



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# Solderless Breadboards

## Breadboards-Powered

### PB-204 Powered Breadboard



Use the PB-204 to construct a wide variety of experiments, including but not limited to:

- Opto-Device Circuits
- Clocks
- Multivibrators
- Oscillator Circuits
- Timers
- Function Generator Circuits
- Logic Circuits
- Gates
- Counters
- Flip-Flops
- Analog-to-Digital Converters
- Digital-to-Analog Converters
- Medium Scale Integration Circuits
- Phase Lock Loops
- Operational Amplifier

#### Features:

- Combines utility of a Proto-Board with highly capable regulated DC power supplies
- Housed in a rugged metal case
- Fixed triple output power supply, 5V @1A, +12V & -12V @ 500mA.
- Up to (24) 14-pin DIP IC capacity
- Includes three new GS-830, 830 Tie-point Solderless Breadboards & one new GS-080, 80 Tie-point Bus Strip
- 3-year warranty on all parts and workmanship.

The PB-204 is a durable powered breadboard capable of being used to design a multitude of analog, digital, logic and microcomputer circuits.

The PB-204's on-board power supply eliminates the need for an external supply, adding more versatility to circuit design and experiments, as well as saving valuable bench space by eliminating the need for an external prototyping power supply. Due to its ample sized breadboarding area, the PB-204 is ideally suited to allow for the breadboarding of virtually any type of circuitry, from TTL, CMOS and ECL, to op-amps, audio, comparators, video amps, microprocessor components, phase locks and more.

The PB-204's breadboarding area is comprised of Global's "Premium" solderless breadboards and is backed by an industry leading 3-year warranty.

Global Specialties powered breadboards are an important part of the necessary tools required to enable engineers and technicians to train for careers in the rapidly growing field of electronics technology.



Innovative Training Solutions

[www.globalspecialties.com](http://www.globalspecialties.com)



## Powered Breadboard

### Specifications

Model	PB-204
<b>Input power Source</b>	AC Line: 110/120VAC @ 60Hz, or 210-220VAC @ 50Hz
<b>Power Supplies</b>	<b>Fixed DC:</b> +5V +/-0.2VDC, 1.0A max, current limited Load Regulation better than 0.8% +/- 0.02%/°C Ripple, <4mVp-p @1A <b>Fixed DC:</b> +12VDC, 0.5A max@ +12VDC +/-5% Load Regulation better than 1% +/- 0.04%/°C, Ripple less that 10mVp-p @ 0.5A <b>Fixed DC:</b> -12VDC, 0.5A max@ +12VDC +/-5% Load Regulation better than 1% +/- 0.04%/°C Ripple less that 10mVp-p @ 0.5A
<b>Binding Posts</b>	(1) Black: Chassis Ground (3) Red: Power Supply Outputs +5VDC, +12VDC & -12VDC
<b>Breadboards</b>	2250 Tie points with (8) 100 pin and (2) 80 pin power rails and accommodates up to 24 (14 pin) IC's
<b>Weight</b>	5lbs 5 oz (2.5kg)
<b>Dimensions</b>	9.8 x 6.6 x3.3" (249 x 167 x 86,7mm)

Technical data subject to change without notice.

### Optional Accessories

**WK-1:** Jumper Wire Kit, 350 pieces

**WK-2:** Jumper Wire Kit, 140 pieces

**WK-3:** Jumper Wire Kit, 70 pieces

**WK-4:** Wire Jumper Kit, 100 wires with machined tips

**GSPA Series:** Prototyping adapters

**GSPA-K1:** Surface Mount to DIP Adapter Kit, 6 adapter boards

**GSPA-K2:** Surface Mount to DIP Adapter Kit, 11 adapter boards

**GSA-3185:** Minipro Test Clip Set

