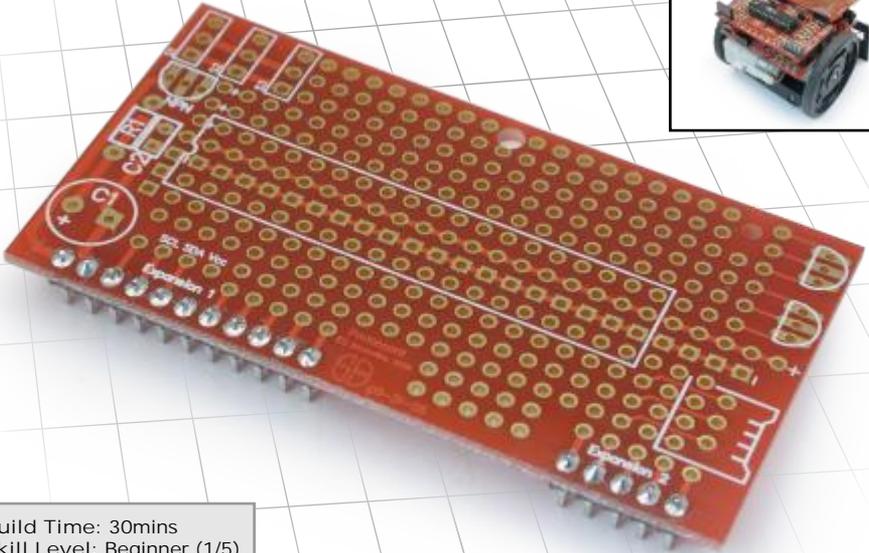
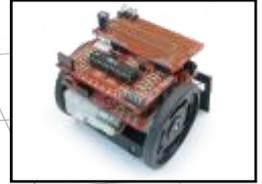


V2.0 Brainboard Prototyping Add-on

for the Solarbotics SUMOVORE



Build Time: 30mins
Skill Level: Beginner (1/5)

Time for some custom upgrades to your Version 2 Brainboard? Plug in the Prototyping Breadboard!

No space for your laser-guided minisumo cannon*?
Mount it on the Prototyping Breadboard!

This breadboard has:

- Three Servo Headers
 - Raw 6V Access
 - Regulated 5V Access
- Transistor, RJ11, and IC footprints
- I²C taps to supporting Brainboards

*If you develop one, let us know!



We strongly suggest you inventory the parts in your kit to make sure you have all the parts listed. There aren't many in this kit, so take 5 seconds and do it. Use a pen, pencil, pricked finger, chocolate bar - anything to mark off the items. If anything is missing, contact us for replacement parts information.

Disclaimer of Liability

Solarbotics Ltd. is not responsible for any special, incidental, or consequential damages resulting from any breach of warranty, or under any legal theory, including lost profits, downtime, good-will, damage to or replacement of equipment or property, and any costs or recovering of any material or goods associated with the assembly or use of this product. Solarbotics Ltd. reserves the right to make substitutions and changes to this product without prior notice. (Sorry, gotta make the lawyer happy!)



The ATmega8L Brainboard

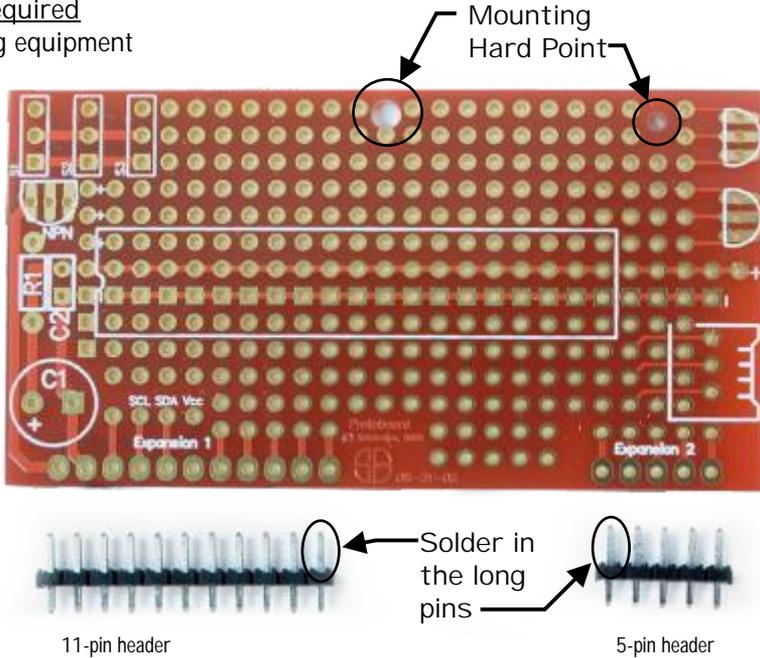


ATmega8 Brainboard Components

- 1 - Printed Circuit Board (PCB)
- 1 - 5-Pin Low-profile Pin Strip for Brainboard connection
- 1 - 11-Pin Low-profile Pin Strip for Brainboard connection

Tools Required

Soldering equipment



You may think it's all easy - just solder in the two pins into the "Expansion 1" and "Expansion 2" ports. Yup, *almost!*

Solder the LONG pin to the PCB. The short side of the pins is what mates to the low-profile sockets on the Brainboard. But, if you mess it up and solder in the short end, it's not that big of a deal!

You'll notice there are a few mounting holes on the PCB. These line up with the pads on the Sumovore if you need to add hard-supports to "lock-down" the breadboard.

C1 and C2 are connected to the regulated 5V line for circuit voltage stabilization. We recommend a 330 μ F 6.3V (or greater) be installed with a 0.1~0.22 μ F capacitor for C2. An R1 value of 1k controls the base of the "NPN" transistor, which in turn toggles the unregulated 6V power to the servo headers.

The RJ11 header has holes ported out next to it for... whatever you may want of it!

Visit us online for more info and cool stuff:

www.solarbotics.com

Solarbotics Ltd.
3740D - 11A Street NE, Suite 101
Calgary, Alberta T2E 6M6
Canada



Toll Free: 1-866-276-2687
International: +1 (403) 232-6268



Fax: +1 (403) 226-3741



Made in Canada