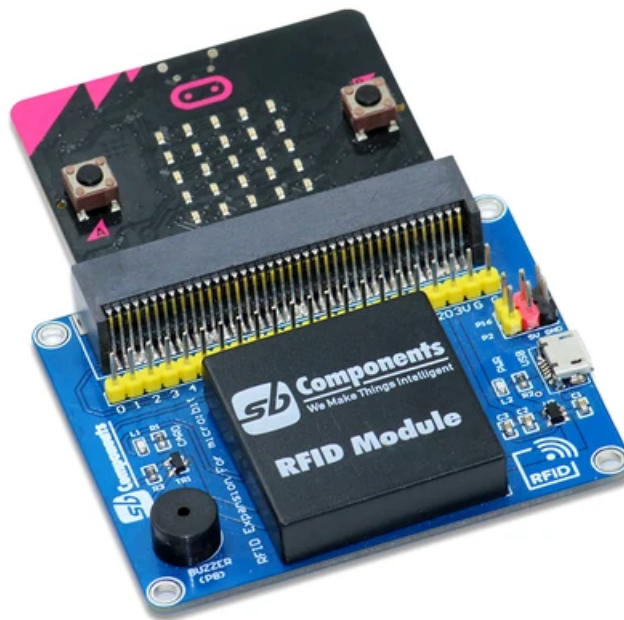


RFID Expansion for Micro:bit



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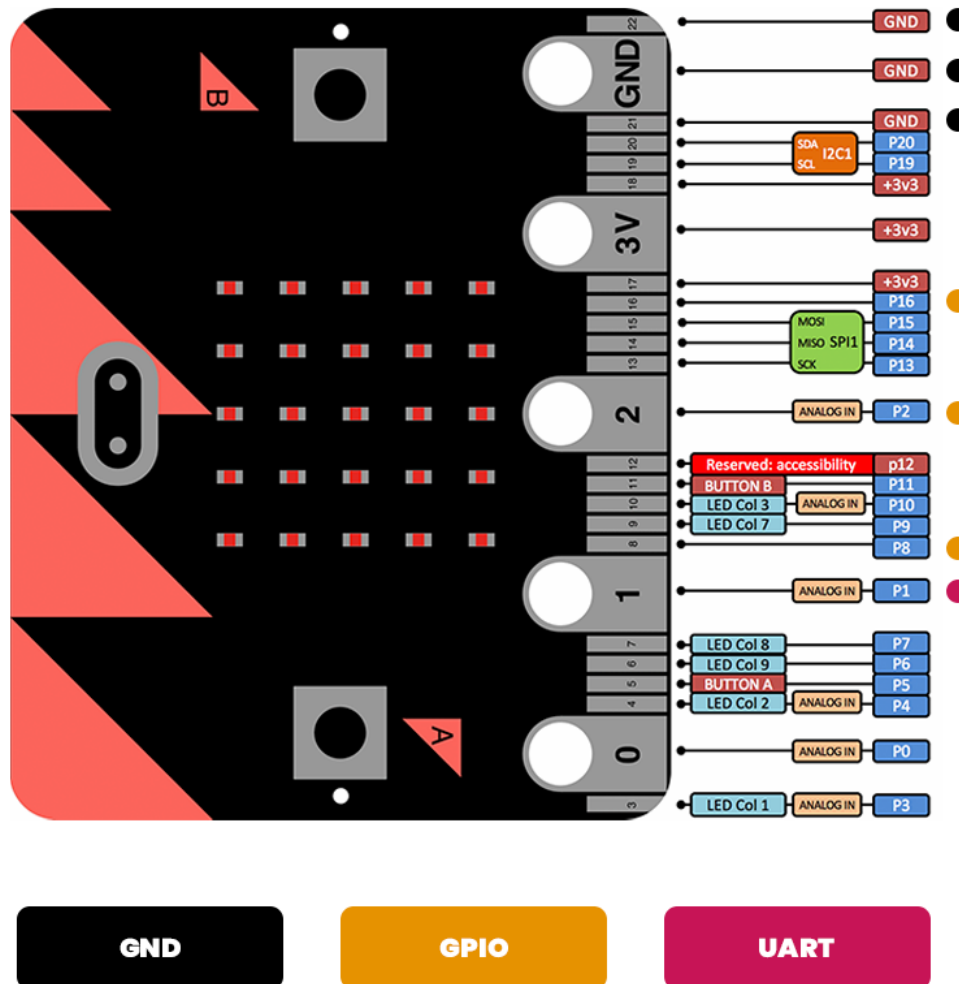
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RFID Expansion for Micro:bit

Introduction

RFID Expansion for Micro:bit is an RFID device with an updated UART interface running at the frequency of 125KHz, Programmable Buzzer, two Dedicated slots for Servo Motor Interfacing, USB power port, and a compact design that compatibles with all the variants of Micro:bit, V1 and V2 both. It is developed with an expansion header to connect the RFID module with Micro:bit via easy stacking.

Pin Out



Expansion	Micro:bit
GND	GND
RFID TX	P1
BUZZER	P8
SERVO 1	P2
SERVO 2	P16

Features

- Micro:bit GPIO Interface
- Supports 125 kHz Cards/ Keyfob/ Tags
- Compatible with Micro:bit V1 and V2
- Programmable Buzzer
- Standard RFID Expansion for Micro:bit
- Two Dedicated slots for Servo Motor Interfacing
- Power and card LED indicator
- Comes with development resources and material
- USB power port to provide power to RFID module and Micro:bit

Specification

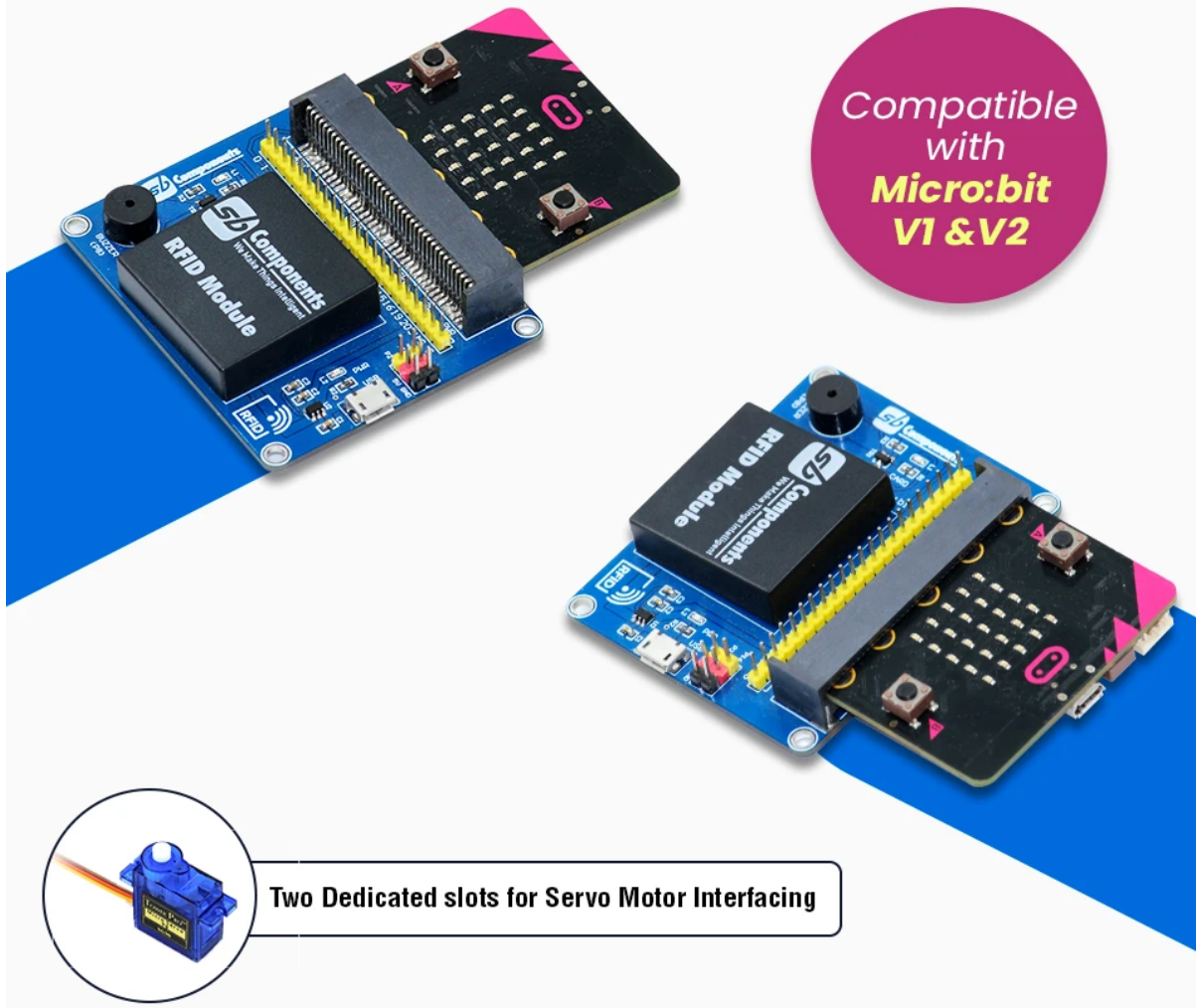
- Operating Voltage - 5V
- Operating Frequency - 125 kHz
- Communication Interface - External Pins (GPIO and Power Pins)
- Default Baud Rate - 9600 bps
- Dimensions - 55.82 x 68 mm

Hardware

RFID Expansion for Micro:bit

helps the user to read the information of ID stored in the **RFID key fob and tags**

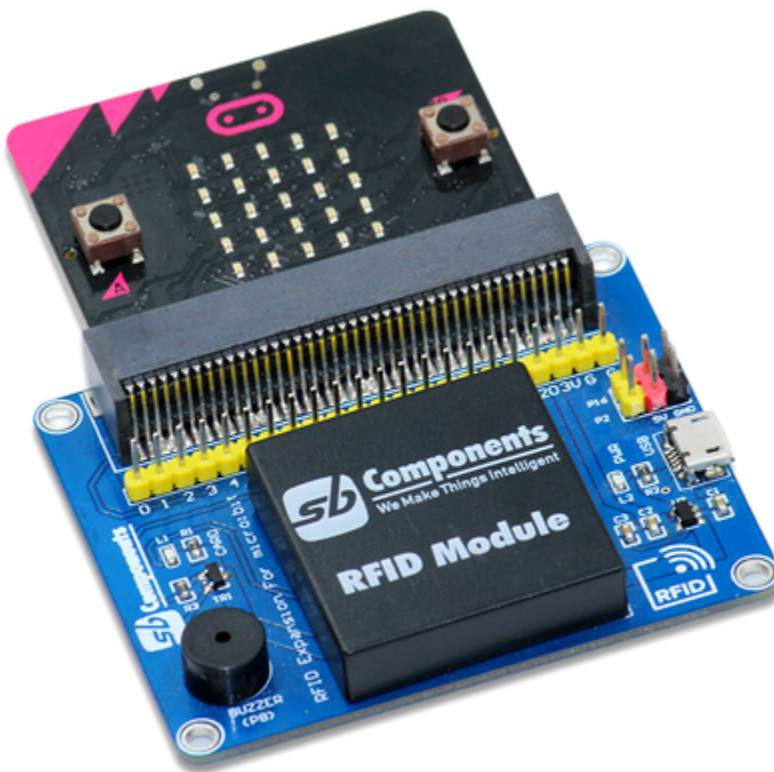
•Micro:bit GPIO Interface •Supports 125 kHz Cards/ Keyfob/ Tags •USB Power Port •Programmable Buzzer



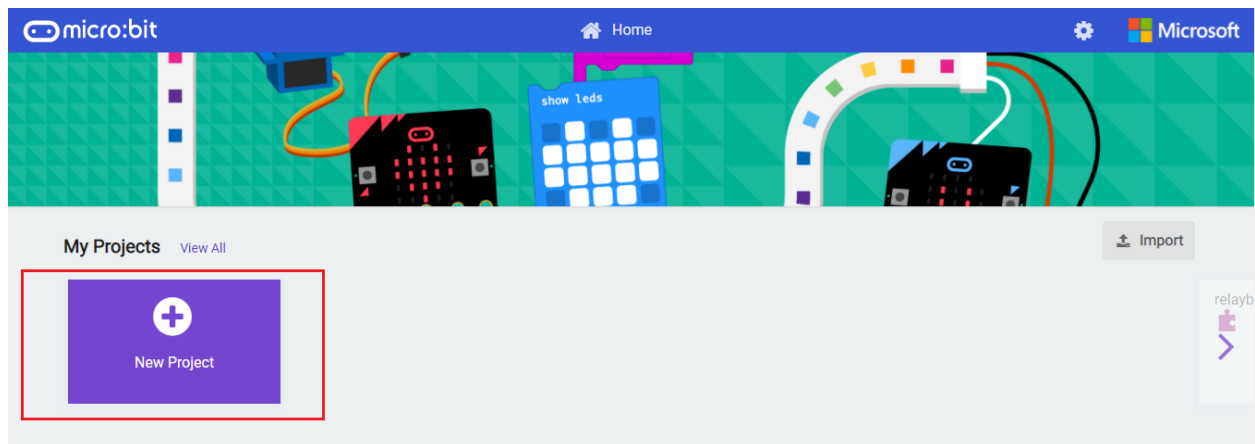
Installation Process

Source code link : <https://github.com/sbcshop/RFID-Expansion-For-Microbit/>

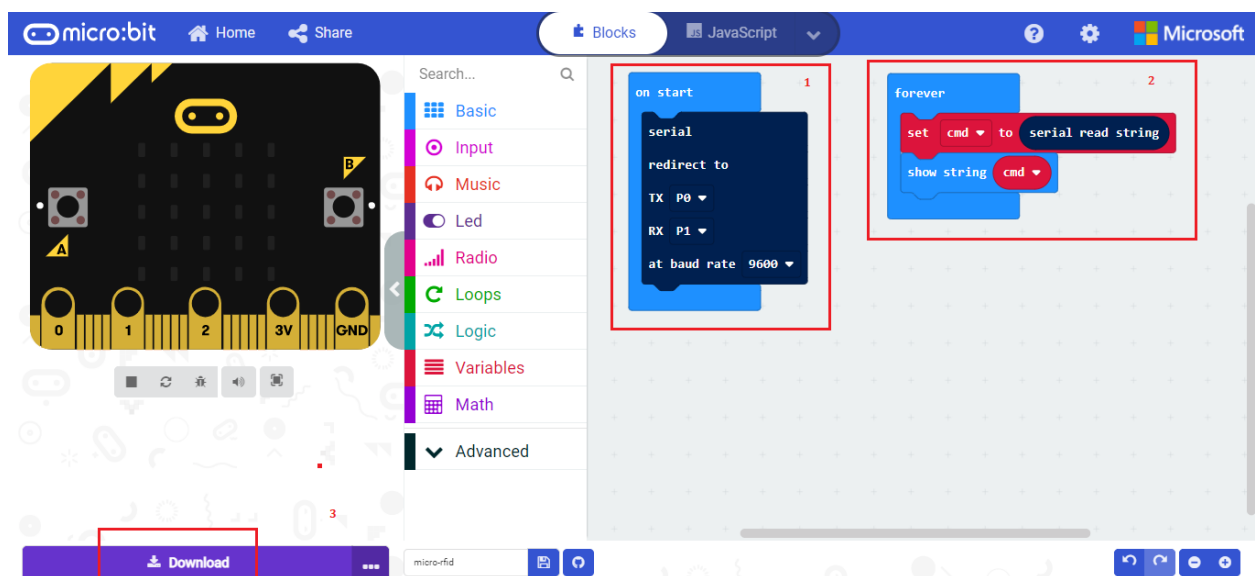
- Attach Micro:bit on stackable connector of RFID Expansion of Microbit as shown below.



- Visit official programming website of Microbit
<https://makecode.microbit.org/>
- Now Create a new project by clicking on "New project" tab and enter the name of your project.



- Now drag and drop the block as shown in the image below and click on the download button to download it on your Microbit.



- Tap RFID card, Keyfob or Tag on RFID receiver to show 12 digit unique id of card on led matrix of Microbit.

Alternate Method :

- You can directly drag and drop test.hex file to Microbit to run the above said program and Tap card/Tag to display their unique id on led matrix.