

Alarm RTC IC, Year/Month/Week/Date/Hr/Min/Sec 12Hr / 24Hr, I2C, 1.8 V to 5.5 V, SOIC-8

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



Images are for reference only

Please submit RFQ for MCP79401-I/SN or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The MCP79401 general purpose I2CTM Compatible real-time clock/calendar (RTCC) is highly integrated with 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 to the SRAM memory, there a unique ID that is factory programmed in a locked section of EEPROM with a MAC Address. This ID can also be unlocked and reprogrammed by the end user.

Features

General purpose RTCC with features that target low power and smart energy applications.

Low Power Operation

VCC>

$I_{cc} < 5 \mu\text{A}$ Typical Dynamic Current

Low Backup Power

VBAT>

$I_{bat} < 700\text{nA}$ Typical Timekeeping & SRAM Retention Current

Automatic Battery Switchover with Timestamp

VCC to VBAT (power lost)

VBAT to VCC (power restored)

Dual alarms with single Interrupt Output that operates on VCC or VBAT

Clock Out frequencies of 32.768, 8.192 & 4.096 KHz and 1 Hz

Digital Trimming Range from -127 to + 127 ppm in 1 ppm steps

1 ppm is approximately 86 milliseconds/day

EEPROM uses 8 bytes/page with Block Sector write protection

Protect none, 1/4, 1/2 or all of array

Unique ID is factory programmed with a MAC Address

Related Products



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SOIC-8



[MCP79410T-I/SN](#)

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[MCP79411-I/SN](#)

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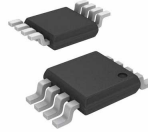
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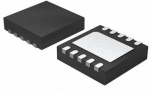
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