

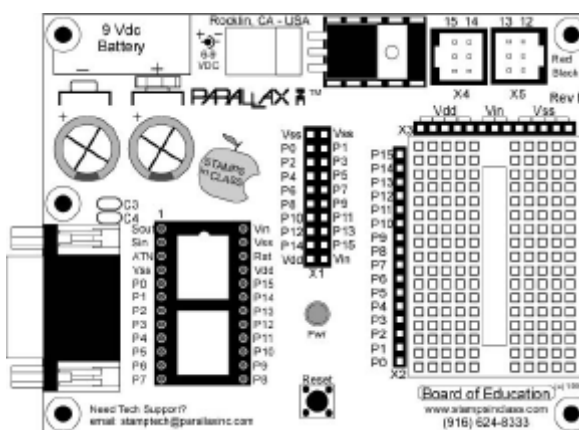
Board of Education Revision B:

BASIC Stamp “What’s a Microcontroller?” Learning Platform

The Board of Education is a BASIC Stamp II (BS2-IC) and BASIC Stamp IISX (BS2SX-IC) learning tool for our Stamps in Class curriculum. The Board of Education has a low price exclusively for the student and educator. For those working alone it's a quick platform for building a circuit, and for an educator it's an easy way to implement your curriculum without providing soldering and wire stripping tools. The Board of Education is a complete, low cost system that is designed to teach entry-level computer integrated electronics.

Features

- Wall-pack or 9-volt battery power supply connections (mechanically interlocked to prevent dual connection);
- DB9 connector for BS2-IC programming and serial communication during run-time;
- On-board regulator delivers up to 1 amp of power for larger projects;
- P0 - P15 I/O pins, Vdd and Vss connections brought adjacent to 2" x 1 3/8" breadboard area;
- Includes set of ten (10) color-coded pluggable 22 gauge wires with tinned ends;
- Female 10-pin dual row connector for optional AppMods; and
- Traces on top of the board show connections between BS2-IC module and breadboard sockets.

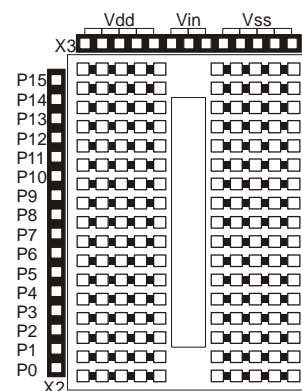


Measures 3" x 4"

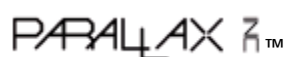
Using the Breadboard

The breadboard has many strips of copper which run underneath the board in a horizontal fashion. These strips connect the sockets to each other. This makes it easy to connect components together to build circuits.

To use the breadboard, the legs of components or wires are placed in the sockets. The sockets are made so that they will hold the component in place. Each hole is connected to one of the metal strips running underneath the board. Each metal strip forms a node. A node is a point in a circuit where two components are connected. Connections between different components are formed by putting their legs in a common node. There are two columns of 17 nodes on the breadboard. Each node contains 5 holes.



For chips with many legs (ICs), place them in the middle of the board so that half of the legs are on the left side and half are on the right side. Nodes on the left side are not connected to the right side.

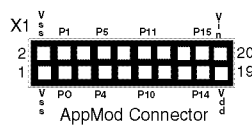


BASIC Stamp II I/O Access, Vdd, and Vss

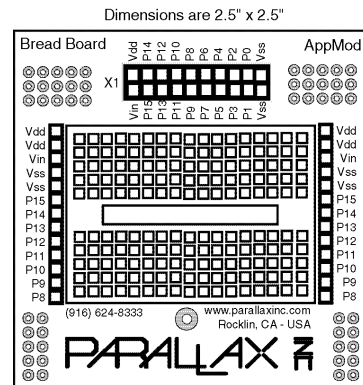
The BS2-IC's 16 I/O pins are brought to the X2 female socket left of the breadboard. I/O pins are accessed by plugging wires into the header, then into the breadboard sockets. The X3 socket provides four connection points for a +5V (Vdd) connection, and ground (Vss). The middle socket in the X3 header is not connected.

AppMod Header

The small AppMod connector is for I/O-oriented projects and additional breadboards made by Parallax. Available AppMods include another breadboard, prototype board, Sound Studio, and LED Display Terminal. Similar to the breadboard on the Board of Education, the breadboard AppMod provides access to all BS2-IC I/O pins, Vss, and Vdd.



AppMods may be stacked using this I/O bus



Schematic

