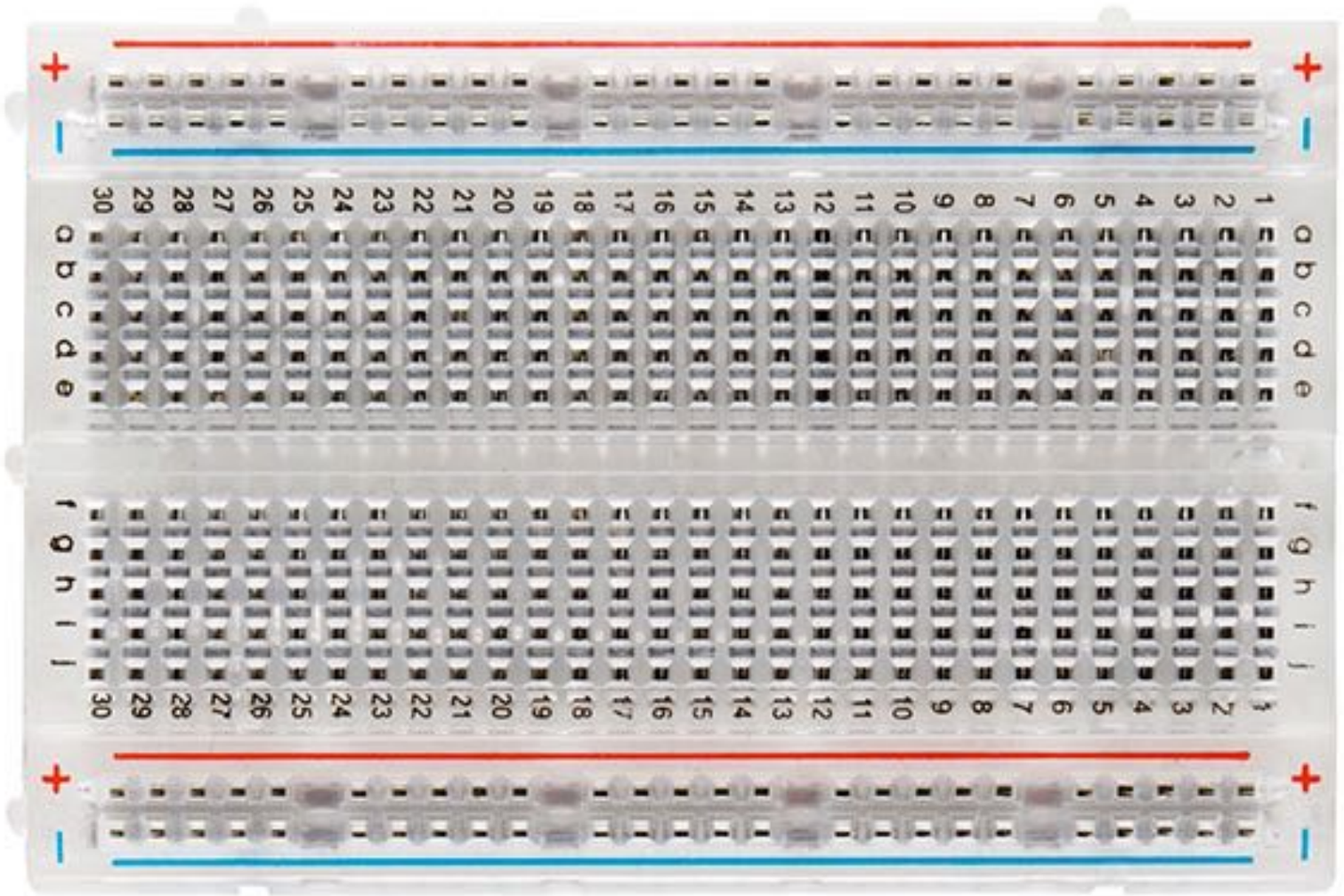
Breadboards

UIT 2022—Daniel Ashbrook & Valkyrie Savage

Breadboards

How they work



[source: https://learn.sparkfun.com/tutorials/how-to-use-a-breadboard,]

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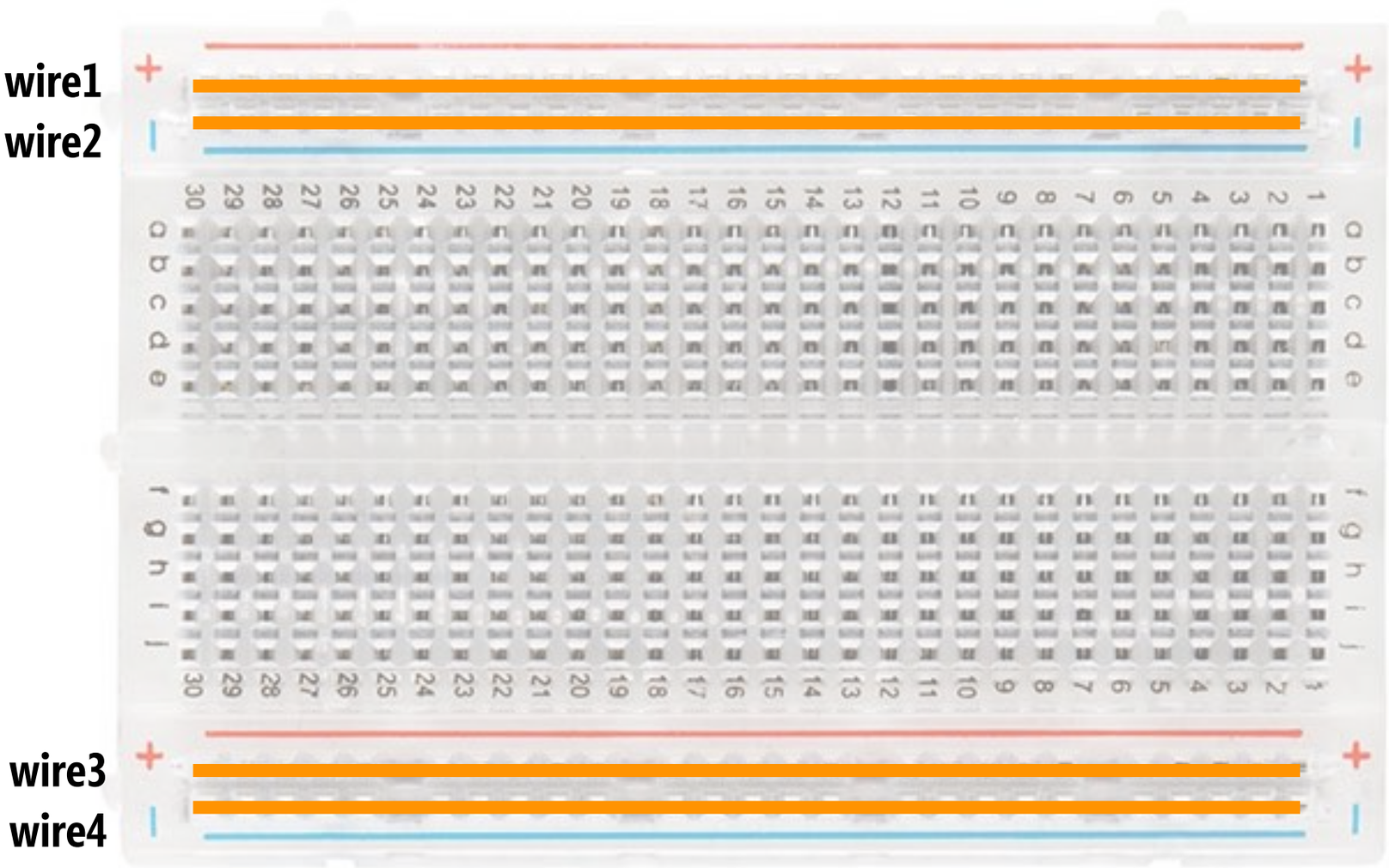
How they work



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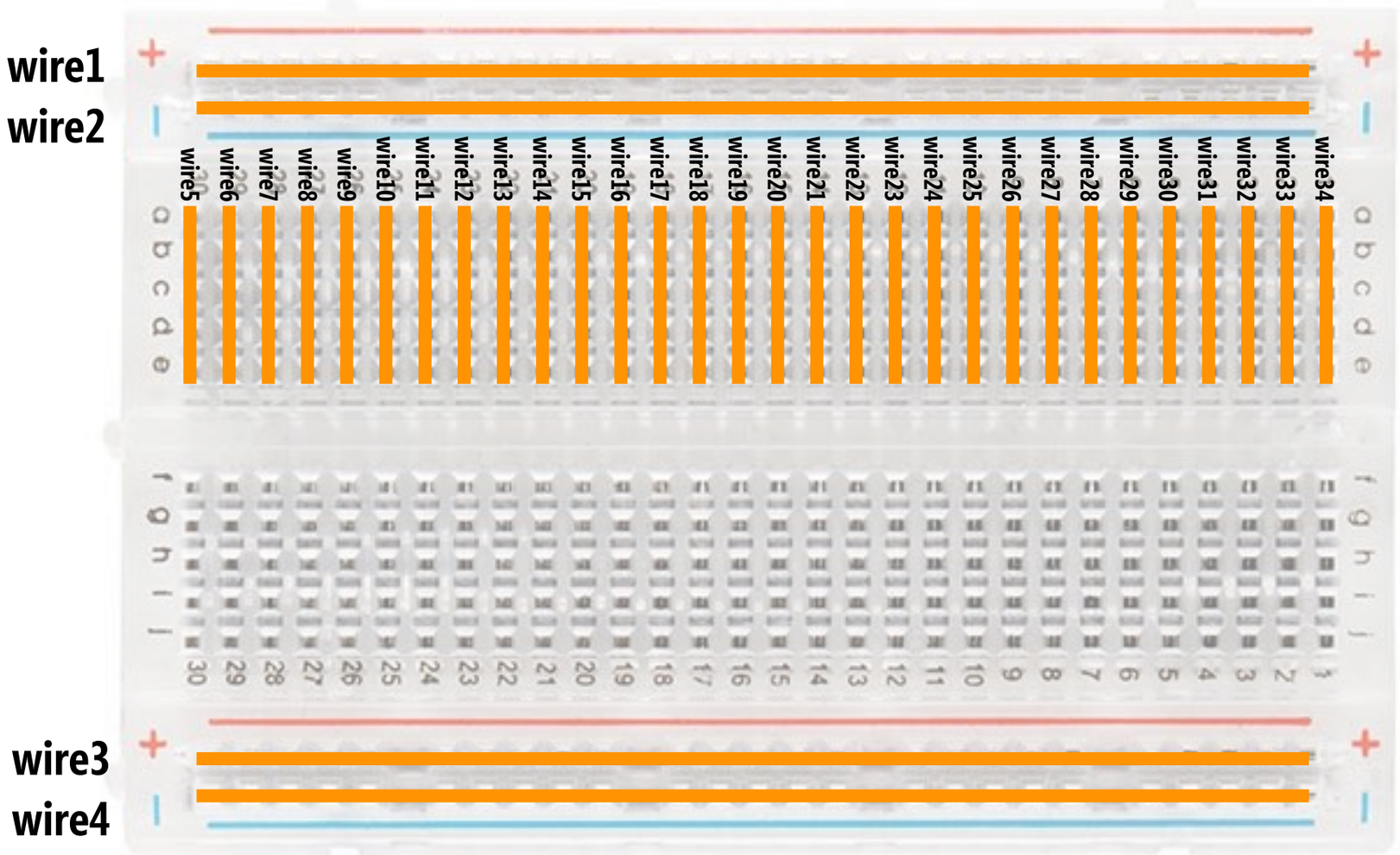

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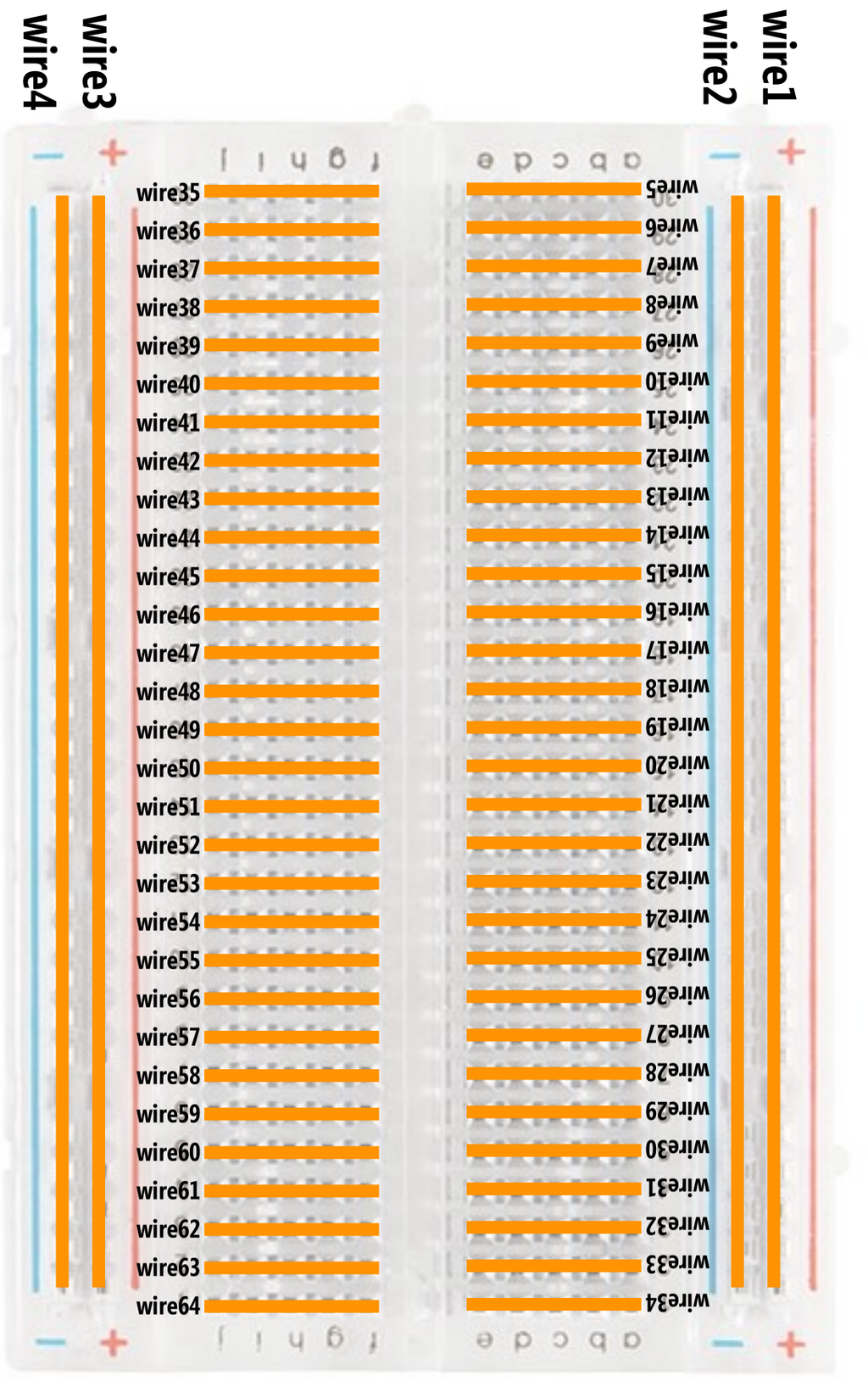

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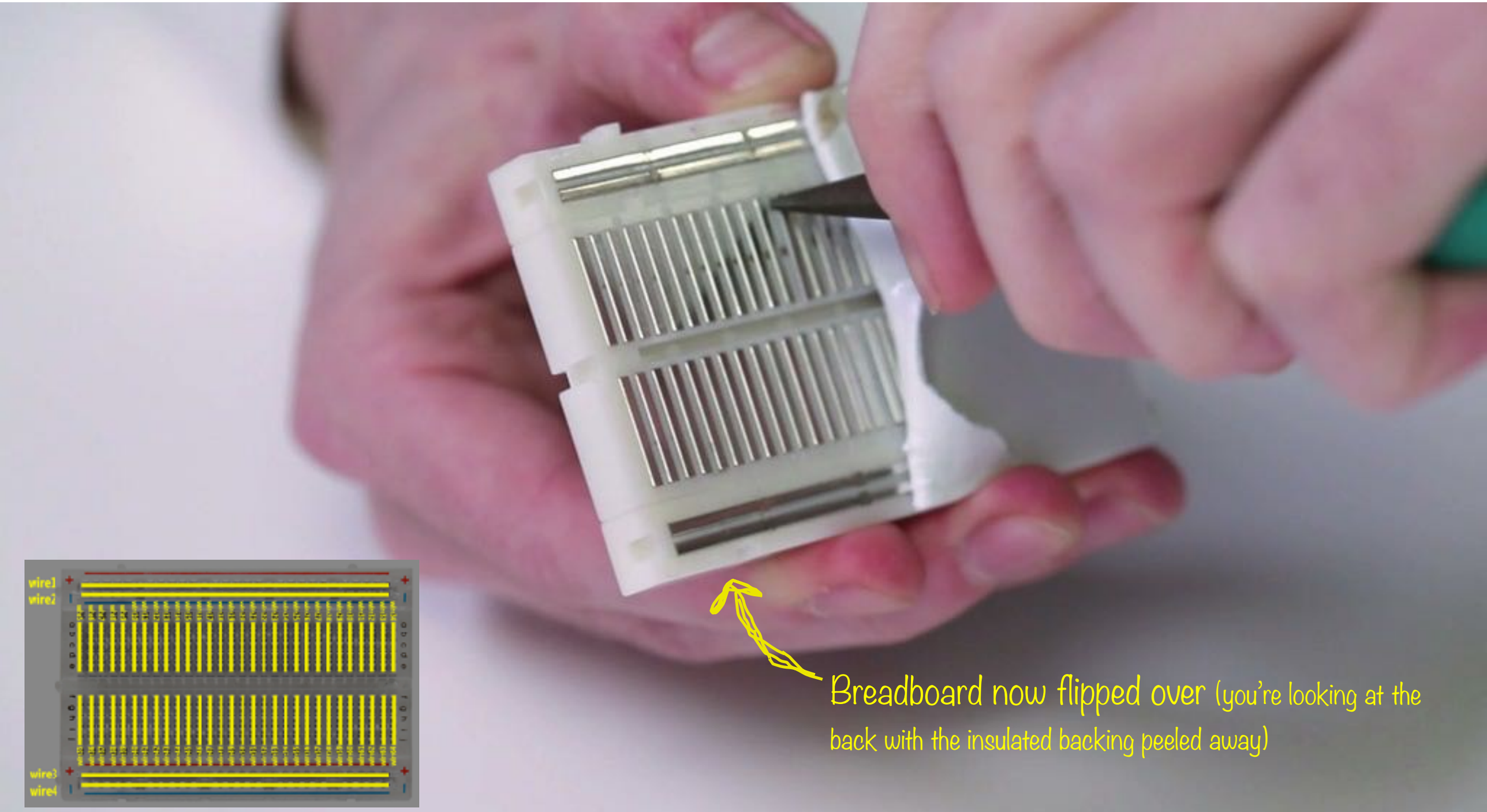
Breadboards

What’s inside?

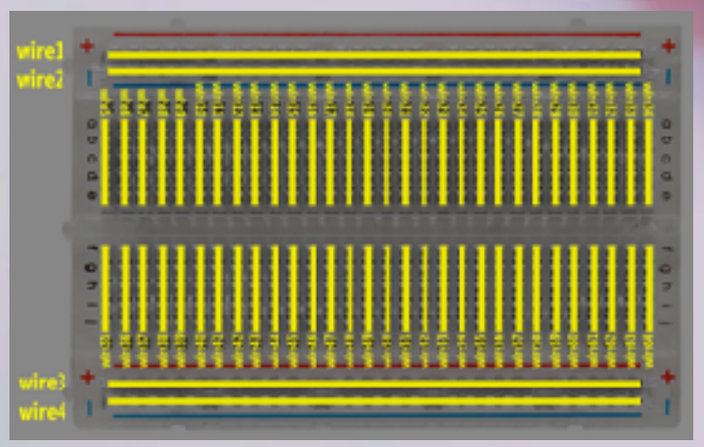


[source: https://learn.adafruit.com/assets/17394, https://learn.sparkfun.com/tutorials/how-to-use-a-breadboard,]

Breadboards

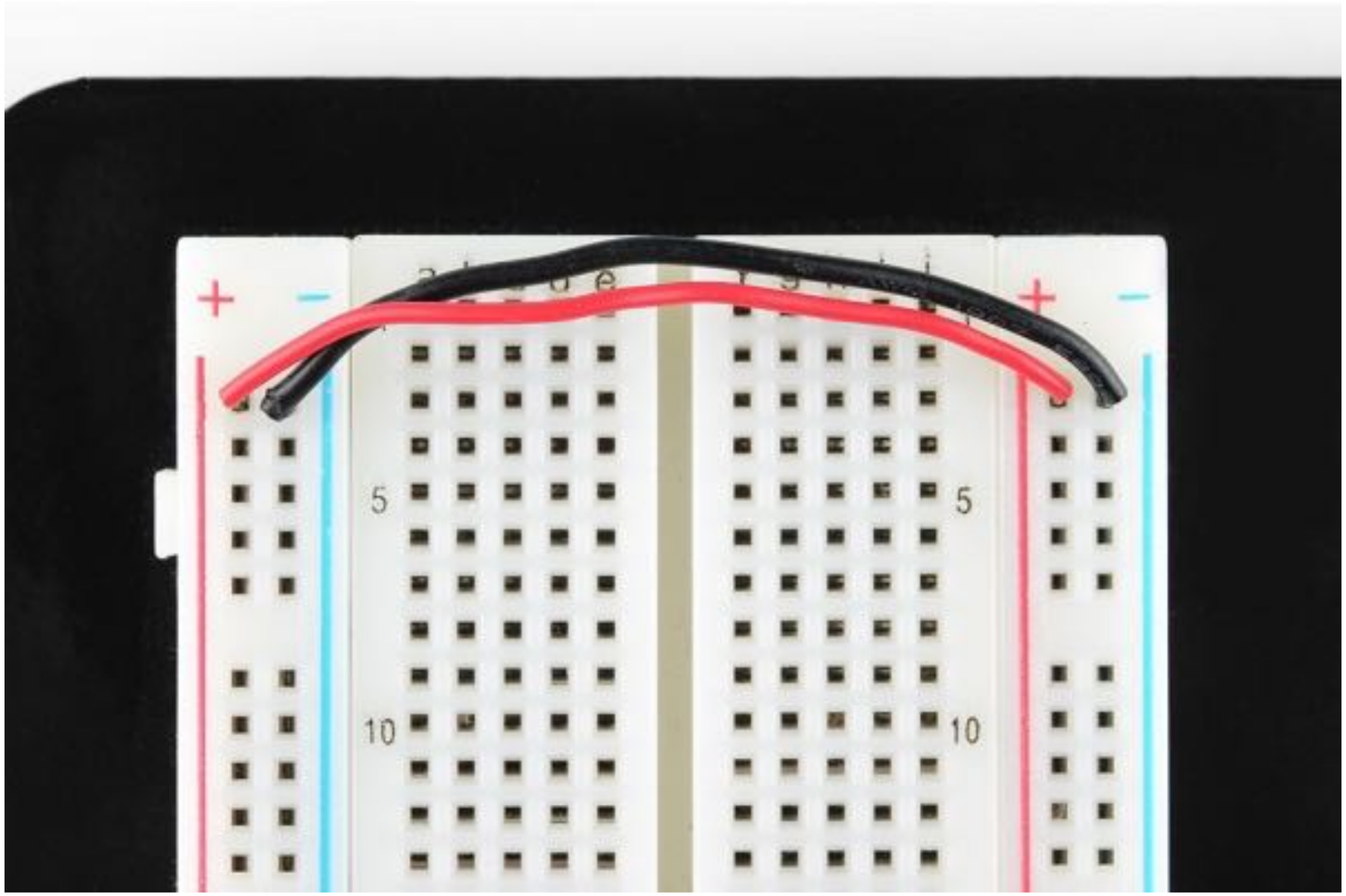
What's inside?

A single strip of conductive metal from breadboard column



Breadboards

Setting up



Two jumper wires used to connect the power rails on both sides. Always attach the ‘**+**’ to ‘**+**’ and the ‘**-**’ to ‘**-**’. I also like to use **black** wire for ‘**-**’ and **red** wire for ‘**+**’.

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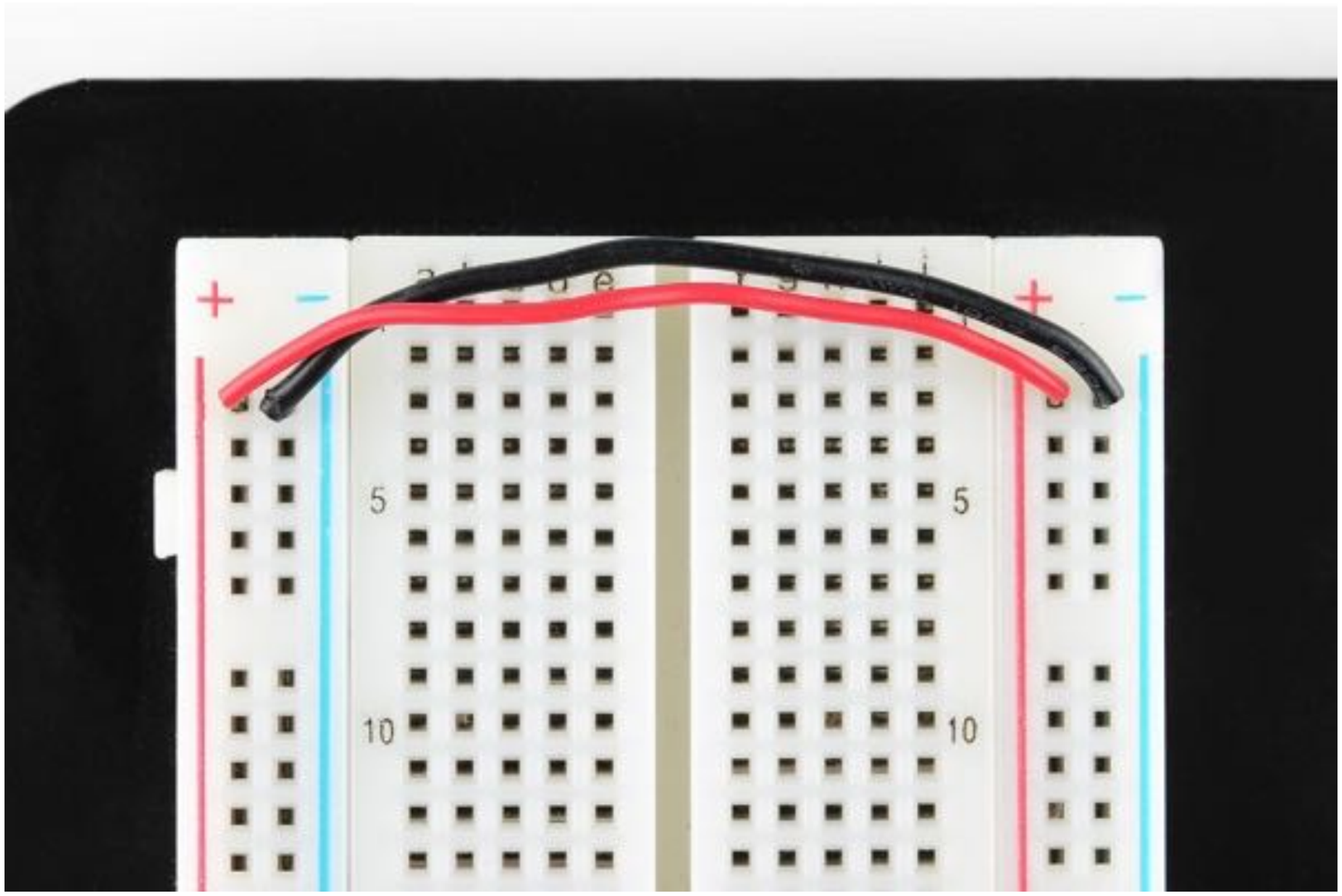
Breadboards

Setting up



Two jumper wires used to connect the power rails on both sides. Always attach the ‘**+**’ to ‘**+**’ and the ‘**-**’ to ‘**-**’. I also like to use **black** wire for ‘**-**’ and **red** wire for ‘**+**’.

But remember! The marks are just there to help— there is nothing inherently + or – about the connections!

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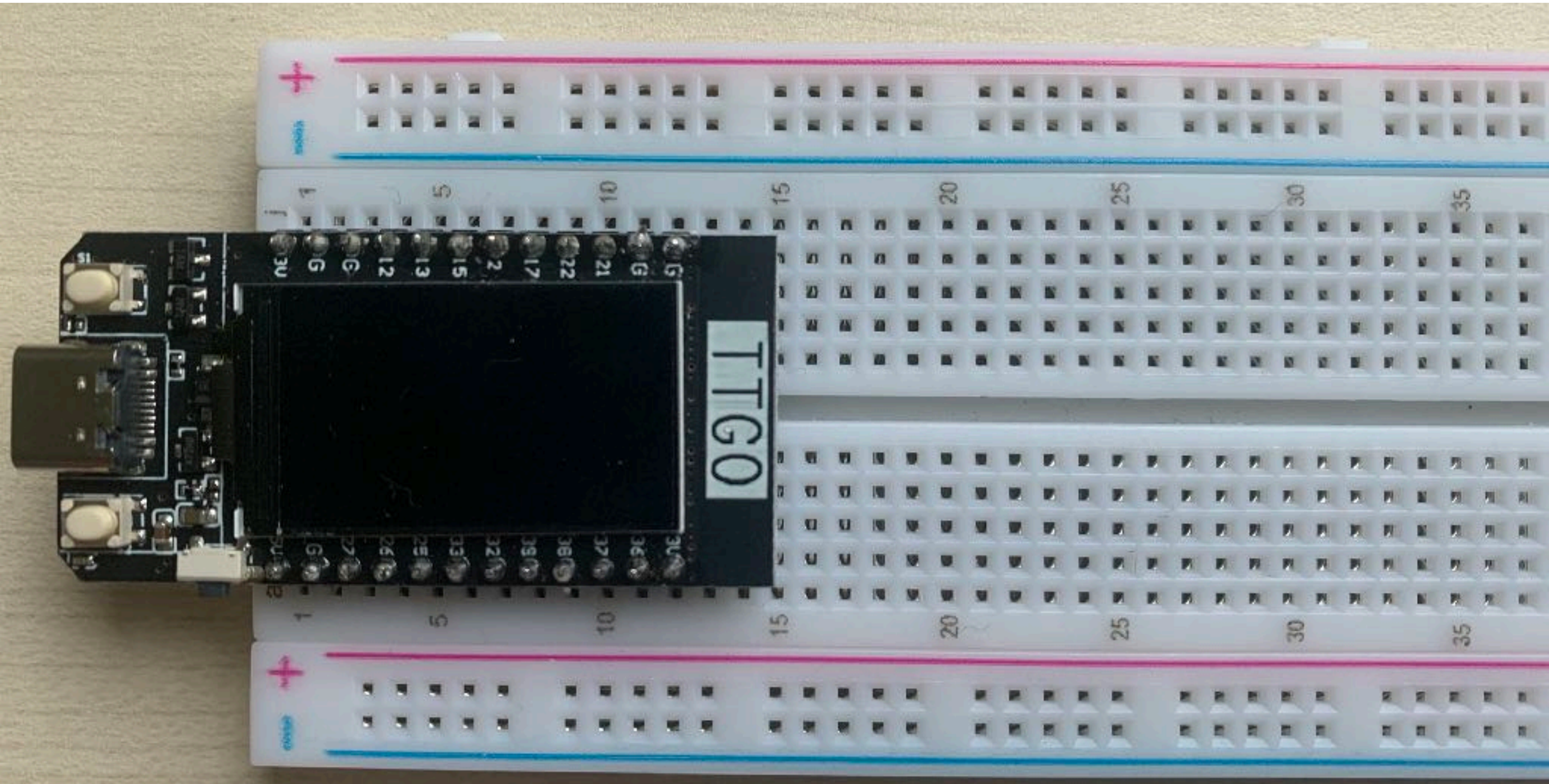
Breadboards

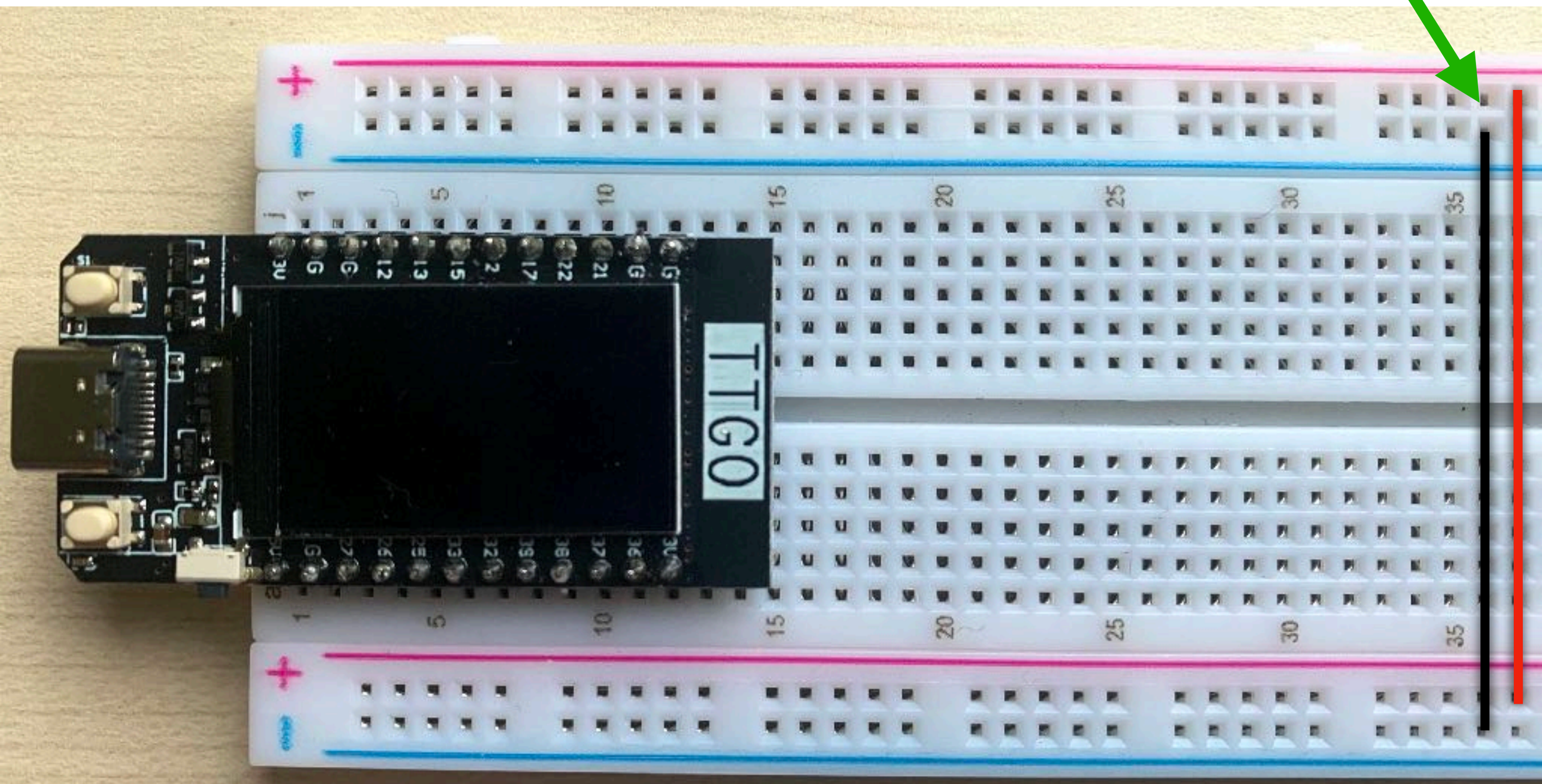
Example



Breadboards

Example

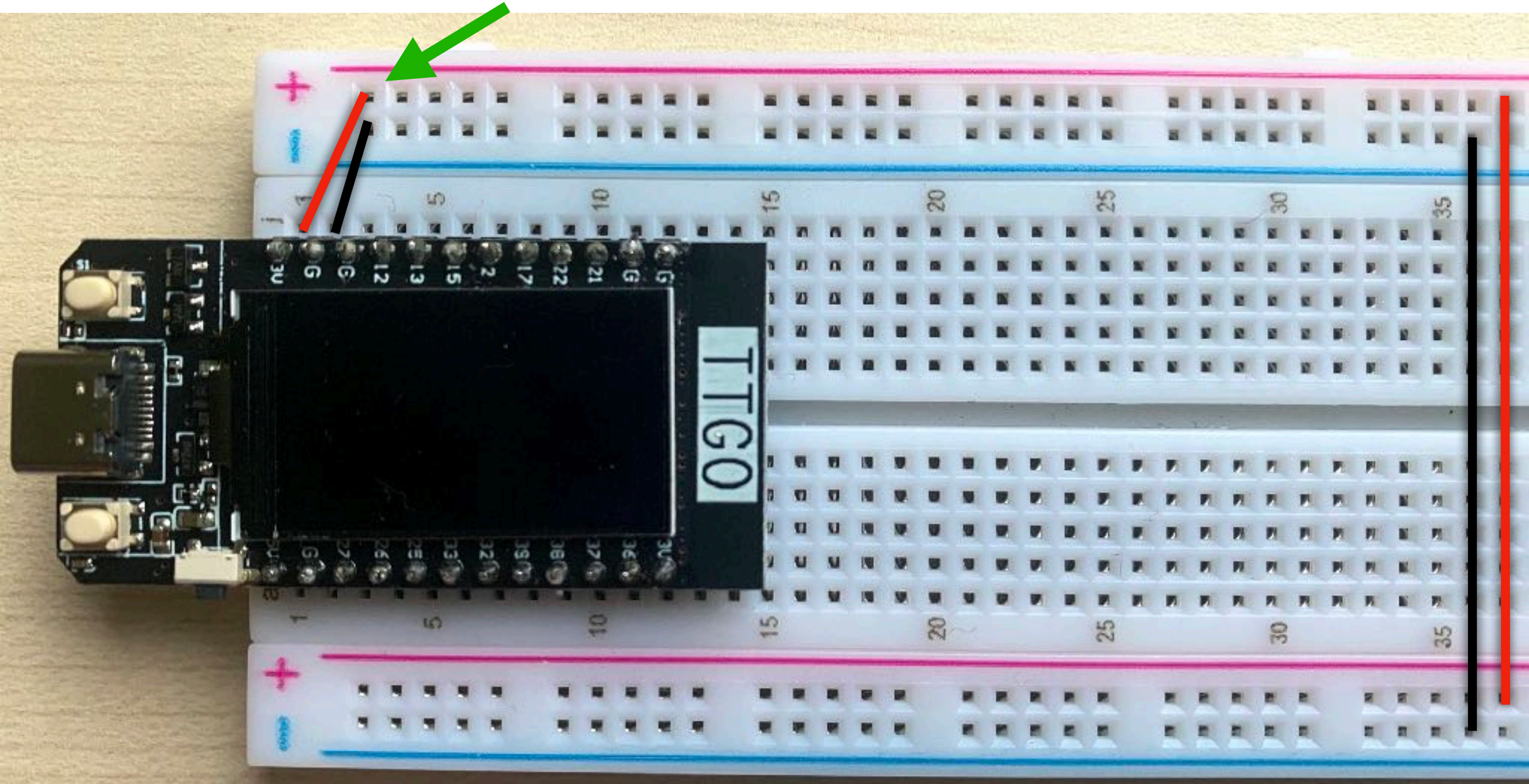
Connect power rails
for convenience
(do it at the far end, not actually here)



Breadboards

Example

The board supplies
power (+) and ground (–)



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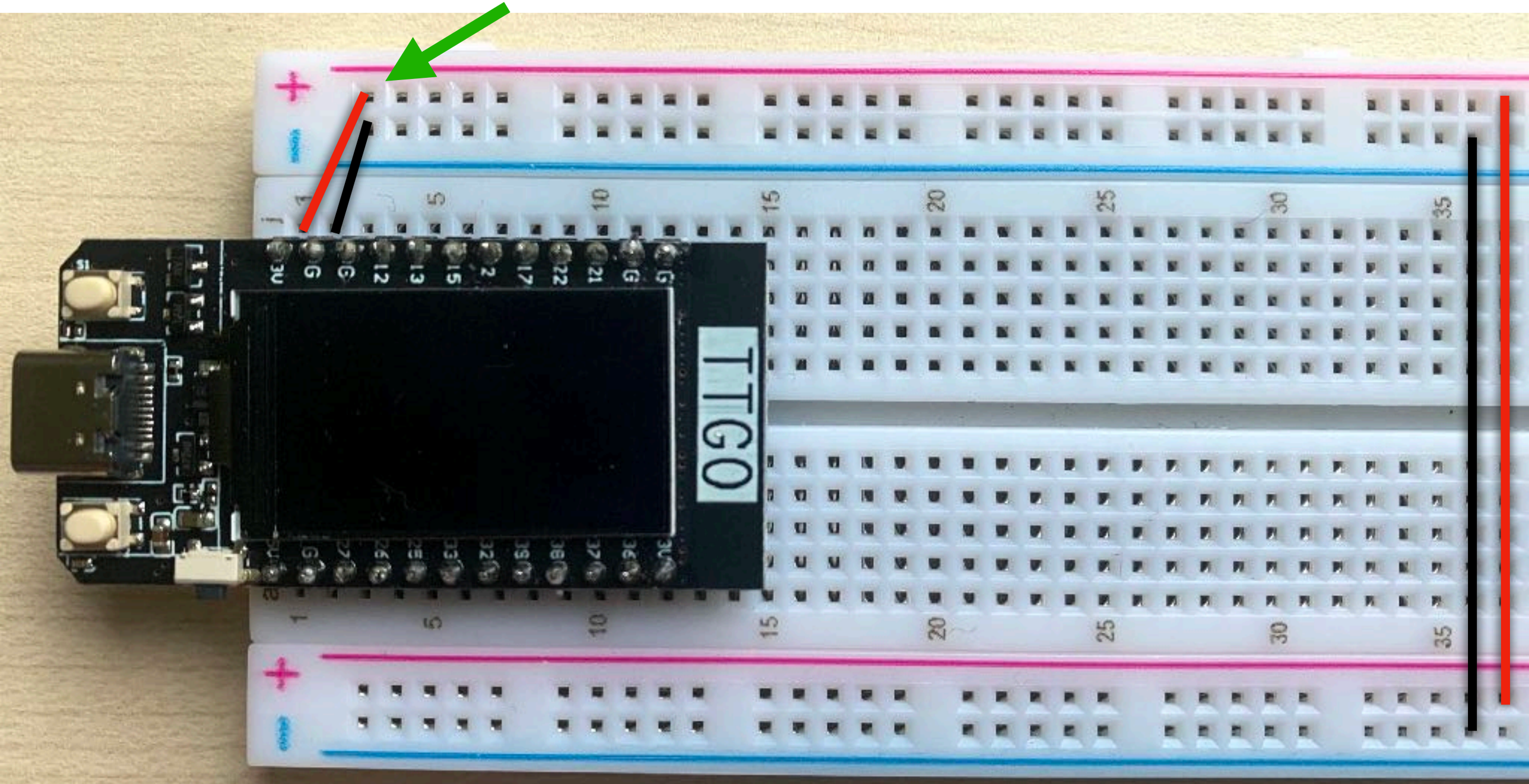
Example

The board supplies
power (+) and ground (–)



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Example