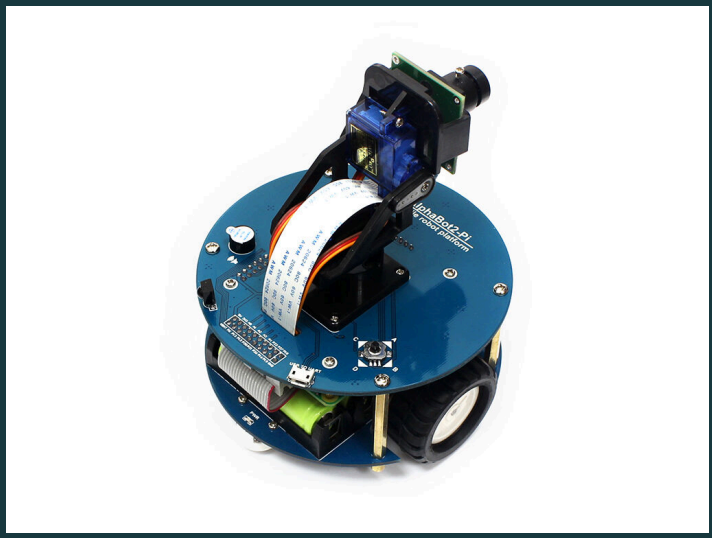
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INDUSTRIAL PRODUCT DATASHEET

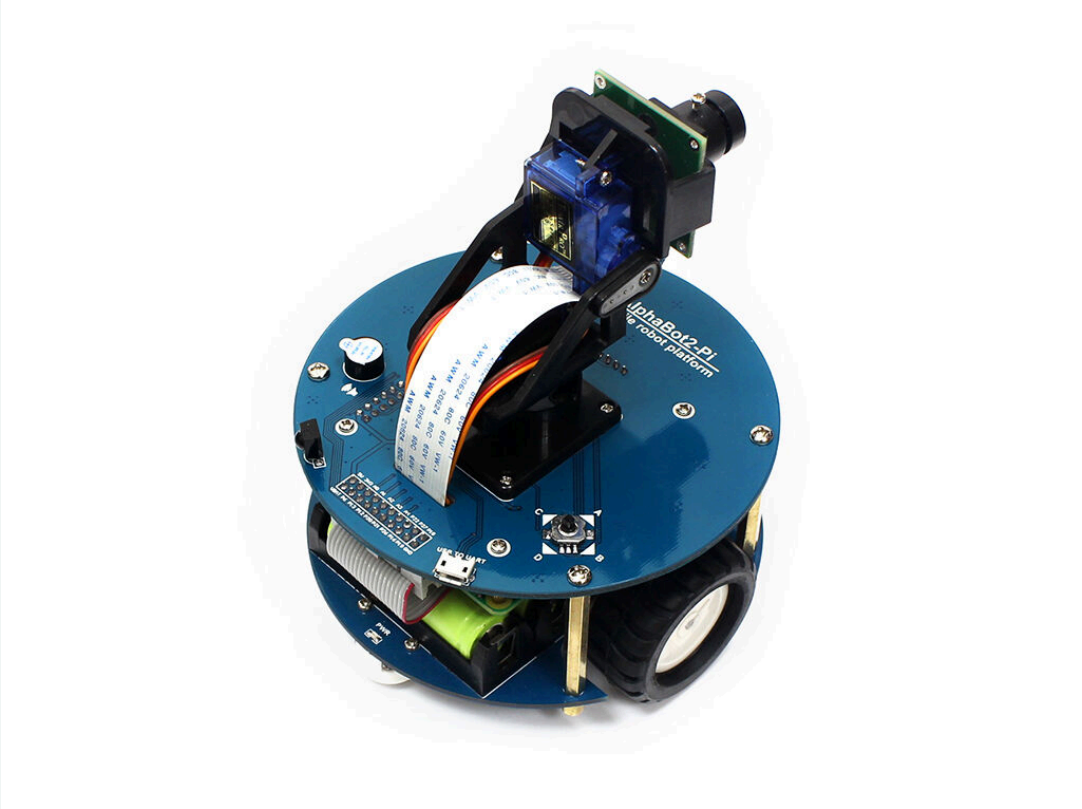
AlphaBot2 robot building kit for Raspberry Pi 3 Model B (no Pi)

AlphaBot2 is a modular robot kit for Raspberry Pi 3 Model B featuring line tracking, obstacle avoidance, and wireless control with easy snap assembly.

SKU	UPDATED	PRICE
110060865	2026-04-09 12:09:54	$77.99(Excl. VAT)



Overview



The AlphaBot2 robot building kit for Raspberry Pi 3 Model B (Raspberry Pi not included) offers a range of robotic functions such as line tracking, obstacle avoidance, and wireless remote control. Its modular snap-together design requires no soldering or wiring, and open-source demo codes enable quick setup.

Key Features

Note: Raspberry Pi is NOT included.

This AlphaBot2 robot kit is designed to use with Raspberry Pi 3 Model B (not included). It features rich common robot functions including line tracking, obstacle avoiding, Bluetooth/infrared/WiFi remote control, video monitoring, etc.

Thanks to the highly integrated modular design, it is fairly easy to assemble by a snap, no soldering, no wiring. After a few minutes spent on hardware assembing, you're almost there, our open source demo codes is ready to help you get started fast.

AlphaBot2 Features

AlphaBot2 employs a 2-layer structure to provide excellent stability and compatibility.

AlphaBot2-Base, the lower base chassis:

• 5-ch infrared sensor, analog output, combined with PID algorithm, stable line tracking

• Onboard modules like line tracking, obstacle avoiding, needs no messy wiring

• TB6612FNG dual H-bridge motor driver, compared with L298P, it's more efficient, more compact, and less heating

• N20 micro gear motor, with metal gears, low noise, high accuracy

• Onboard RGB LEDs, true color lighting, pretty cool

AlphaBot2-Pi, the upper adapter board for controller:

• LM2596 voltage regulator, provides the Pi with stable 5V power

• TLC1543 AD acquisition chip, allows the Pi to use analog sensors

• PCA9685 servo controller, make it more smoothly to rotate the pan head

• CP2102 UART converter, easy for controlling the Pi via UART

What's on the AlphaBot2-Base

1. **AlphaBot2 control interface:** for connecting sorts of controller adapter board
2. **Ultrasonic module interface**
3. **Obstacle avoiding indicators**
4. **Omni-direction wheel**

5. **ST188:** reflective infrared photoelectric sensor, for obstacle avoiding
6. **ITR20001/T:** reflective infrared photoelectric sensor, for line tracking
7. **Potentiometer** for adjusting obstacle avoiding range
8. **TB6612FNG** dual H-bridge motor driver
9. **LM393** voltage comparator
10. **N20 micro gear motor** reduction rate 1:30, 6V/600RPM
11. **Rubber wheels** diameter 42mm, width 19mm
12. **Power switch**
13. **Battery holder:** supports 14500 batteries
14. **WS2812B:** true color RGB LEDs
15. **Power indicator**

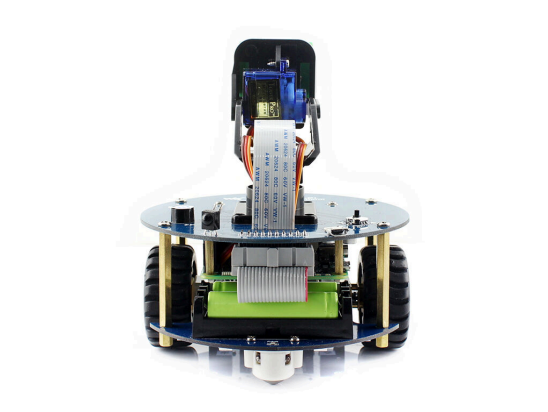
What's on the AlphaBot2-Pi

1. **AlphaBot2 control interface:** for connecting AlphaBot2-Base
2. **Raspberry Pi interface:** for connecting Raspberry Pi 3 Model B
3. **Servo interface**
4. **USB TO UART:** easy for controlling the Pi via UART
5. **LM2596:** 5V voltage regulator
6. **TLC1543:** 10-bit AD acquisition chip, allows the Pi to use analog sensors
7. **PCA9685:** servo controller, make it more smoothly to rotate the pan head
8. **CP2102:** USB TO UART converter
9. **Joystick**
10. **IR receiver**
11. **Buzzer**

Examples

Note: photos are FOR REFERENCE ONLY, the other boards/modules/accessories are NOT included in the price.

Product Gallery



Part List

AlphaBot2-Pi (adapter board)	1
AlphaBot2-Base (base chassis)	1
RPi Camera (B)	1
Micro SD Card 16GB	1
Power adapter US standard 5V/2.5A USB output	1
SG90 servo	2
2 DOF pan and tilt kit	1
IR remote controller	1
FC-20P cable 8cm	1
USB type A plug to micro B plug cable	1
15PIN FFC 25cm	1
AlphaBot2-Pi screws	1
Micro SD Card Reader	1
Screwdriver	1

Compliance & Logistics



HSCODE	9023009000
USHSCODE	9023000000
EUHSCODE	9023001000
COO	CHINA

Resource Links

- https://www.seeedstudio.com/AlphaBot2-robot-building-kit-for-Raspberry-Pi-3-Model-B-no-Pi.html

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