Real Time Clock Serial 16byte
Clock/Calendar/Alarm/Timer/Interrupt 8-Pin CLLCC T/R

Manufacturer:	STMicroelectronics, Inc
Package/Case:	CLCC8
Product Type:	Clock & Timer ICs
RoHS:	RoHS Compliant/Lead free
Lifecycle:	Obsolete
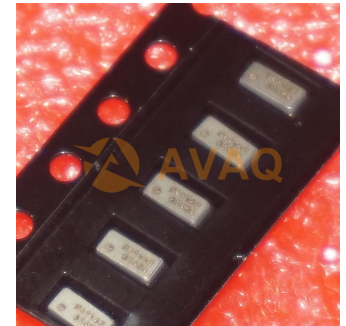
Images are for reference only

Inquiry

General Description

The M41T6x is a low-power serial real-time clock (RTC) with a built-in 32.768 kHz oscillator. Eight registers are used for the clock/calendar function and are configured in binary-coded decimal (BCD) format. An additional eight registers provide status/control of alarm, 32 kHz output, calibration, and watchdog functions. Addresses and data are transferred serially via a two-line, bidirectional I2C interface. The built-in address register is incremented automatically after each WRITE or READ data byte.

Functions available to the user include a time-of-day clock/calendar, alarm interrupts (M41T62/65), 32 kHz output (M41T62/64), programmable square wave output (M41T62/64), and watchdog output (M41T65). The eight clock address locations contain the century, year, month, date, day, hour, minute, second and tenths/hundredths of a second in 24-hour BCD format. Corrections for 28-, 29- (leap year), 30- and 31-day months are made automatically.

The M41T6x is supplied in two very small packages: a tiny, 3 x 3 mm 16-pin QFN which requires a user-supplied 32 kHz crystal, and an ultra-small 1.5 x 3.2 mm LCC with embedded crystal - no external crystal is required.

Key Features

350 nA timekeeping current at 3 V

Timekeeping down to 1.0 V

1.3 V to 4.4 V I2C bus operating voltage

CC

suitable for lithium-ion battery operation

Low operating current of 35 µA (at 400 kHz I2C speed)

32 kHz square wave output is on at power-up. Suitable for driving a microcontroller in low-power mode. Can be disabled. (M41T62/64)

Programmable 1 Hz to 32 kHz square wave output (M41T62/64)

Programmable alarm with interrupt function (M41T62/65)
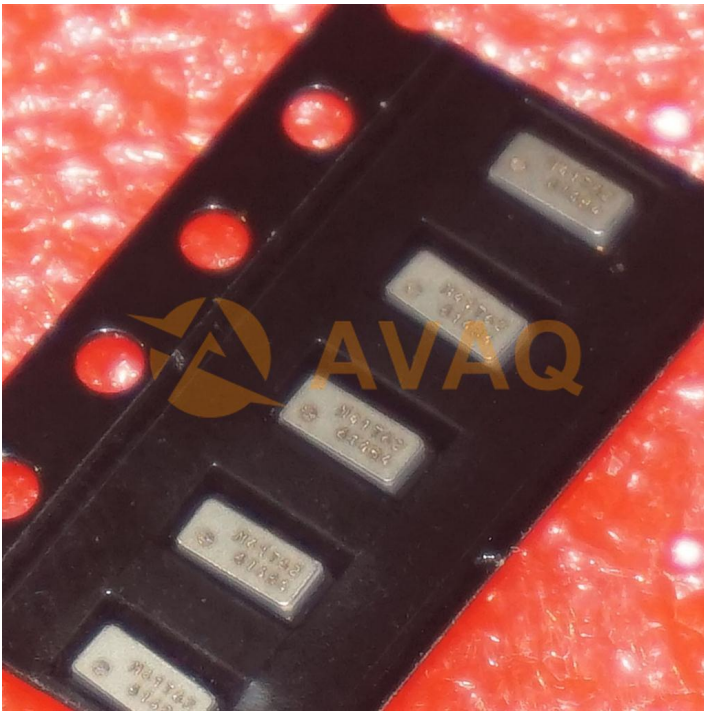
Recommended For You

M48T35Y-70PC1	**M48T18-150PC1**	**M48T58Y-70PC1**
STMicroelectronics, Inc	STMicroelectronics, Inc	STMicroelectronics, Inc
DIP	DIP	DIP

M48T08-150PC1	**M41ST85WMH6F**	**M48T08-100PC1**
STMicroelectronics, Inc	STMicroelectronics, Inc	STMicroelectronics, Inc
DIP	SOP28	DIP

M41ST85WMX6TR	**M48T58-70PC1**	**M41ST87WMX6TR**
STMicroelectronics, Inc	STMicroelectronics, Inc	STMicroelectronics, Inc
SOP28	DIP	SOP28

M48T12-150PC1	**M41T93SMY6F**	**M41T66Q6F**
STMicroelectronics, Inc	STMicroelectronics, Inc	STMicroelectronics, Inc
DIP	SOP18	QFN16

M41T94MQ6F	**M41T62Q6F**	**M41T94MH6F**
STMicroelectronics, Inc	STMicroelectronics, Inc	STMicroelectronics, Inc
SOP16	QFN16	SOH-28