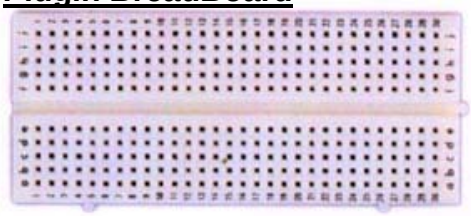
BB300, BB400 – Plug-in BreadBoards

300 and 400 tie point solderless "plug-in" breadboards provide a quick way to build and test circuits for experimentation or when learning electronics.

When the BR1 solderable PC breadboard was introduced in 2005, it quickly became our most popular PC board. It allows hobbyists to easily transfer their plug-in breadboard project to a permanent soldered prototype board.

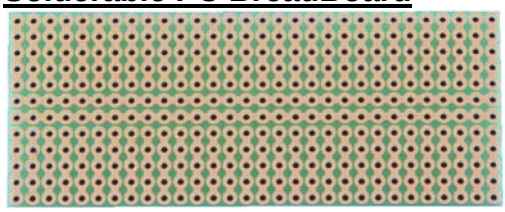
To complement the BR1 we are now offering the B300 and BB400 plug-in Solderless BreadBoards and the SB300 and SB400 Solderable PC BreadBoards for smaller projects.

Plugin BreadBoard



Move your project to SB300

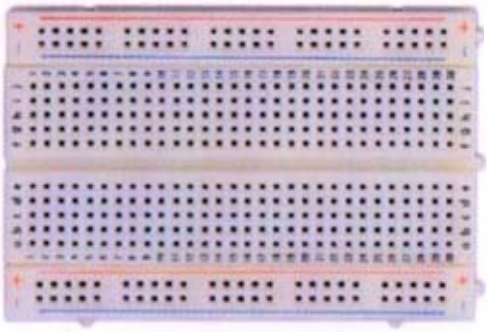
Solderable PC BreadBoard



BB300 – 300 tie point Solderless BreadBoard
ABS plastic
1 IC/Circuit Area, 300 tie-points
Size: 3.3 x 1.4 x 0.3in (84 x 35.5 x 8.5mm)

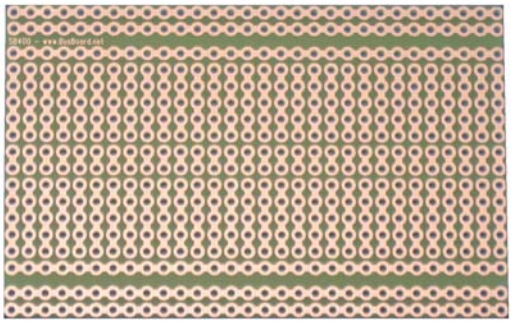
SB300 – 300 tie point
Solderable PC BreadBoard

Plugin BreadBoard



Move your project to SB400

Solderable PC BreadBoard



BB400 – 400 tie point Solderless BreadBoard,
with two power rails
ABS plastic with color legend
1 IC/Circuit Area, 300 tie-points
2 Distribution strips, 100 tie-points
Size: 3.3 x 2.1 x 0.3in (84 x 54.3 x 8.5mm)

SB400 – 400 tie point
Solderable PC BreadBoard

RoHS LEAD-FREE COMPLIANT

Solderless Plug-in BreadBoards

Solderless BreadBoard Specifications

BB300 Body Material: White ABS Plastic with Black Printed Legend
BB400/BB830 Body Material: White ABS Plastic with Color Printed Legend
BB830T Body Material: Transparent ABS Plastic with Color Printed Legend

Hole Pitch/Style: 0.1" (2.54 mm), Square Wire Holes

ABS Heat Distortion Temperature: 84° C. (183° F.)

Spring Clip Contact: Phosphor Bronze with Plated Nickel Finish
Contact Life: 50,000 insertions
Rating: 36 Volts, 2 Amps

Insertion Wire Size: 21 to 26 AWG
0.016 to 0.028 inches diameter (0.4 to 0.7mm diameter)

Backing: Peelable adhesive tape for attaching to a surface.
Metal back plate provided with 830 tie point breadboards.

Metal Back Plate Thickness: 0.031 inches (0.8mm)

All BPS BreadBoards are Lead-Free and ***RoHS Compliant***.

Solderless BreadBoard NSFAQ

Q: What circuit frequencies can I use with a plug-in solderless breadboard?
A: Due to large stray capacitance (from 2-25pF per contact point), the inductance of connections, and a relatively high and not very reproducible contact resistance, solderless breadboards are limited to operate at relatively low frequencies, usually less than 10 MHz, depending on the nature of the circuit. The relatively high contact resistance can also be a problem for some DC and very low frequency circuits.
Source http://en.wikipedia.org/wiki/Breadboard

Note: Solderable PC BreadBoards, such as the BPS BR1, SB300, and SB400 will provide lower stray capacitance and lower connection resistance which may allow higher frequency operation for some circuits.
For circuits sensitive to small changes in values, component adjustments may be needed when the circuit is moved from a plug-in breadboard to a Solderable PC BreadBoard, due to these small differences.

Q: Who invented the solderless breadboard?
A: US Patent #203938 was awarded to Ronald J. Portugal of EI Instruments Inc. in 1971.

Q: Why is phosphorus added to the bronze used in the contacts?
A: Phosphor bronze is an alloy of copper with 3.5 to 10% of tin and a significant phosphorus content of up to 1%. The phosphorus is added as deoxidizing agent during melting.

These alloys are notable for their toughness, strength, low coefficient of friction, and fine grain. The phosphorus also improves the fluidity of the molten metal and thereby improves the castability, and improves mechanical properties by cleaning up the grain boundaries.
Source http://en.wikipedia.org/wiki/Phosphor_bronze