

The diagram illustrates the hardware connections for an SPI interface between an Arduino Uno and an RTC module. The RTC module includes an RTC chip, a 32.768 kHz crystal, and a 3V3 voltage regulator.

- Power Connections:**
 - The RTC's **VCC** pin is connected to the **5V** pin of the Arduino.
 - The RTC's **GND** pin is connected to the **GND** pin of the Arduino.
 - The Arduino's **5V** pin is connected to the **3V3** pin of the RTC via a 390Ω resistor and a diode, likely for current limiting and protection.
- Signal Connections:**
 - Arduino **D13** is connected to the RTC's **MISO** pin.
 - Arduino **D12** is connected to the RTC's **MOSI** pin.
 - Arduino **D11** is connected to the RTC's **SCK** pin.
 - Arduino **D10** is connected to the RTC's **CS** pin.
- RTC Module Details:**
 - The RTC chip has pins labeled **Ah**, **AS**, **A**, **3**, **13**, **12**, **11**, and **10**.
 - The voltage regulator has pins for **5V**, **3V3**, and **GND**.

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