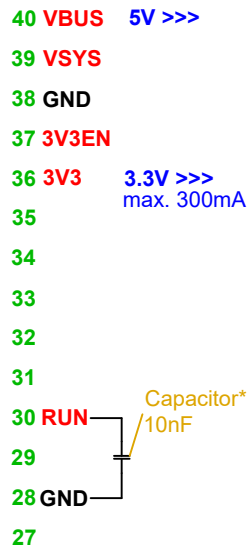
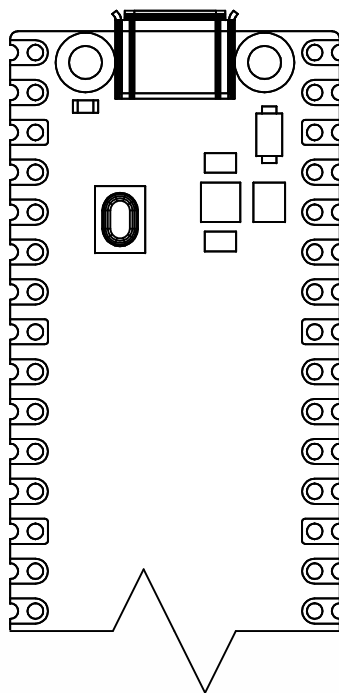
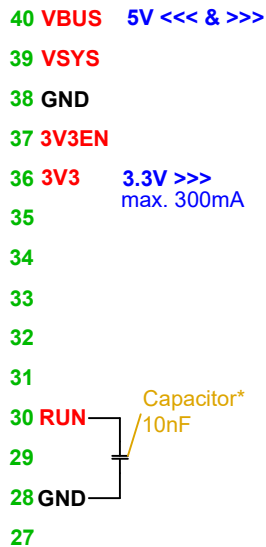


Variants of the Pico Power Supply (PSU)

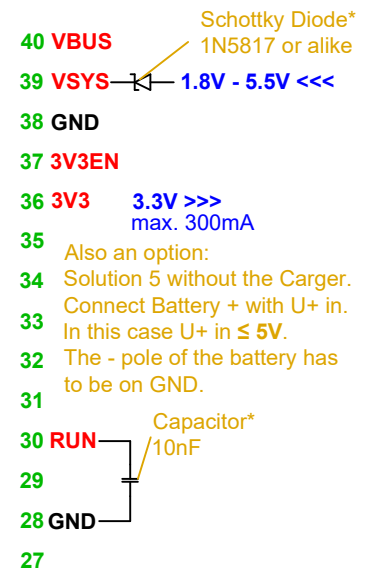
1. USB Host or 5V PSU



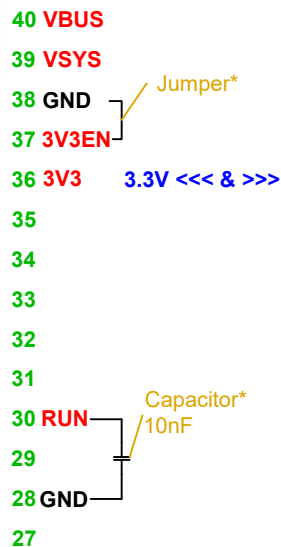
2. Powered by 5V PSU only



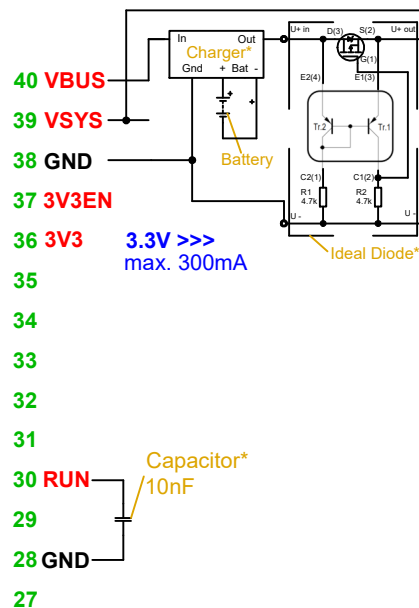
3. Powered by 1.8V - 5.5V only



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 inhibited by shorting 3.3V_EN (Pin 37) to GND (Pin 38). It does not bypass it. The board runs from the external 3.3V supply while the jumper is on. Firmware loading proceeds as normal.

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?