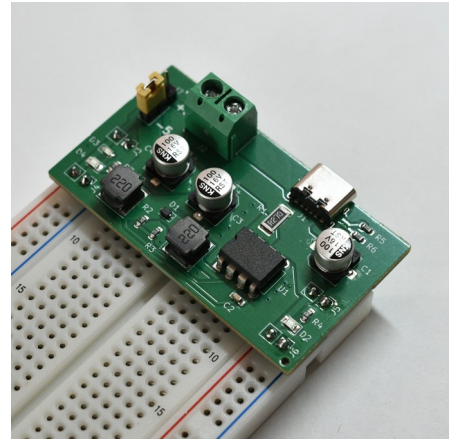


Split Rail Breadboard Power Supply

Features

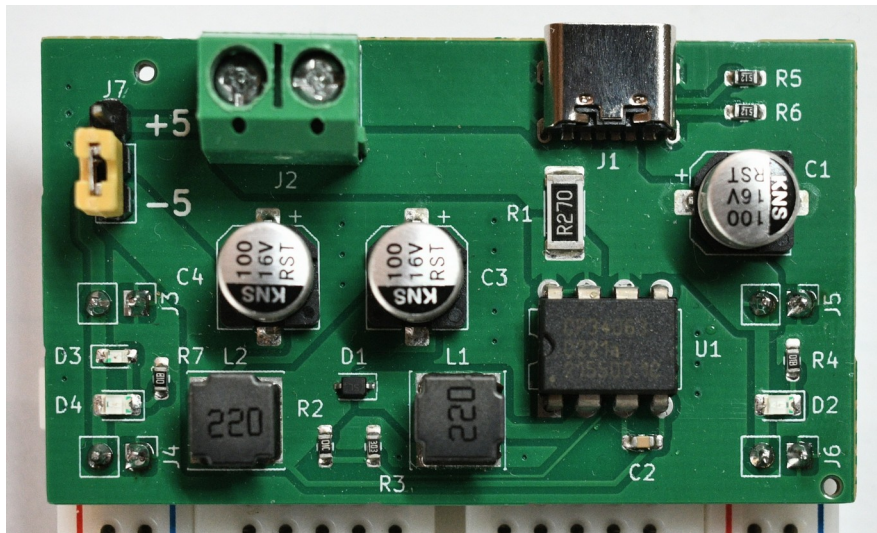
- Breadboard power supply with USB type C input
- $\pm 5V$ split rail supply
- Delivers up to 250mA on the -5V rail

This is a $\pm 5V$ split rail breadboard power supply. The module is based on the 34063 switching converter IC, which generates the -5V rail from the +5V input.

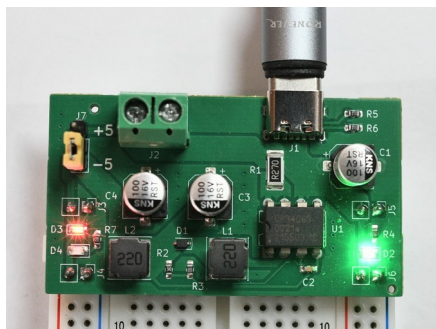


Configurations

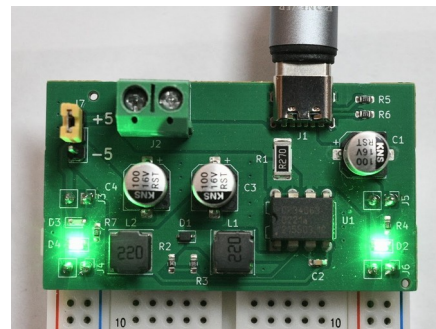
This module is designed to fit on the top of a breadboard, providing power for your breadboard projects that requires $\pm 5V$ split rail power. If the -5V rail isn't needed, it can still be used as a simple board to breakout the power from the USB type C connector to the breadboard.



- The left power rail is configurable, either -5V or +5V can be selected with the jumper J7.
- The right power rail is fixed to the input voltage of 5V.
- The LED D2 lights up in green when power is provided to the module.
- The LED pair D3 and D4 shows the selected voltage on the left power rail.



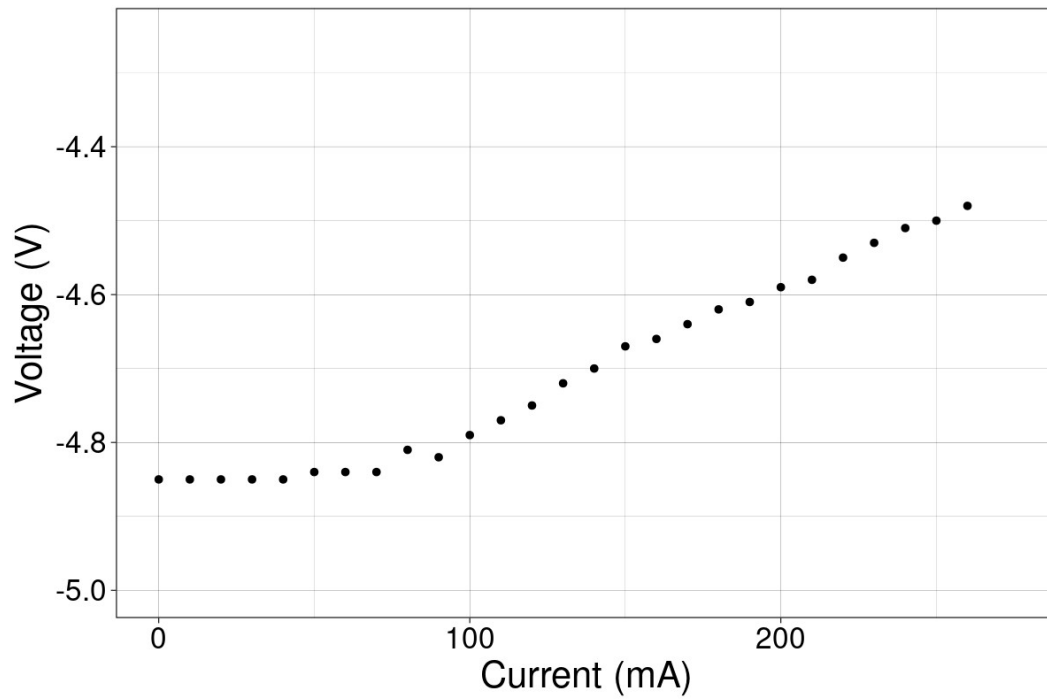
D3(red): -5V output active.



D4(green): +5V output active.

Testing Data

The following data is measured from the -5V rail to provide performance insights of the switching converter. The figure below shows the IV curve of the -5V rail.



-5V rail voltage ripple: less than 100mV peak-to-peak