

# HaloCode standard kit

**SKU:** P1030065  
**WEIGHT:** 0.00 KGS  
**EAN:** 6928819509269  
**PACKING METHOD:** Box Packing



## Description

### • What is HaloCode standard kit?

HaloCode is a wireless single board computer. With its built-in Wi-Fi support and microphone, the students can easily bring your board into the IoT projects and add speech recognition ability to it.

It comes with plenty of sensors, such as 12 programmable RGB LED, a motion sensor, a touch sensor and more. And its companion software, mBlock 5, makes it easy to get started with HaloCode and learn to code. Using HaloCode, everyone can make their own creations, in a easy and fun way!

## Features

### • With Built in Wi-Fi, Creating an IoT project has never been easier

- a. With built in Wi-Fi module, the student can use HaloCode and mBlock 5 to create smart devices platform and the IoT models, like controlling home appliances in distance, in the simplest way ever.
- b. The Local Area Network(LAN) makes it possible for two or more HaloCodes to communicate with each other. This enables students to make HaloCode do many more things, like a tabletop drum pad.

### • Exposes Students to AI Tech, such as Speech Recognition

HaloCode features a built-in microphone that enables it to detect the voice . And its cloud storage and Wi-Fi features give students the freedom to create unique projects based on the speech recognition service. Whether you are making a voice interaction toy or setting up a voice-controlled smart home, or a DIY prototype of AI speaker, HaloCode is exactly what you are looking for.

### • Built-in Sensors Make HaloCode Multitalented

HaloCode has 12 programmable RGB LED, a touch sensor, a motion sensor and more. Students can use them to build an interactive rainbow lamp, create motion sensing games, interact with the Sprites of mBlock 5, and even make themselves motiontracking wristbands.

- **Support the real Multithreading**

Equipped with 4MB memory and an onboard powerful Xtensa dual-core 32-bit LX6 microprocessor, the 45mm-sized HaloCode is empowered to execute multiple processes or threads concurrently. It doesn't matter how many programs you write, with HaloCode, you can just run them at the same time, which is hardly possible with Micro:bit.

- **The Scratch 3.0 inspired graphical programming language**

mBlock 5 is developed based on Scratch 3.0. It supports block-based programming, which makes coding intuitive and easy to pick up. All that students need to do is dragging and dropping those color-coded blocks. They can quickly gain an understanding of the basics of coding and focus on the more important thing, Creating.

- **Move on to advanced Python with one-click**

HaloCode support MicroPython. In mBlock 5, you can switch to Python coding with just one click. Python code changes in sync with the coding blocks in real time so students can check how their programs look like in Python mode. It also satisfies the needs of teachers for advanced teaching. Of course, students can write code directly in mBlock 5's Python editor.

- **Cross-platform compatibility, Support Learn the Machine Learning Knowledge in an easy way**

Here you can find out everything about the cutting-edge AI techniques, from Microsoft Cognitive Services to Google's Deep Learning. mBlock 5 is available for Web, MacOS, Windows PC, iOS, and Android. By training the machine model, the students can make some AI applications such as the face recognition unlocking system. Tips: Machine Learning function is not included in the mobile application.

- **An integration of hardware and software makes it fun to learn to code**

With mBlock 5, students can program the stage to create projects that are engaging. For instance, they can design puzzle games that are played by controllers. Using simple materials, they can create animations, games or stories that are unique. By learning coding on hardware, students can see how their code work exactly in the real world and how coding benefits their life. This helps students develop an intuitive understanding of the programming logic.

## Specifications

Processor Core : Xtensa dual-core 32-bit LX6 microprocessor ; CPU Clock Speed : 240Mhz

Chip - ESP32

Onboard Memory :

Flash ROM : 440K ; RAM : 520K

Expanded Memory

SPI Flash : 4MB ; PSRAM : 4MB

Communication

USB Port、Bluetooth、WiFi (Dual modes, access to Local Area Network)

Onboard Components 1 - 12 Programmable RGB LED 、 Motion Sensor (include three-axis accelerometer and three-axis gyroscope)

Onboard Components 2 - Microphone、 Programmable Button、 4 Touch Sensors (4 I/O pins that can generate PWM outputs ; 4 digital input ports, 2 analog input ports)

External Components - Alligator clips, expansion board

Operating Voltage - 3.3V

Software - mBlock 5

Coding Languages - Block-based programming language, Python

mBlock for Web - Above MacOS 10.10/Above Win7/Chromebook/Linux

mBlock for PC - Above MacOS 10.10/Above Win7

## Part list

1 x HaloCode

1 x AAA Size Battery Holder

3 x AAA Battery

1 x Micro USB Cable

1 x Hook&Loop Strap

1 x Black Fuzzy Fastener (pack of 4)

1 x White Hook Fastener(pack of 4)

1 x Copper Foil Tape

1 x Quick Start Guide

1 x Sample Project Guide

1 x Multicolored Alligator Clips (pack of 4)