

## Real Time Clock Serial Clock/Calendar 8-Pin SOIC N T/R



Images are for reference only

[Inquiry](#)

**Manufacturer:** [Analog Devices, Inc](#)

**Package/Case:** SOP8

**Product Type:** Clock & Timer ICs

**RoHS:** RoHS Compliant/Lead free 

**Lifecycle:** Active

### General Description

The DS1337 serial real-time clock is a low-power clock/calendar with two programmable time-of-day alarms and a programmable square-wave output. Address and data are transferred serially through an I2C bus. The clock/calendar provides seconds, minutes, hours, day, date, month, and year information. The date at the end of the month is automatically adjusted for months with fewer than 31 days, including corrections for leap year. The clock operates in either the 24-hour or 12-hour format with AM/PM indicator. The device is fully accessible through the serial interface while VCC is between 1.8V and 5.5V. I2C operation is not guaranteed below 1.8V. Timekeeping operation is maintained with VCC as low as 1.3V.

### Key Features

- Supply voltage range from 1.8V to 5.5V
- Operating temperature range from -40°C to 85°C
- 425nA time keeping current and 100nA data retention current (oscillator disabled)
- Completely manages all timekeeping functions
- Programmable square wave output defaults to 32KHz on power-up
- Oscillator stop flag
- Interfaces with most microcontrollers through I2C serial interface
- Active supply current of 150µA and standby current of 1.5µA
- SCL clock frequency of 400KHz (fast mode) and 100KHz (standard mode)

### Application

- Consumer Electronics (Set-Top Box, VCR/Digital Recording)
- Handhelds (GPS, POS Terminal, MP3 Player)
- Medical (Glucometer, Medicine Dispenser)
- Office Equipment (Fax/Printer, Copier)
- Other (Utility Meter, Vending Machine, Thermostat, Modem)
- Telecommunications (Router, Switcher, Server)

### Recommended For You

**DS1244Y-70+**

Analog Devices, Inc  
DIP

**DS1683S+**

Analog Devices, Inc  
SOIC-8

**DS1306+**

Analog Devices, Inc  
DIP

**DS1670E+**

Analog Devices, Inc  
TSSOP20

**DS1501YZ+**

Analog Devices, Inc  
SOIC(W)

**DS1308U-18+T**

Analog Devices, Inc  
UMAX-8

**DS1100U-50**

Analog Devices, Inc  
USOP-8

**DS1004C-305**

Analog Devices, Inc  
SOP8

**DS1100LZ-20/T+MOT**

Analog Devices, Inc  
8-SOIC

**DS1100M-25**

Analog Devices, Inc  
DIP8

**DS1308U-3+T**

Analog Devices, Inc  
UMAX-8

**DS1685Q-5+**

Analog Devices, Inc  
PLCC-28

**DS1100Z-25/T&R**

Analog Devices, Inc  
SOP8

**DS1023S-25+T**

Analog Devices, Inc  
SOIC(W)-16

**DS1685-5+**

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DIP24