

7.2 TR8804

RTC Modules(I²C-Bus)
Time stamp and digital temperature compensation(Automotive Grade)

Pb-Free

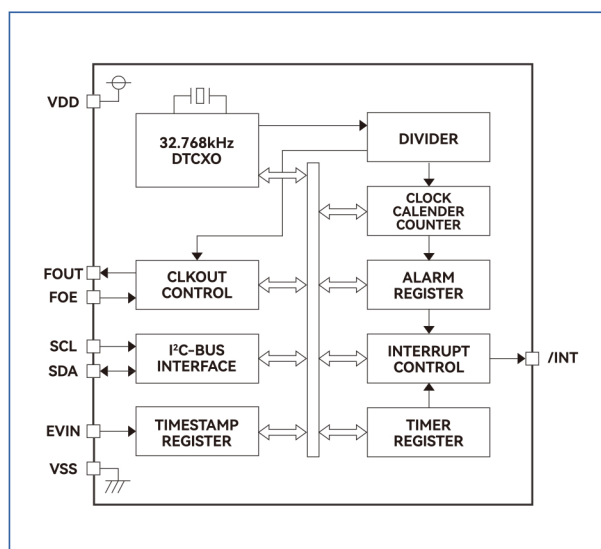
RoHS compliant



FEATURES AND APPLICATIONS

- Built-in 32.768kHz DTCXO
- Interface Type: I²C
- I²C-Bus Voltage: 1.5--5.5V
- Fixed-cycle Timer Interrupt Function
- Time update interrupt Function
- AEC-Q100&AEC-Q200 compliant
- Support High Speed I²C-Bus Agreement(400KHz)
- Clock Output Voltage: 1.6--5.5V
- Temperature Compensation Voltage: 1.5--5.5V
- Alarming interrupt for week, day, hour, and minute
- Temperature compensation signal output of 32.768kHz

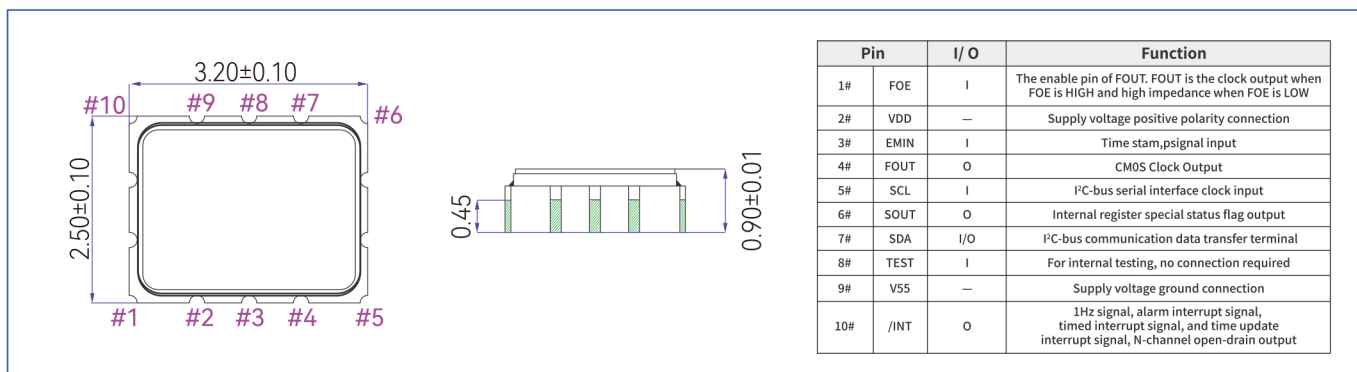
STRUCTURE



OVERVIEW

- ◆ Interface Type: 400kHz High-speed I²C-Bus
- ◆ Clock Output: Frequency 32768Hz, 1024Hz, 1Hz available, CMOS output controlled by FOE
- ◆ Fixed-cycle timer: Maximum counting cycle as long as 32 years available, source clock 1/60Hz, 1Hz, 64Hz, 4096Hz, /INT output interrupt signal available
- ◆ Time Stamp: Time stamp counting from year to second, triggered by EVIN input, able to be monitored by I²C
- ◆ Fixed-cycle arouse function: alarm interrupt output from day to minute
- ◆ Time update interrupt: Interrupt every second or minute
- ◆ Self-monitor: Interrupt, voltage falling test

EXTERNAL DIMENSIONS



FREQUENCY CHARACTERISTICS

Parameter		Conditions	Min.	Typ.	Max.	Unit.
Operating Voltage	VDD	—	1.6	3.0	5.5	V
Operating Temperature	Ta	—	-40	25	105	°C
Frequency Tolerance	$\Delta f/f$	Ta=-40°C~85°C VDD=3.0V	—	—	±5	10 ⁻⁶
		Ta=-40°C~105°C VDD=3.0V	—	—	±8	10 ⁻⁶
Start-up Time	Tsta	Ta=-40°C~85°C VDD=1.6~5.5V			TBD	s
Current Consumption	I _{DD1}	SCL=SDA=/INT=VDD FOE=VSS 2s Temperature Compensation Interval	VDD=5V		TBD	μA
	I _{DD2}		VDD=3V		TBD	

FREQUENCY TEMPERATURE CHARACTERISTICS

32.768kHz DTCXO Frequency Temperature Characteristics(Instance)

