Real Time Clock (RTC), 64B RAM Serial-2 Wire, Serial-I2C, 8-Pin MSOP

Manufacturers	Microchip Technology, Inc
Package/Case	MSOP-8
Product Type	Clock & Timer ICs
RoHS	Rohs
Lifecycle	
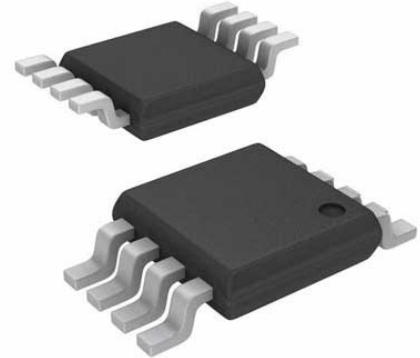
Images are for reference only

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

General Description

The MCP79410 general purpose I2C™Compatible 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

MCP79410T-I/SN

Microchip Technology, Inc

SOIC-8

MCP79411-I/SN

Microchip Technology, Inc

SOIC-8

MCP79511-I/MS

Microchip Technology, Inc

MSOP-10

MCP79510-I/MS

Microchip Technology, Inc

MSOP-10

MCP79411-I/MS

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MSOP-8

MCP79410T-I/MNY

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