

Embedded Workshop

Design and build your
own PCB Shield using
<https://circuits.io>

Rusty Cain Sept-28-2016

From Breadboard to Printed Circuit Board.

<https://circuits.io/>

Sign up for free.

Open Electronics Lab Hub

(Build a project on a Breadboard)

Open PCB Design Hub

(Design a PCB)

Open Circuit Scribe

(Teaches Electronics)

Let's start a project

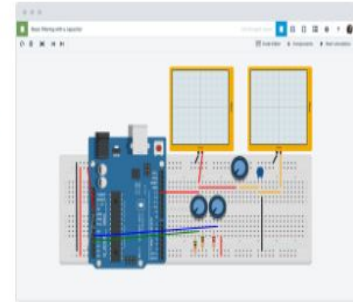
+New Project

Electronics Lab

Simulate and program Arduino and breadboard components.

Test your Arduino code in our real-time simulation environment and see your designs come to life in the browser.

 Open Electronics Lab Hub

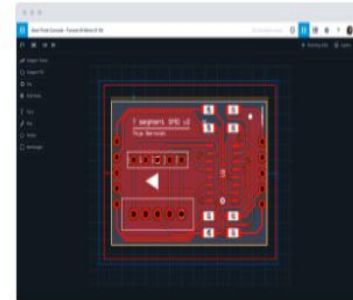


PCB Design + Manufacturing

Design a PCB board or import designs from Eagle.

Use components from our ever growing library or create your own.
Order boards when you are done.

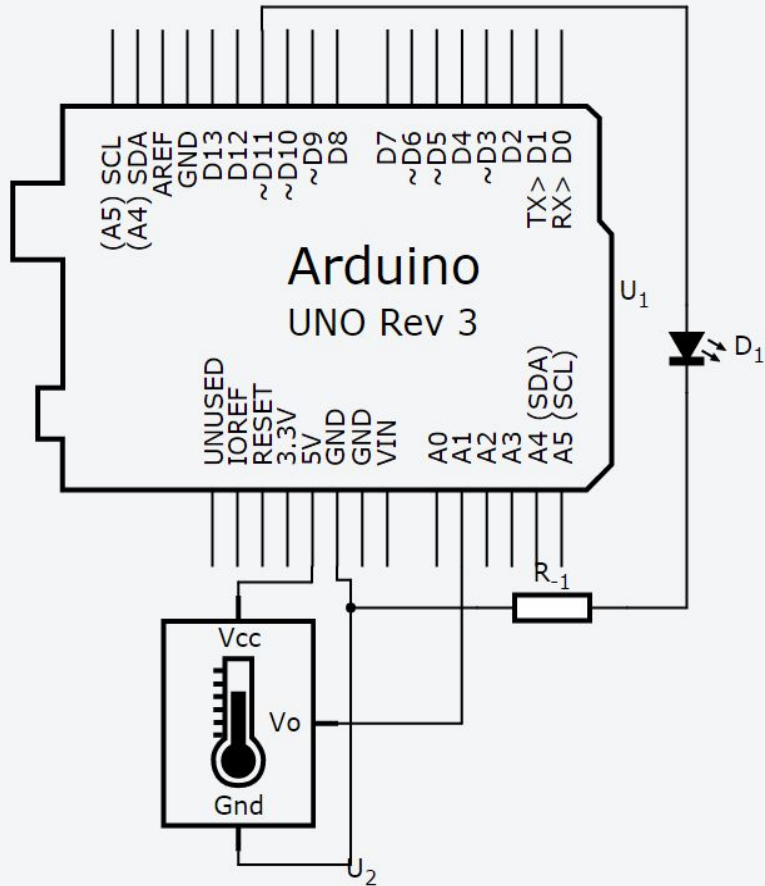
 Open PCB Design Hub



Schematic



Bill Of Materials

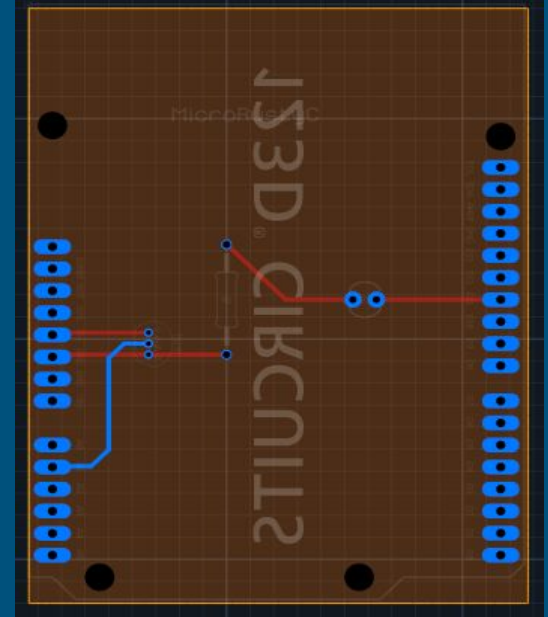
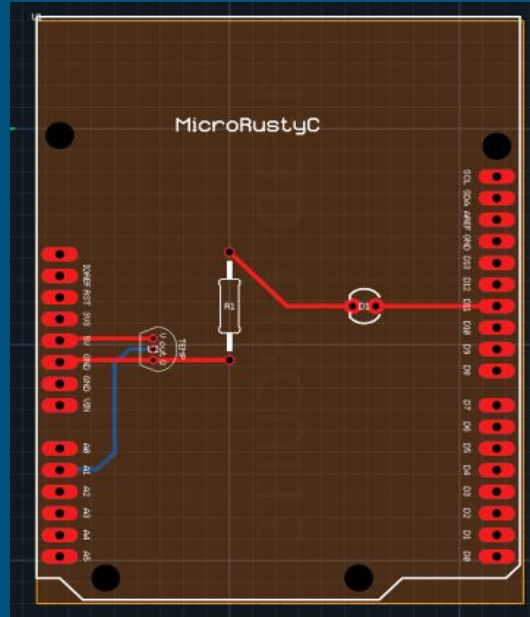




IDs	#	Component	Footprint	Properties
U1	1	Arduino Uno R3 The official Arduino Uno Rev3	Arduino Uno R3	<pre>int val; int tempPin = 1; void setup() { Serial.begin(9600); pinMode(11, OUTPUT); } void loop() { digitalWrite(11, HIGH); val = analogRead(tempPin); float mv = (val/1024.0)*5000; float cel = mv/10; float farh = (cel*9)/5 + 32; Serial.print("TEMPRATURE = "); Serial.print(cel); Serial.print("°C"); Serial.println(); delay(1000); Serial.print("TEMPRATURE = "); Serial.print(farh); Serial.print("°F"); Serial.println(); digitalWrite(11, LOW); delay(1500); } code</pre>
U2	1	Temperature Sensor [LM35]	Temp Sensor 3-pin TO-92	
R-1	1	Resistor Resist the flow of electrical energy in a circuit, changing the voltage and current as a result.	0207/12	1 kohm
D1	1	LED A type of diode that illuminates when electricity passes through it. Unlike an RGB Led, this one has a defined color.	LED3MM	650 green[["green","Green"],["yellow","Yellow"],["orange","Orange"],["blue","Blue"],["red","Red"]]

Components Placement on the PCB



- Copper Trace
- Copper Pour
- Via
- Drillhole
- Text
- Pen
- Circle
- Rectangle



View	Layers
<input checked="" type="checkbox"/> Grid 	Top 
<input checked="" type="checkbox"/> Board	Bottom 

Download the Gerber Files

Overview

Share

 17

 0

Version 1 - Last update: Sep 22, 2016

Demonstration of the LM35 Temperature sensor connected to an Arduino Uno

No description...

Tags: none

License: CC-BY-SA 3.0

Edit Project

Download Gerber

Duplicate Project

Share & Embed

 Delete

0 Comments

123D Circuits

 Login ▾

 Recommend

 Share

Sort by Best ▾

Use a Gerber Viewer before purchase boards.