

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.



OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

| PARAMETERS | CONDITIONS | ECS-RTC-3225-5699HS | | | 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

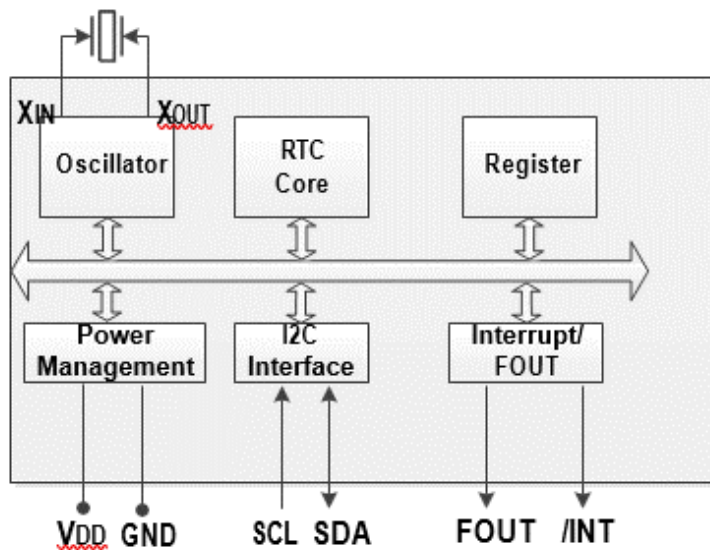


Figure 1) Top, and Side Views

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

Dimensions (mm)

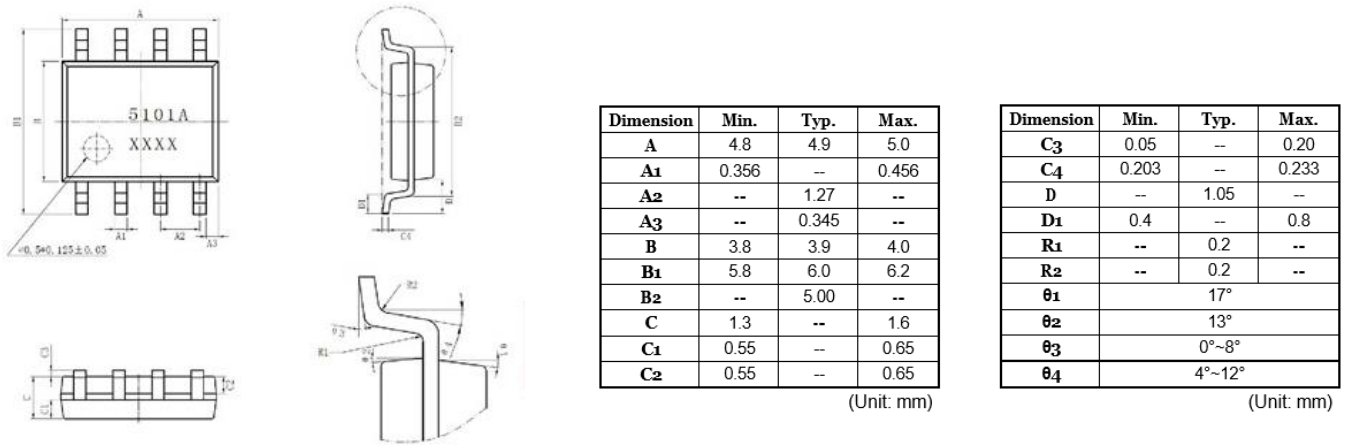


Figure 1) Top, Side, End View

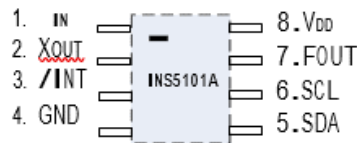


Table1. Pin Definition

| 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