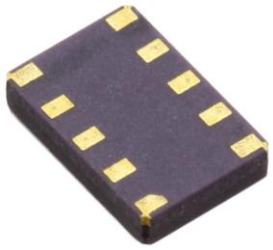
ECS-RTC-3225-5609

Low Power Consumption I²C RTC

The ECS-RTC-3225-5609 Real Time Clock Module (I²C-Bus) with built in 32.768 kHz TCXO. It supports calendar (year, month, day, hour, minute,second), clock and timer functions.

ECS-RTC-3225-5609



- Low Frequency Resonator
- RoHS Compliant (Note 7 exemption)
- Extended temp range

OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-RTC-3225-5609			UNITS
		MIN	TYP	MAX	
Power Supply Voltage	Normal mode	2.5	3.0	5.0	V
Power Supply Voltage	$V_{DD}=V_{BAT}$	1.6	3.0	5.0	V
Backup Battery	VBAT	1.6	3.0	5.0	V
Current Consumption I_{DD}	Battery Supply		2.0	3.0	µA
Stability	-20 ~ +70°C			±5	ppm
	-40 ~ -20°C			±20	Ppm
	+70 ~ +85°C			±20	Ppm
Oscillation start time	@ +25°C			1	s
Aging				±3	Ppm
Operating Temperature	Topr	-40		+85	°C
Storage Temperature	Tstg	-40		+85	°C

Block Diagram

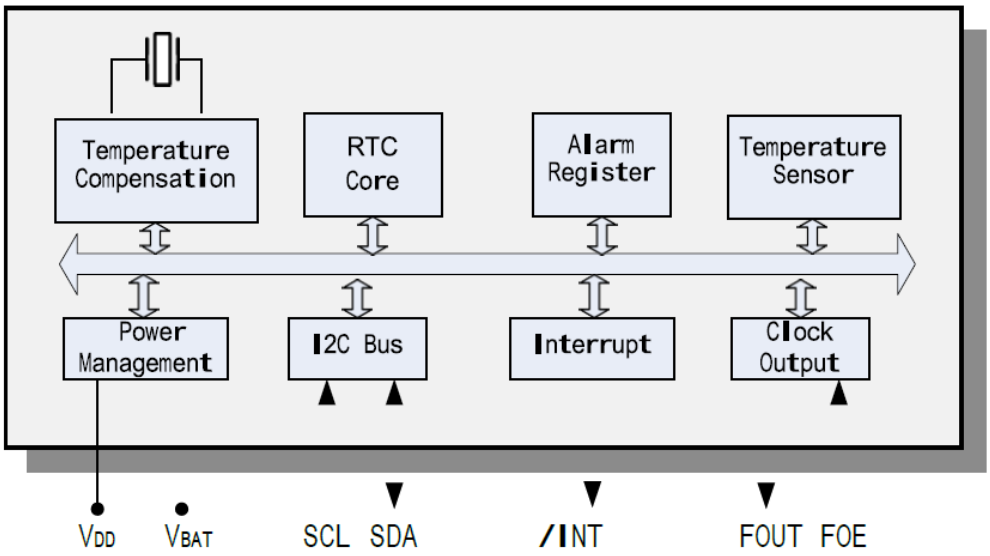
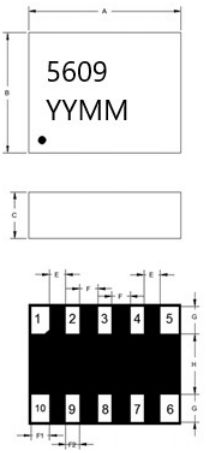


Figure 1) *Top, and Side Views*

PART NUMBER: ECS-RTC-3225-5609

Rev.2021

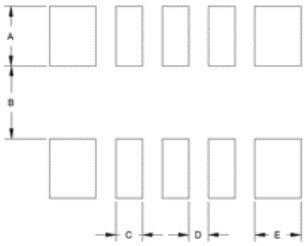
Dimensions (mm)



Dimension	Min.	Typ.	Max.
A	3.0	3.2	3.4
B	2.3	2.5	2.7
C	--	1.0	--
E	--	0.30	--
F	--	0.4	--
G	--	0.6	--
H	--	1.3	--
F1	--	0.45	--
F2	--	0.30	--

(Unit: mm)

Figure 1) *Tope, Side, Bottom View*



Dimension	Max.
A	0.9
B	1.1
C	0.4
D	0.3
E	0.7

(Unit: mm)

Figure 2) *Suggested Soldering Pattern*

Pin Number	Pin Name	I/O	Description
1	FOE	In	FOUT output control pin. "1" - enable FOUT, "0"- FOUT Hi-Z
2	V_{DD}	-	Power supply
3	V_{BAT}	-	Backup battery pin. Connect to large-capacity capacitors or a backup battery. Connect to V_{DD} when switchover function is not necessary
4	FOUT	Out	Frequency output. Controlled by FOE. Frequency can be set by FSEL bits.
5	SCL	In	I²C clock signal
6	T1	-	Manufacturer test only. Ensure to be floating
7	SDA	In/Out	I²C data signal
8	T2	-	Manufacturer test only. Ensure to be floating
9	GND	-	Ground
10	/INT	Out	Interrupt Output, Open-Drain

Figure 3) *Pin Function*