



## Adafruit Perma-Proto 40-Pin Raspberry Pi Half-Size PCB Kit – with 2x20 Header

PRODUCT ID: 4353

We put a PermaProto half-sized proto board in a blender with a Pi Cobbler and out emerged this very tasty confection – the 40-Pin PermaProto for Pi! It has the Cobbler baked right in. Simply solder the 2x20 box header in, and you get all the labeled breakouts with extra prototyping space, power rails, mounting holes and that gorgeous silk.

This version is for modern Raspberry Pi computers with 2x20 connectors such as the Pi B+, A+, 2, 3, 4, Zero, etc! We also stock a version for the older Pi 1's with 2x13 headers.

Customers have asked us to carry basic perf-board, but we never liked the look of most basic perf: it's always crummy quality with pads that flake off and no labeling. Then we thought about how people actually prototype – usually starting with a solderless breadboard and then transferring the parts to a more permanent PCB. That's when we realized what people would really like is a proto board that makes it easy!

This proto-board is the PCB you always wish you had, but never realized it! We took the basic layout of a half-sized breadboard (the PCB has 30 rows) and turned that into a beautiful PCB. The top side has a white silkscreen and the same markings you're familiar with, to make transferring components easy. The bottom has the 5-hole pad design that matches a classic breadboard, with 4 power bus lines on the sides, and no mask so you can easily cut traces when necessary. We used 1.2mm diameter drill holes so even parts with big leads will fit. All holes are thru-plated for strength – these won't peel off with rework. The finish is a gold plate – you won't get oxidation like with bare copper perf! There are also tons of mounting holes so you can attach the PCB to your project box.

Comes as one PCB and one box header. You'll need to do a little soldering to attach the box header to the PCB. but it's fast and easy to do. To connect a Pi, you'll also need a 40-pin GPIO cable, if you don't already have one.

## TECHNICAL DETAILS

- 20 x dual rows 4-pin holes breaking out the GPIO cable
- 2 x dual rows of 4-holes
- 8 x dual rows of 5-holes
- 4 power rails with positive/negative markings
- 3.25" x 2.0" (82.8mm x 50.7mm), 0.063" thick FR4
- 1.2mm / 0.047" drill holes

