

# Description

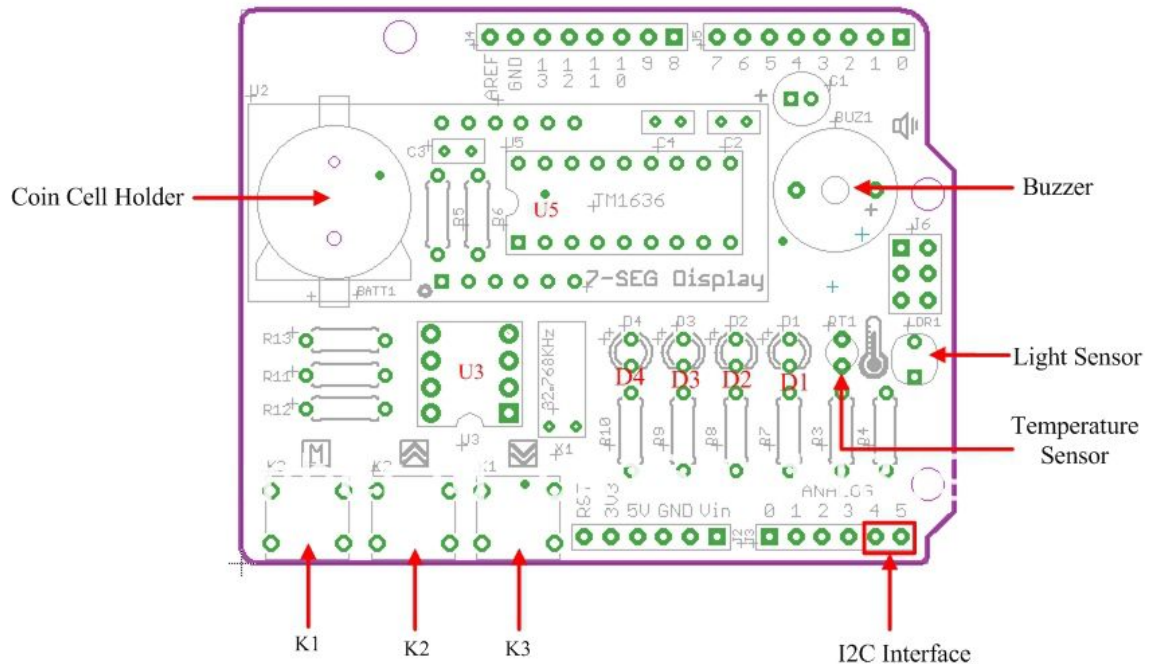
Clock Shield (digital clock module) Shield contains most common resources for a basic electronic project, like buttons, sensors, buzzer and display. Combined with Arduino compatible motherboard is a perfect start for beginners of Arduino world.

# Features

- 1 Brand new handy and pretty cheap
- 2 Can be directly inserted on the compatible board for Arduino
- 3 On-board real-time clock chip
- 4 For Arduino rich supporting experimental routines with other SCM systems
- 5 Handy and pretty cheap Specification

# Interface

Clock Shield interface as shown below:



Hardware resources:

**Battery Holder :** Battery on the card to the real-time clock chip power supply, making the board can continue to power down timer ;

**Buzzer :** 5V DC buzzer , do alarm clock, key tone ;

**Photoresistor :** intensity of ambient light sensor ;

**Thermistor:** detecting environmental temperature ;

**K1 ~ K3:** SCM can be scanned directly touch of a button ;

**U5:** TM1636, namely, four 8-segment common anode LED Driver IC ;

**U3:** DS1307, namely, real-time clock chip ;

**D1 ~ D4:** blue, green , red, red , 3mm plug LED.

**Digital tube:** 4 8 segments of positive points with a digital clock , and the decimal point is not displayed , only for identification purposes direction .

Occupied Arduino pin Resources:Total occupied nine digital pins , two analog input pins, an I2C interface

**D2:** control blue LED1;

**D3:** Control the green LED2;

**D4:** Control the red LED3;

**D5:** Control the red LED4;

**D7:** connection TM1636 clock pin SCLK;

**D8:** TM1636 data connection pin DIO;

**D9:** control keys K1;

**D10:** control buttons K2;

**D11:** control buttons K3;

**A0:** poll readings from temperature sensor;

**A1:** poll readings from light sensor;

**A4:** connect the DS1307 I2C data pin SDA;

**A5:** connect the DS1307 I2C clock pin SCL