Low current consumption
I²C-Bus INTERFACE REAL TIME CLOCK MODULE

RTC - 8564 JE / NB

• Built in frequency adjusted 32.768 kHz crystal unit.
• Interface Type: I²C-Bus Interface (Hi-speed bus specifications 400 kHz)
• Low-voltage detection: VLOW = 3.0 V

Overview

- Interface Type
  - I²C-Bus Interface. (Hi-speed bus specifications 400 kHz)
  - I²C-Bus slave address: read A2h and write A2h

- Low Timekeeper voltage range
  - 1.0 V to 5.5 V / Ta = -20 °C to +70 °C
  - 1.1 V to 5.5 V / Ta = -40 °C to +85 °C

- 32.768 kHz frequency output function
  - CLKOUT pin output (C-MOS output), CL=30 pF
  - CLKOE pin enables output on/off control.
  - Output selectable: <32.768 kHz, 1024 Hz, 32 Hz, 1 Hz>

- The various interrupt function
  - Timer function can be set up between 1/4096 second and 255 minutes.
  - Alarm function can be set to any combination of day of week, hour, or minute.

- Functions are compatible with RX-8564 LC series.

Block diagram

Pin Function

- Signal Name: Input/Output
- Function: Serial clock input pin.
- SCL
- SDA: Bi-directional Data input and output pin.
- CLKO:E: Input
- CLKO:E: Output
- / INT: Output
- Vcc: Connected to a positive power supply.
- GND: Connected to a ground.

Terminal connection / External dimensions

- (Unit:mm)
- RTC - 8564 JE
- RTC - 8564 NB

Specifications (characteristics)

- Refer to application manual for details.

Recommended Operating Conditions

- Power voltage: VDD
- Clock voltage: Vcc
- Operating temperature: T0RTH

Low voltage detection

- Low voltage detection: VLOW
- Ta = +20 °C to +70 °C
- Ta = -40 °C to +85 °C

Frequency characteristics

- Frequency tolerance: Δf/f
- Ta = +25 °C
- Vcc = 3.0 V

Current consumption characteristics

- I²C-Bus output OFF (LOW)
- I²C-Bus output ON
- CLKOE: output OFF (LOW)

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