

The ECS-RTC-SOP8-5101A Low Cost Real Time Clock Module (I²C-Bus). Provides calendar (year, month, day, hour, minute, second), clock and timer functions based on external 32.768 kHz crystal.

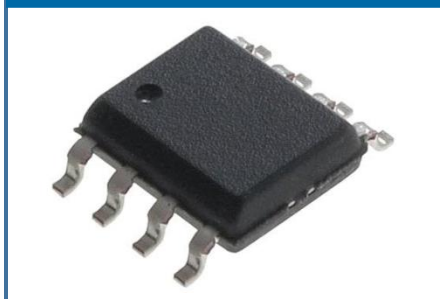
Discontinued Product

11/24/2025

ECS-RTC-SOP8-5101A

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-RTC-SOP-5101A			UNITS
		MIN	TYP	MAX	
Power Supply Voltage	Normal mode	1.6	3.0	5.6	V
Power Supply Voltage	Time keeping	1.2	3.0	5.5	V
Backup Battery	VBAT	1.6	3.0	5.0	V
Current Consumption 3.0V			0.8	2.8	μA
Duty Cycle	t _w /t	40		60	%
Operating Temperature	T _{opr}	-40		+85	°C
Storage Temperature	T _{stg}	-55		+125	°C



- Low Current Consumption 0.8 μA Typical
- Time, Alarm, Interrupt
- Frequency Output
- Extended temp range

Block Diagram

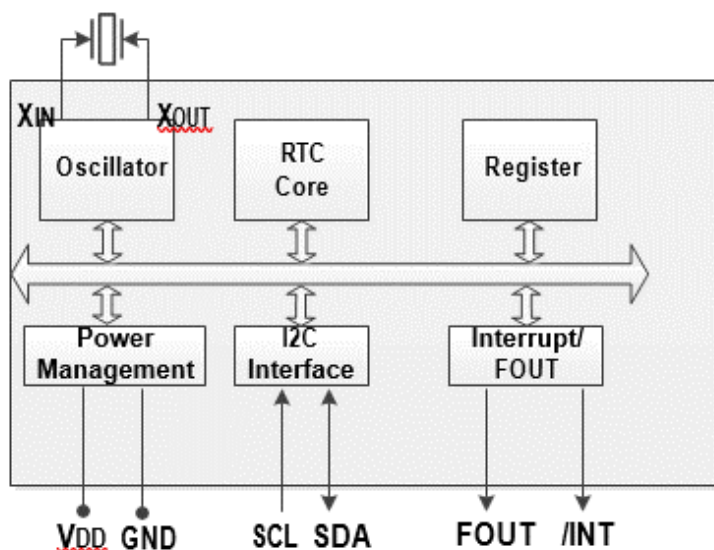
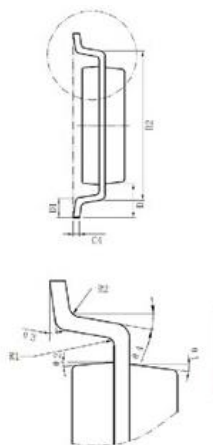
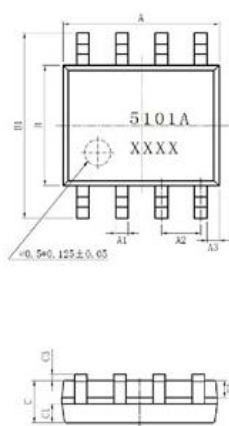


Figure 1) Top, and Side Views

PART NUMBER: ECS-RTC-SOP8-5101A-TR

Dimensions (mm)



Dimension	Min.	Typ.	Max.
A	4.8	4.9	5.0
A1	0.356	--	0.456
A2	--	1.27	--
A3	--	0.345	--
B	3.8	3.9	4.0
B1	5.8	6.0	6.2
B2	--	5.00	--
C	1.3	--	1.6
C1	0.55	--	0.65
C2	0.55	--	0.65

(Unit: mm)

Dimension	Min.	Typ.	Max.
C3	0.05	--	0.20
C4	0.203	--	0.233
D	--	1.05	--
D1	0.4	--	0.8
R1	--	0.2	--
R2	--	0.2	--
θ1	17°		
θ2	13°		
θ3	0°~8°		
θ4	4°~12°		

(Unit: mm)

Figure 1) Tope, Side, End View

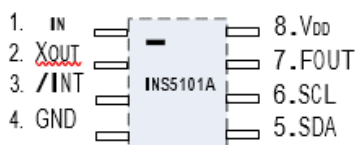


Table1. Pin Definition

Pin Number	Pin Name	I/O	Description
1	X _{IN}		Oscillator Input
2	X _{OUT}		Oscillator Output
3	/INT	Out	This pin can be configured as output of Alarm Timer. Time-update Interrupt or Frequency, effective when Low Voltage (Open-Drain)
4	GND	-	Ground
5	SDA	In/Out	I2C data signal
6	SCL	In	I2C clock signal
7	FOUT	Out	This pin can be configured as the output of timer or frequency, effective when Low Voltage (CMOS)
8	V _{DD}	-	Power in

Figure 2) Pin Function