

# CheapDuino (SKU:DFR0236)



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# Introduction

CheapDuino is the most cheapest Arduino compatible processor in the world. It's aimed to supply a low cost processor for the students and DIYers from second and third world countries. The price for each cheapDuino controller is almost 1/5 price of the Arduino UNO. So it's also suitable for you to DIY custom project, workshop, gift for friend, E-Textiles and education usage.

# Specification

- Working voltage: 3~5 volts
- Recommended power supply: 5v
- Microctonroller: Atmel AVR ATmega8
- bootloader(Board option in Arduino IDE): Arduino NG / w ATmega8
- 3 digital pins, 3 analog pins with easy-to-solder hexagonal pads
- Integrate 3 pwm pins,I2C interface and UART interface
- Suitable for workshop,education usage and DIY custom projects
- Low cost Arduino compatible controller
- Designed for the students and DIYers from second and third world countries
- Dimensions: 2cm x 2cm x 0.2cm

**Pinout Diagram** 





**Bottom View** 

# **Connection Diagram**



Fig1: cheapDuino Pin Out

#### Note:

• When plugin the fpc programming cable to DFRobot FPC programmer and cheapDuino, please the blue side facing upward.

### Example Code

- Choose the right com port of your programmer in the Arduino IDE first.
- Choose "Arduino NG or older /w ATmega8" in the "Boards" option.
- Then just upload your arduino sketch to the cheapDuino. The "Blink" sketch will be used to drive the LED connected to the D13 pin onboard.

```
const int ledPin = 13; // the number of the LED pin on the cheapDuino
// Variables will change:
int ledState = LOW; // ledState used to set the LED
long previousMillis = 0; // will store last time LED was updated
// the follow variables is a long because the time, measured in miliseconds,
```

```
// will quickly become a bigger number than can be stored in an int.
long interval = 1000;
                                // interval at which to blink (milliseconds)
void setup() {
  // set the digital pin as output:
 pinMode(ledPin, OUTPUT);
}
void loop()
{
  // here is where you'd put code that needs to be running all the time.
  // check to see if it's time to blink the LED; that is, if the
  // difference between the current time and last time you blinked
  // the LED is bigger than the interval at which you want to
  // blink the LED.
  unsigned long currentMillis = millis();
  if(currentMillis - previousMillis > interval) {
    // save the last time you blinked the LED
    previousMillis = currentMillis;
    // if the LED is off turn it on and vice-versa:
    if (ledState == LOW)
      ledState = HIGH;
    else
      ledState = LOW;
    // set the LED with the ledState of the variable:
    digitalWrite(ledPin, ledState);
  }
}
```