

Unit IR

SKU:U002



Description

Unit IR is a compact short-range photoelectric transceiver unit integrating both infrared transmission and reception. It features a 940nm infrared emitting diode and a 38kHz hardware-demodulating receiver, supporting modulated transmission and automatic demodulation reception for standard infrared protocols such as NEC. The unit communicates via a Grove HY2.0-4P interface with an effective range of less than 5 meters, and incorporates LEGO-compatible mounting holes for flexible integration with LEGO structures or screw-based installation. Suitable for smart home control, infrared remote learning, and short-range inter-device communication.

Features

- Emission Wavelength: 940nm (invisible light)
- Reception Frequency: 38kHz (hardware demodulation)
- Effective Range: $\leq 5\text{m}$
- Communication Interface: Grove HY2.0-4P
- 2 x LEGO-Compatible Mounting Holes
- Development Platform
 - UiFlow1
 - UiFlow2

- Arduino IDE

Includes

- 1 x Unit IR
- 1 x HY2.0-4P Grove Cable

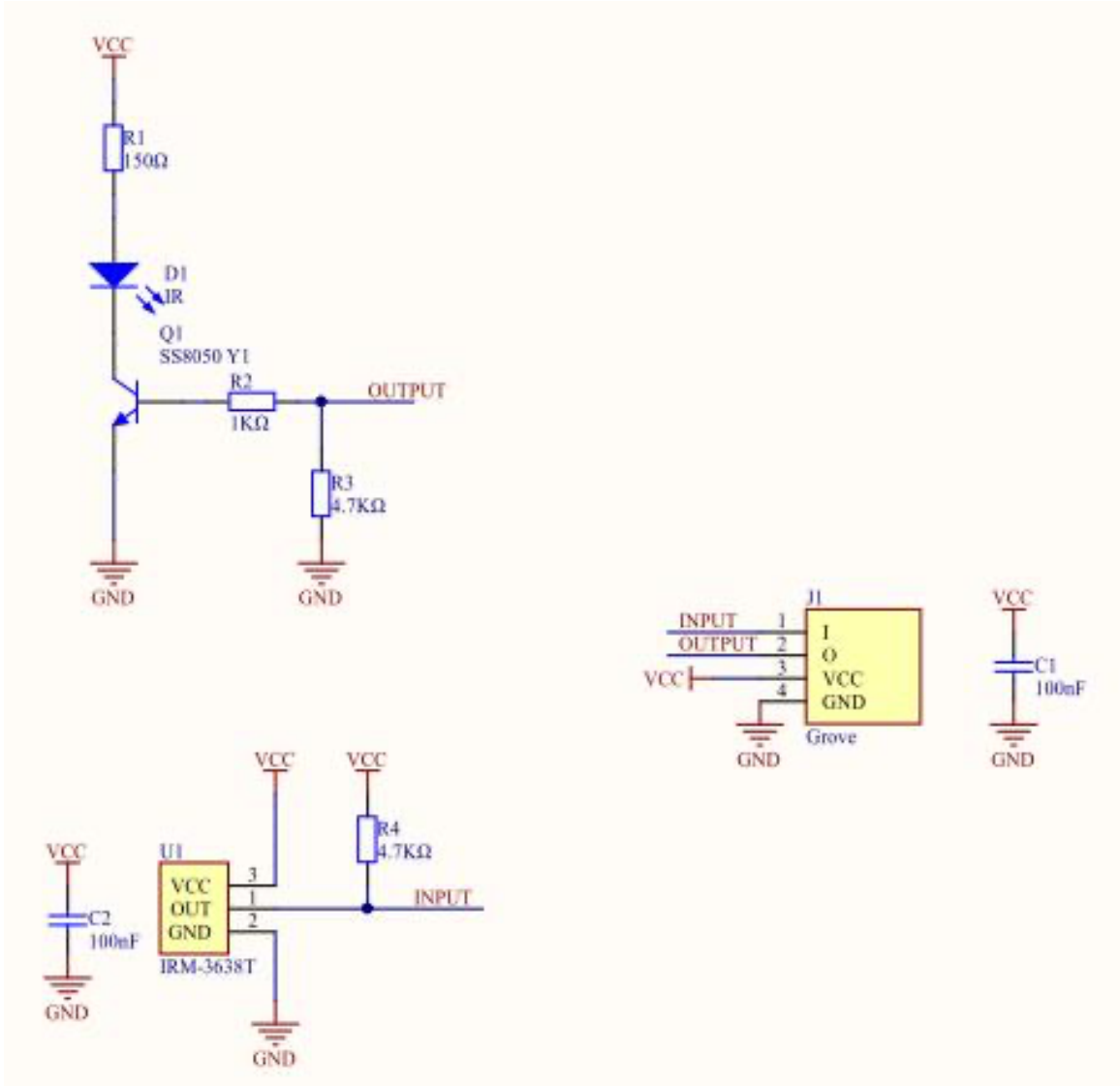
Applications

- Smart Home
- Infrared Remote Control

Specifications

Specification	Parameter
IR Emitter Wavelength	940nm
Product Size	32.0 x 24.0 x 8.0mm
Product Weight	4.6g
Package Size	67.0 x 53.0 x 12.0mm
Gross Weight	17.0g

Schematics

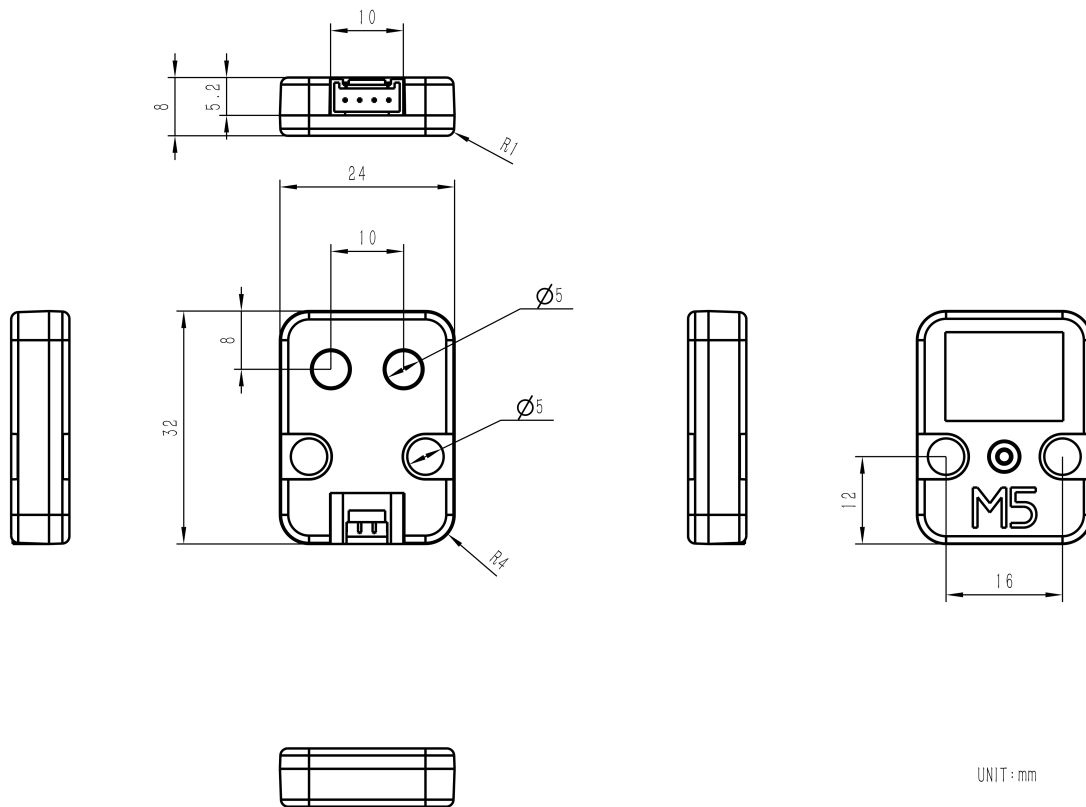


PinMap

Unit IR

HY2.0-4P	Black	Red	Yellow	White
PORT.B	GND	5V	IR_TX	IR_RX

Model Size



Structure

- [Unit IR Structural Files](#)

Softwares

Arduino

- [Unit IR Example - with M5Core](#)

UiFlow1

- [Unit IR UiFlow1 Docs](#)

UiFlow2

- [Unit IR UiFlow2 Docs](#)

Home Assistant

- [Home Assistant Integration](#)

EasyLoader

Easyloader	Download	Note
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| Video
