

# **MCP79410T-I/SN**

Data Sheet

low-power Real-Time Clocks (RTC) uses digital timing compensation - SOIC-8

Manufacturers <u>Microchip Technology, Inc</u>

Package/Case SOIC-8

Product Type Clock & Timer ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for MCP79410T-I/SN or Email to us; sales@ovaga.com We will contact you in 12 hours.

**RFO** 

# **General Description**

The MCP79410 general purpose I2CTMCompatible real-time clock/calendar (RTCC) is highly integrated with nonvolatile memory and advanced features normally found in higher priced devices. These features include a battery switchover circuit for backup power, a timestamp to log power failures and digital trimming for accuracy. Using a low-cost 32.768 kHz crystal or other clock source, time is tracked in either a 12-hour or 24-hour format with an AM/PM indicator and timing to the second, minute, hour, day of the week, day, month and year. As an interrupt or wakeup signal, a multifunction open drain output can be programmed as an Alarm Out or as a Clock Out that supports 4 selectable frequencies. In addition, non-volatile memory is included along with a Unique ID in a locked section of EEPROM that can be unlocked and programmed by the End User.

#### **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
2-Wire Serial Interface, I2C™Compatible
I2C Clock Frequency up to 400 kHz
User Memory
64 Bytes Battery-Backed SRAM
1Kb EEPROM Memory
64-bit Protected EEPROM Area
Robust write unlock sequence
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**



MCP79412-I/SN

Microchip Technology, Inc SOIC-8



### MCP79511-I/MS

Microchip Technology, Inc MSOP-10



### MCP79411-I/SN

Microchip Technology, Inc SOIC-8



## MCP79510-I/MS

Microchip Technology, Inc MSOP-10



MCP79411-I/MS

Microchip Technology, Inc MSOP-8



MCP79410T-I/MNY

Microchip Technology, Inc TDFN-8



MCP79410T-I/MS

Microchip Technology, Inc MSOP-8



#### MCP79410-I/MS

Microchip Technology, Inc MSOP-8