

RTC MODULE BASED ON DS1307 FROM MAXIM

The module based on DS1307, The DS1307 serial real-time clock (RTC) is a low-power, full binary-coded decimal (BCD) clock/calendar plus 56 bytes of NV SRAM. Address and data are transferred serially through an I²C, bidirectional bus. The clock/calendar provides seconds, minutes, hours, day, date, month, and year information. The end of the month date is automatically adjusted for months with fewer than 31 days, including corrections for leap year. The clock operates in either the 24-hour or 12-hour format with AM/PM indicator. The DS1307 has a built-in power-sense circuit that detects power failures and automatically switches to the backup supply. Timekeeping operation continues while the part operates from the backup supply.

Key Features

Supply 5V DC

Completely Manages All Timekeeping Functions

Real-Time Clock Counts Seconds, Minutes, Hours, Date of the Month, Month, Day of the Week, and Year with Leap-Year Compensation Valid Up to 2100

56-Byte, Battery-Backed, General-Purpose RAM with Unlimited Writes

Programmable Square-Wave Output Signal

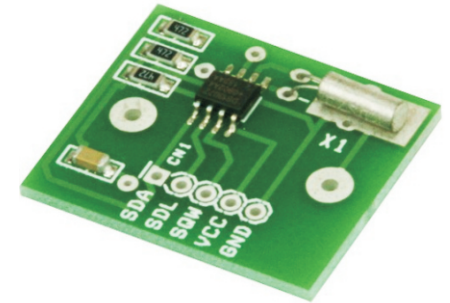
Simple Serial Port Interfaces to Most Microcontrollers

I²C Serial Interface

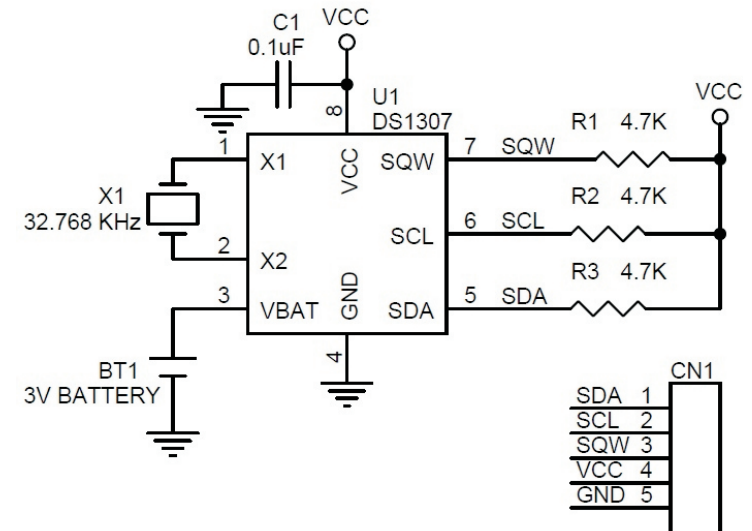
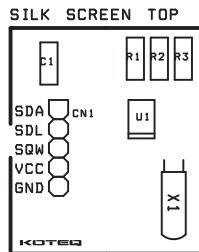
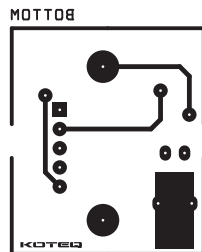
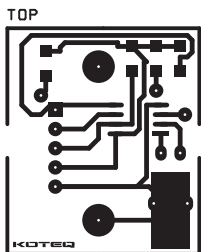
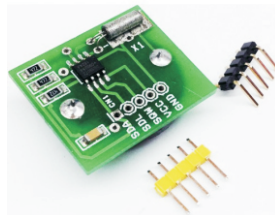
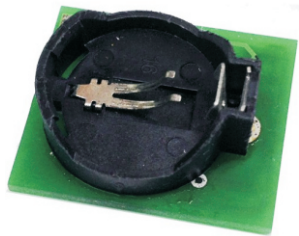
Low Power Operation Extends Battery Backup Run Time

Consumes Less than 500nA in Battery-Backup Mode with Oscillator Running

Automatic Power-Fail Detect and Switch Circuitry



BOM			
SR.	QTY.	REF.	DESCRIPTION
1	1	BT1	3V COIN BATTERY + HOLDER
2	1	CN1	5 PIN HEADER CONNECTOR
3	1	C1	0.1uF SMD1206
4	3	R1,R2,R3	4.7K SMD 1206
5	1	U1	DS1307 S008 SMD
6	1	X1	32.768 KHz



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