Module 2-1

SETTING UP THE ARDUINO IDE: What’s A Datalogger?
What is a Datalogger?
Memory
Realtime Clock

2020 Calendar
PCF8563
Real-time clock/calendar
Rev. 11 — 26 October 2015
Product data sheet

1. General description

The PCF8563 is a CMOS† Real-Time Clock (RTC) and calendar optimized for low power consumption. A programmable clock output, interrupt output, and voltage-low detector are also provided. All addresses and data are transferred serially via a two-line bidirectional I²C-bus. Maximum bus speed is 400 kbit/s. The register address is incremented automatically after each written or read data byte.

2. Features and benefits

- Provides year, month, day, weekday, hours, minutes, and seconds based on a 32.768 kHz quartz crystal
- Centry flag
- Clock operating voltage: 1.0 V to 5.5 V at room temperature
- Low backup current: typical 0.25 µA at VDD = 3.0 V and Tamb = 25 °C
- 400 kHz two-wire I²C-bus interface (at VDD = 1.8 V to 5.5 V)
- Programmable clock output for peripheral devices (32.768 kHz, 1.024 kHz, 32 Hz, and 1 Hz)
- Alarm and timer functions
- Integrated oscillator capacitor
- Internal Power-On Reset (POR)
- I²C-bus slave address: read A3h and write A2h
- Open-drain interrupt pin
Sensor
Invisible Things

• Power optimization
• Reliability
• Recovery
• Usability
COMING UP
Module 2-2
Setting Up Arduino