



# Raspberry PI GPS Add-on

## Overview

Raspberry PI GPS Add-on is customized for Raspberry Pi interface based on NEO-6 GPS module. Through the serial port on Raspberry Pi, data returned from NEO-6 module can be received, thus information such as the current location and time can be searched.

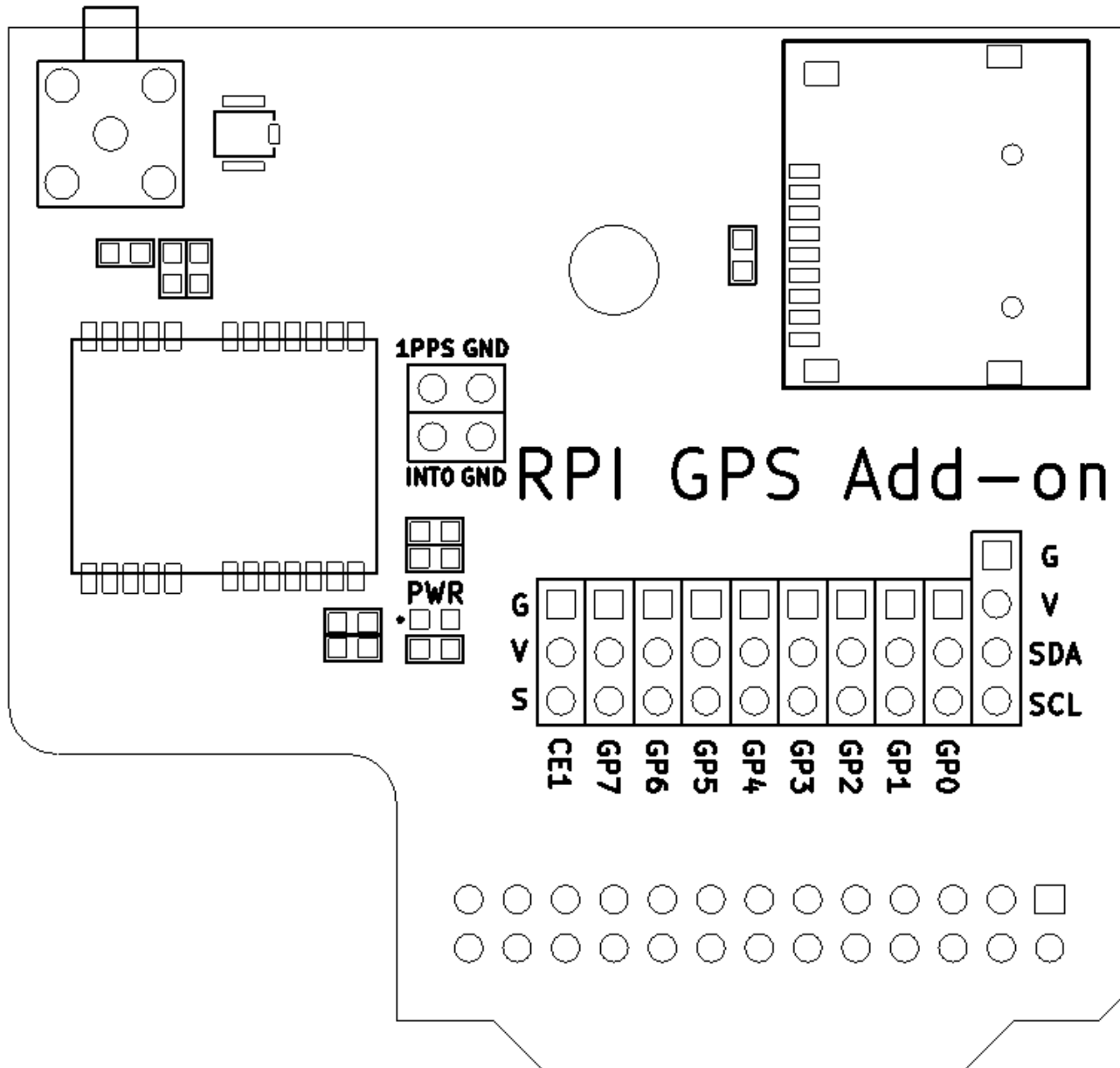
## Specifications

|               |                         |
|---------------|-------------------------|
| PCB size      | 58.5mm X 54.6mm X 1.6mm |
| Input voltage | 3.3V                    |
| Interface     | UART                    |
| Baud rate     | 38400 (default)         |

## Electrical characteristics

| Parameters                    | Min. | Typical | Max. | Unit |
|-------------------------------|------|---------|------|------|
| Supply voltage                | -    | 3.3     | 3.6  | VDC  |
| Current consumption (average) | -    | 40      | -    | mA   |

# Hardware



## Pinmap

Raspberry PI interfaces

| Raspberry PI Pin N.O. | Pin name | Pin of GPS Module | Description                |
|-----------------------|----------|-------------------|----------------------------|
| 11                    | GPIO0    | -                 | Electronic brick interface |
| 12                    | GPIO1    | -                 |                            |
| 13                    | GPIO2    | -                 |                            |
| 15                    | GPIO3    | -                 |                            |
| 16                    | GPIO4    | -                 |                            |



|    |       |        |  |
|----|-------|--------|--|
| 18 | GPIO5 | -      |  |
| 22 | GPIO6 | 1PPS   | Pulse per second / Electronic brick interface          |
| 7  | GPIO7 | EXINT  | External interruption pin / Electronic brick interface |
| 3  | SDA0  | -      | Electronic brick interface                             |
| 5  | SCL0  | -      |  |
| 24 | CE0   | CS     | Chip selection for Micro SD card                       |
| 26 | CE1   | -      | Electronic brick interface                             |
| 19 | MOSI  | MOSI   | Data input for Micro SD card                           |
| 21 | MISO  | MISO   | Data output for Micro SD card                          |
| 23 | SCLK  | SCLK   | Clock for Micro SD card                                |
| 8  | TXD   | GPS_RX | Receiving end for SIM900 serial port                   |
| 10 | RXD   | GPS_TX | Sending end for SIM900 serial port                     |
| 2  | +5V   | -      |  |
| 1  | +3.3V | -      |  |
| 6  | GND   | -      |  |

## Indicator

### 1. PWR

Power: When there is normal supply to the board, the power indicator keeps on.

## Revision record

| Version | Description     | Written by | Date                          |
|---------|-----------------|------------|-------------------------------|
| v1.0    | Initial Edition | Stan Lee   | 27 <sup>th</sup> , Dec., 2013 |