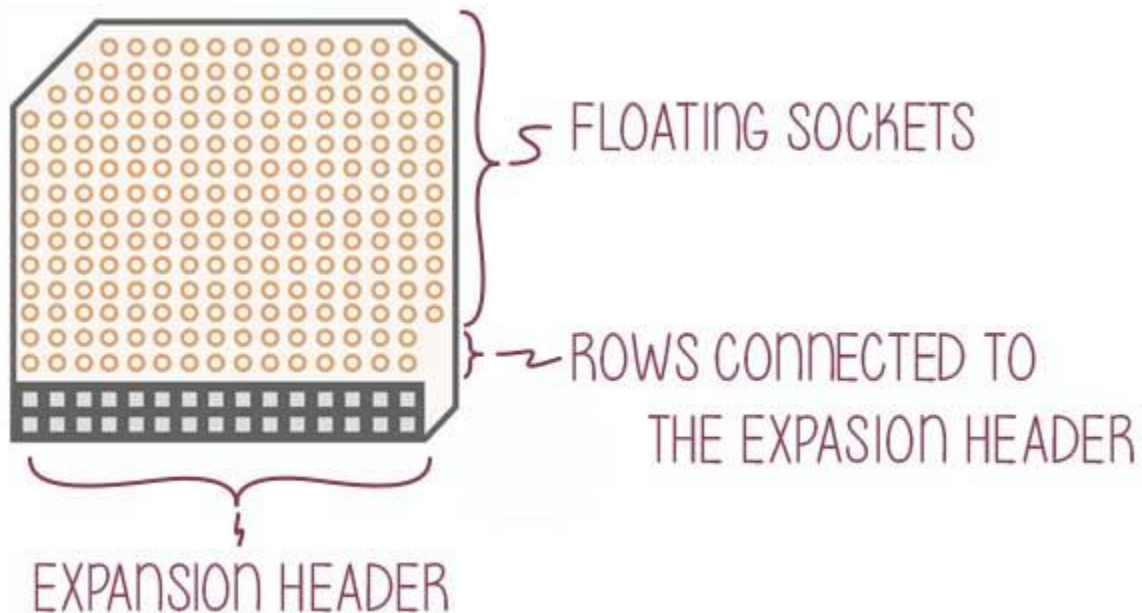


Proto Expansion

The Proto Expansion allows you to create your very own expansion that interfaces with your Omega. It provides a small soldering area and 30-pin header that plugs into the Onion Dock that has Expansion Header.

The Hardware

The Proto Expansion has 30-pin header with a 0.1" pitch that are located next to the Expansion Header allowing you to solder any component to the available terminals. Along with the header terminals, it has a soldering area of 185 pins that allow you to create and customize your own Omega-friendly expansion.

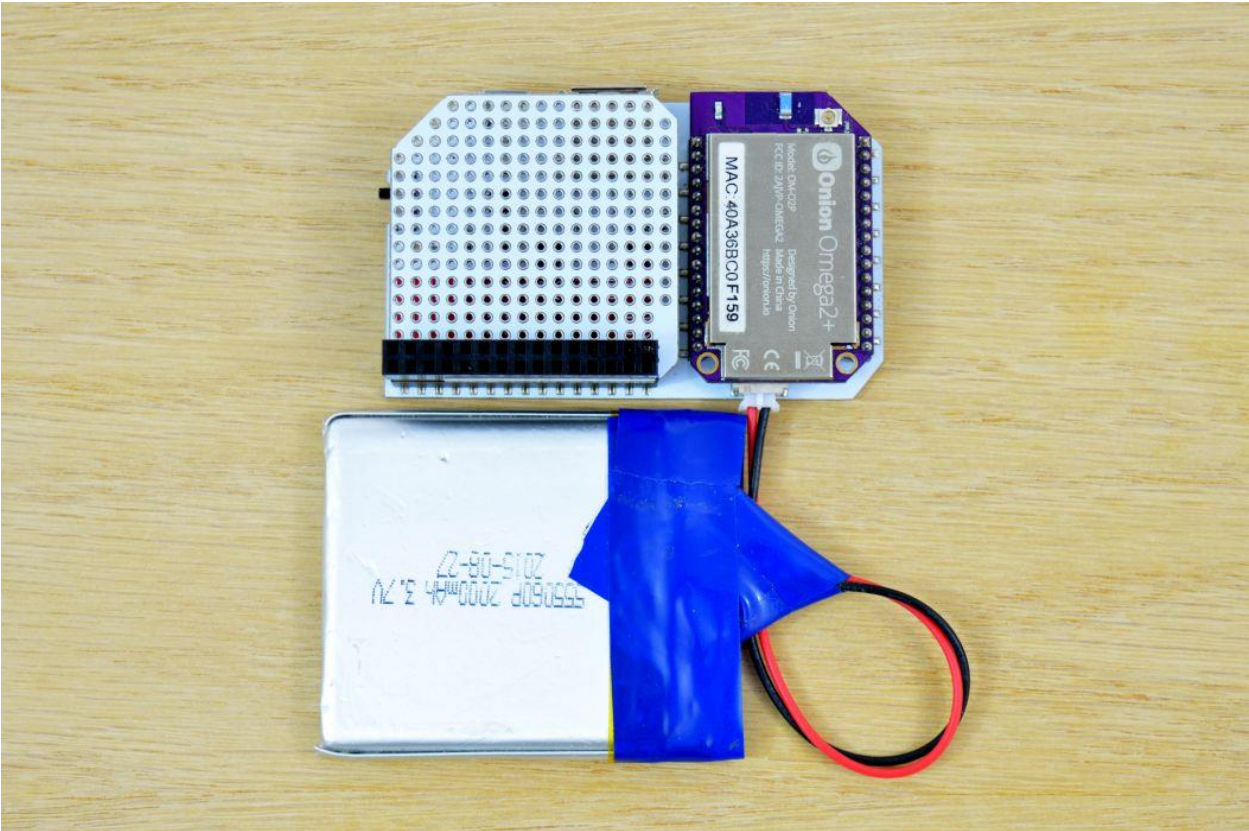
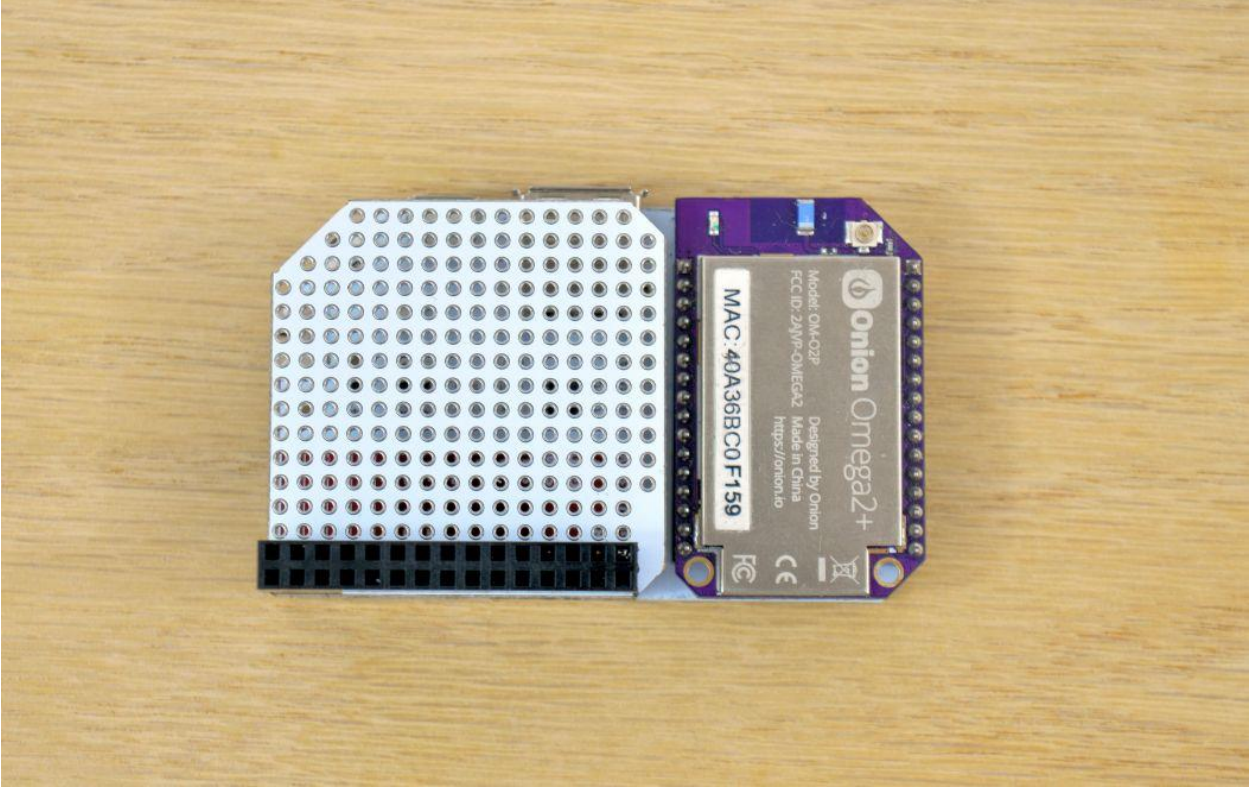


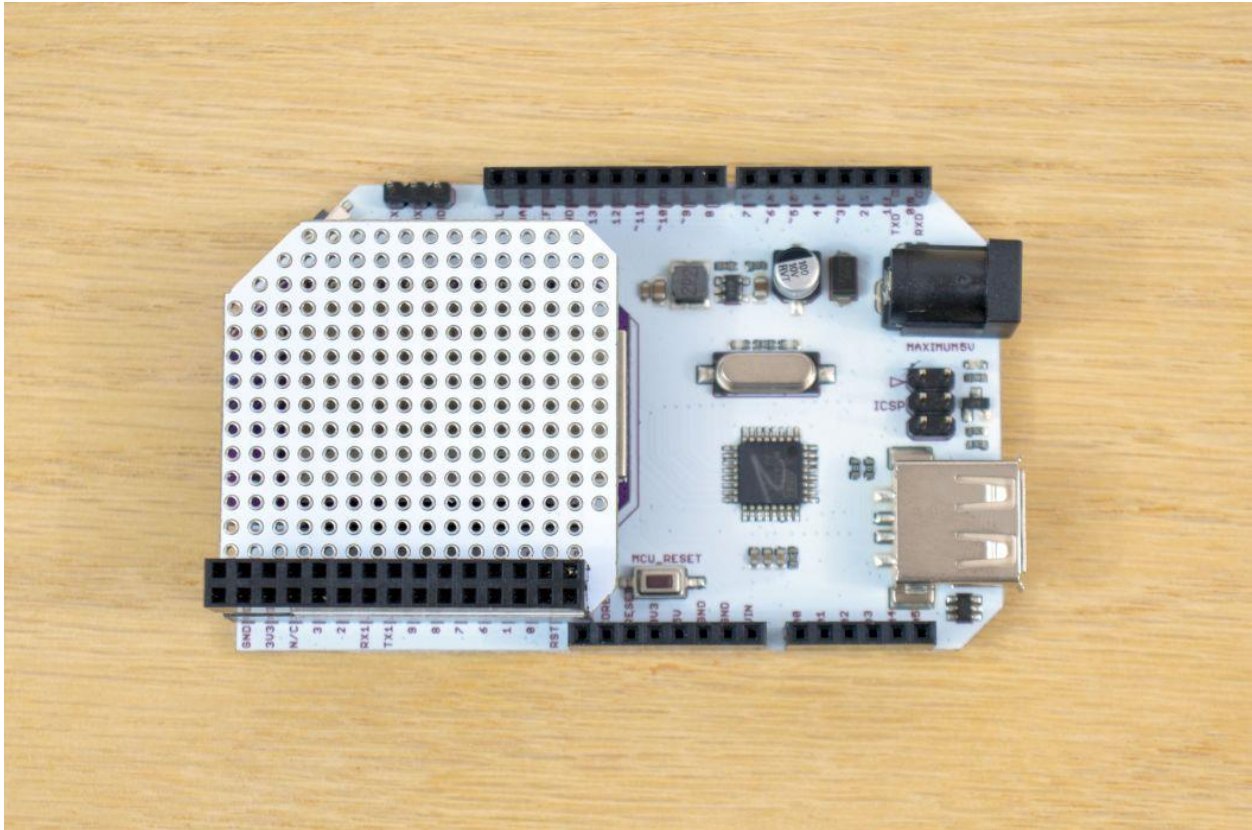
Connecting to a Dock

To use the Proto Expansion, plug it into a Dock that has Expansion header pins (Expansion Dock, Power Dock, Arduino Dock R2).

You can safely stack other Expansions on top of it. **However, be mindful of wires that are connected to the header pins underneath.**

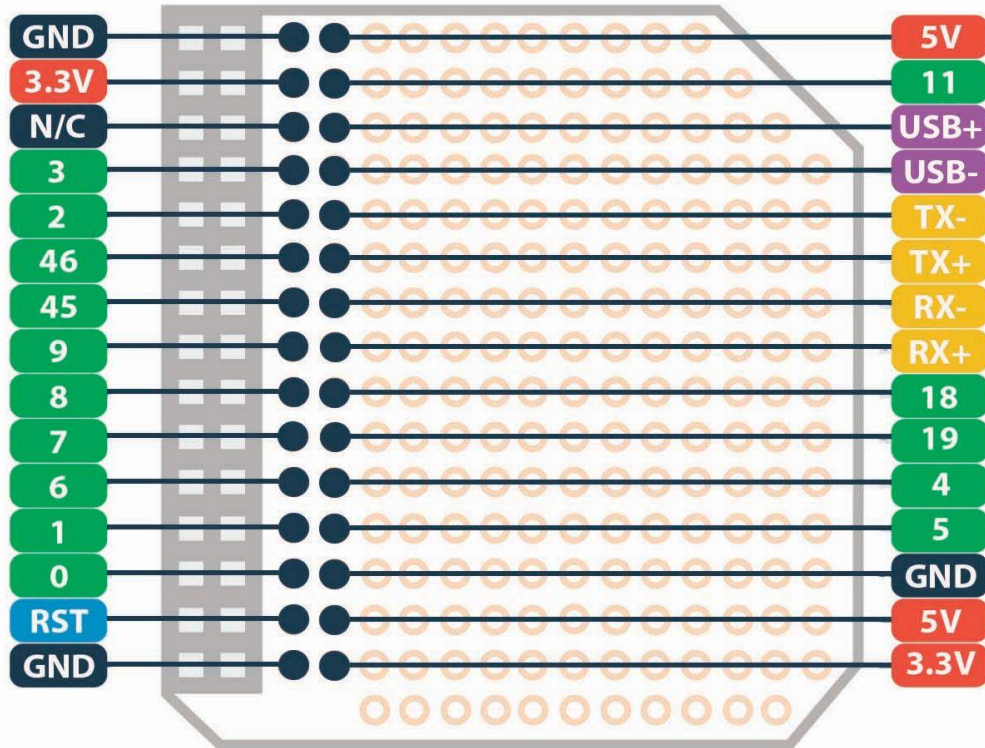
You can have as many Proto Expansions stacked on top of each other as needed





Solder-Friendly Header

The 2 rows of pins above the Expansion Header are connected relatively, allowing you to solder any terminals to the corresponding Omega Inputs. The pinout diagram below show the Expansion Header's connections:



Using the Expansion

The soldering pins are located within 0.1" pitch which allows you to solder almost any component (e.g. Temperature/Humidity Sensors, Joysticks, Screens, etc.) since almost every electronic components are loaded withing a given pitch. Certain projects require customized circuits with certain parts and Proto Expansion will give you this opportunity.