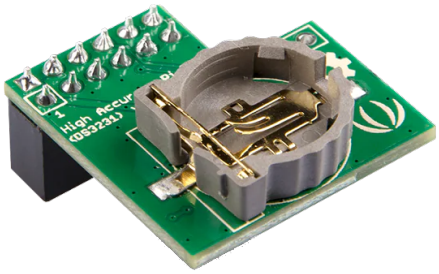
High Accuracy Pi RTC(DS3231) Module

Product Overview

08-16-2022

For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description



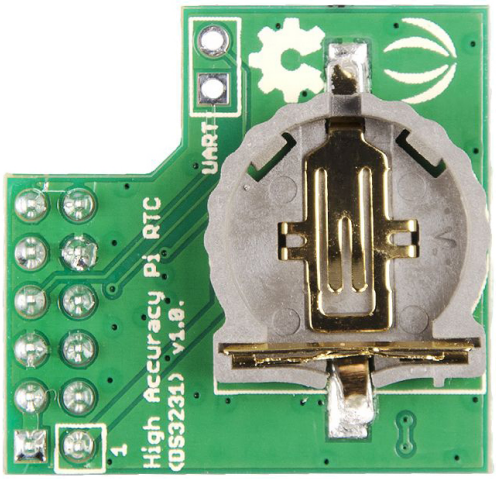
Seeed Studio High Accuracy Pi RTC Module is designed based on the clock chip DS3231. This DS3231 is low-cost and provides a real-time clock for Raspberry Pi via the I²C interface. This Pi RTC clock operates in either the 24-hour or 12-hour format with AM/PM indicator. The RTC module records information of seconds, minutes, hours, months, dates, days, and years from TCXO. The Pi Rtc clock module counts the date at the end of the month and automatically adjusts for months with fewer than 31 days, including corrections for leap years. This clock operates in either the 24-hour or 12-hour format with AM/PM indicator. A 3V CR1225 lithium cell is used in the battery-holder to set the module timing when the Raspberry Pi is powered off.

The clock provides two programmable time-of-day alarms and programmable square-wave output. The INT/SQW pin either generates an interrupt due to alarm conditions or outputs a square-wave signal and the selection is controlled by the bit INTCN. This module features low power consumption and supports Raspberry Pi 2/3 B/B+. The High Accuracy Pi RTC tool is available in 25mm x 25mm x 15mm dimensions and weighs about 13.9g. This development tool applications need Real Time on Raspberry such as utility power meters, telematics, and GPS.

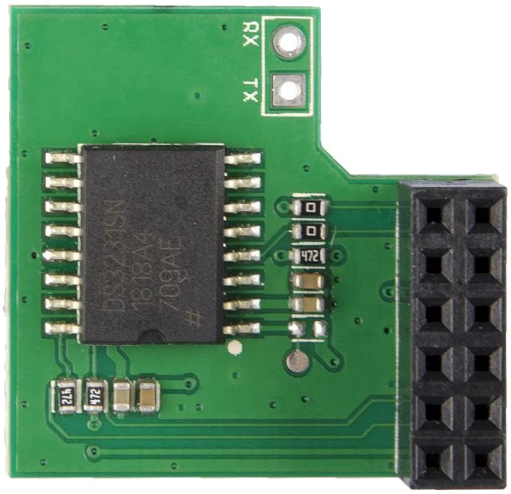
Features

- Supports:
  - Raspberry Pi 2
  - Raspberry Pi 3 B/B+
  - Raspberry Pi zero
- Support seconds, minutes, dates, hours, days, months, and year
- Support 24-hour or 12-hour format with AM/PM indicator
- Low-power consumption
- Two time-of-day alarms
- Fast (400kHz) I²C interface

Module overview

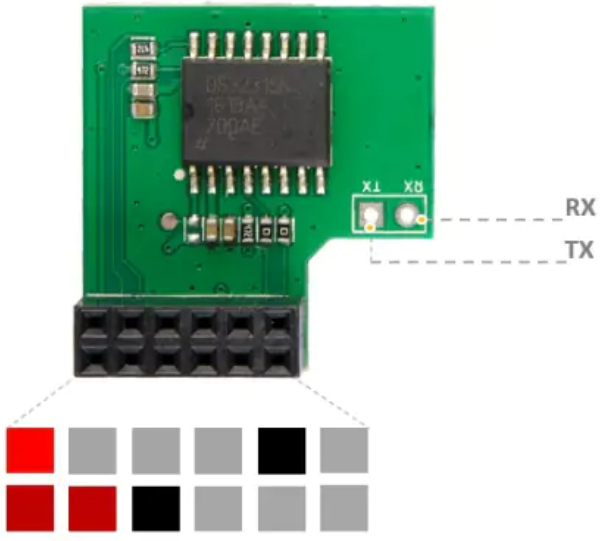


Top View



Bottom View

Pin Diagram



3V3	SDA_3V3	SCL_3V3	GPIO9	GND	S/INT
5V	5V	GND	TX	RX	RST

Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/seeed-studio/seeed-high-accuracy-pi-rtc-dev-tool/