

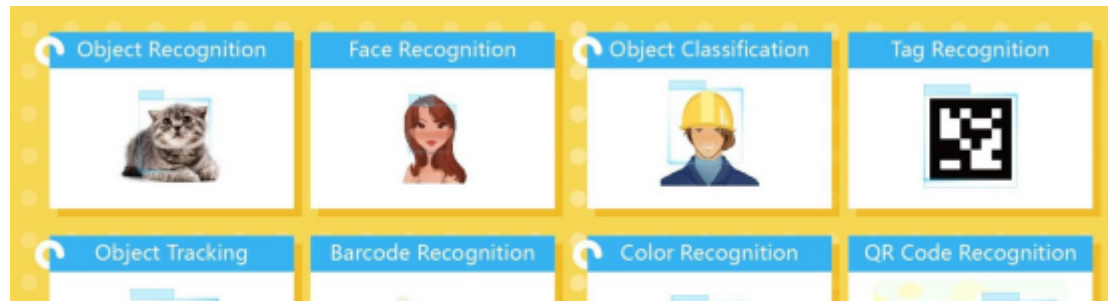
SKU:KIT0179-EN (<https://www.dfrobot.com/product-2378.html>)



(<https://www.dfrobot.com/product-2378.html>)

Introduction

The Study Pack of HUSKYLENS for micro:bit is an HuskyLens extension kit based on micro:bit programming. It is suitable for students aged 8-19. Centered around AI image recognition, the kit is equipped with 7 external modules and 28 cards that are applicable to teaching scenarios. Focusing on computer science, the tutorial provided for this kit aims to help students learn knowledge related to AI image recognition in an enjoyable and engaging way. In the tutorial, they will explore how the image recognition technology is applied to real-life through projects like face unlocking, AI camera, pet feeding, self-service charging, scanning code payment, target tracking, etc. And each project comes with corresponding teaching cards to help them get started easily.





Features

- A variety of tutorial cases, 25 fun projects in 12 lessons
- 28 teaching cards help you easily learn the AI image recognition function
- Cards: people, colors, objects, barcodes, labels, QR codes, object tracking

Projects introduction and tutorial contents

Name

Name

Lesson 1 The Musical Magic Mirror

(<https://img.dfrobot.com.cn/wiki/5d09937f437c63049d98b469/5acebbd535893ec592454c2a>

Name

Lesson 2 Face Recognition Access Control

(<https://img.dfrobot.com.cn/wiki/5d09937f437c63049d98b469/c557194524dc851f573f56401f>)

Name

Lesson 3 Colorful Piano

(<https://img.dfrobot.com.cn/wiki/5d09937f437c63049d98b469/72e6c2478632788cf6d81ec8f>)

Name

Lesson 4 Vending Machine for Stray Cats & Dogs

(<https://dfimg.dfrobot.com/nobody/wiki/905d955c74e423bd5e05252320a79730.pdf>)

Name

Lesson 5 Object Tracker

(<https://dfimg.dfrobot.com/nobody/wiki/b763ea6d558f1db638099ad3de8f52da.pdf>)

Name

Lesson 6 Self-service Cashier

(<https://img.dfrobot.com.cn/wiki/5d09937f437c63049d98b469/eb30356d1e34b17b337d1305>)

Name

Lesson 7 Energy Harvest

(<https://img.dfrobot.com.cn/wiki/5d09937f437c63049d98b469/45823b502838f32d9f82bd96>)

Name

Lesson 8 Smart Bus Ticketing Machine

(<https://dfimg.dfrobot.com/nobody/wiki/8bbf8c8c4932dbadd0f421e5d61267d3.pdf>)

Name

Lesson 9 Safety Helmet Reminder

(<https://img.dfrobot.com.cn/wiki/5d09937f437c63049d98b469/3f176acf27ddccb9dc5eebe9>)

Name

Lesson 10 Decrypt Binary

(<https://dfimg.dfrobot.com/nobody/wiki/06ddb5355d767223a9c334f1e78e3ebc.pdf>)

Name

Lesson 11 Huskylens Camera

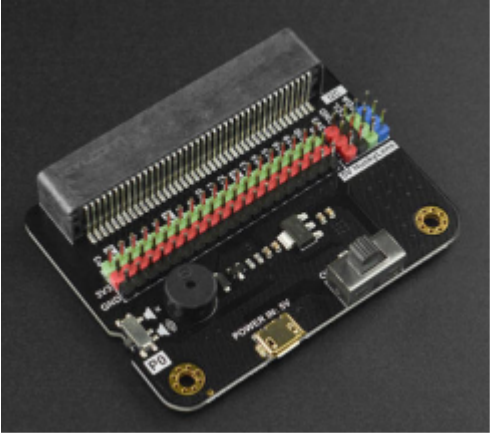
(<https://dfimg.dfrobot.com/nobody/wiki/fda7cd3d414e7c1d47c2c69286bbf3ab.pdf>)

Name

Lesson 12 Emergency Lane Watchdog

(<https://dfimg.dfrobot.com/nobody/wiki/69609c1a2ee226e5c5a7e142aad41a92.pdf>)

Product List

IO Extender for micro:bit	Introduction
 (https://www.dfrobot.com/product-1867.html)	Power Supply Voltage:5V IO Expansion Port(3.3V):×18 I2C Interface (3.3V): ×2 HuskyLens-I2C Port(5V): ×1 Buzzer: ×1 Dimension: 66mm×50.5mm/2.60×1.99"
Micro Vibration Motor Module	

IO Extender for micro:bit

Introduction



(<https://www.dfrobot.com/product-1542.html>)

Operating Voltage: 5V

Interface Type: Digital

Control Mode: High-low level/PWM signal

**Dimension:* *30mm×20mm/1.18×0.78"

Voice Recorder Module

IO Extender for micro:bit

Introduction



(<https://www.dfrobot.com/product-1507.html>)

Operating Voltage:5V

Recording Time: 10 seconds

Sampling Frequency: **6.4KHZ

Repeatable Recording Times: 100000次

Dimension: **37×35mm/1.46×1.38"

Stereo Enclosed Speaker

IO Extender for micro:bit

Introduction



(<https://www.dfrobot.com/product-1506.html>)

Power:3W

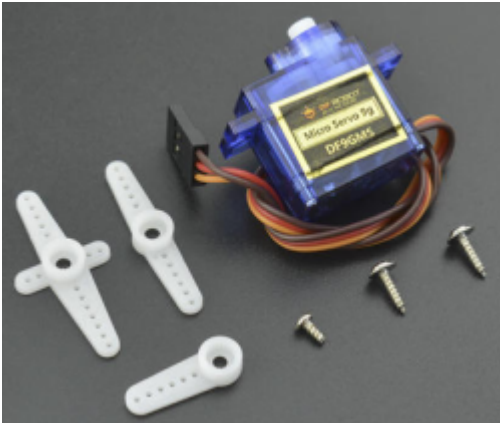
Resistance:8 Ω

Dimension:70mm×30mm×16mm/2.76×1.18×0.63"

Micro Servo

IO Extender for micro:bit

Introduction



(<https://www.dfrobot.com/product-255.html>)

Operating Voltage4.8V

Stall Torque:1.6kg/cm

Speed:0.14s/60°

Operating temperature:-30 ~ +60 °C

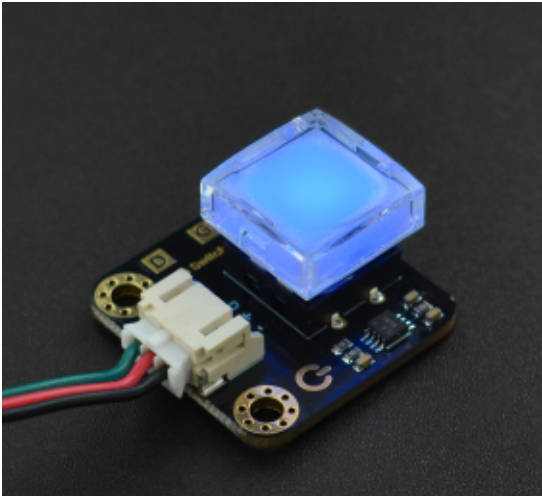
Dead Set:5 microseconds

Dimension:23mm×12.2mm×29mm/0.9×0.5×1.2"

LED Switch - Blue

IO Extender for micro:bit

Introduction



(<https://www.dfrobot.com/product-2350.html>)

Operating Voltage3.3 V~5 V

Interface Type:Digital

Usage Method:The button has its own indicator light, which will light up when pressed.

Dimension:2.7mm×2.6mm

RGB Full Color LightsWith

IO Extender for micro:bit	Introduction
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	Operating Voltage:3V~5V Interface Type:PH2.0-3P LED Quantity:7 Dimension:13cm×10mm
Face Card	
	Main Usage:HUSKYLENS face recognition function Main Projects:Musical magic mirror, face

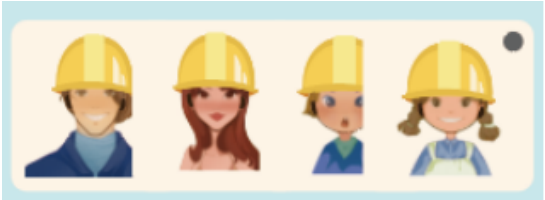
	Main Usage: Introduction, access control Introduction
	Number: 5 Dimension: 9cm×9cm

Color Card	
	Main Usage: HUSKYLENS color recognition function Main Projects Color Piano Number: 7 Dimension: 9cm×9cm
Object Card	
	Main Usage: HUSKYLENS object recognition function Main Projects: Automatic pet feeder, emergency lane watchdog Number: 3 Dimension: 9cm×9cm

IO Extender for micro:bit Barcode Card	Dimension:9cm×9cm Introduction
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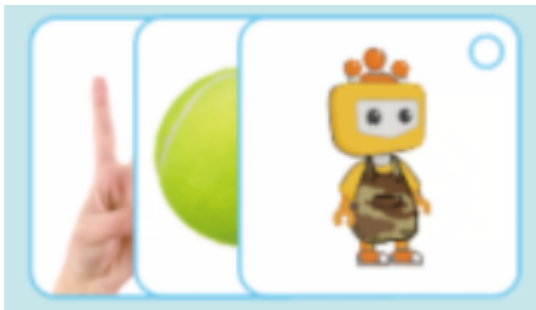
	Main Usage:HUSKYLENS barcode recognition function Main Projects:Self-service Supermarket Cash Register Number:3 Dimension9cm×9cm
Label Card 	Main Usage:HUSKYLENS label recognition function Main Projects:Collect Energy Every Day, Encryption and Decryption Number:3 Dimension:9cm×9cm

IO Extender for micro:bit QR Code Card	Introduction
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	Main Usage:HUSKYLENS QR code recognition function Main Projects:Smart Bus Card Reader Number:3 Dimension:9cm×6cm
Object Classification Card	
	Main Usage:HUSKYLENS Object classification function Main Projects:Safety Helmet Reminder Number:4 Dimension:9cm×9cm
Object Tracking Card	

IO Extender for micro:bit

Introduction



Main Usage:HUSKYLENS object tracking function

Main Projects:Target Locator

Number:3(All the above cards can be used to track objects)

Dimension:9cm×9cm

FAQ

For any questions, advice or cool ideas to share, please visit the **DFRobot Forum** (<https://www.dfrobot.com/forum/>).

More Documents



DFshopping_car1.png Get **Study Pack of HUSKYLENS for micro:bit**

(<https://www.dfrobot.com/product-2378.html>) from DFRobot Store or **DFRobot Distributor**.

(<https://www.dfrobot.com/index.php?route=information/distributorslogo>)

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