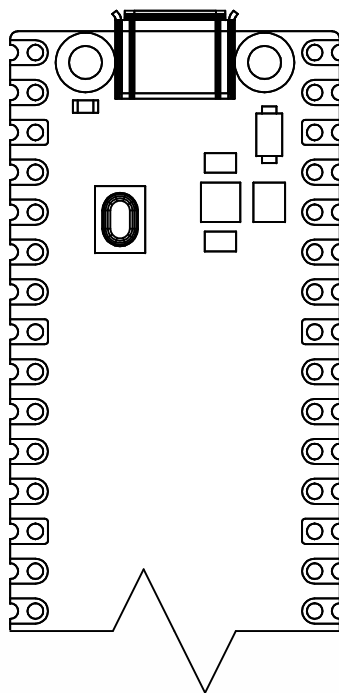
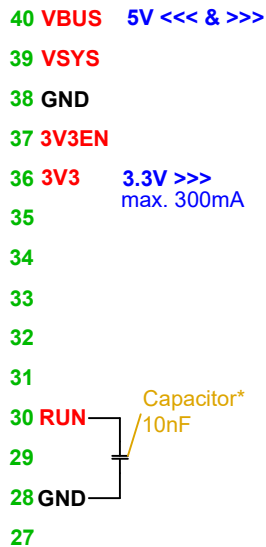


Variants of the Pico Power Supply (PSU)

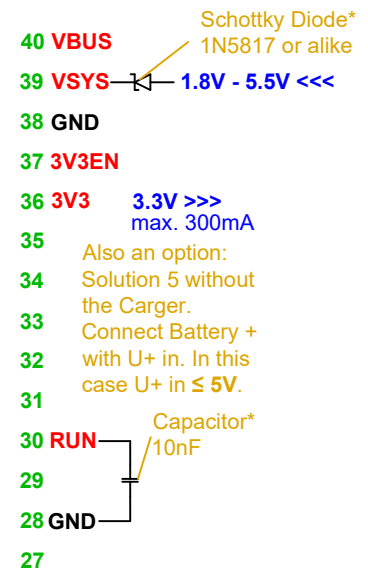
1. USB Host or 5V PSU



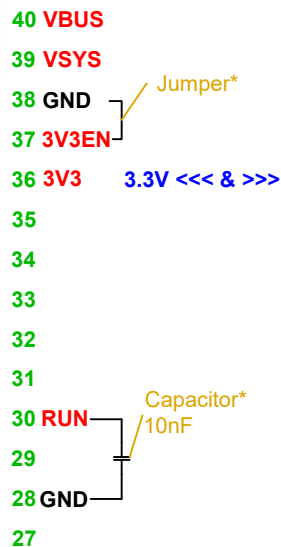
2. Powered by 5V PSU only



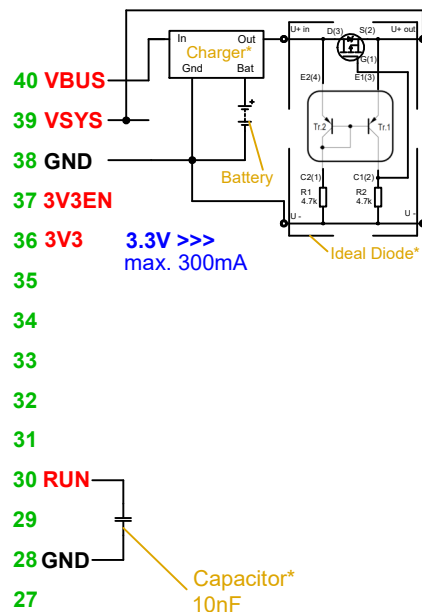
3. Powered by 1.8V - 5.5V only



4. Powered by 3.3V PSU only



5. Powered by rechargeable battery 1.8V - 5.5V only



Capacitor*

Typically the circuits work more reliable if a capacitor (10nF) from the RUN (Pin 30) to ground is added. This prevents accidental RESET's in electrical noisy environments (industrial / welders / CF lights).

Schottky Diode*

The type 1N5817 or alike with a voltage drop of 0.4V prevents a current in a wrong direction. To be save you need a $\geq 2.2V$ source.

Jumper*

The on board 3.3V regulator has to be disabled by shorting 3.3V_EN (Pin 37) to GND (Pin 38).

Charger*

There are many different charging modules. Search for arduino charger board.

Ideal Diode*

The ideal diode, consisting of a P-Channel Mosfet and a PNP double transistor, can reduce the drop voltage down to 0.05V. For this example the IRLML6402 and the BCV62 are used. What prevents us from soldering wires to a SMD for the breadboard?