Real Time Clock Serial 128Byte Clock/Calendar/Alarm/Interrupt/Battery Backup 20Pin SOIC Tube

Manufacturers	Renesas Technology Corp
Package/Case	SOIC-20
Product Type	Clock & Timer ICs
RoHS	
Lifecycle	

Images are for reference only

Please submit RFQ for ISL12022MIBZ or Email to us: sales@ovaga.com We will contact you in 12 hours.   RFQ

General Description

The ISL12022M device is a low power real time clock (RTC) with an embedded temperature sensor and crystal. Device functions include oscillator compensation, clock/calendar, power fail and low battery monitors, brownout indicator, one-time, periodic or polled alarms, intelligent battery backup switching, Battery Reseal™ function and 128 bytes of battery-backed user SRAM. Backup battery current draw is less than 1.6µA over the temperature range. The device is offered in a 20 Ld SOIC module that contains the RTC and an embedded 32.768kHz quartz crystal. The calibrated oscillator provides less than ±5ppm drift over the full -40°C to +85°C temperature range. The RTC tracks time with separate registers for hours, minutes, and seconds. The calendar registers track date, month, year and day of the week and are accurate through 2099, with automatic leap year correction. Daylight Savings time adjustment is done automatically, using parameters entered by the user. Power fail and battery monitors offer user-selectable trip levels. The time stamp function records the time and date of switchover from VDD to VBAT power, and also from VBAT to VDD power.

Features

Embedded 32.768kHz quartz crystal in the package

20 Ld SOIC package (for DFN version, see the ISL12020M)

Calendar

On-chip oscillator temperature compensation

10-bit digital temperature sensor output

15 selectable frequency outputs

Interrupt for alarm or 15 selectable frequency outputs

Automatic backup to battery or supercapacitor

V_{DD} and battery status monitors

Battery Reseal function to extend battery shelf life

Power status brownout monitor

Time stamp for battery switchover

128 bytes battery-backed user SRAM

1.6µA maximum battery current

I^2C Bus

RoHS compliant

Related Products

IS82C54-10Z

Renesas Technology Corp

PDIP-28

ISL12022IBZ

Renesas Technology Corp

SOP-8

IS82C54Z

Renesas Technology Corp

PLCC-28

IS82C54

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IS82C54-10

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PLCC28