

# Stratux RPi LoRa Module

## Installation Instructions

1. Place the module on the Raspberry Pi pins as below:

| Raspberry Pi 3 GPIO Header |                                    |                                                                                     |                                    |        |    |
|----------------------------|------------------------------------|-------------------------------------------------------------------------------------|------------------------------------|--------|----|
| Pin#                       | NAME                               |                                                                                     | NAME                               | Pin#   |    |
| 01                         | 3.3v DC Power                      |    | DC Power 5v                        | 02     |    |
| 03                         | GPIO02 (SDA1 , I <sup>2</sup> C)   |    | DC Power 5v                        | 04     |    |
| 05                         | GPIO03 (SCL1 , I <sup>2</sup> C)   |    | Ground                             | 06     |    |
| 07                         | GPIO04 (GPIO_GCLK)                 |    | (TXD0) GPIO14                      | 08     |    |
| 09                         | Ground                             |    | (RXD0) GPIO15                      | 10     |    |
| 11                         | GPIO17 (GPIO_GEN0)                 |    | (GPIO_GEN1) GPIO18                 | 12     |    |
| 13                         | GPIO27 (GPIO_GEN2)                 |    | Ground                             | 14     |    |
| 15                         | GPIO22 nRESET                      |    | DIO2                               | GPIO23 | 16 |
| 17                         | 3.3v DC Power                      |    | DIO1                               | GPIO24 | 18 |
| 19                         | GPIO10 (SPI_MOSI)                  |   | Ground                             | 20     |    |
| 21                         | GPIO09 (SPI_MISO)                  |  | DIO0                               | GPIO25 | 22 |
| 23                         | GPIO11 (SPI_CLK)                   |  | (SPI_CE0_N) GPIO08                 | 24     |    |
| 25                         | Ground                             |  | LINK_ACT                           | GPIO07 | 26 |
| 27                         | ID_SD (I <sup>2</sup> C ID EEPROM) |  | (I <sup>2</sup> C ID EEPROM) ID_SC | 28     |    |
| 29                         | GPIO05                             |  | Ground                             | 30     |    |
| 31                         | GPIO06                             |  | GPIO12                             | 32     |    |
| 33                         | GPIO13                             |  | Ground                             | 34     |    |
| 35                         | GPIO19                             |  | GPIO16                             | 36     |    |
| 37                         | GPIO26                             |  | GPIO20                             | 38     |    |
| 39                         | Ground                             |  | GPIO21                             | 40     |    |

Rev. 2  
29/02/2016

[www.element14.com/RaspberryPi](http://www.element14.com/RaspberryPi)

The module will look like this:



2. You will need to have Raspbian installed on the RPi to start. Install the example software as below.
3. Run “example\_txrx” to both transmit and receive an example message on 915 MHz. When a message is received, it will be printed to the console while the program is running.
4. If you are using different software to access the module, make sure to match the control pins (DIO0, etc) according to the pinout diagram above.
5. If you encounter any issues, please send us a message at [products@stratux.me](mailto:products@stratux.me).

## Software Installation Instructions

1. Install required programs: *apt-get install git wiringPi golang*.
2. Download the software: *git clone <http://github.com/stratux/goRFM95W>*.
3. Change to the software directory: *cd goRFM95W*.
4. Compile the software: *make*.
5. Run the program: *./example\_txrx*.