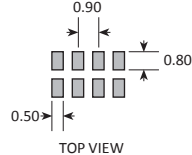


SOLDER PAD LAYOUT

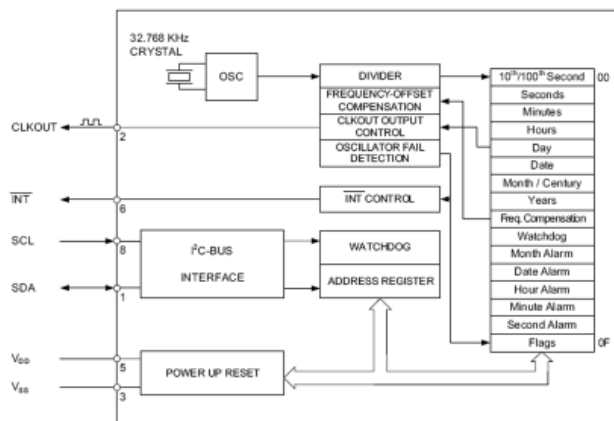


PAD	CONNECTION	PAD	CONNECTION
1	Serial data (SDA)	5	Supply voltage (VDD)
2	Frequency output (CLKOUT)	6	Interrupt output ($\overline{\text{INT}}$)
3	Ground (VSS)	7	Not connected
4	Not connected	8	Serial clock input (SCL)

Features

- ▶ Ultra-miniature ceramic SMD RTC module
- ▶ Compliant with I²C-Bus interface (400kHz)
- ▶ Built-in crystal for adjustment-free operation
- ▶ Programmable alarm, timer and interrupt
- ▶ Low power consumption, low ageing

Block Diagram



Specifications

Parameters	Product	Option Codes
	RV4162C7	
Frequencies (selectable): 32.768kHz down to 1Hz	■	
Frequency tolerance: ±10ppm ±20ppm	□ ■	A B
Turnover temperature (T₀): +25°C ±5°C	■	
Frequency / temp coefficient: -0.035ppm/°C ² ±10%	■	
Operating temperature range: -40 to +85°C	■	
Storage temperature range: -55 to +125°C	■	
Supply voltage (V_{DD}): I ² C bus active 1.3 ~ 4.4V Time-keeping mode 1.0 ~ 4.4V	■ ■	
Supply current (during access): 35µA typ (f _{scl} =400kHz, V _{DD} =3V) 20µA typ (f _{scl} =400kHz, V _{DD} =2V)	■ ■	
Supply current (time-keeping): 350/500nA typ/max (f _{scl} =0Hz, V _{DD} =3V) 270/400nA typ/max (f _{scl} =0Hz, V _{DD} =1V)	■ ■	
Ageing: ±3ppm max first year	■	
Shock and vibration resistance: ±5ppm, 5,000g, 0.3ms, ½ sine ±5ppm, 20g, 10.0 ~ 2,000Hz	■ ■	
Soldering condition: Reflow, 260°C, 20 sec max	■	
Qualification: Commercial AEC-Q200 (Automotive)	■ □	A

■ Standard. □ Optional - Please specify required code(s) when ordering

Ordering Information

Product + option code
eg: **RV4162C7/B** ±20ppm
RV4162C7/AA ±10ppm, AEC-Q200
Option code X (eg RV4162C7/X) denotes a custom spec.

- ◆ Available on T&R - 1k or 3k pcs per reel. See our website for details
- ◆ Evaluation / development board & manual available on request
- ◆ The I²C-Bus is a trademark of Philips Electronics NV

Description

This ultra small RTC Module has been specially designed for miniature and cost sensitive high volume applications.

The SMT ceramic package combines the 32.768kHz crystal unit with the CMOS-based oscillator and real-time-clock circuitry. The clock function provides tenths/hundredths of seconds, seconds, minutes and hours. The calendar function tracks date, month, year and century with automatic leap year compensation. Programmable CLKOUT frequencies, alarm settings and watchdog function increase flexibility.



- ◆ Manufactured by Micro Crystal
- ◆ Stocked & supplied by Golledge