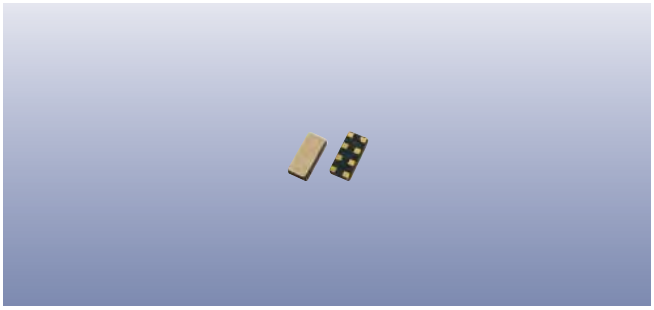
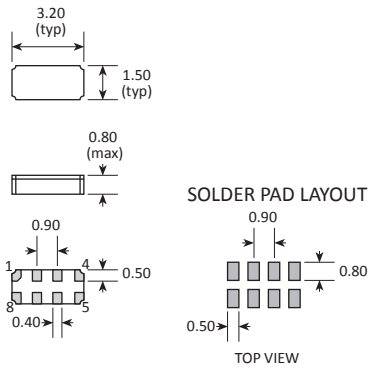
Real Time Clock, Ultra Low Power

RV8803C7



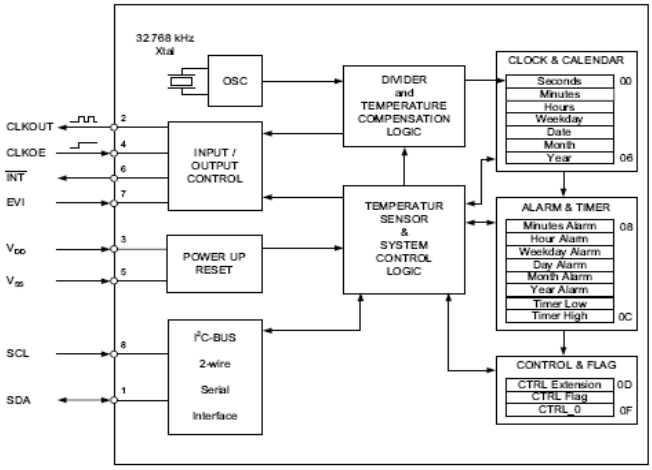


PAD	CONNECTION	PAD	CONNECTION
1	Serial data (SDA)	5	Ground (VSS)
2	Frequency output (CLKOUT)	6	Interrupt output ($\overline{INT}$)
3	Supply voltage (VDD)	7	Event input (EVI)
4	Clock output enable (CLKOE)	8	Serial clock input (SCL)

Features

- **High accuracy, ultra low power**
- **Built-in crystal for adjustment-free operation**
- **Time stamp event input function**
- **I²C-Bus interface (up to 400kHz)**
- **Programmable alarm, timer and interrupt**

Block Diagram



Specifications

Parameters	Product RV8803C7	Option Codes
Frequencies (selectable): 32.768kHz, 1024Hz, 1Hz	■	
Frequency tolerance (1Hz): ±3ppm max, -40+85°C	■	
Frequency tolerance (32.768kHz): ±10ppm typ, ±20ppm max, 25°C	■	
Time accuracy: ±1.5ppm max (0.13s/day), 0+50°C ±3ppm max (0.26s/day), -40+85°C	■ ■	
Turnover temperature (T_0): +25°C ±5°C	■	
Frequency / temp coefficient: -0.035ppm/°C² ±10%	■	
Operating temperature range: -40 to +85°C	■	
Storage temperature range: -55 to +125°C	■	
Supply voltage (V_{DD}): 1.5 ~ 5.5V	■	
Supply current: 240/400nA typ/max, V_{DD}=3V	■	
Ageing (25°C): ±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	■	

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

Ordering Information

Product code
ie: **RV8803C7**
Option code X (eg RV8803C7/X) denotes a custom spec.

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

Description

The RV8803C7 is an high accuracy, ultra low power Real-Time-Clock module with embedded 32.768 kHz Crystal. High accuracy, high stability is achieved by factory calibrated, temperature compensated DTCXO giving time-accuracy of ± 3.0 ppm accross the temperature range from -40°C to +85°C. Standard Clock & Calendar function tracks second, minute, hour in 24-hour format, year and leap-year flags. Beside standard RTC functions like Timer & Alarm, it includes integrated Temperature Sensor, Time Stamp Event Input and User RAM and offers I2C-bus (2-wire Interface). RV-8803-C7 is the smallest sized and consumes the lowest current of all temperature compensated RTC modules.

MICRO CRYSTAL SWITZERLAND

- Manufactured by Micro Crystal
- Stocked & distributed by Golledge