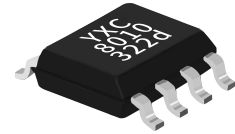


## Real Time Clock Module (I<sup>2</sup>C-BUS)

# YSN8010

Low current consumption

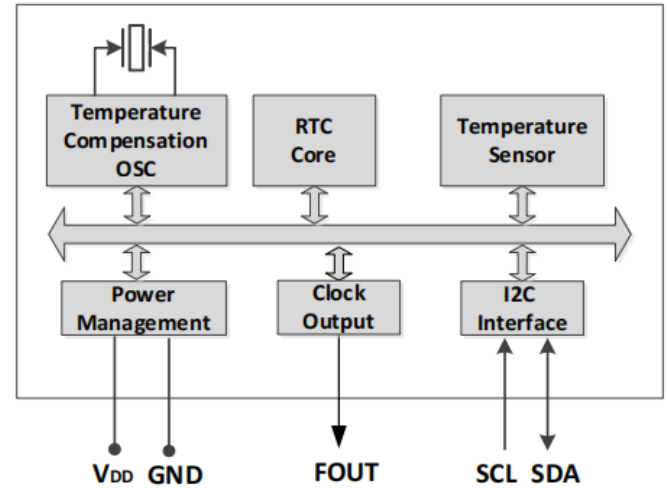


YSN8010SJ (SOP-8)

### Overview

- Low current consumption: 1.0uA (Typ.)
- High stability:
  - ± 20ppm @ -20 ~ +70
  - ± 50ppm @ -40 ~ +85
- Communication interface: I<sup>2</sup>C-bus
- Power supply voltage: 1.6V~5.5V
- Operation temperature range: -40 ~ +85
- Leap years autocorrection
- Build-in XO: 32.768kHz
- Build-in temperature sensor
- Package: 4.9mm × 6.0mm × 1.6mm(SOP-8)

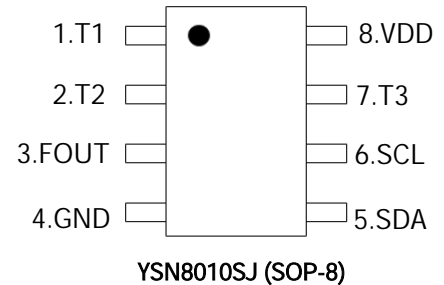
### Block Diagram



### Pin Function

Pin	Pin Name	I/O	Description
1	T1		Manufacturer test only.Ensure to be floating
2	T2		Manufacturer test only.
3	FOUT	Out	Frequency output Pin,configurable,CMOS.
4	GND		Ground
5	SDA	In/Out	I2C data signal
6	SCL	In	I2C clock signal
7	T3		Manufacturer test only. Ensure to be floating
8	VDD		Power in

### Terminal Connection



### Specifications (Characteristics)

Parameter	Symbol	Value			Unit	Remarks
		Min.	Typ.	Max.		
Power Supply Voltage (Normal mode)	VDD	2.5	3.0	5.5	V	
PowerSupply Voltage (Time keeping)	VDD	1.6	3.0	5.5	V	
Operation Temperature	TOPR	-40	25	85	°C	
Frequency stability	$\Delta f/f$	±20			ppm	@-20°C~+70°C , VDD=3.0V;
		±50			ppm	@-40°C~+85°C , VDD=3.0V;
Oscillation start time	t <sub>STA</sub>			1	s	@25
Year Aging	f <sub>a</sub>			±3	ppm	First year@25
Average Current1	IDD1		1.25	5.1	μA	fSCL=0Hz, SCL and SDA are low.
Average Current2	IDD2		1.0	4.9		