



REAL TIME CLOCK MODULE (SPI-Bus)



Product Number
RTC-4574SA : Q41457452000200

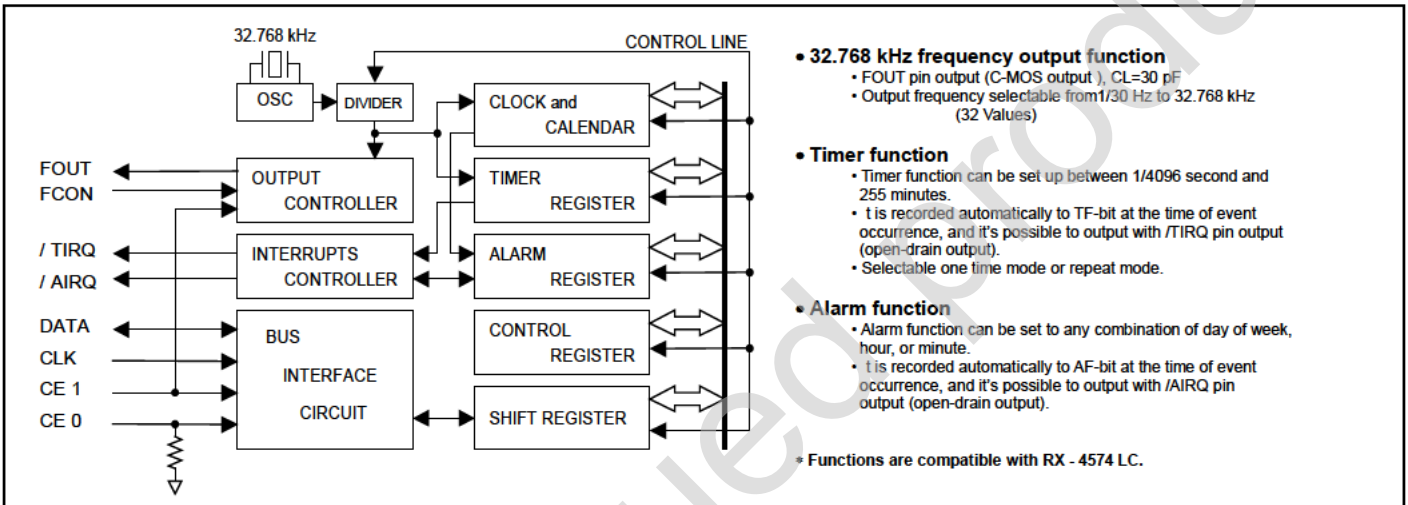
RTC-4574SA

- Built in frequency adjusted 32.768 kHz crystal unit.
- Interface Type : 3-wire serial interface
- Operating voltage range : 1.6 V to 5.5 V
- Wide Timekeeper voltage range : 1.6 V to 5.5 V
- Low backup current : 0.5 μ A / 3 V (Typ.)
- 32.768 kHz frequency output function : C-MOS output With Control Pin
- The various functions include full calendar, alarm, timer.



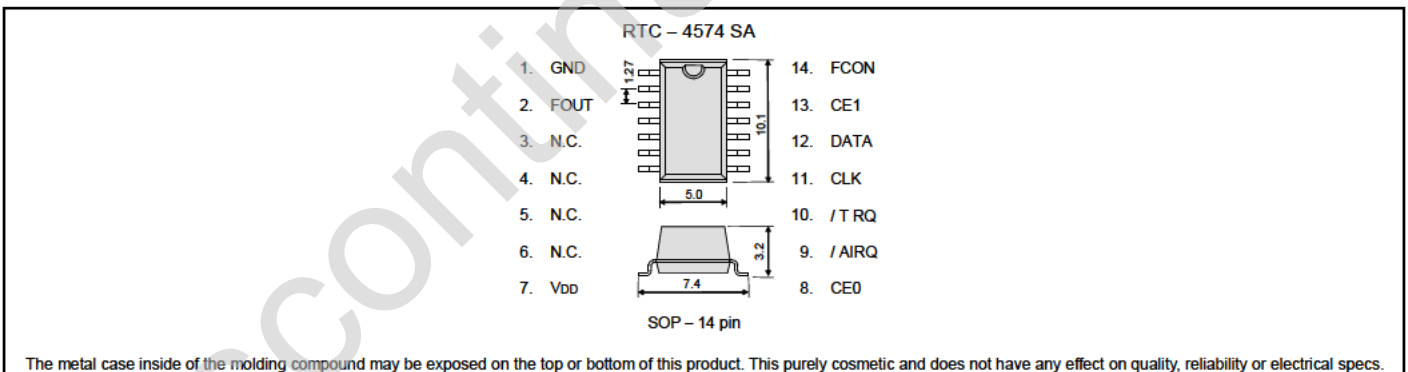
Block diagram

Overview



Terminal connection / External dimensions

(Unit:mm)



Specifications (characteristics)

* Refer to application manual for details.

Recommended Operating Conditions

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Power voltage	V _{DD}	—	1.6	3.0	5.5	V
Clock voltage	V _{CLK}	—	1.6	3.0	5.5	V
Operating temperature	T _{OPR}	—	-40	+25	+85	°C

Frequency characteristics

Item	Symbol	Conditions	Rating	Unit
Frequency tolerance	$\Delta f/f$	T _a = +25 °C V _{DD} = 3.0 V	B: 5 ± 23 *	× 10 ⁻⁶
Oscillation start-up time	t _{STA}	T _a = +25 °C V _{DD} = 1.6 V	3 Max.	s

* Please ask for tighter tolerance. (Equivalent to ±1 minute of monthly deviation)

Current consumption characteristics

T_a = -40 °C to +85 °C

tem	Symbol	Conditions	Min.	Typ.	Max.	Unit	
Current Consumption	I _{BK}	CE0, CE1 = GND FOUT ; output OFF (Hi - z)	V _{DD} = 5 V	-	1.0	2.0	μ A
			V _{DD} = 3 V	-	0.5	1.0	
Current Consumption	I _{32k}	CE0 = GND CE1 = V _{DD} FOUT ; 32.768 kHz output ON CL = 30 pF	V _{DD} = 5 V	-	8.0	20.0	μ A
			V _{DD} = 3 V	-	5.0	12.0	