

GENERAL DESCRIPTION

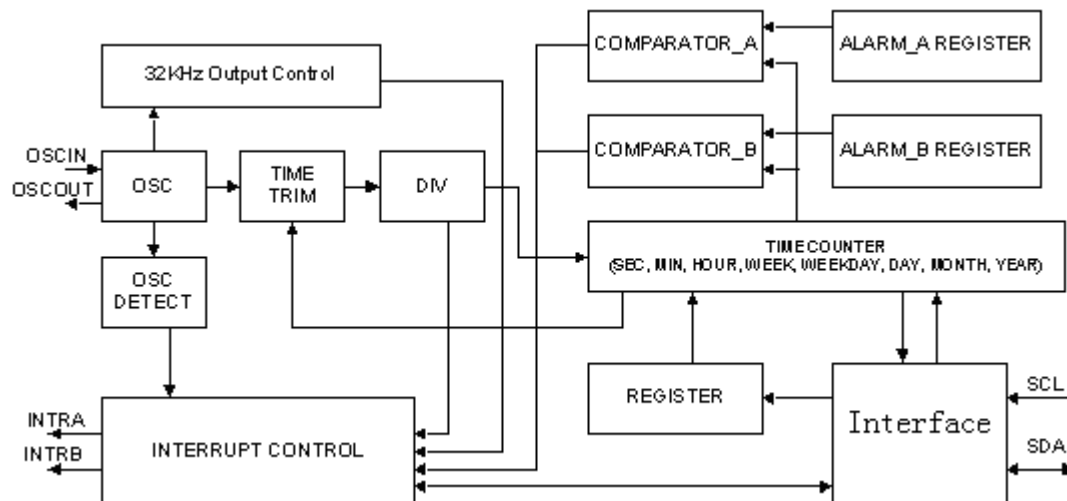
The AS7063 is a CMOS type real-time clock, which is connected to the CPU via two wires and capable of serial transmission of clock to the CPU. The AS7063 can generate various periodic interrupt clock pulses lasting for long period (one month), and alarm interrupt can be made by two incorporated systems. Since an oscillation circuit is driven at a constant voltage, it undergoes fluctuations of few voltage and consequently offers low current consumption (TYP. 400nA @ 5V)

It also provides an oscillator halt sensing function applicable for data validation at power-on and other occasions. The product also incorporates a time trimming circuit that adjusts the clock with higher precision by adjusting any errors in crystal oscillator frequencies based on signals from the CPU. The crystal oscillator may be selected from 32KHz or 32.768KHz types. It adopts 8-pin SOP or TSSOP package.

FEATURES

- Lowest supply current: 400nA TYP. @ 5V
- Connected to the CPU via only 2-wires (MAX. 100KHz)
- A clock counter (counting hours, minutes, and seconds) and a calendar counter (counting leap years, years, months, days, and days of the week) in BCD codes
- Two systems output providing interrupt to the CPU output (period of one month to one second, interrupt halt function)
- Two systems output of alarm functions
- Oscillation halt sensing to judge internal data validity
- Clock output of 32.768KHz (32KHz) (output controllable via a register)
- Second digit adjustment by ± 30 seconds
- Automatic leap year recognition up to the year 2099
- 12-hour or 24-hour time display selectable
- High precision time trimming circuit
- Oscillator of 32.768KHz or 32KHz may be used
- CMOS logic
- Package: 8pin SOP or TSSOP

BLOCK DIAGRAM



ORDERING INFORMATION

Type number	Package	
	Name	Description
AS7063D/TR-LF	SOP8	plastic small outline package; 8 pins; body width 3.9mm
AS7063DT/TR-LF	TSSOP8	plastic thin shrink small outline package; 8 pins; body width 4.3mm