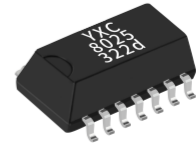


Real Time Clock Module (I²C-BUS)

YSN8025

High stability: Bulid-in TCXO

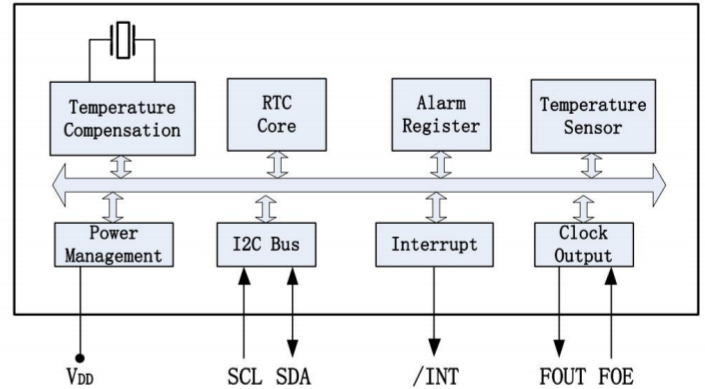


YSN8025T(SOP-14)

Overview

- Low current consumption: 1.0uA (Typ.)
- High stability: $\pm 3.4\text{ppm}$ @ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Operation Temperature Range: $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- Communication Interface: I2C bus
- Build-in TCXO: 32.768KHz
- Build-in temperature sensor
- Power Supply Voltage: 1.6V ~ 5.5V
- Leap years autocorrection
- Timer output function with adjustable period
- Package: 10.1mm \times 7.4mm \times 3.2mm (SOP14)
- RoHS 2.0 & REACH compliant

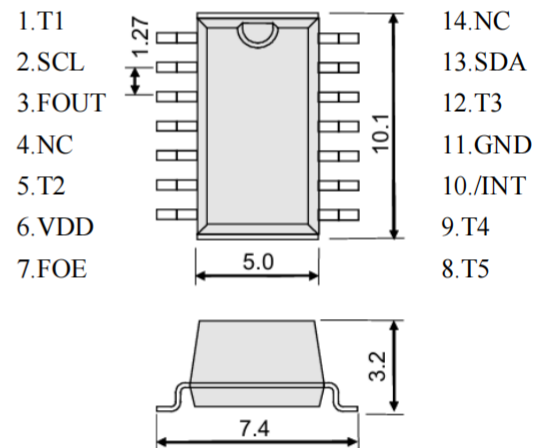
Block diagram



Pin Fuction

Pin	Pin Name	I/O	Description
1	T1	-	Manufacturer test only. Ensure to be floating
2	SCL	In	I ² C clock signal
3	FOUT	Out	Frequency output. Controlled by FOE. Frequency can be set by FSEL bits.
5	T2	-	Manufacturer test only. Ensure to be floating.
6	VDD	-	Power supply
7	FOE	In	FOUT output control pin. "1" -enable FOUT, "0" -FOUT Hi-Z
8	T5	-	Manufacturer test only. Ensure to be floating
9	T4	-	Manufacturer test only. Ensure to be floating
10	/INT	Out	Interrupt Output, Open-Drain
11	GND	-	Ground
12	T3	-	Manufacturer test only. Ensure to be floating.
13	SDA	In/Out	I ² C data signal
4,14	NC	-	Leave to be floated or connected to VDD or GND

Terminal Connection



Specifications (Characteristics)

Parameter	Symbol	Value			Unit	Remarks
		Min.	Typ.	Max.		
Power Supply Voltage	VDD	1.6	3.0	5.5	V	
Operation Temperature	TOPR	-40	25	85	$^{\circ}\text{C}$	
Frequency stability	$\Delta f/f$	± 3.4			ppm	@ $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$, VDD=3.0V;
Oscillation start time	t_{STA}			1	s	@ 25°C
Year Aging	f_a			± 3	ppm	First year @ 25°C
Average Current1	IDD1		1.25	5.1	μA	f=0Hz, FOE=GND, /INT = VDD SCL ; FOUT off (High-Z); Compensation interval 2s
Average Current2	IDD2		1.0	4.9		