# imall

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!



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(images/product/110090039 2.jpg)

mBot-Blue(2.4G Version) sku: 110090039



mBot is a low cost, easy-to-run robot kit for kids to get hands-on experience about graphical programming, electronics, robotics. It is an all-in-one solution for robotics learning and designed for STEM education.

Cute shape with easy assembly is our goal. mBot contains only about 45 pieces in total, so it is easy to have a sense of achievement for kids to assemble in 10 mins quickly.

How can mBot help kids?



Since Scratch2.0 is very popular in teachers and students as a graphical programming software, it has almost been proved to be the most easy-to-use graphical programming tool. So based on Scratch 2.0, we develop a new software mBlock to use Scratch-style coding to program Arduino and robots. You are free to download from here (http://mblock.cc/download/).

#### New features in mBlock:

- Based on scratch 2.0 developed by MIT Media Lab, nice interface and easy for everyone.
- Free & source code: the software is free and support Window & Mac systems. We will also open
- the source code later.
- **Supports wireless communication:** you can use Bluetooth or 2.4GHz wireless serial to communicate with mBot. And download the program wirelessly is supported.
- Supports standard Arduino boards, like Arduino Uno, Lenardo boards, Makeblock mCore(Based on Arduino Uno) and etc. With open communication protocols and source code, it is easy to add new support for new hardware.
- Easy to use: No additional helper app. The easiest way to program your Arduino and robots.
- Arduino mode: perfect for every beginner to switch from graphical programming to text-based programming. See more improvements we made for easy teaching and learning from BELOW.

	Bluetooth Version	2.4G Version
Suitable	individual users or family	Classroom
Host computer requirement	Support Bluetooth	No
Technology	Bluetooth Paring	No paring, the same technology with wireless mouse
Driver needed	Yes	No
Арр	Yes	No

We have two available wireless communication instead of wired USB cable, so users can enjoy wireless programming to control robots without the limit of USB cable. The Bluetooth Version comes with a Bluetooth module and is suitable for individual usage or team working; The 2.4G Version comes with two 2.4G wireless modules and is suitable for classroom

### Open source platform, Continuous learning



Arduino is an open-source electronic prototyping platform used by people in the global world to start a project quickly. It has been proved to be very expandable and suitable for beginners. So we designed mBot's electronics based on Arduino platform , which is easy for kids to use and extend , and bring their every idea to life.



With intuitional color labels and easy-to-use RJ25 connectors, the board could get wired within a few seconds, so students could get more time to focus on creating all kinds of interactive stories and projects.

## Part List:

2 × Micro TT motor	1 × Universal wheel	1 x Me Ultrasonic sensor
1 × mCore	15 × Socket Cap Screw M4 x 8	1 x Me Line follower
2 × 90T Plastic Wheel	6 × Countersunk Screw M3 x 25	1 x 2.4G wireless serial-USB
2 × Tyre 90T B	8 × Nut M3	1 x 2.4G wireless serial-module
2 × Velcro	4 × Self-drilling Screw M2.2 x 9.5	1X Line follower map
4 × Brass stud M4 x25	2 x 6P6C RJ25 cable-20cm	1 x IR Controller
1 × Chassis	1 x USB A-Male to B-Male Cable 1m	1X Instruction Book
1 × Battery holder 4 AA	1 × Screw driver	