MCP7940NT-I/MNY

Data Sheet

RTC, Clock/Calendar, Date Time Format (YY-MM-DD-dd, HH:MM:SS), I2C, 1.8V to 5.5V Supply, TDFN-8

Manufacturers	Microchip Technology, Inc
Package/Case	TDFN-8
Product Type	Clock & Timer ICs
RoHS	Rohs
Lifecycle	

Images are for reference only

Please submit RFQ for MCP7940NT-I/MNY or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The MCP7940N series of low-power Real-Time Clocks (RTC) uses digital timing compensation for an accurate clock/calendar, a programmable output control for versatility, and a power sense circuit that automatically switches to the backup supply. Using a low-cost 32.768kHz crystal, it tracks time using several internal registers.For communication, the MCP7940N uses the I2C™ bus. The clock/calendar automatically adjusts for months with fewer than 31 days, including corrections for leap years. The clock operates in either the 24-hour or 12-hour format with an AM/PM indicator and settable alarm(s) to the second, minute, hour, day of the week, date or month. Using the programmable CLKOUT, frequencies of 32.768, 8.192 and 4.096kHz and 1 Hz can be generated from the external crystal.The device is fully accessible through the serial interface while VCC is between 1.8V and 5.5V, but can operate down to 1.3V for timekeeping and SRAM retention only.

Features

Timekeeping

Battery-Backed Real-Time Clock/Calendar (RTCC)

Hours, Minutes, Seconds, Day of Week, Day, Month, Year

Leap year compensated to 2399

12/24 hour modes

On-Chip Digital Trimming/Calibration

1 PPM Resolution

Dual Programmable Alarms

Versatile Output Pin

Clock output with selectable frequency

Alarm output

General Purpose output

Power-Fail Time-Stamp

Time logged on switchover to and from Battery Backup

64 Bytes Battery-Backed SRAM

2-Wire Serial Interface, I2C™Compatible

I2C Clock Frequency up to 400 kHz

Low-Power

Wide Voltage Range

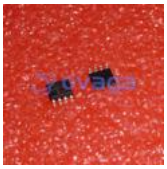
Operating Voltage 1.8V to 5.5V

Backup Voltage 1.3V to 5.5V

Low Typical Timekeeping Current

Automatic Switchover to Battery Backup

Related Products



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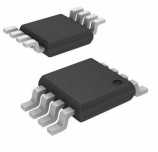

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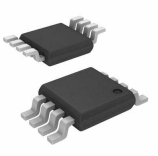

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