

# Gravity: DFR0627 I<sup>2</sup>C to Dual UART Module

DFR0627

## Product Overview

07-04-2022

For the most up-to-date information, visit [www.mouser.com](http://www.mouser.com) or the supplier's website.

## Description

DFRobot Gravity DFR0627 I<sup>2</sup>C to Dual UART Module offers up to 1Mbps of data transmission rate, and each sub-UART has 256-byte FIFO hardware-independent buffer for receiving and transmitting. For every sub-UART, the word length, baud rate, and also check format can be set independently. The module provides a maximum communication rate of 2Mbps. At most, onto one controller board, four of such modules can be connected to expand 8 hardware serial ports. This I<sup>2</sup>C to dual UART module can be used with the ultrasonic ranging module, GPS module, and, IoT module.



Usually, there are only 1 or 2 UARTs on controller boards like Raspberry Pi, micro: bit, Arduino, or others, and amongst these one of them will be used in debugging or program downloading. This module would be a perfect solution for situations like when the user's application needs to connect to several UART devices, chances are that they may find short in UARTs on the mainboard for connecting, at those times this module is a perfect solution. The user can also use this product in the WS2818 RGB relevant projects with strict timing requirements and in IR receivers.

## Features

- I<sup>2</sup>C to dual UART
- Up to 2Mbps communication rate
- Expand 8 hardware serials at most
- Sub-UART receives/transmits independently
- Independent setting for band rate and word length of sub-UART

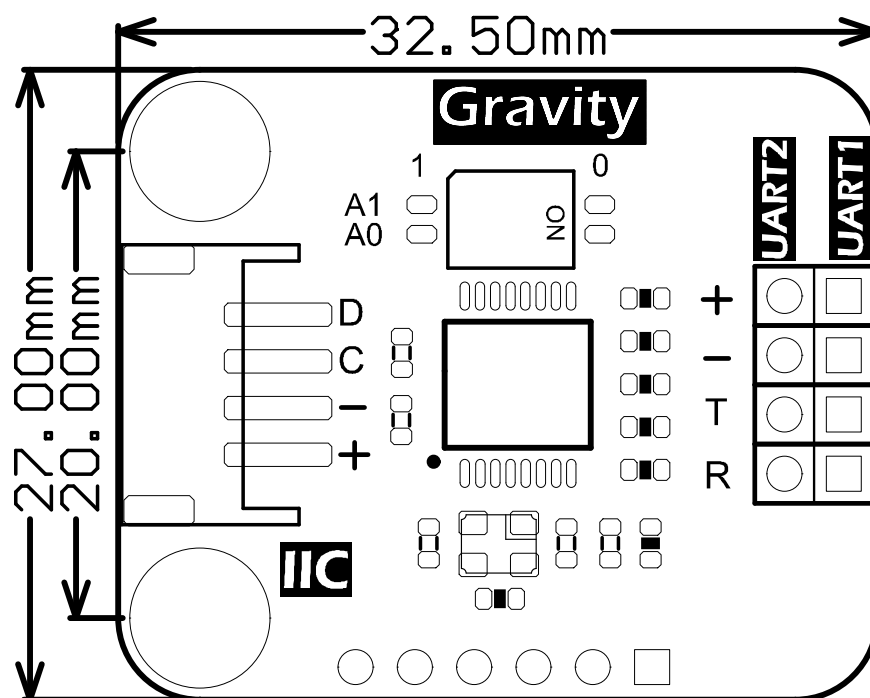
## Specifications

- 3.3V to 5.5V operating voltage range
- < 3mA operating current
- Gravity-IIC 4-pin communication port
- 2 expanded UART
- -40°C to 85°C operating temperature range
- 32.5mm x 27mm/1.28" x 1.1" dimensions

## Applications

- Internet of Things (IoT) module
- Ultrasonic ranging module
- GPS module
- Speech synthesis module

## Dimensions Diagram



## Mouser Part Number

[View Part](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-dfr0627-i2c-to-dual-uart-module/>