Macoun

B.L.I.N.K.

MacLemon

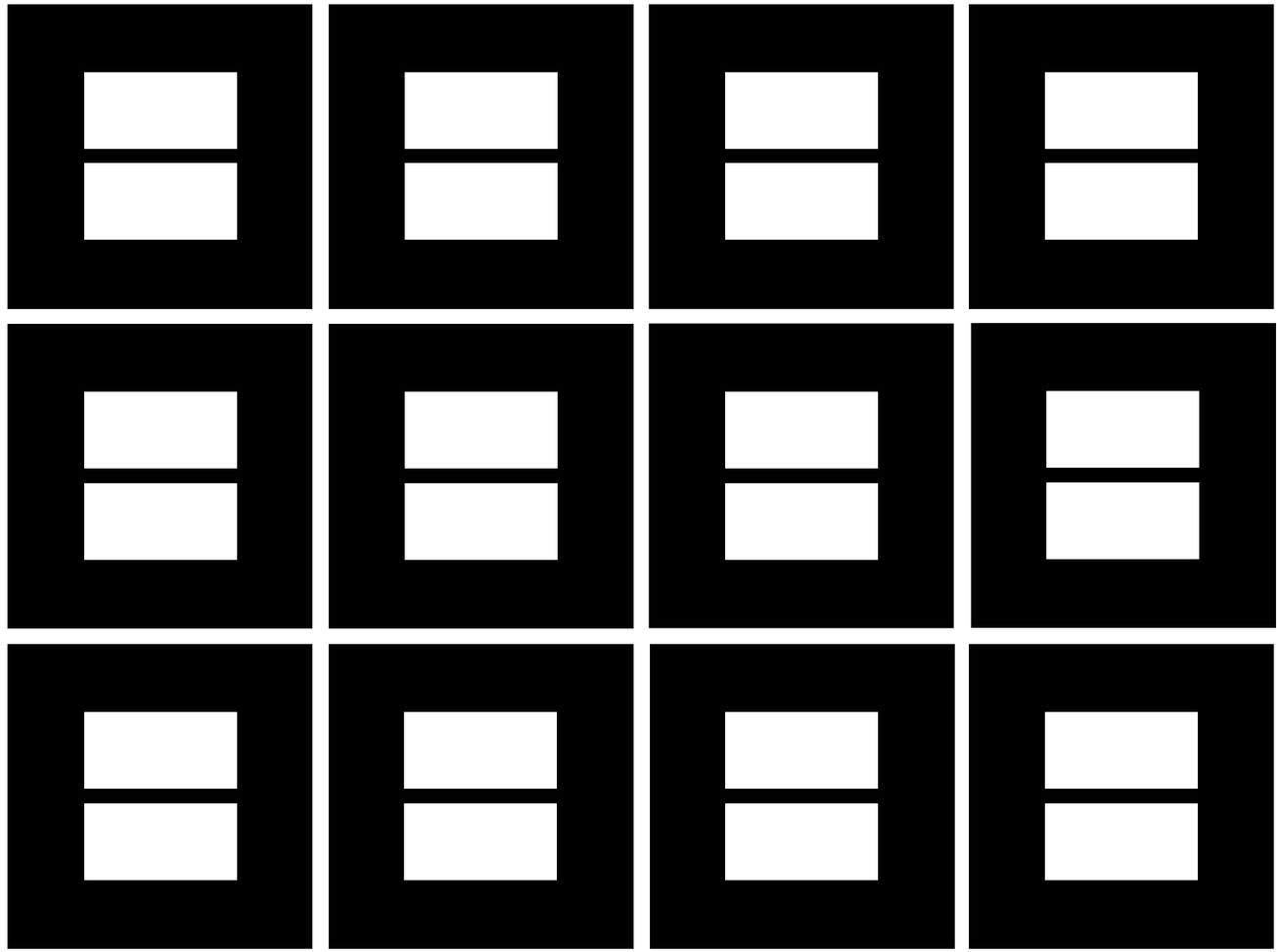
0b10110111

Give correct Number of

B.linken
L.öten
I.nteragieren
N.achbauen
K.odieren

MacPro

12 CPUs 3GHz



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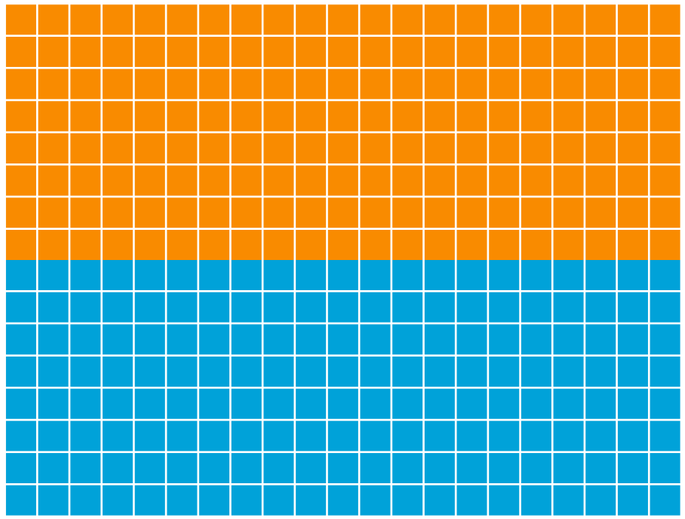

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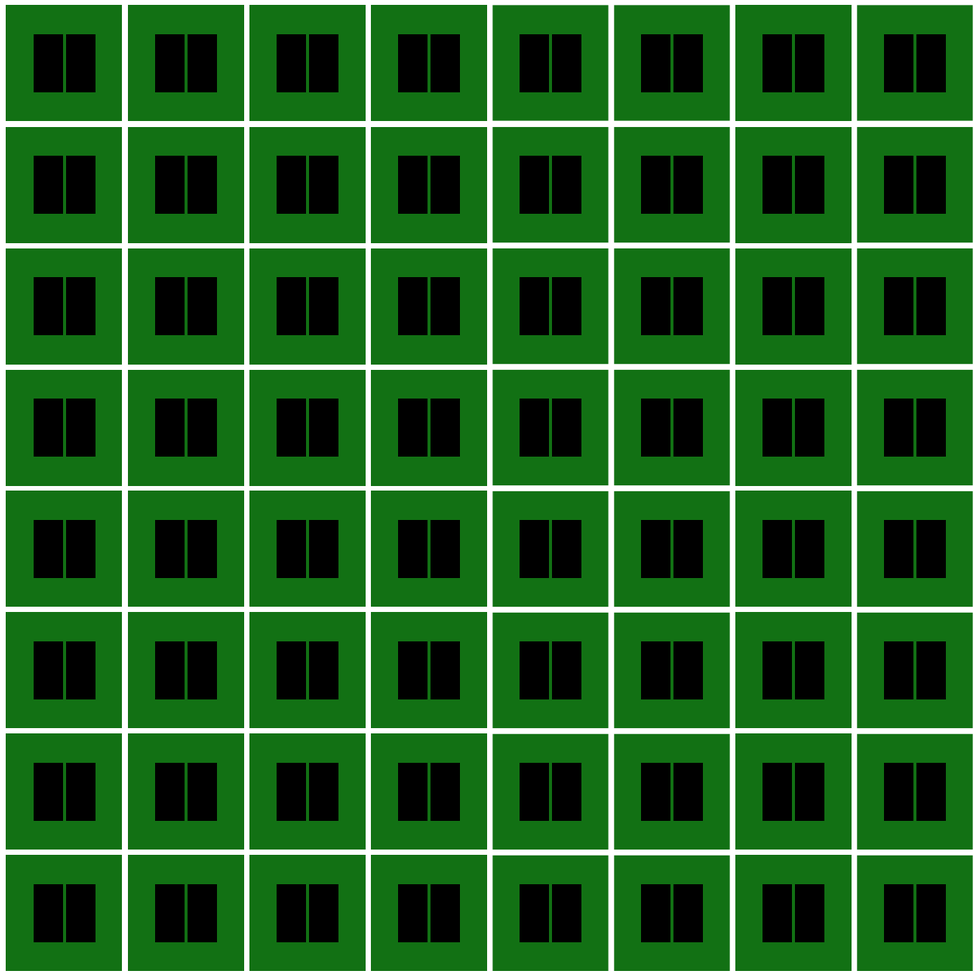
2^{30} Bytes

1 GB

1 GiBi

64GB RAM



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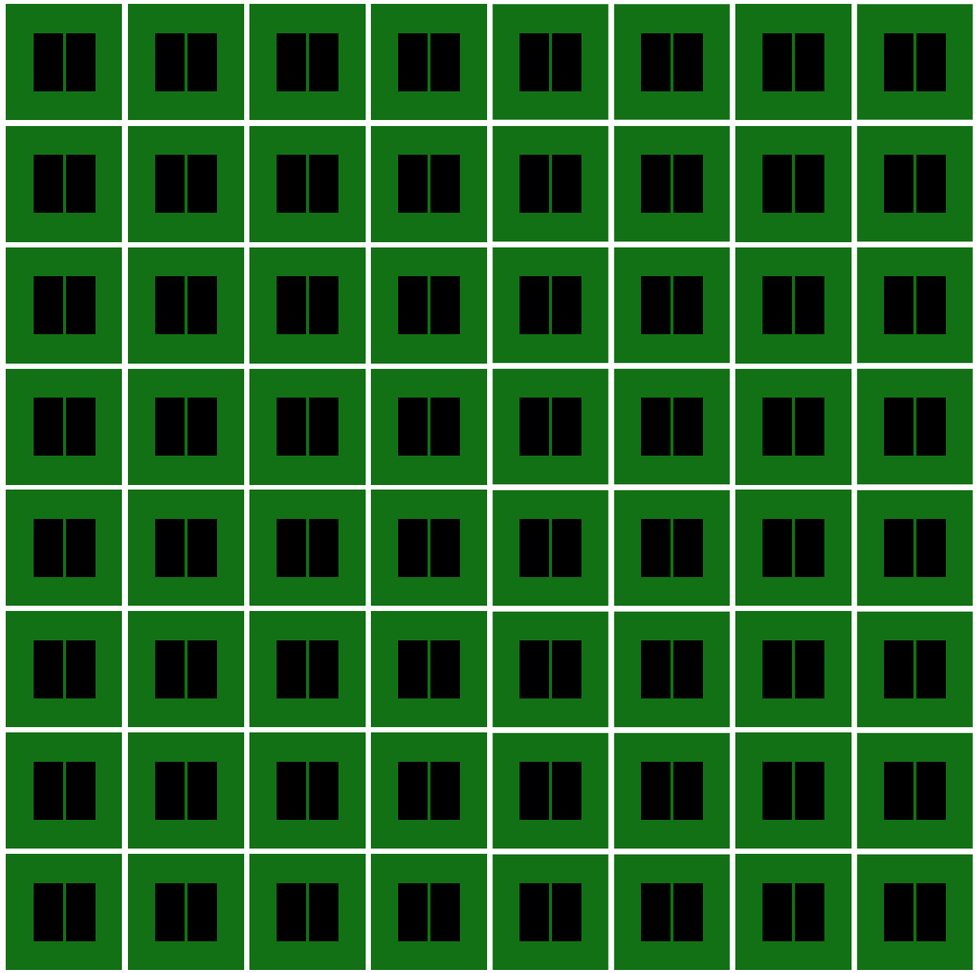
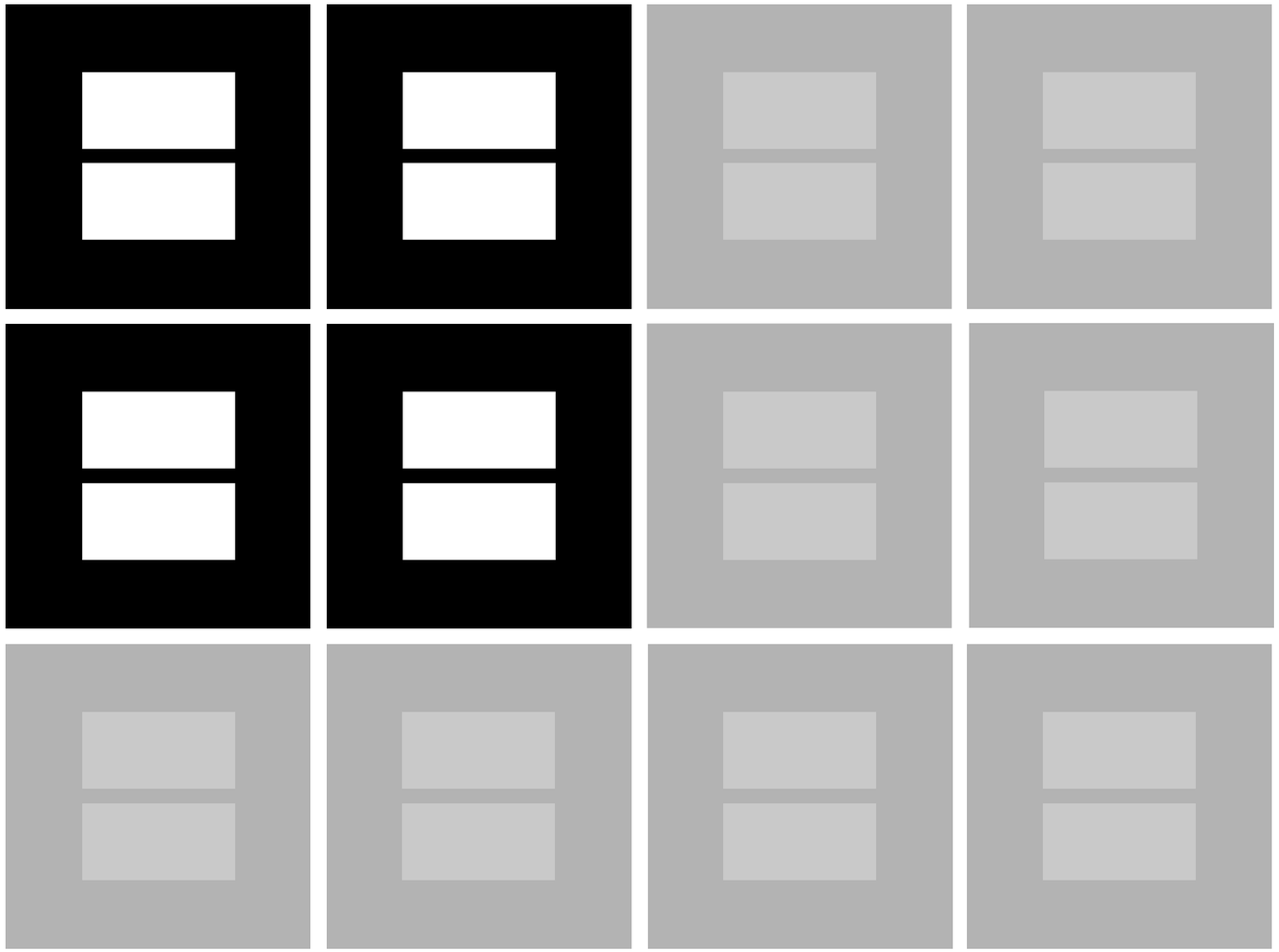
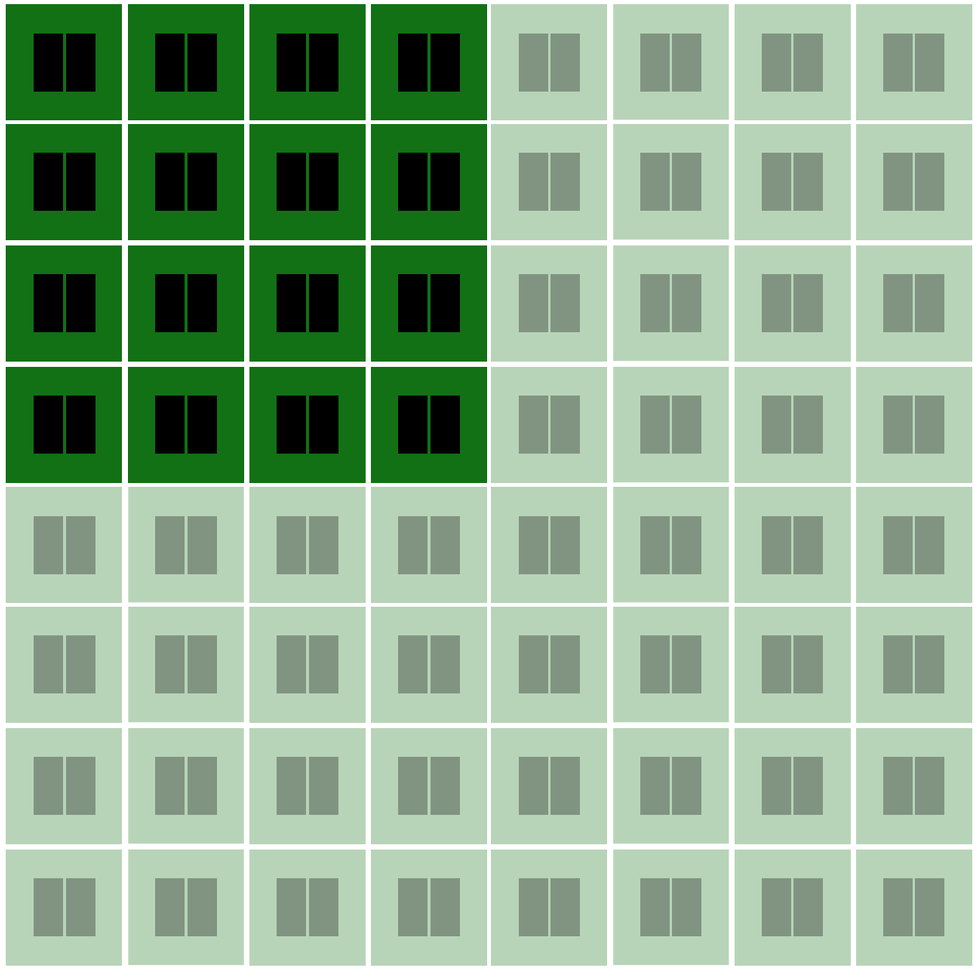


MacBook Pro

4 CPUs 2,7GHz



16GB RAM



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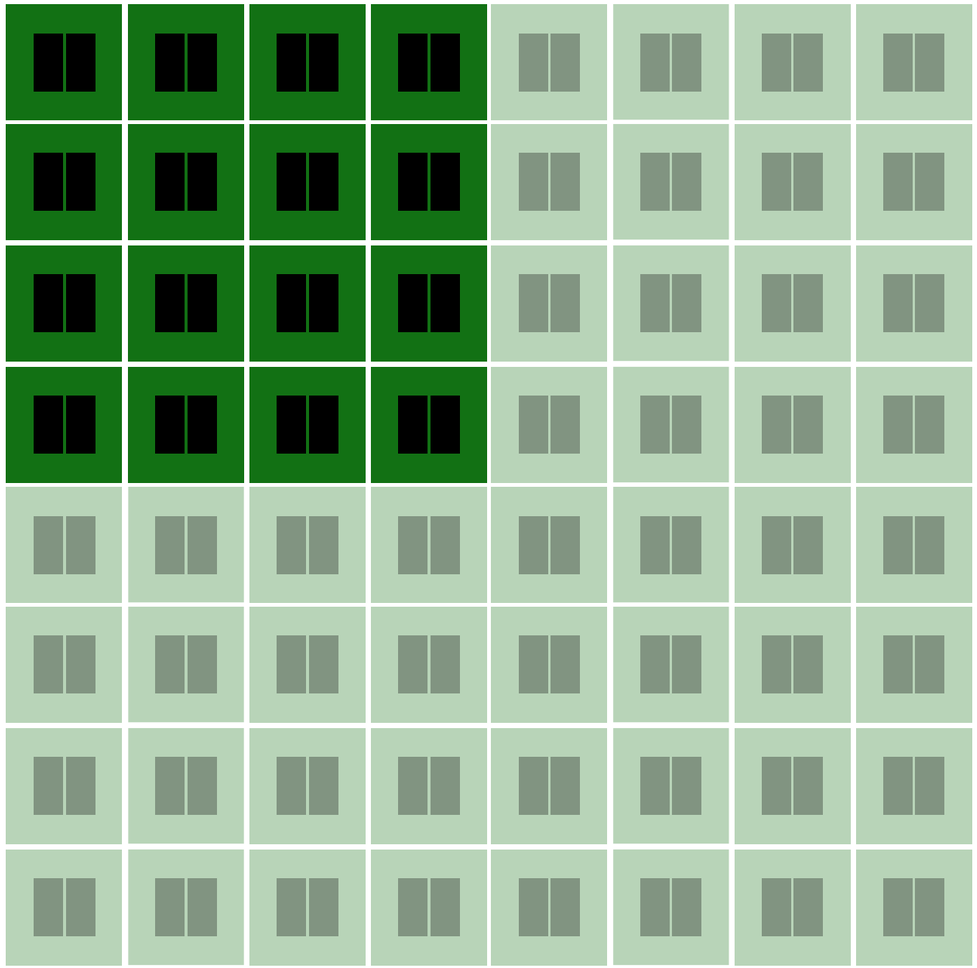
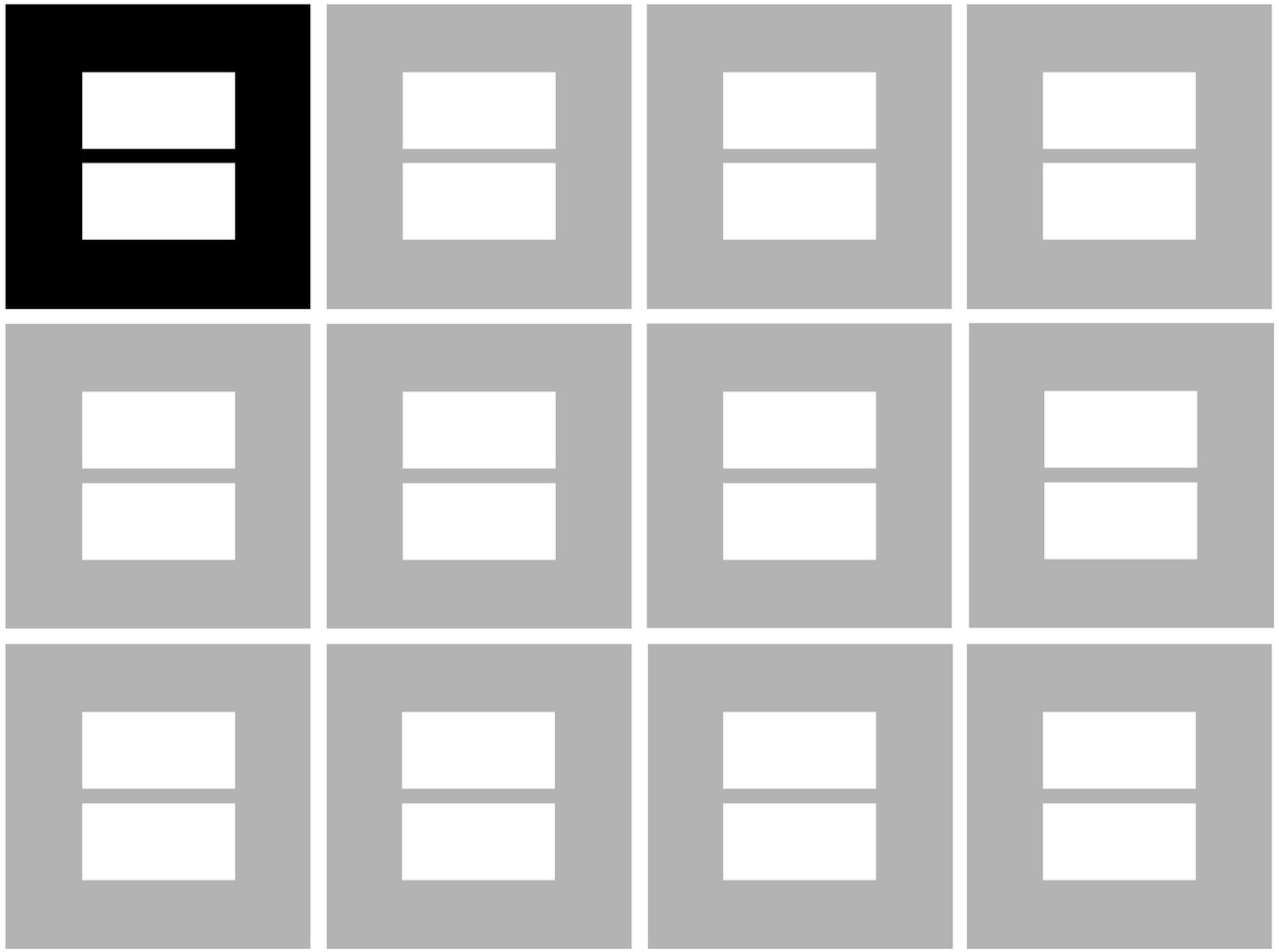


iPhone 5S

1 CPU 1,3GHz



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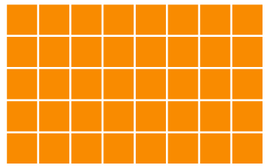

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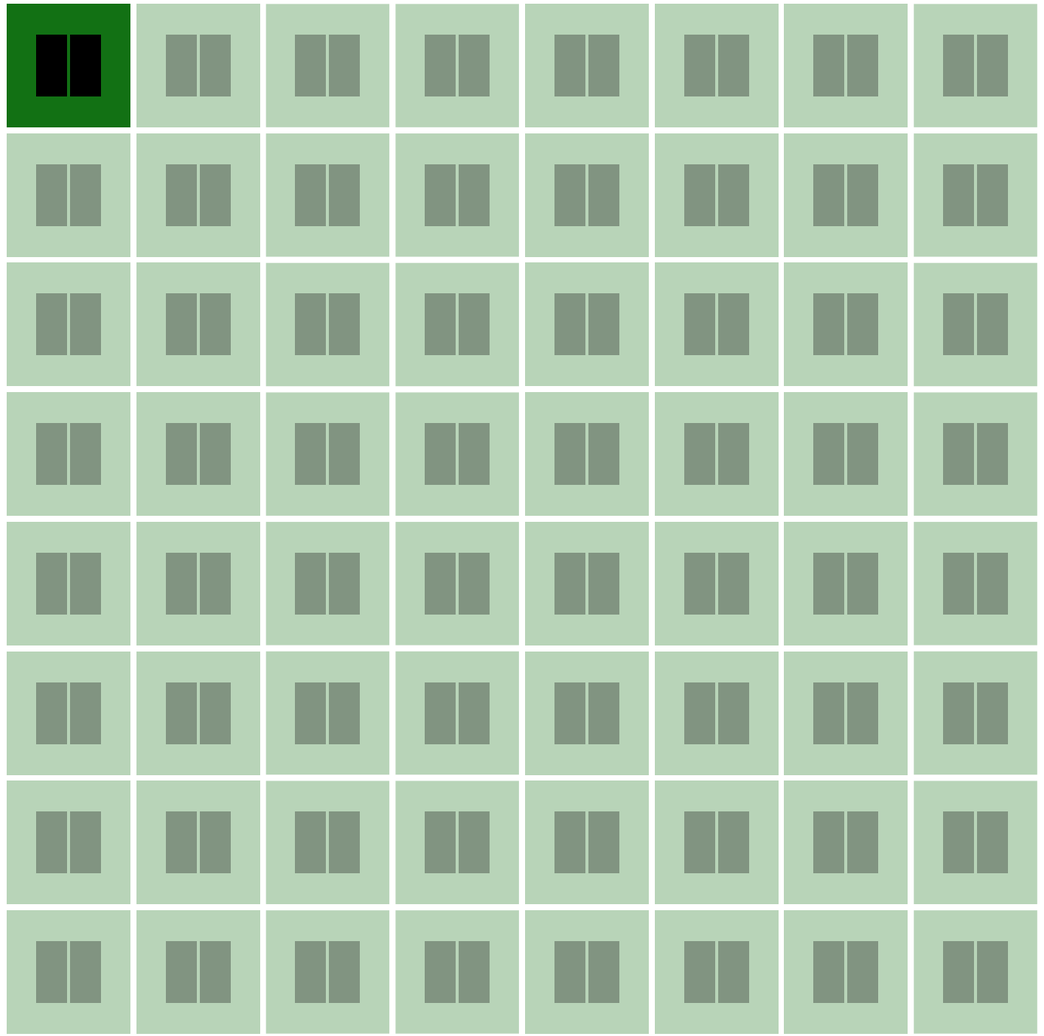
1GB RAM



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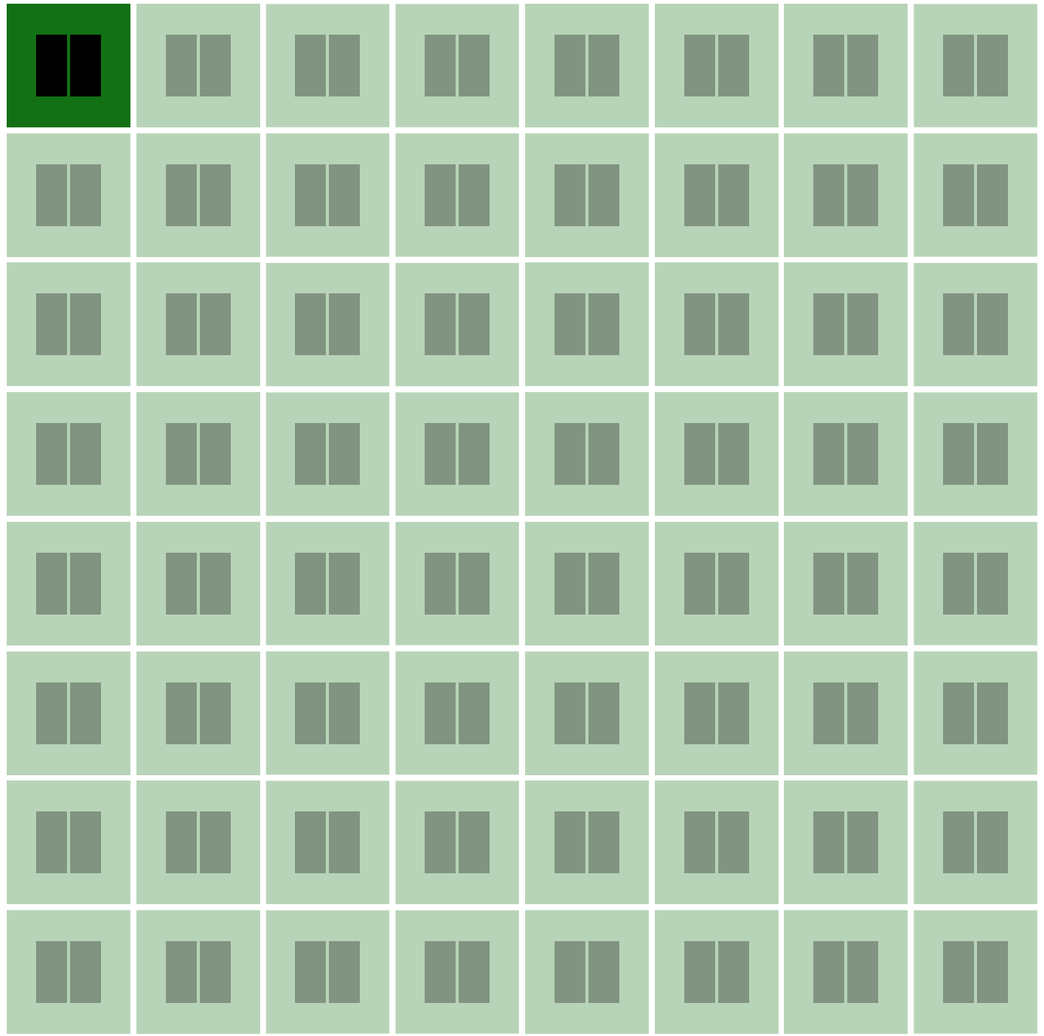

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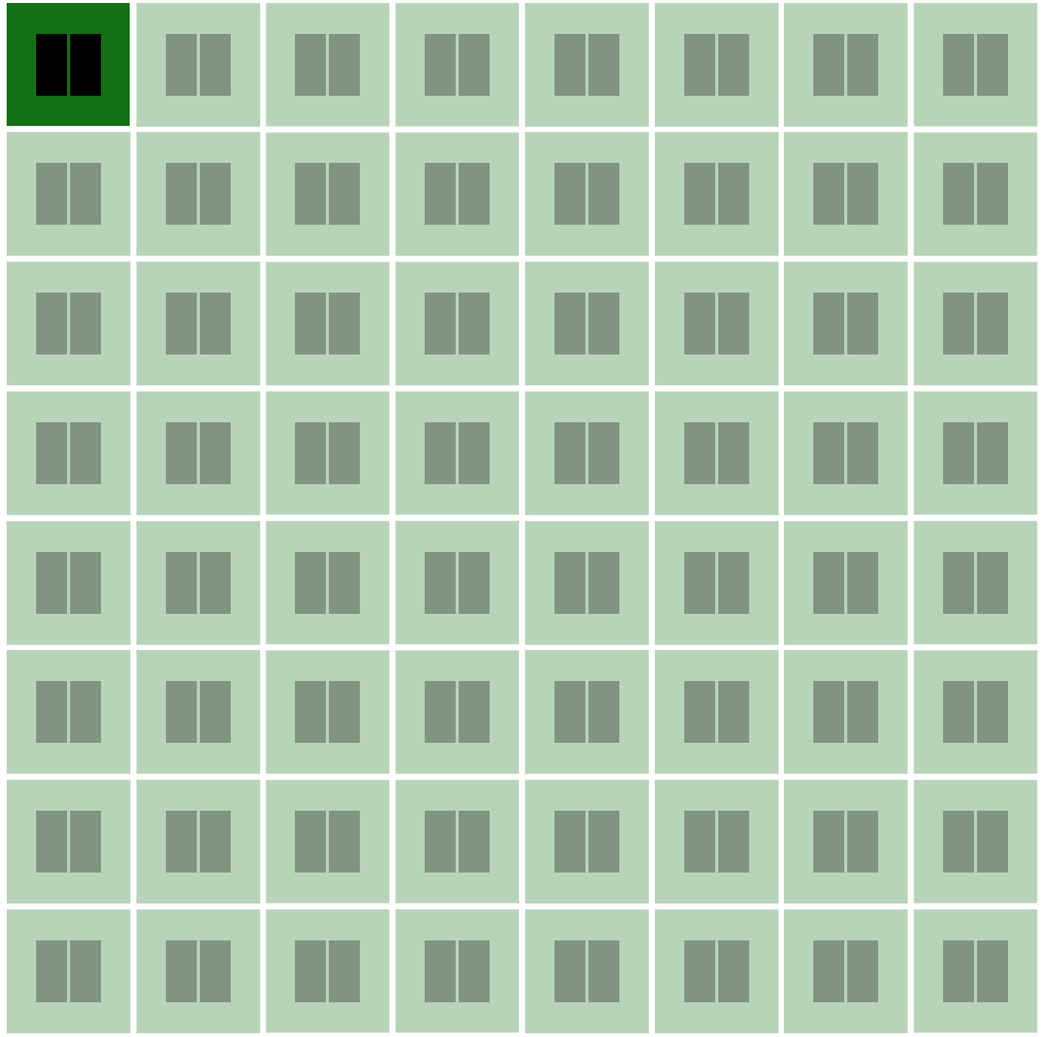

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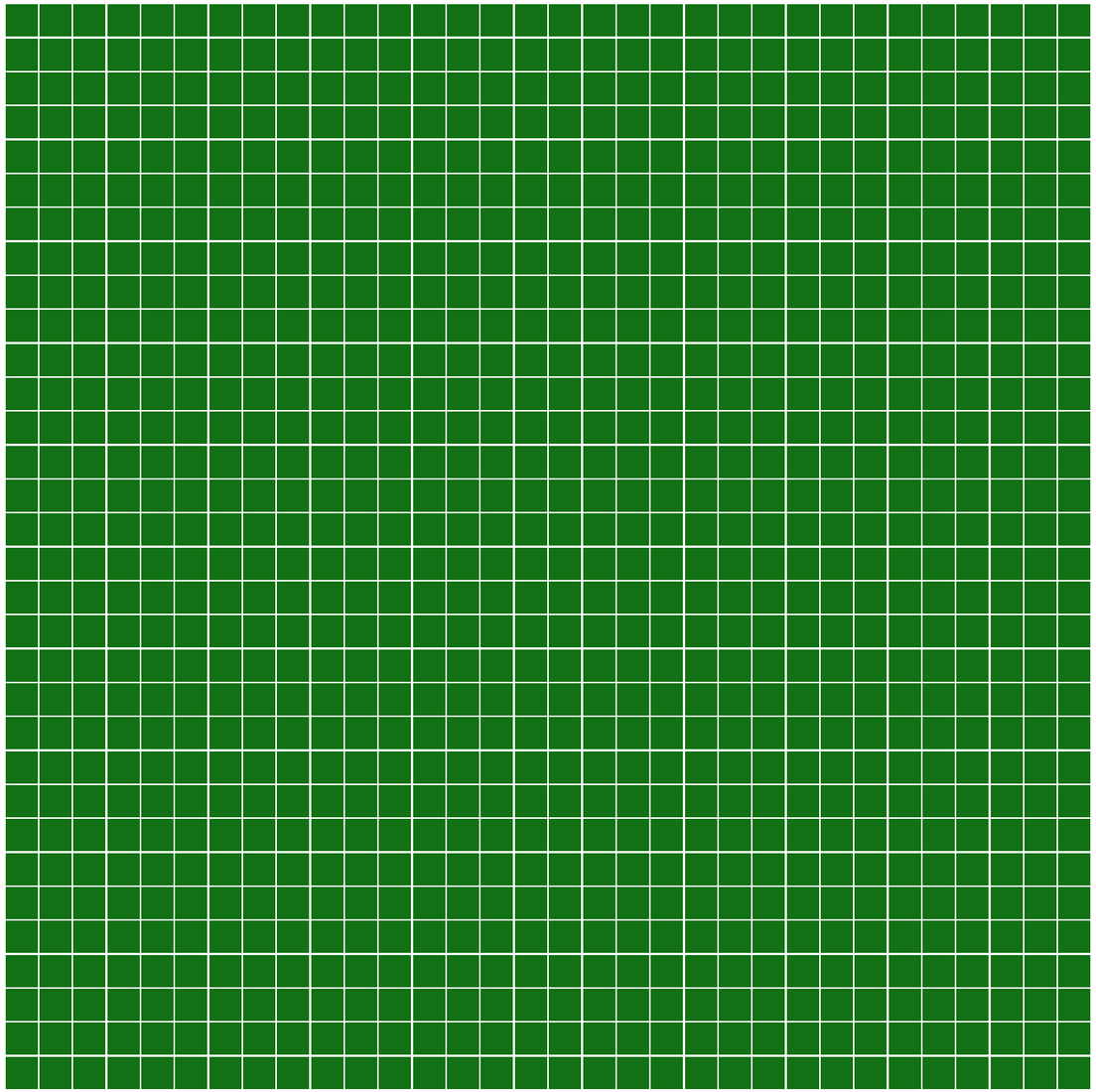
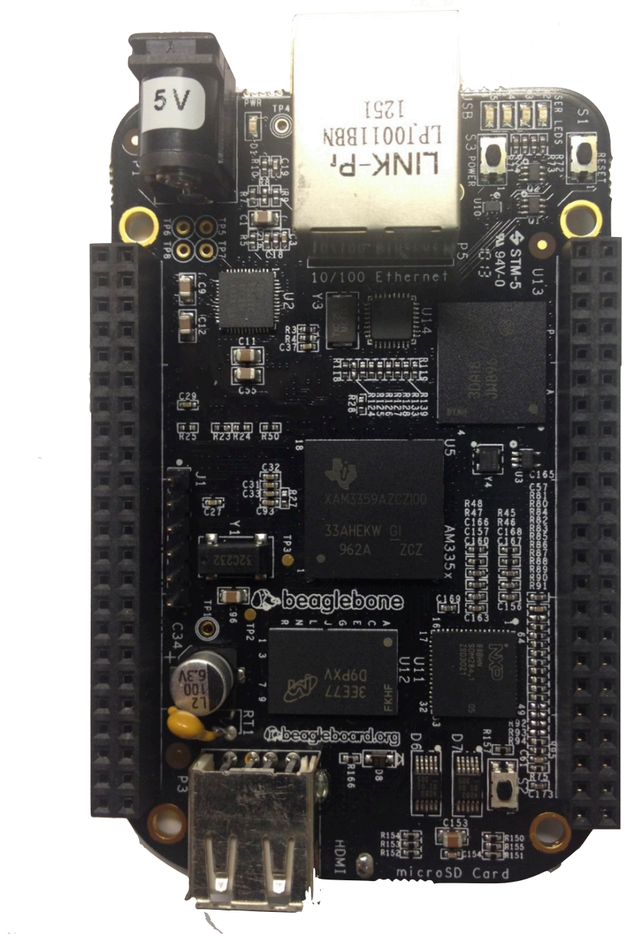


2^{20} Bytes

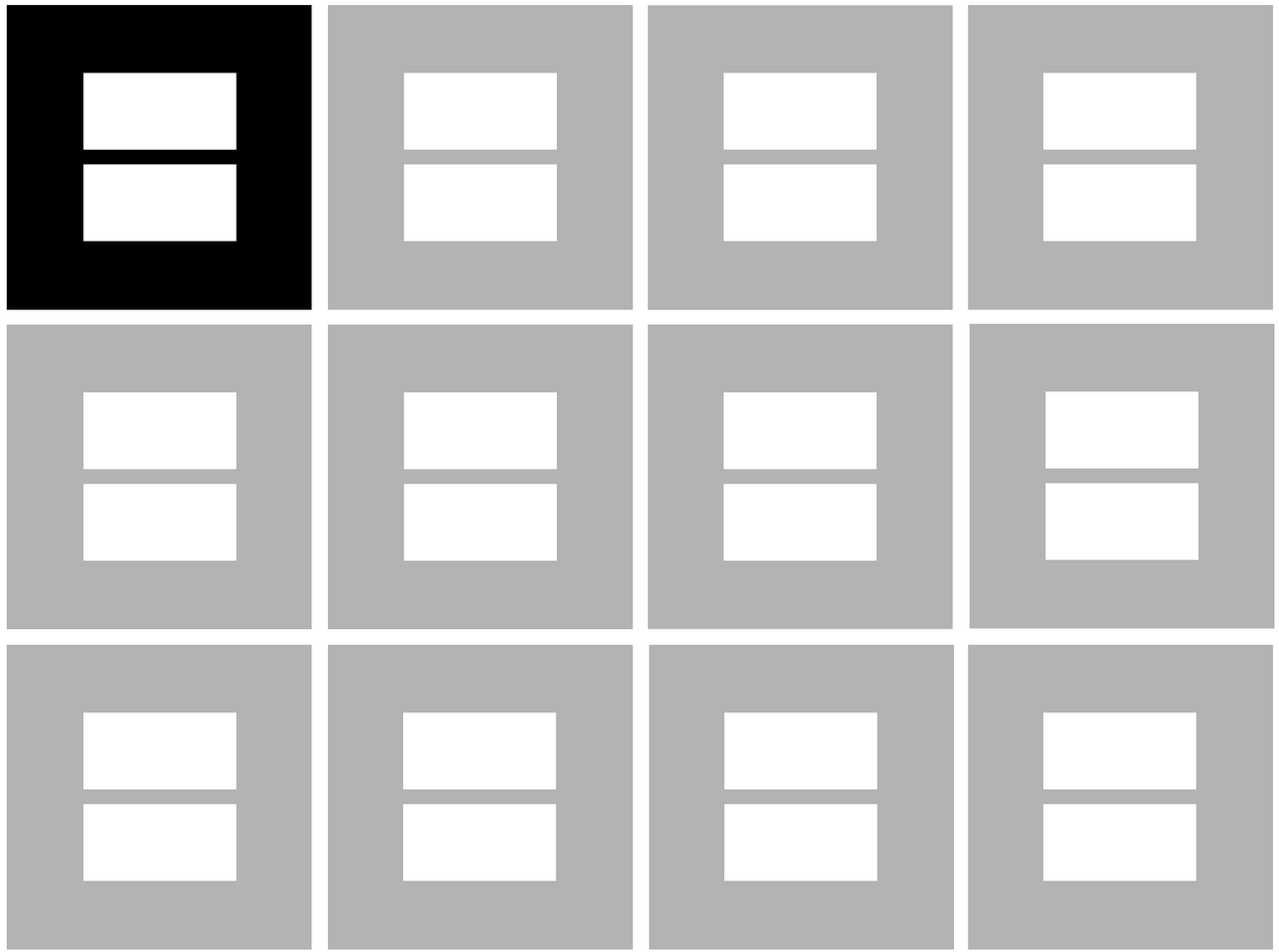
IMB

MiBi

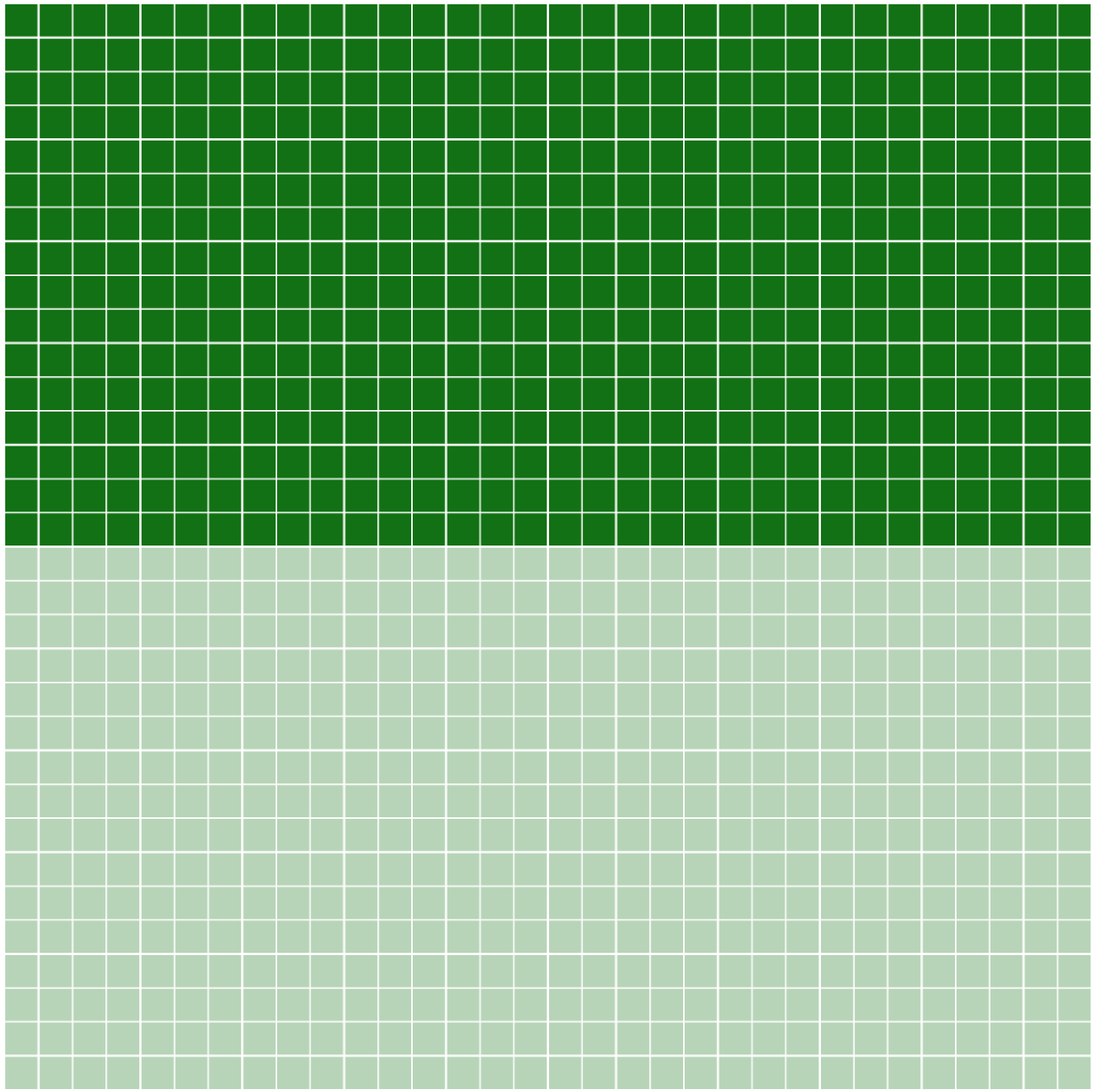


BeagleBone Black

1 CPU 1,0GHz



512MB



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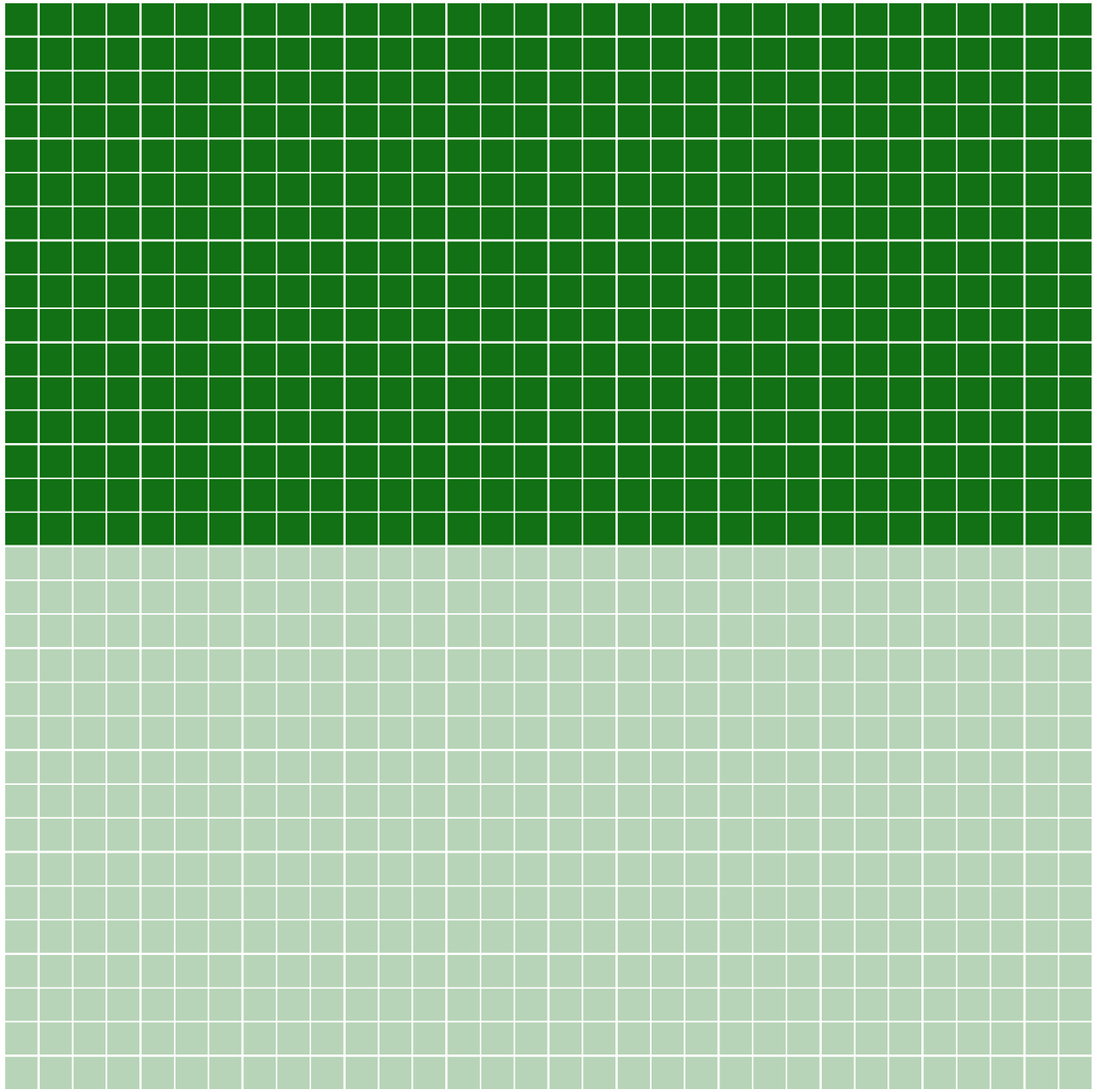

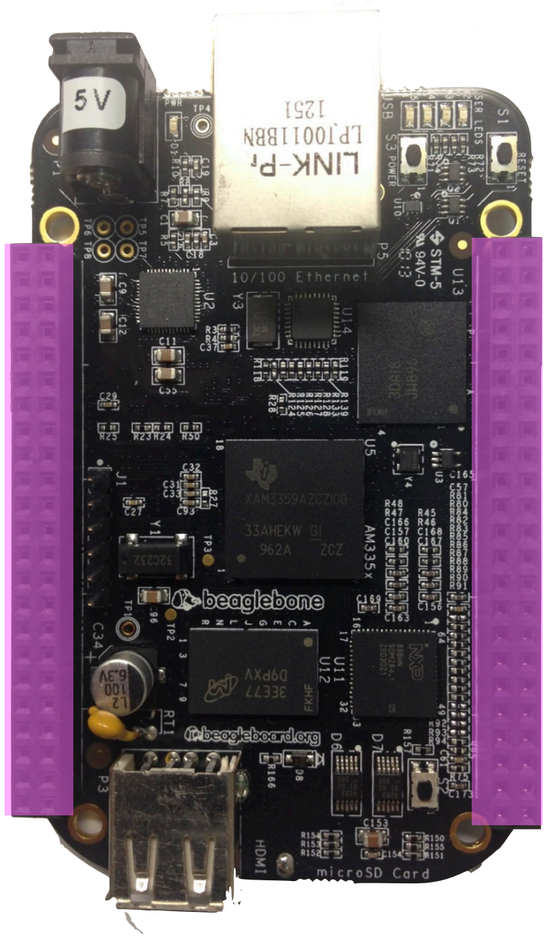
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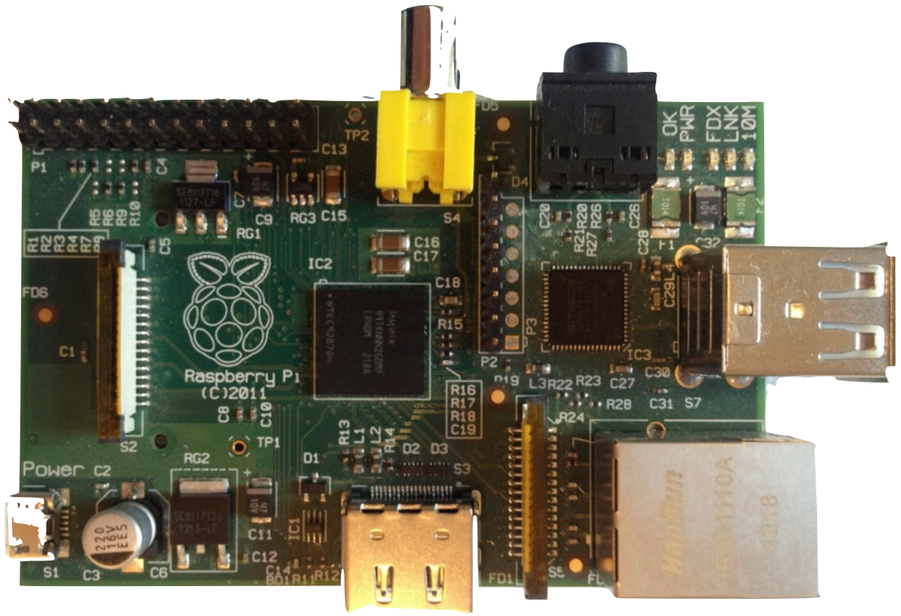
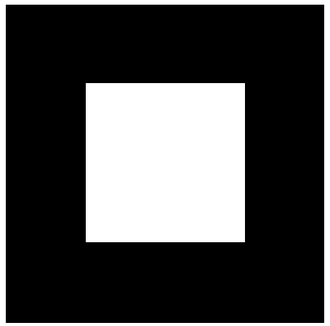
10/100 Ethernet
beaglebone
beagleboard.org
microSD Card
HDMI

65 GPIOs



Raspberry Pi

1 CPU 700MHz



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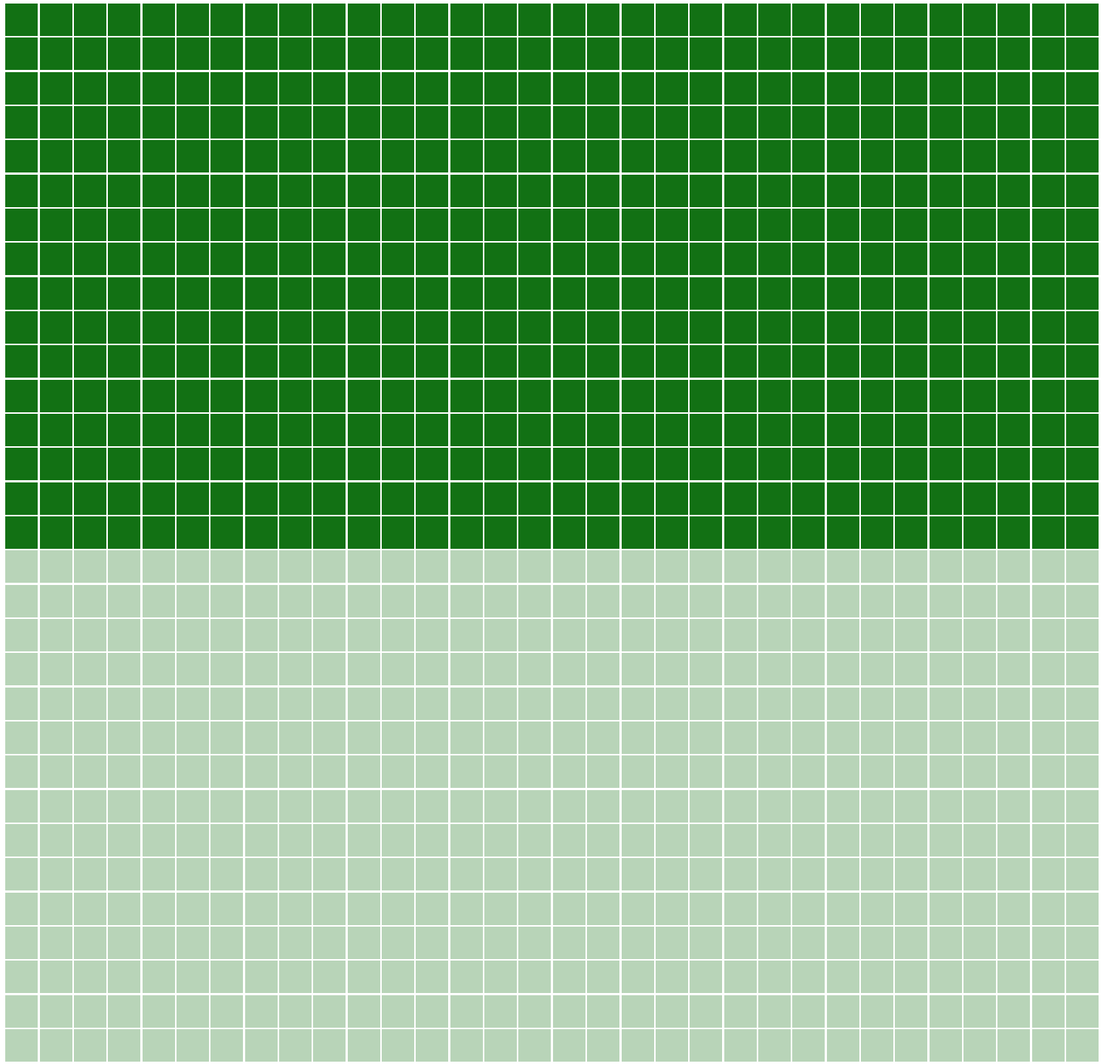
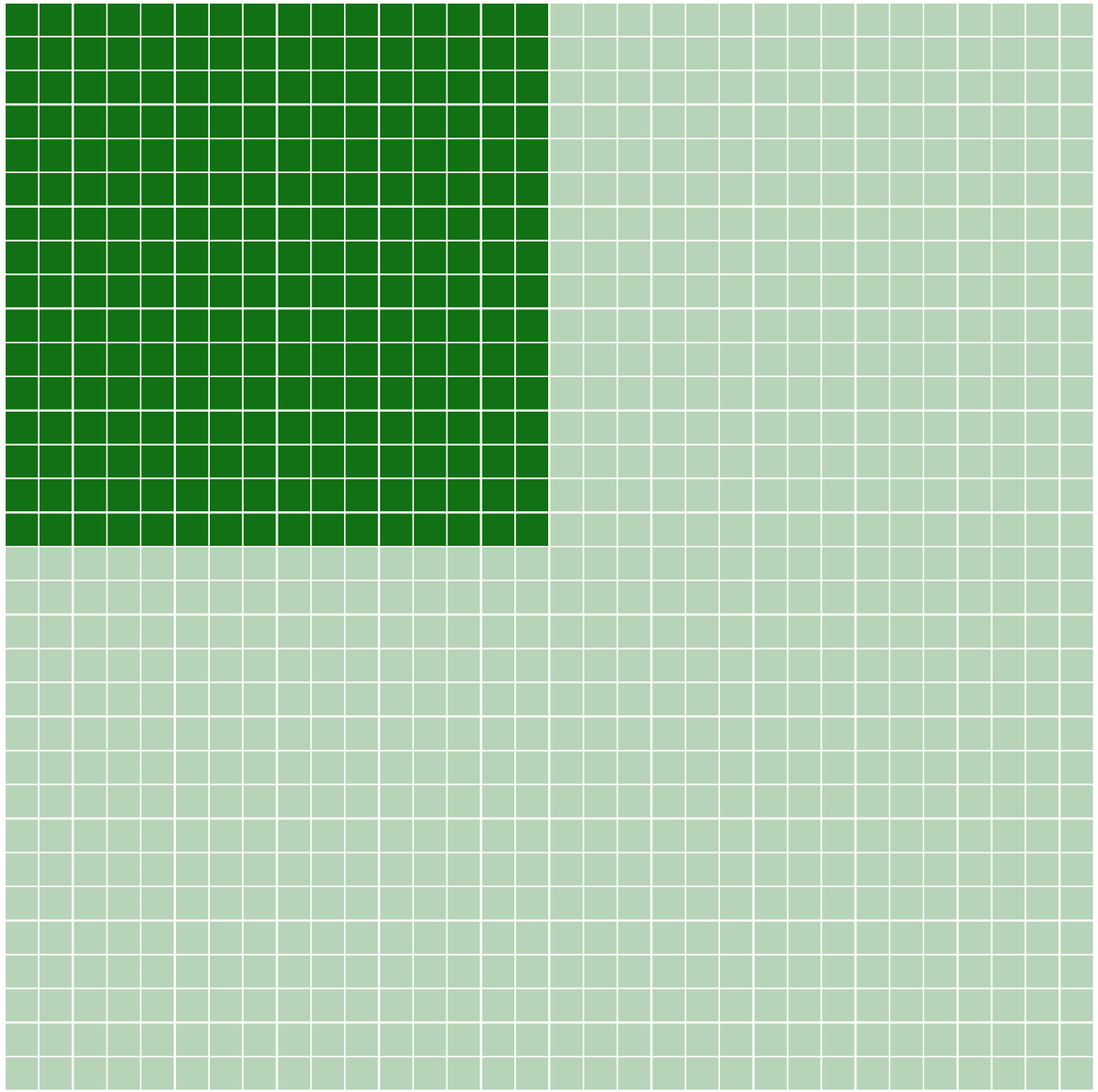
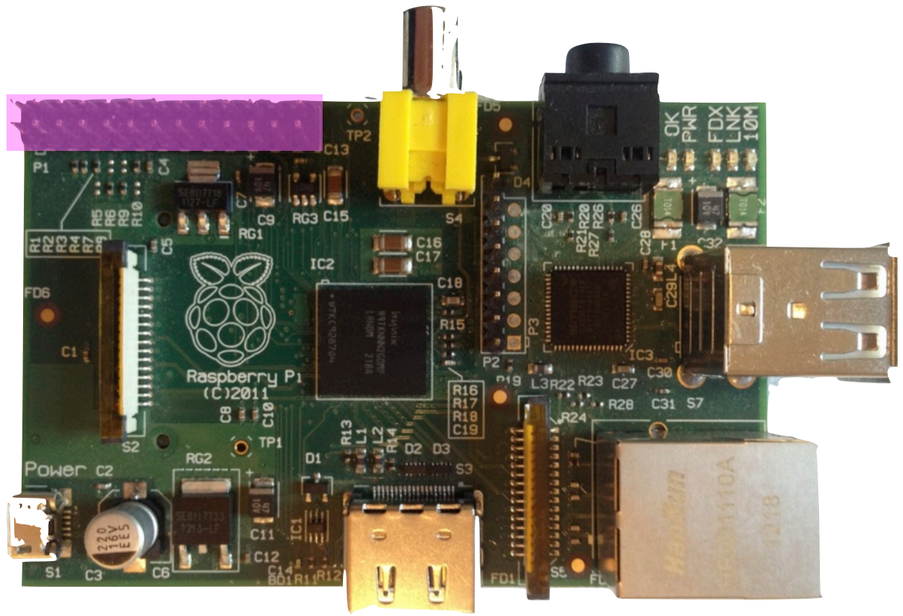


256MB

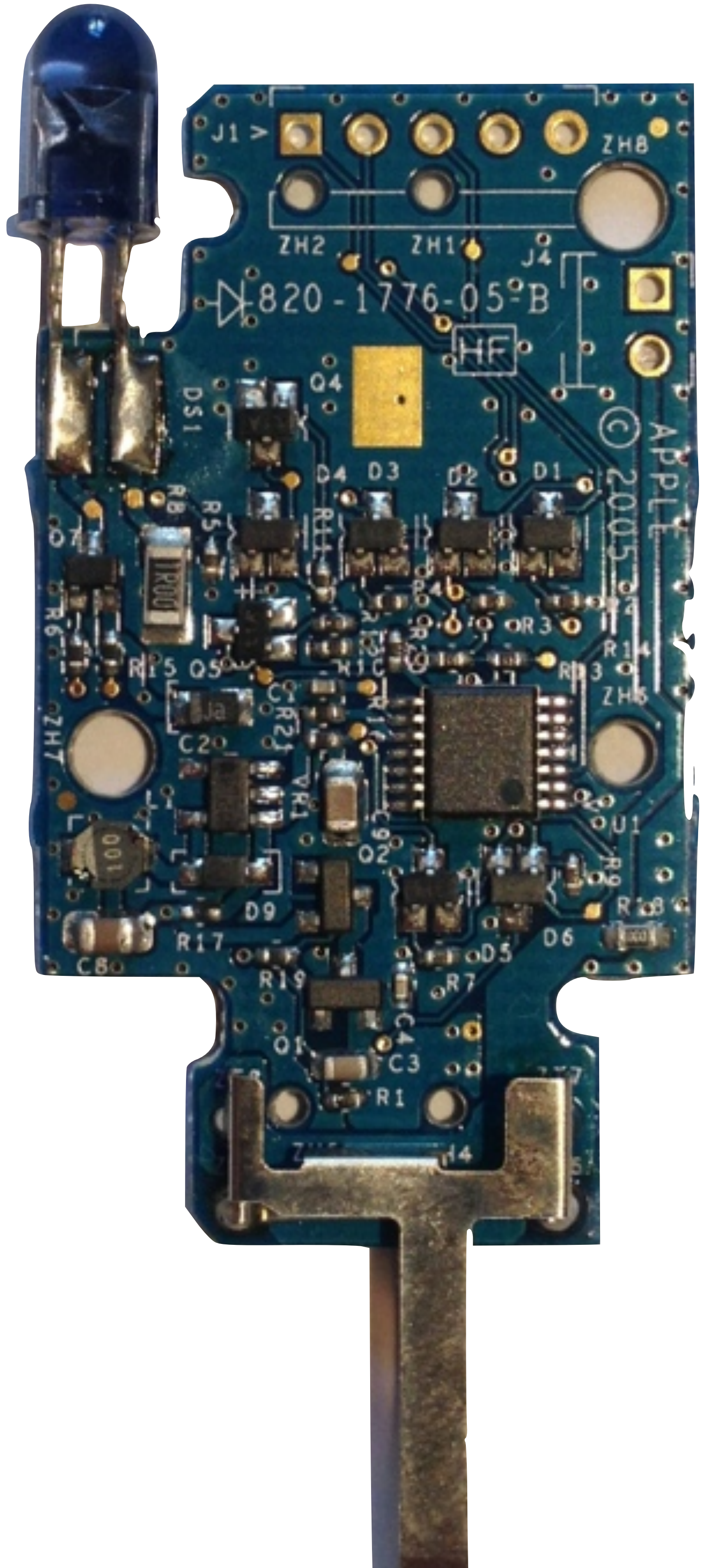




17 GPIOs

Microcontroller

Überall



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ZH2
ZH1
J4
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HF
© APPLE 2005
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D4 D3 D2 D1
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D6
D5
R7
D9
R17
C8
R19
C3
R1
Q1
Q2
C2
100


menu


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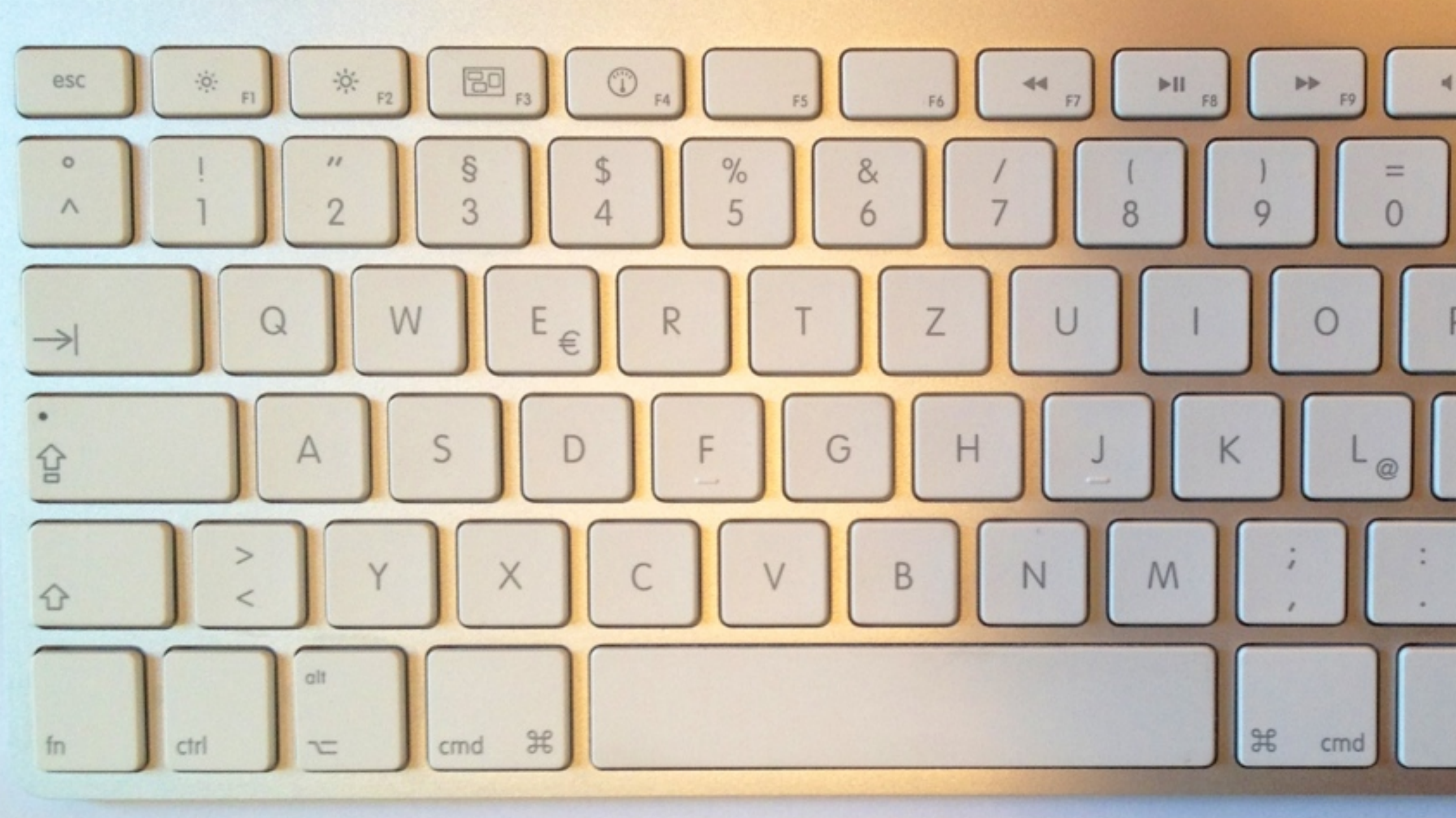
G 0239 ΔΔ
WHE38834.
KOREA


TM
PP5002D_C
L2C2159
G 0239 AA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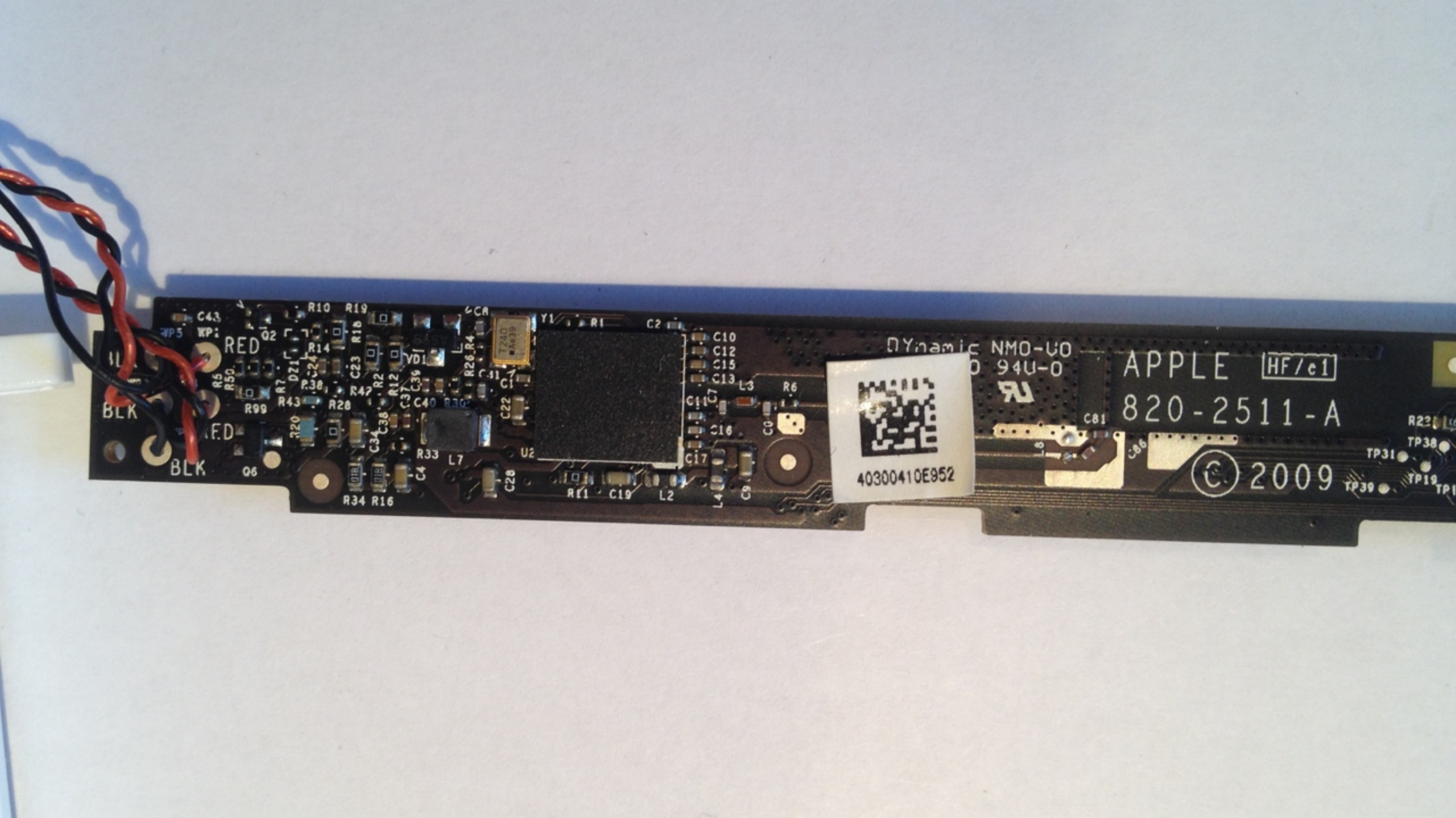
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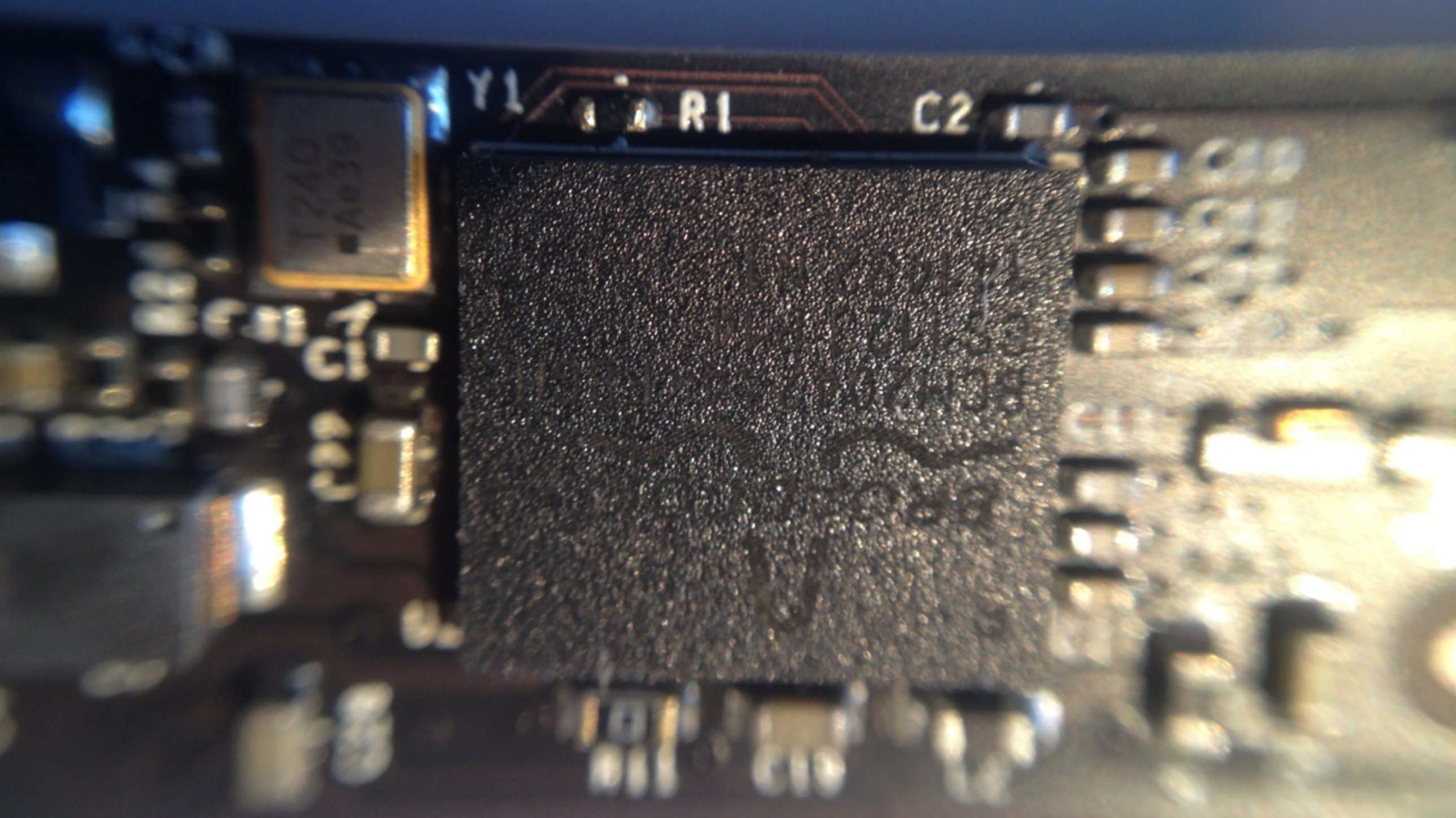

Y1
R1
C2
C1


ohne Schleudern
mit Schleudern


TEFCOLD
MILITARY CLASS III
Coca-Cola
CHNAYA


SONY
SELECT
START

MODEL LIP1359 Li-ion
BATTERY PACK 3.7V(3.7V) 610mAh
CAUTION
DO NOT DISASSEMBLE. DO NOT INCINERATE.
DO NOT SHORT TERMINALS. DO NOT EXPOSE
TO HIGH TEMP. (140°F/60°C). USE SPECIFIED
CHARGER ONLY. DISPOSE OF PROPERLY.
DO NOT PUNCTURE.
MH29788
Maximum Charge Current : 0.4A
Maximum Charge Voltage : 4.2V
RISK OF EXPLOSION IF BATTERY IS REPLACED
BY AN INCORRECT TYPE. DISPOSE OF USED
BATTERIES ACCORDING TO THE INSTRUCTIONS.
Refer to instruction manual.
Sony Corporation
Cell made in Japan
Processed in China
8221BWB
2-886-270-12
TCI-D2S F
0805
TP22
TP7
TP23
TP73
U6
C70
BMG

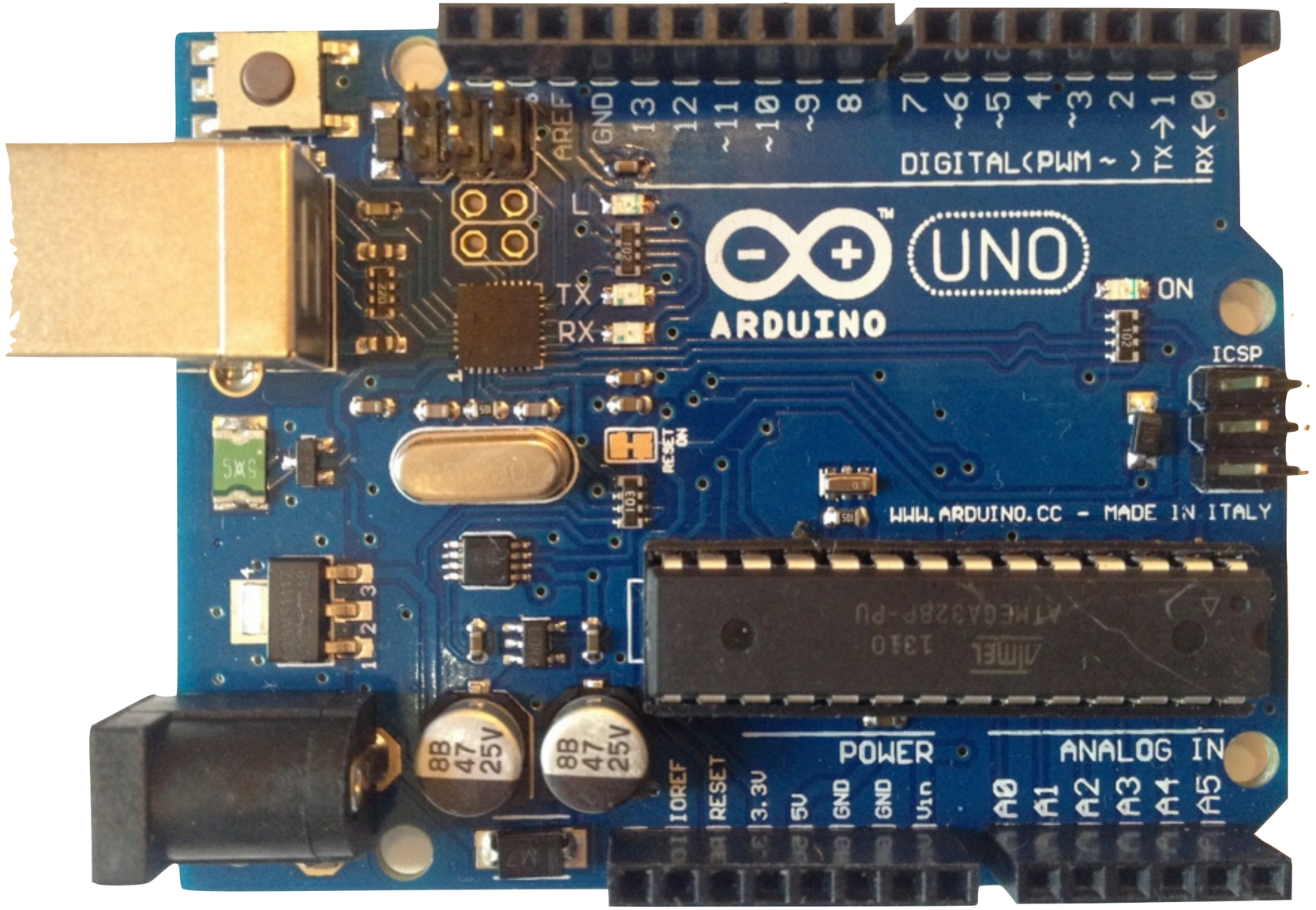

TCI-D2S F ▲ 94V-0 0805
TOSHIBA
TMP96FG-T002
JAPAN 0B0EGI
F0161ZAF


TOSHIBA
T6UN6EFG-002
JAPAN 0806EGI
F0.161ZAF


@MacLemon
HB2
HB1
m0dul B
m0dul A

Microcontroller

Microcontroller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UNO
ARDUINO
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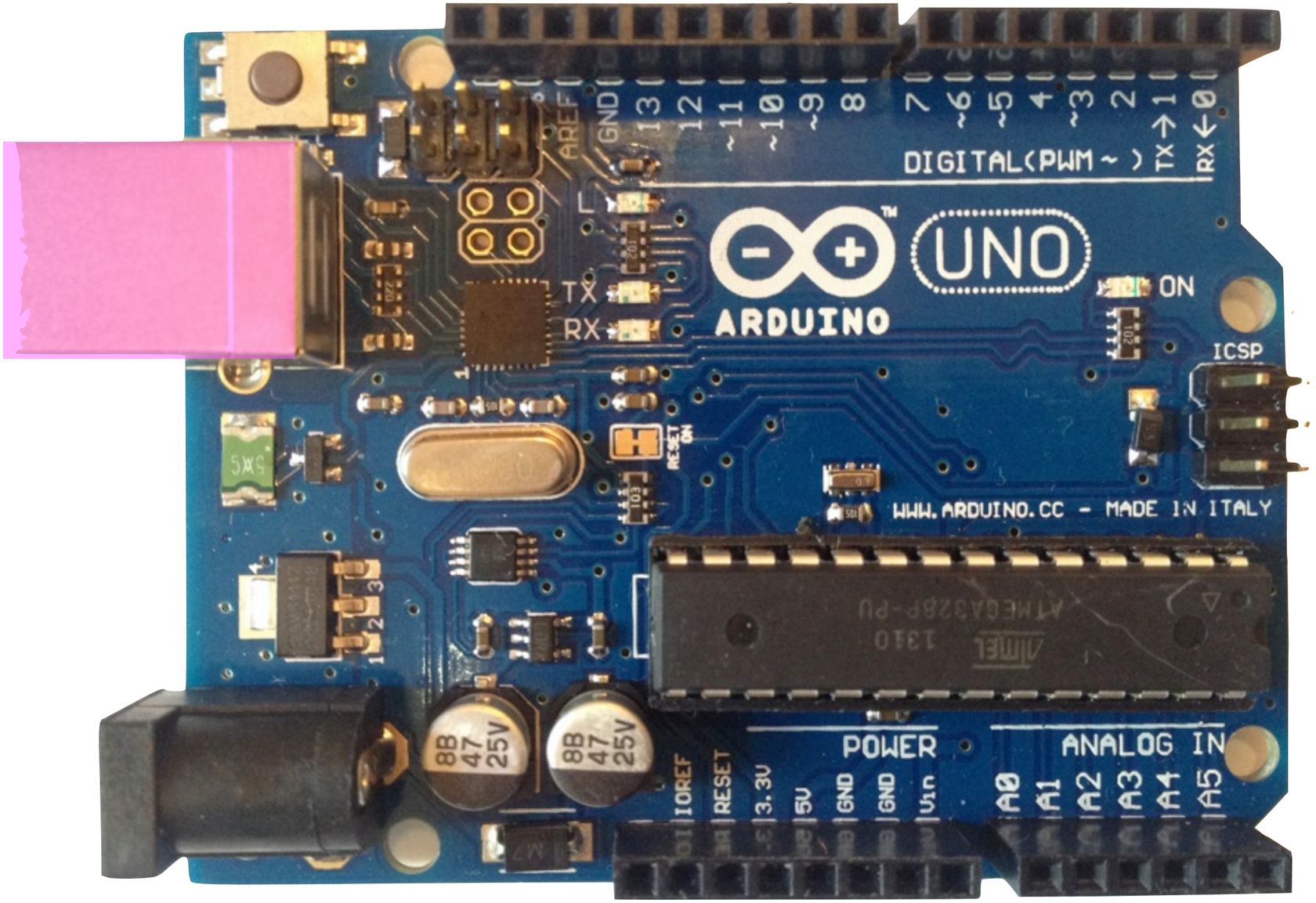
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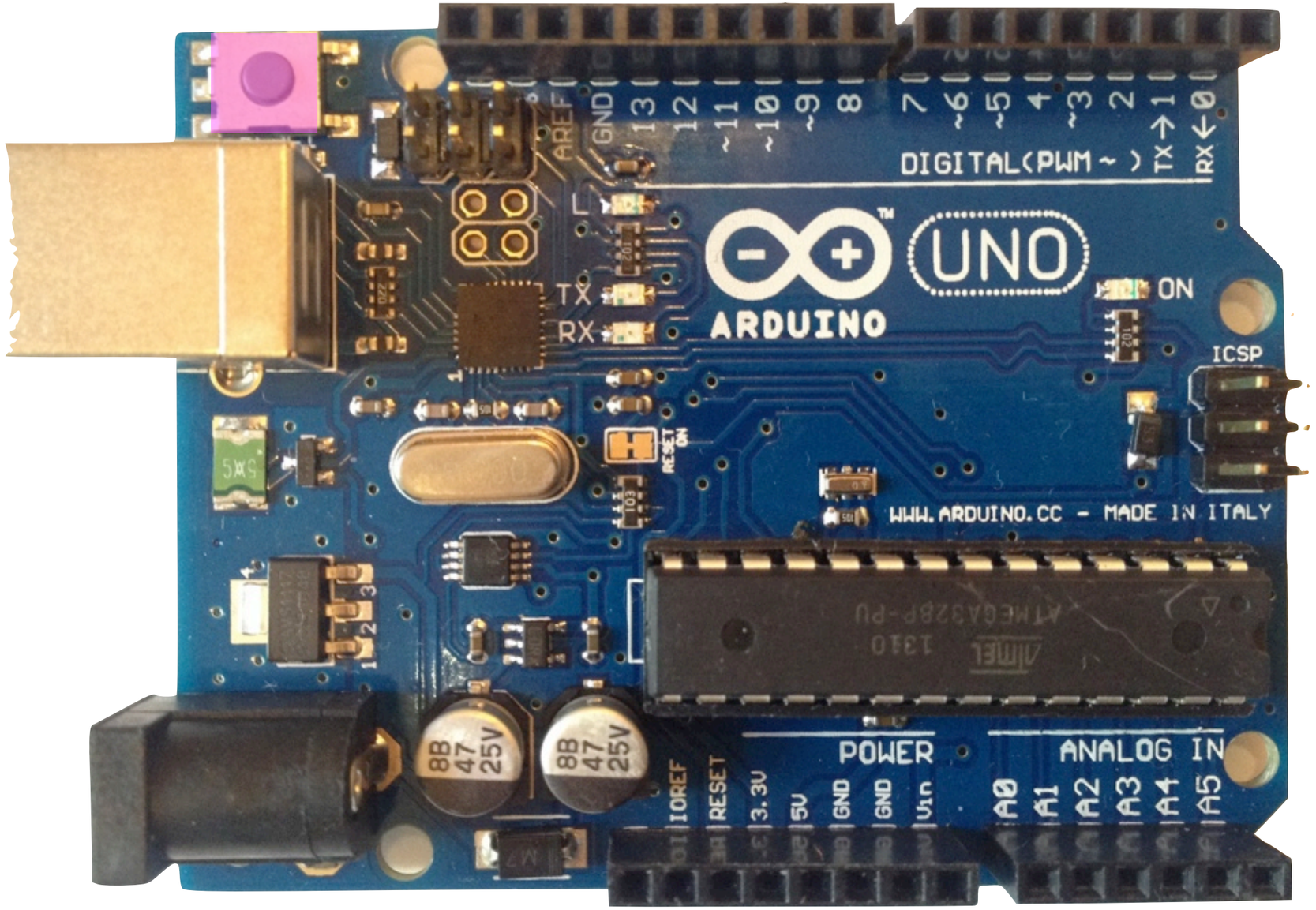
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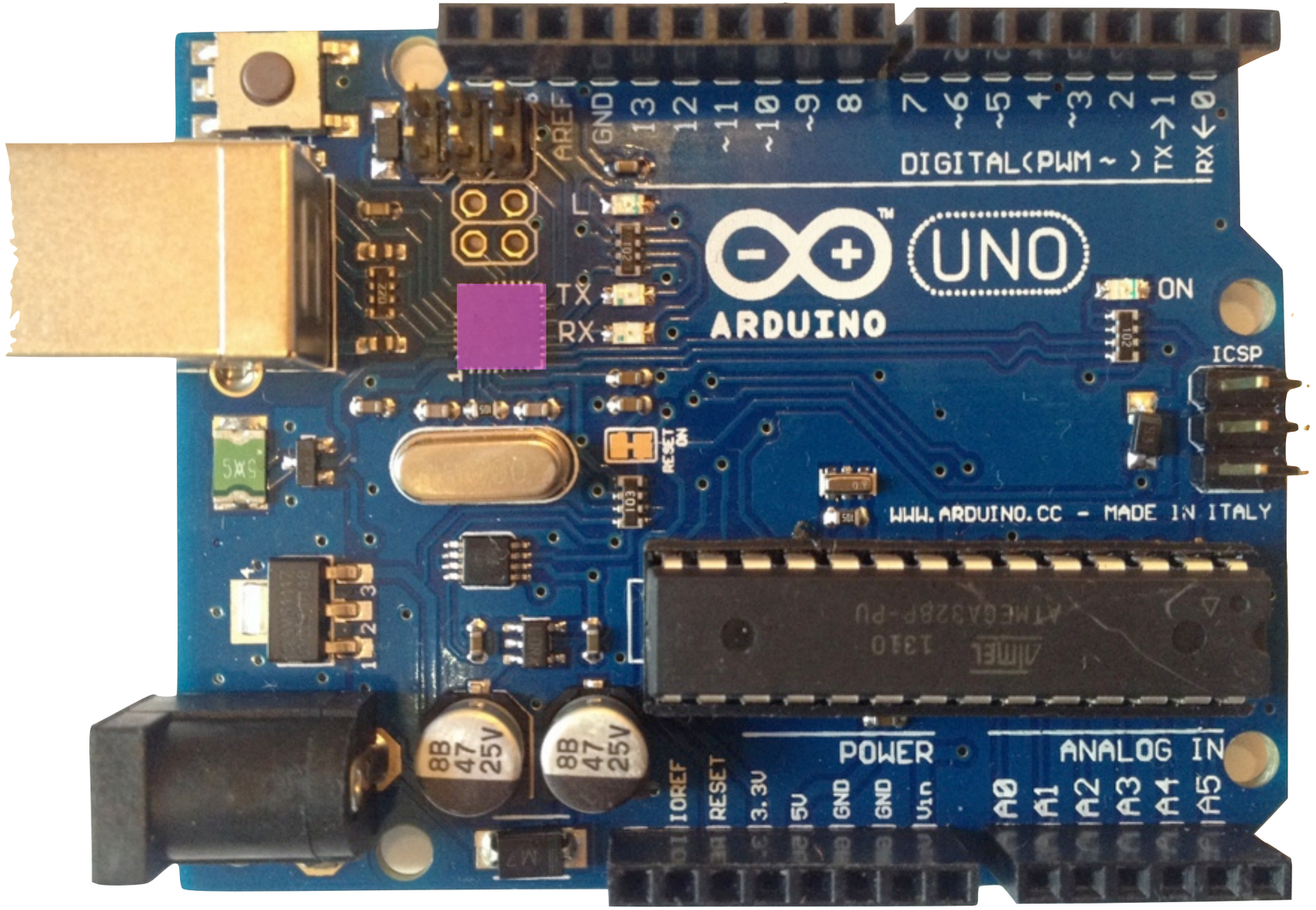
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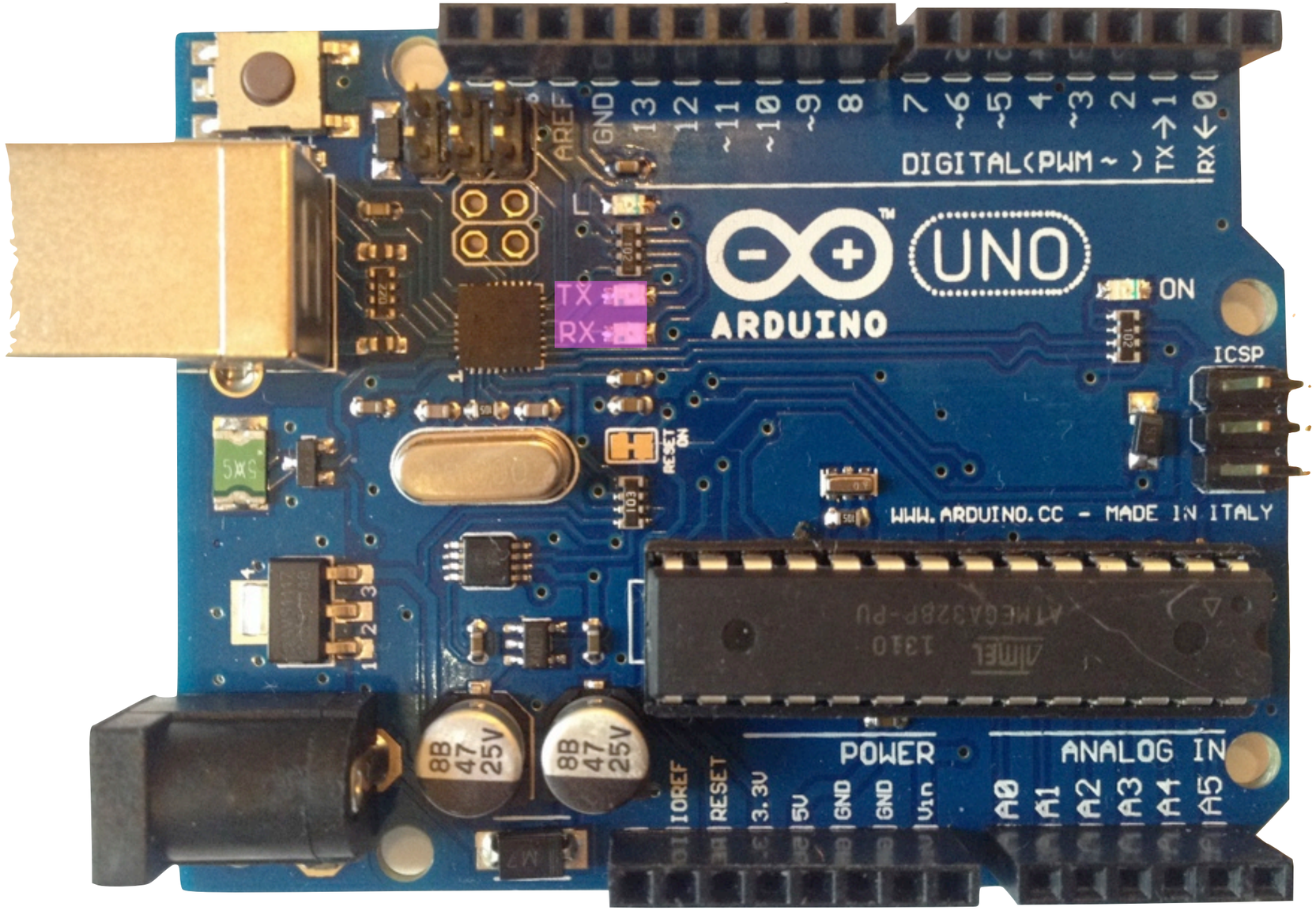
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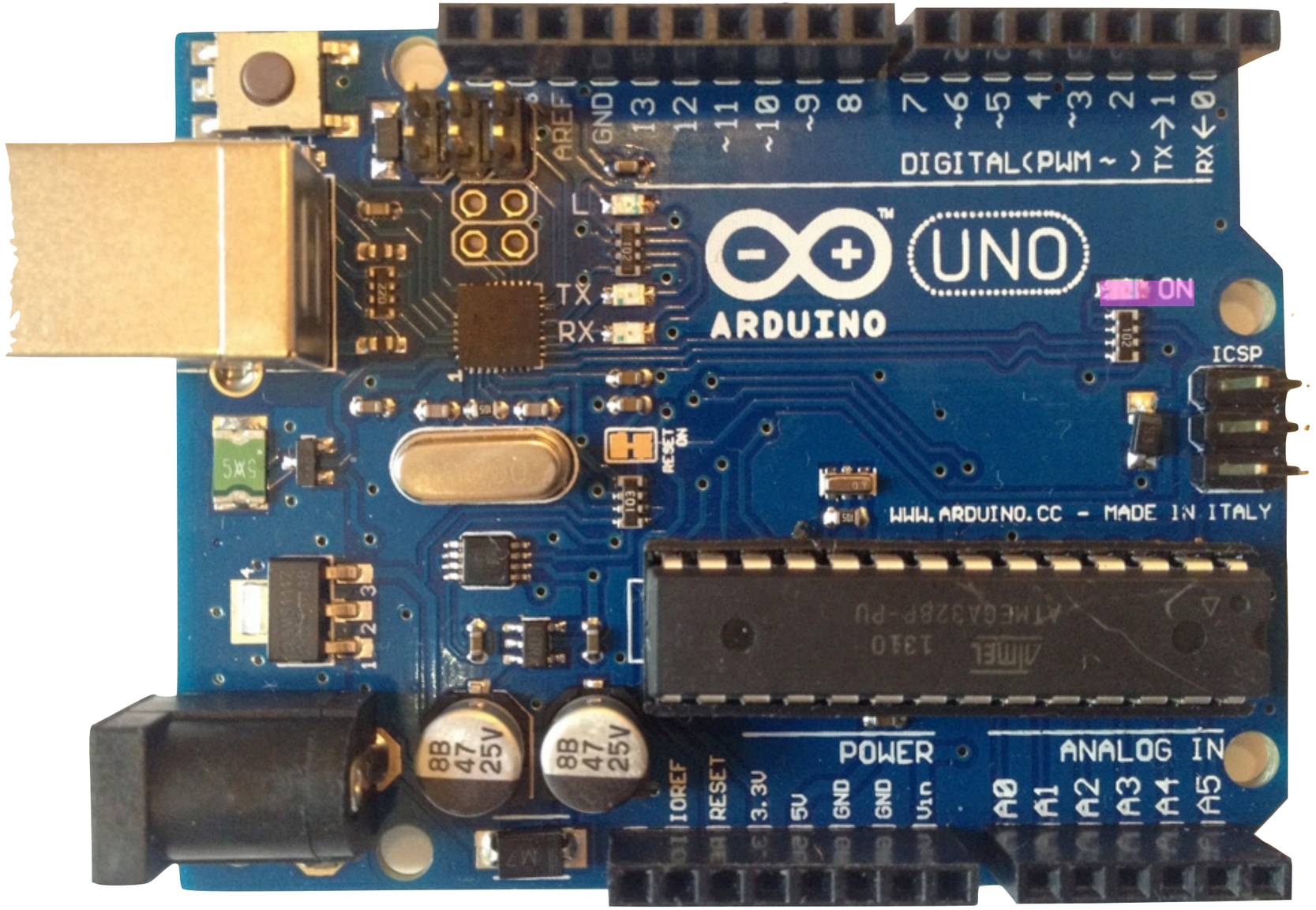
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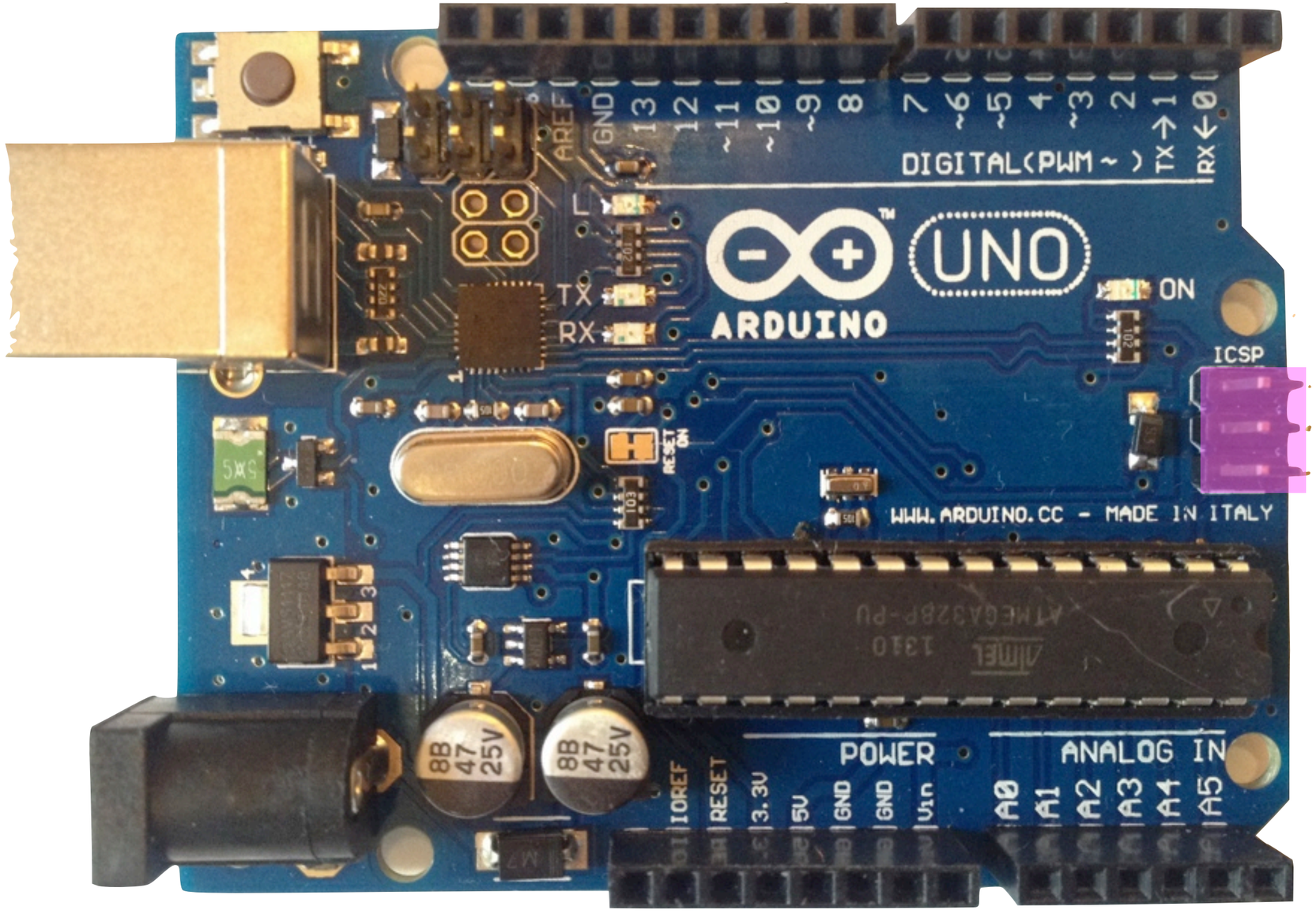
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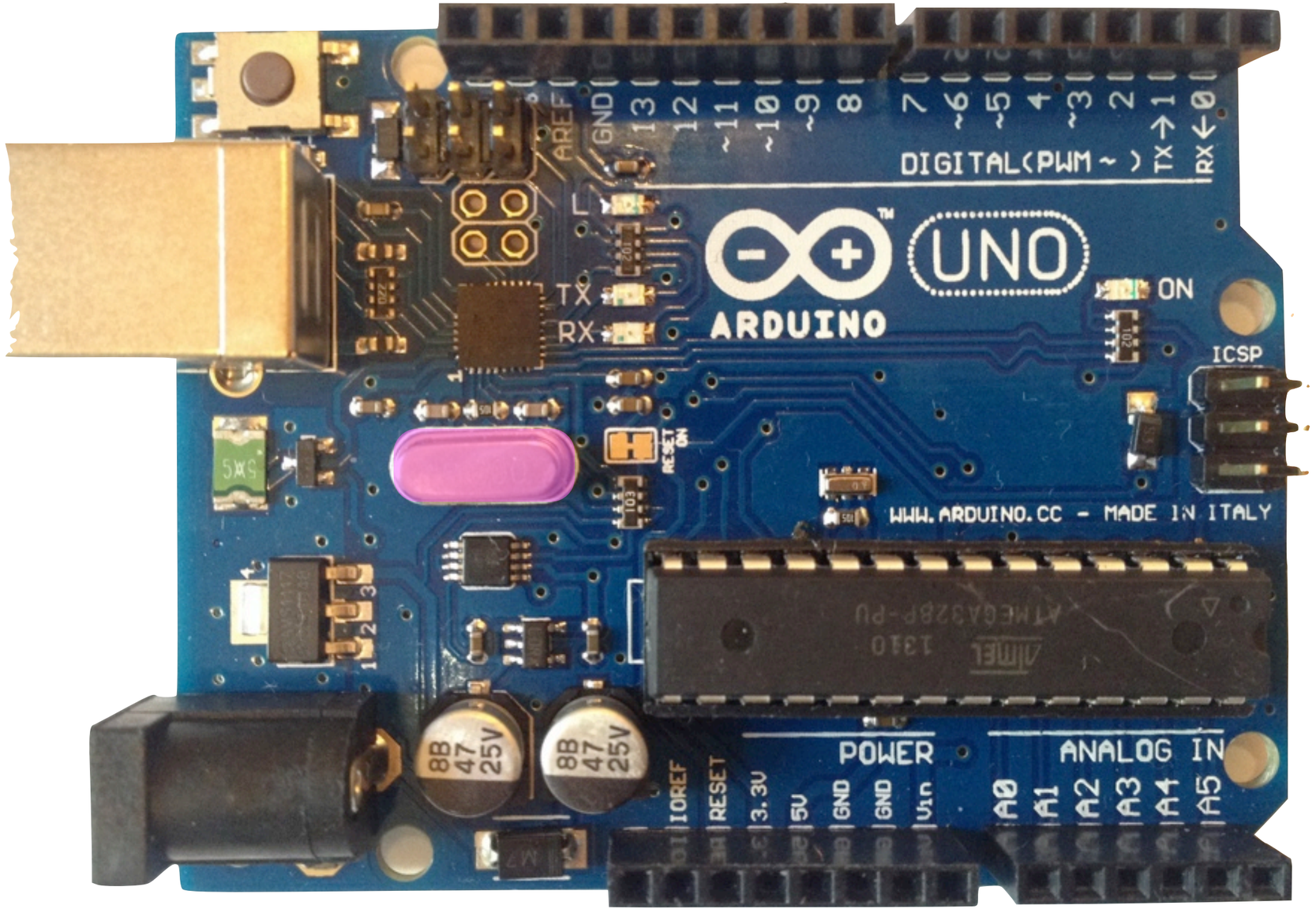
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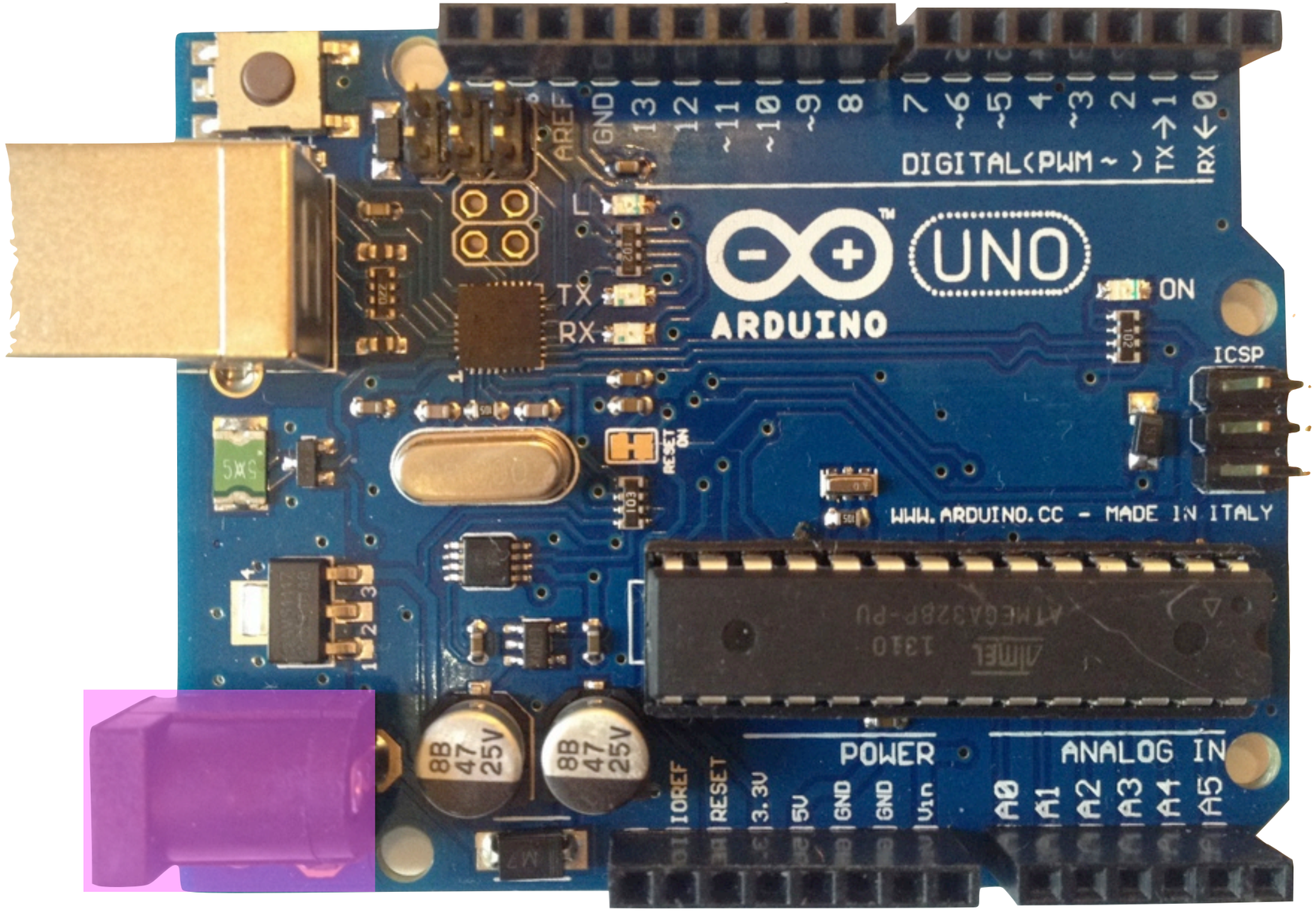
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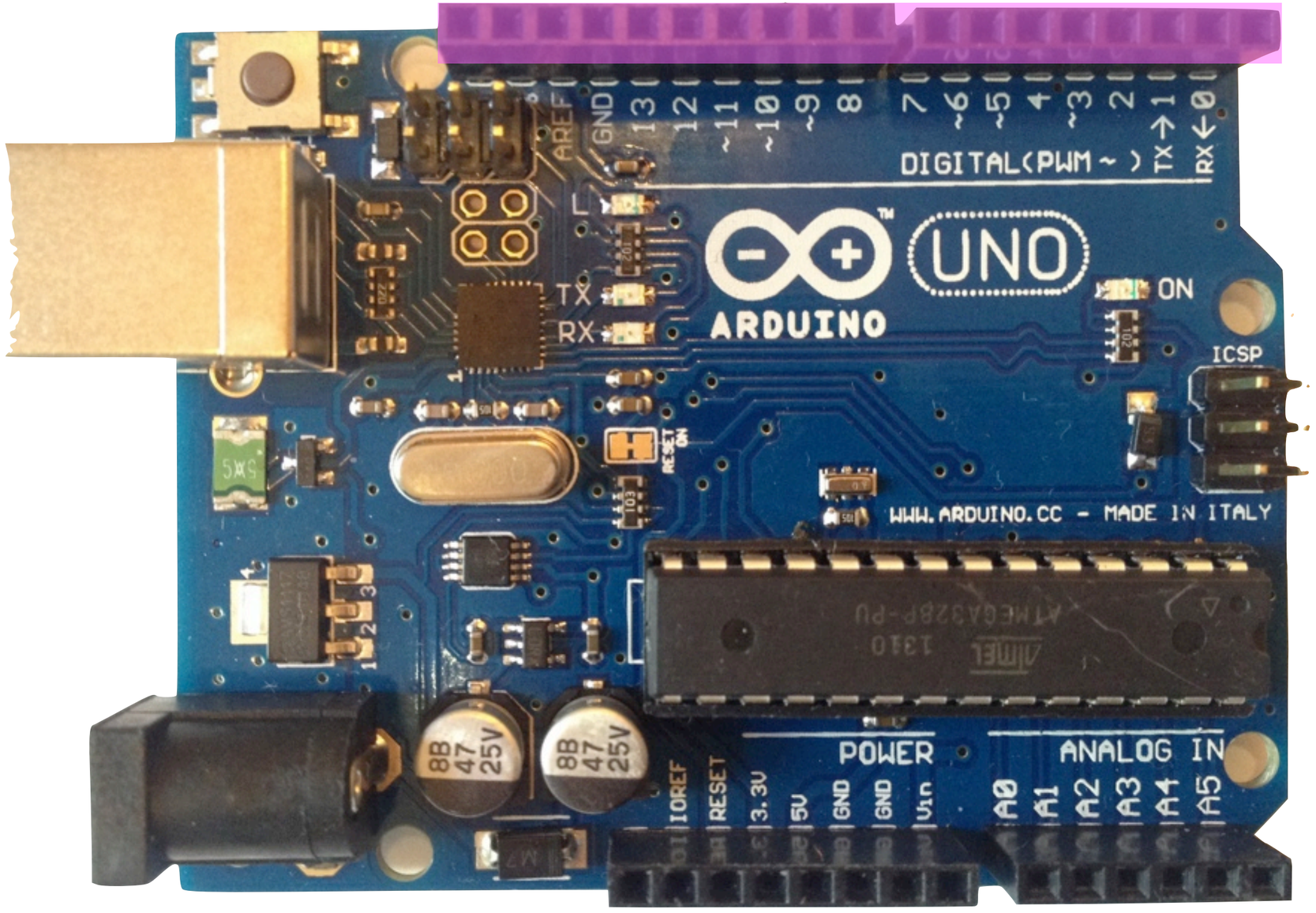
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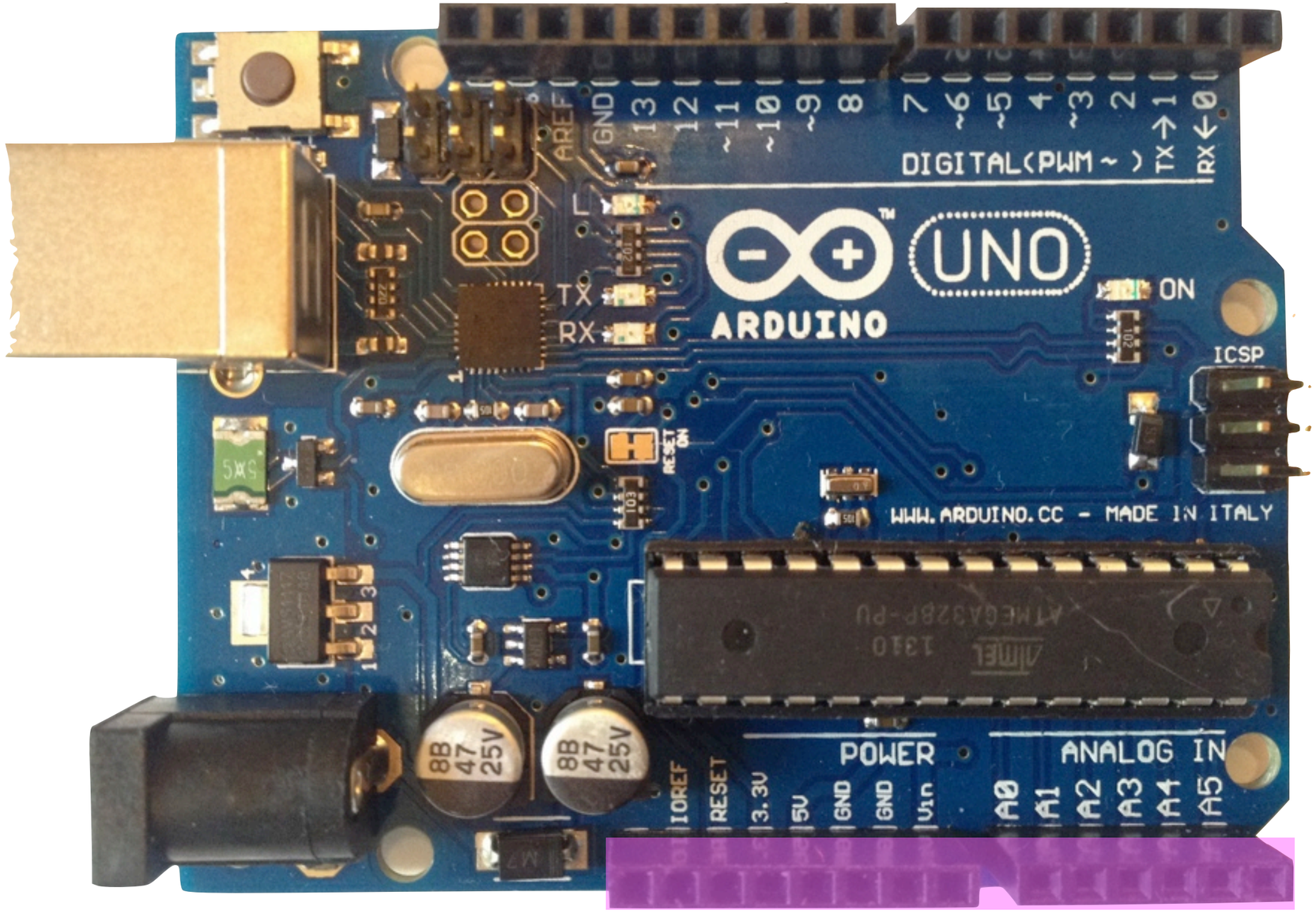
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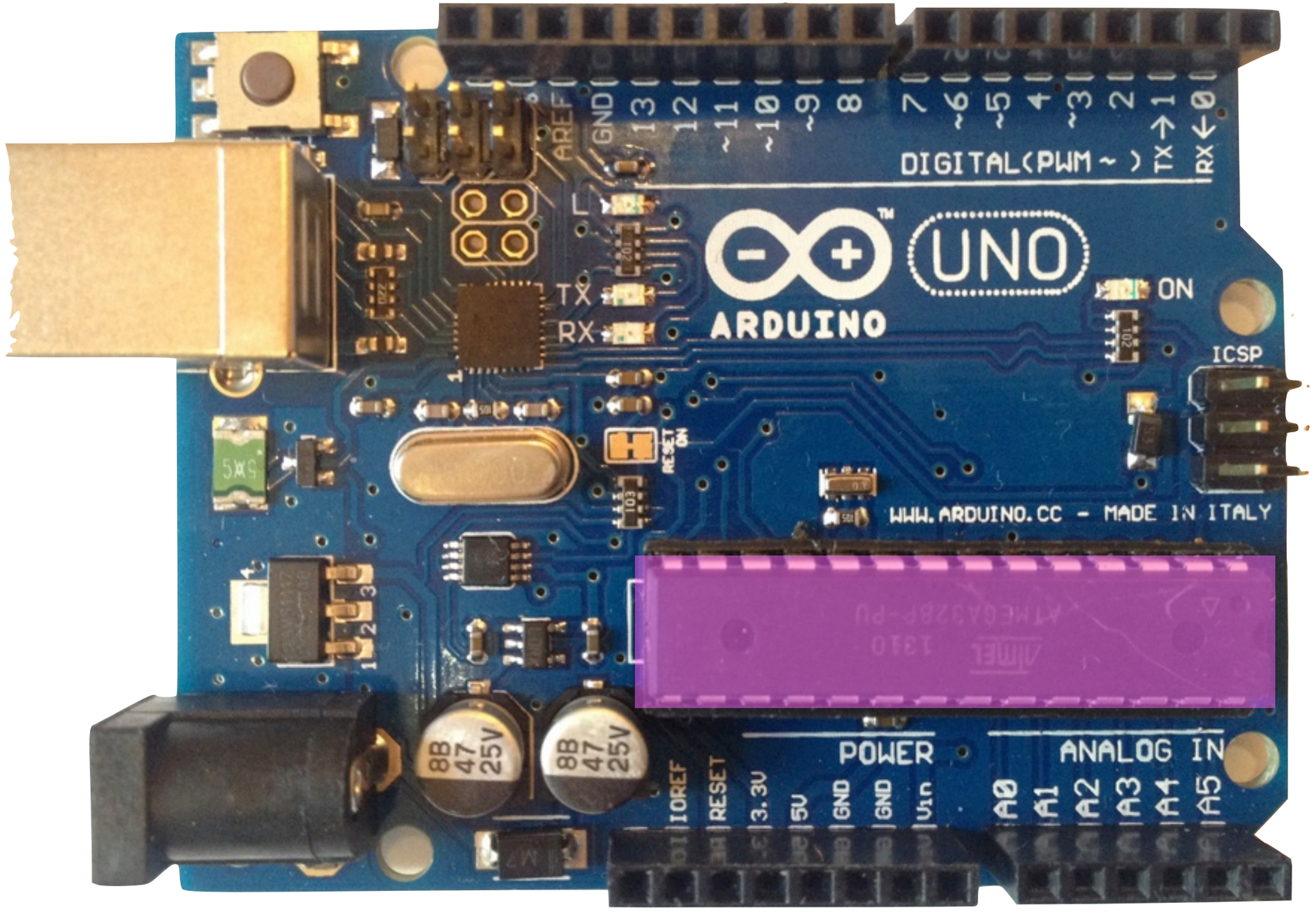
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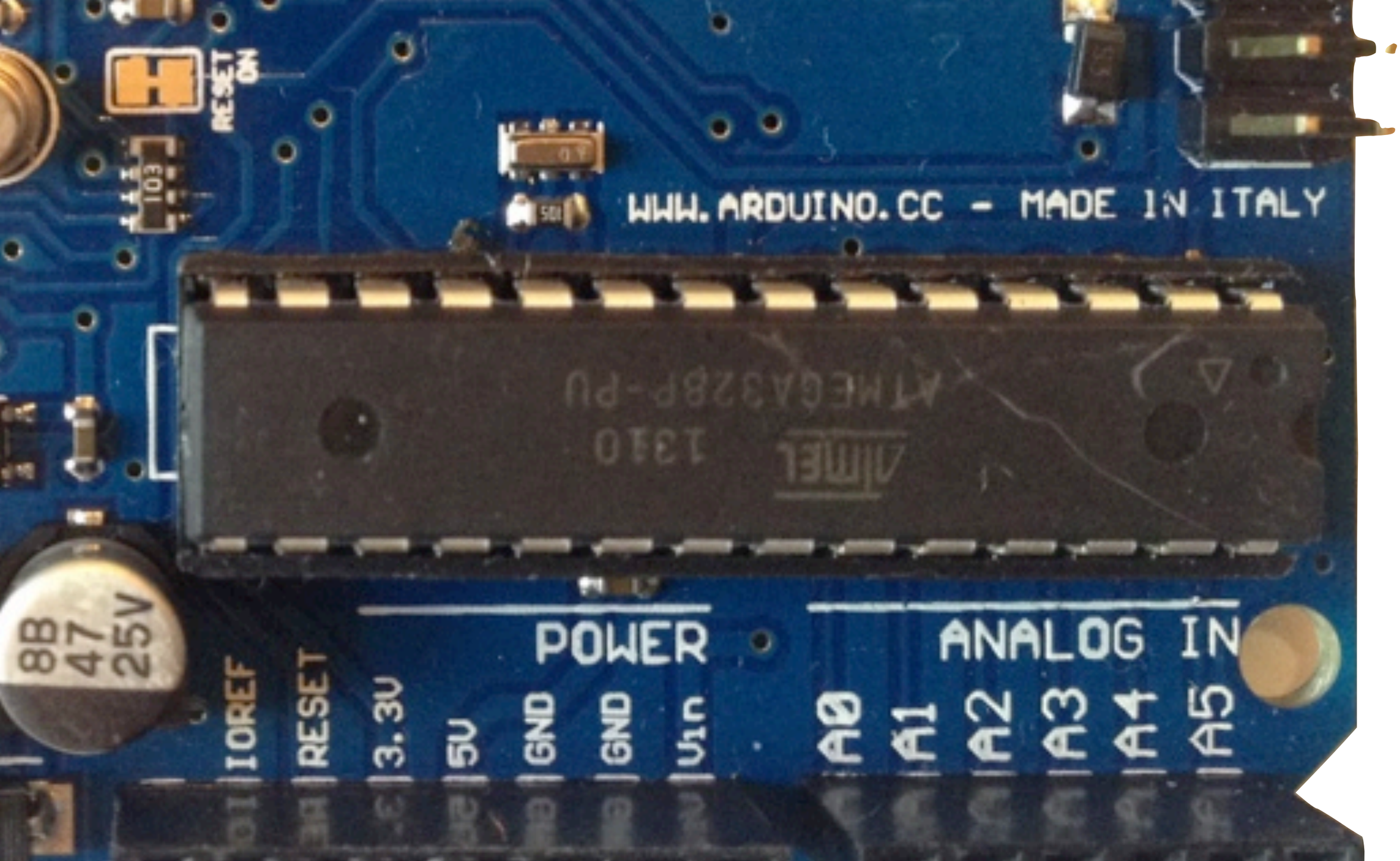
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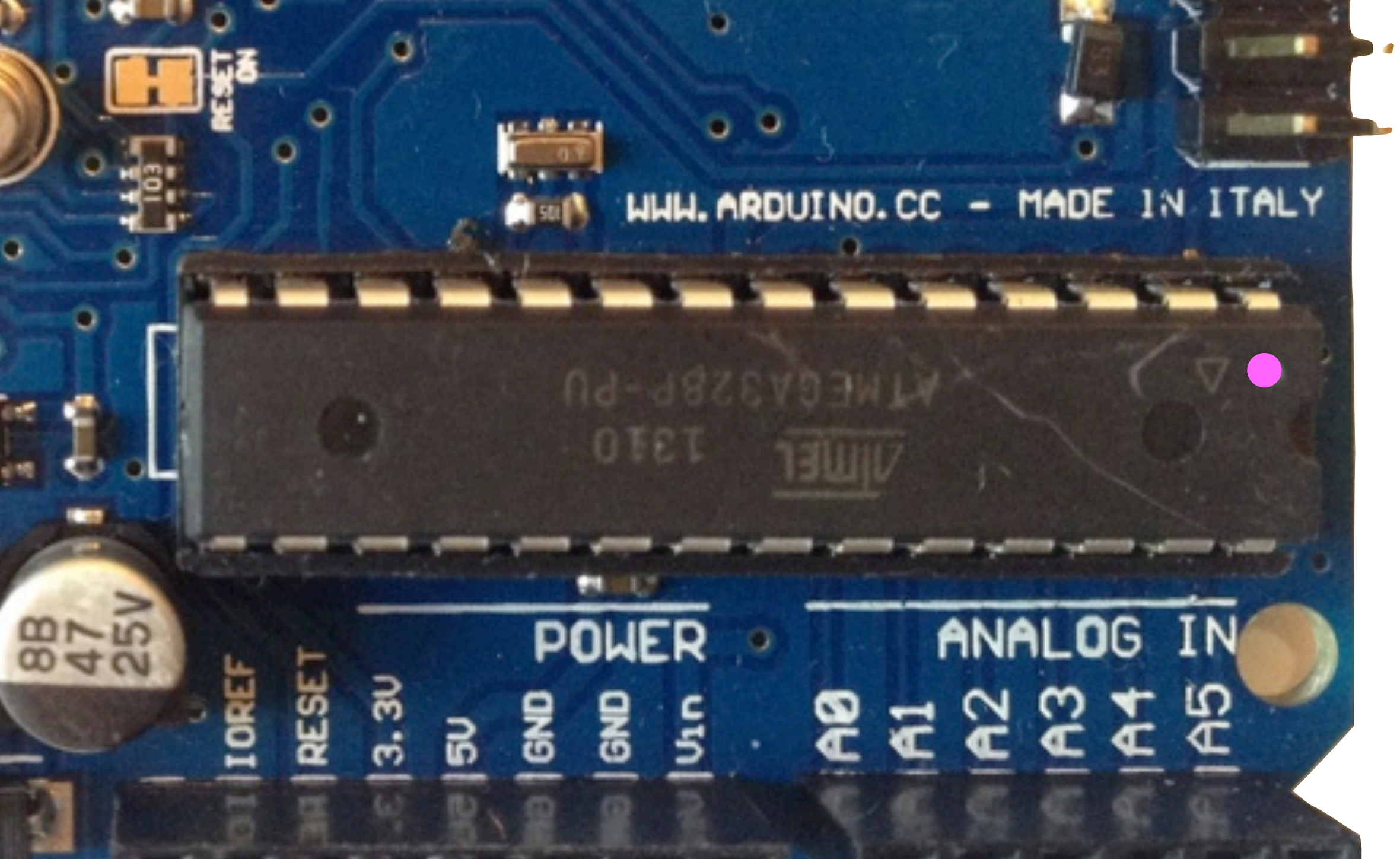
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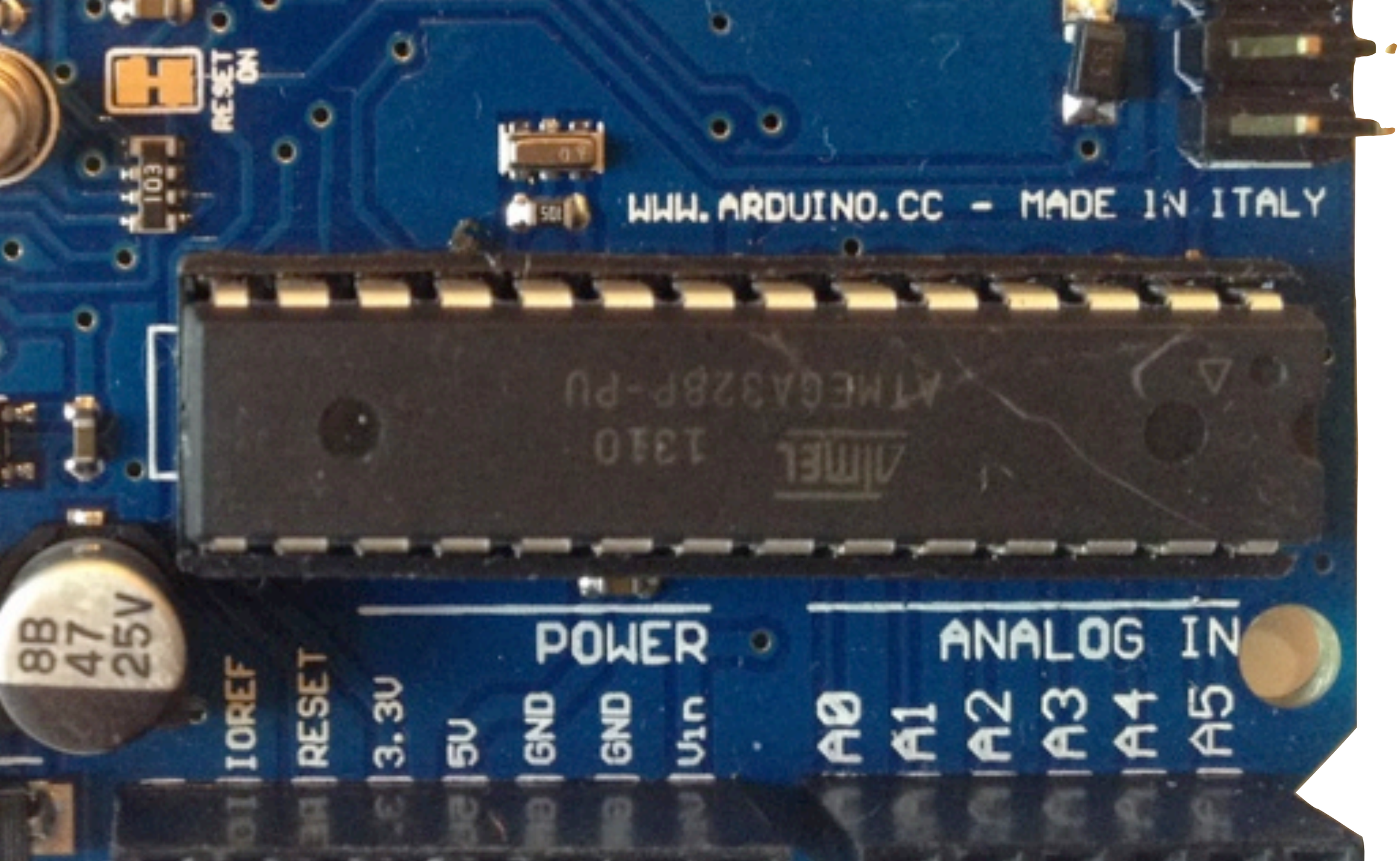
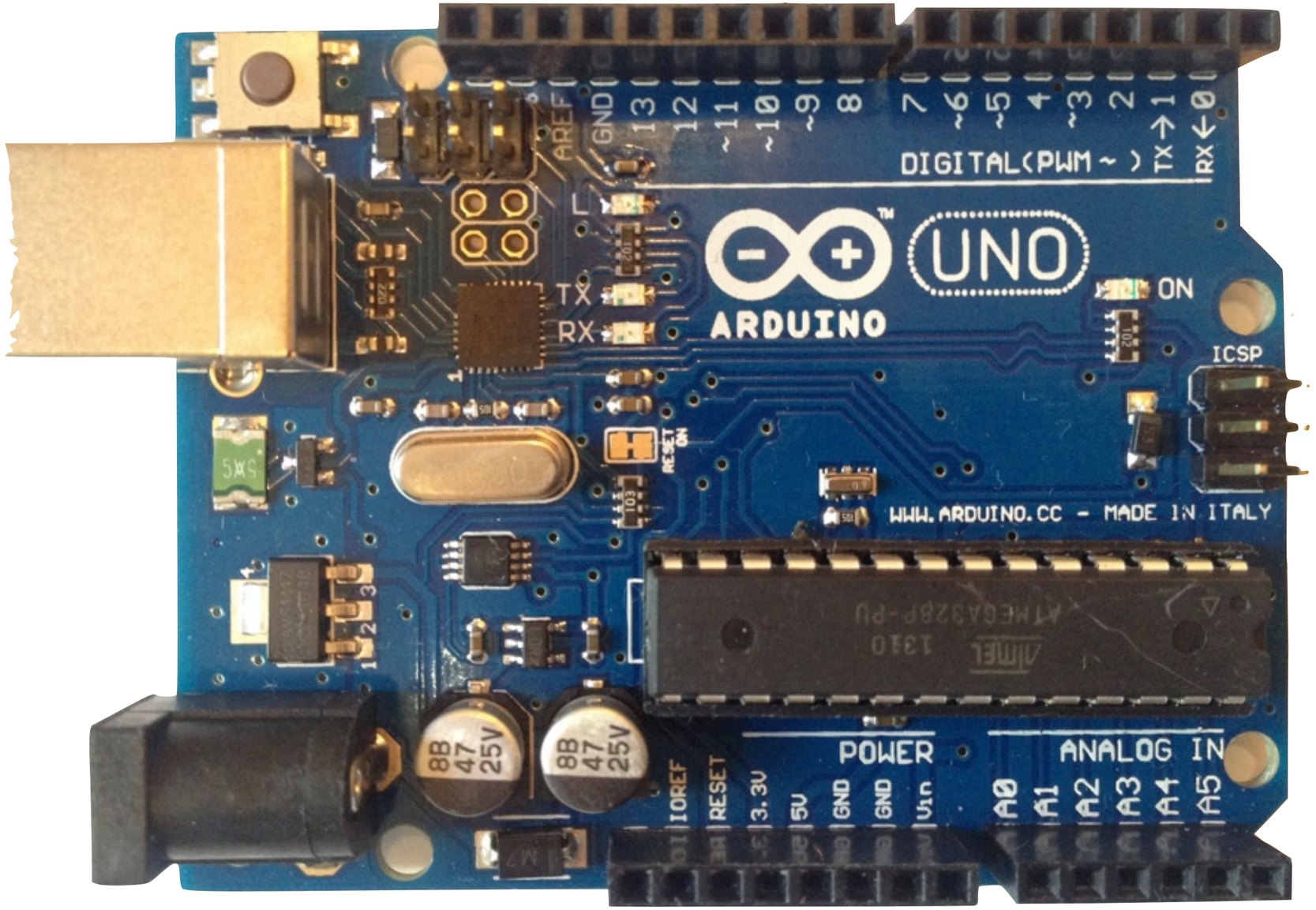
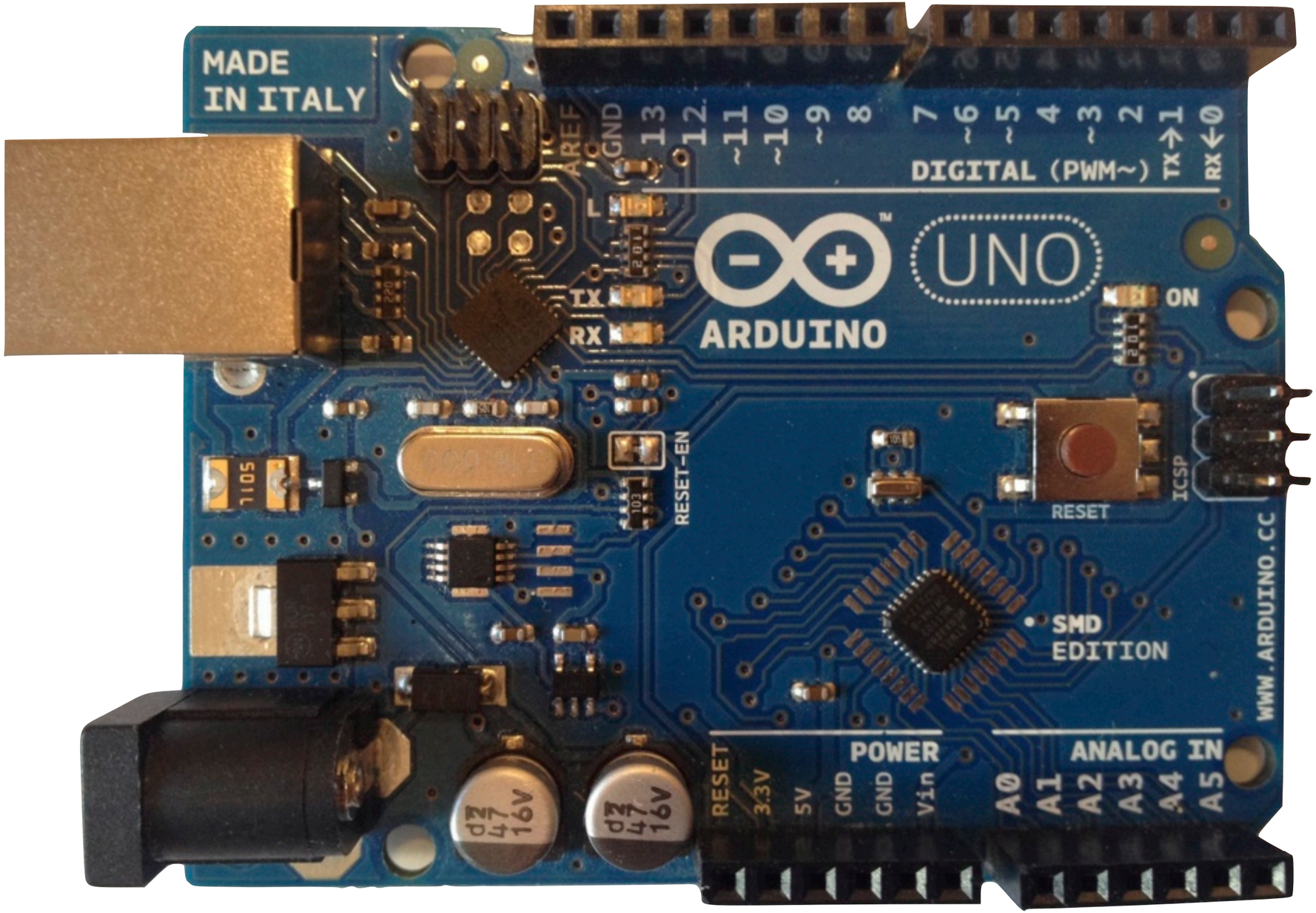
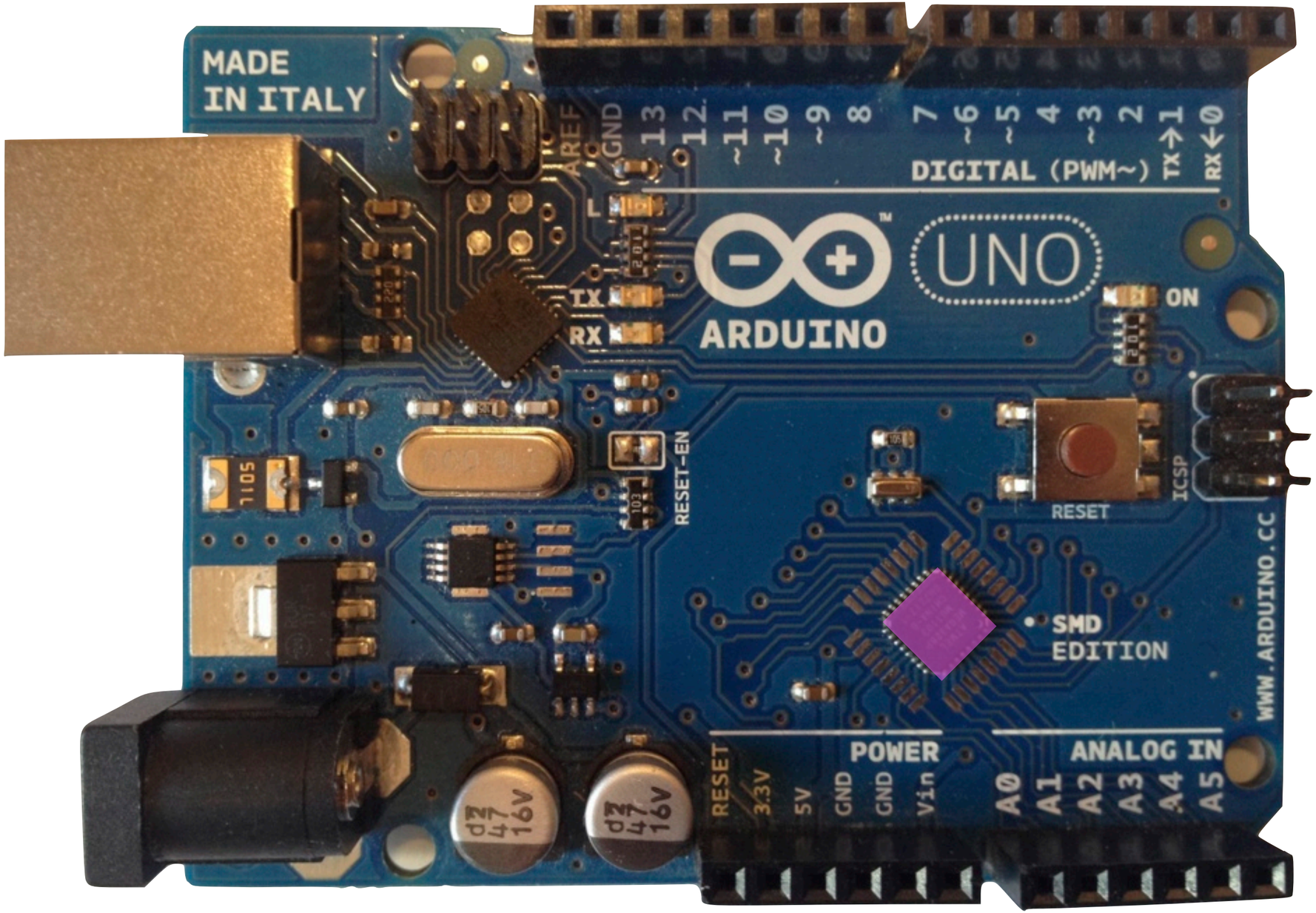
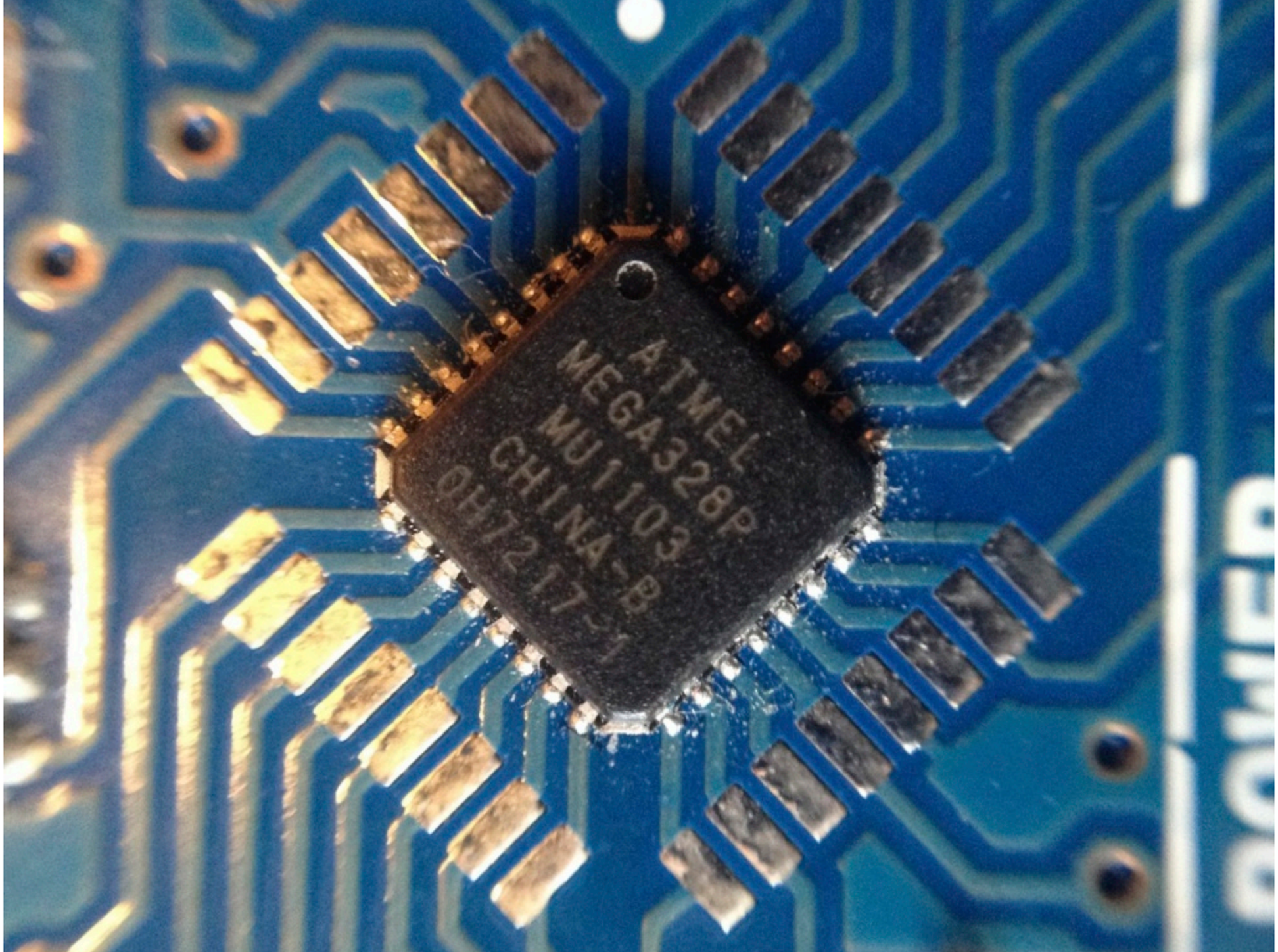

RESET
WWW.ARDUINO.CC - MADE IN ITALY
POWER
ANALOG IN
IOREF
RESET
3.3V
5V
GND
GND
Vin
A0
A1
A2
A3
A4
A5

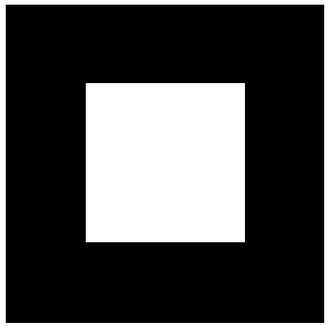

DIGITAL(PWM~)
UNO
ARDUINO
ON
ICSP
WWW.ARDUINO.CC - MADE IN ITALY
POWER
ANALOG IN
IOREF
RESET
3.3V
5V
GND
GND
Vin
A0
A1
A2
A3
A4
A5


MADE
IN ITALY
AREF
GND
13
12
~11
~10
~9
8
7
~6
~5
4
~3
2
TX→1
RX←0
DIGITAL (PWM~)
L
TX
RX
ARDUINO
UNO
ON
RESET-EN
RESET
ICSP
SMD
EDITION
WWW.ARDUINO.CC
POWER
ANALOG IN
RESET
3.3V
5V
GND
GND
Vin
A0
A1
A2
A3
A4
A5


MADE
IN ITALY
AREF
GND
13
12
~11
~10
~9
8
7
~6
~5
4
~3
2
TX→1
RX←0
DIGITAL (PWM~)
L
TX
RX
ARDUINO
UNO
ON
RESET-EN
RESET
ICSP
SMD
EDITION
WWW.ARDUINO.CC
POWER
ANALOG IN
RESET
3.3V
5V
GND
GND
Vin
A0
A1
A2
A3
A4
A5


ATMEL
MEGA328P
MU1103
CHINA-B
0H7217

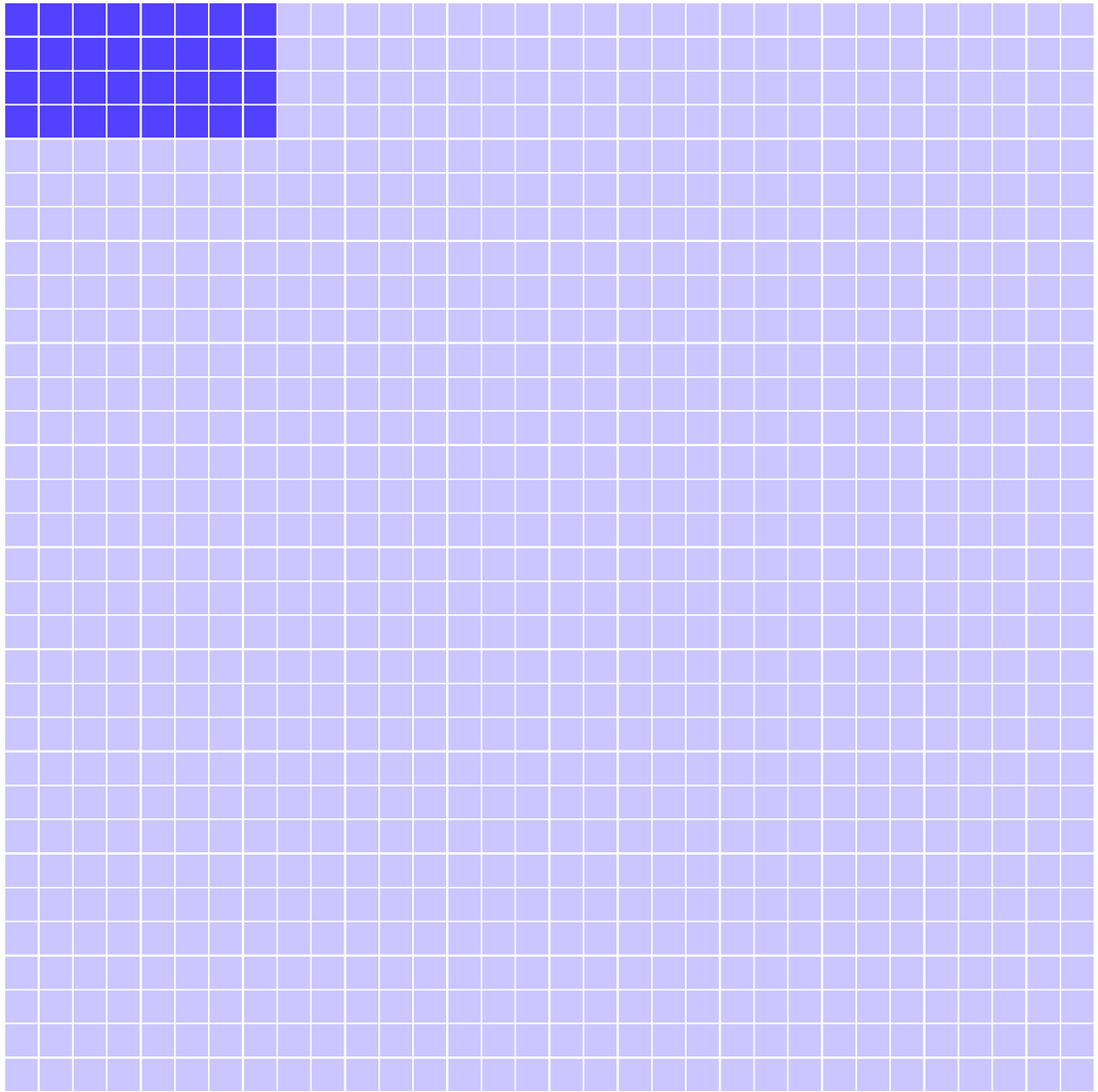
1 CPU 16MHz



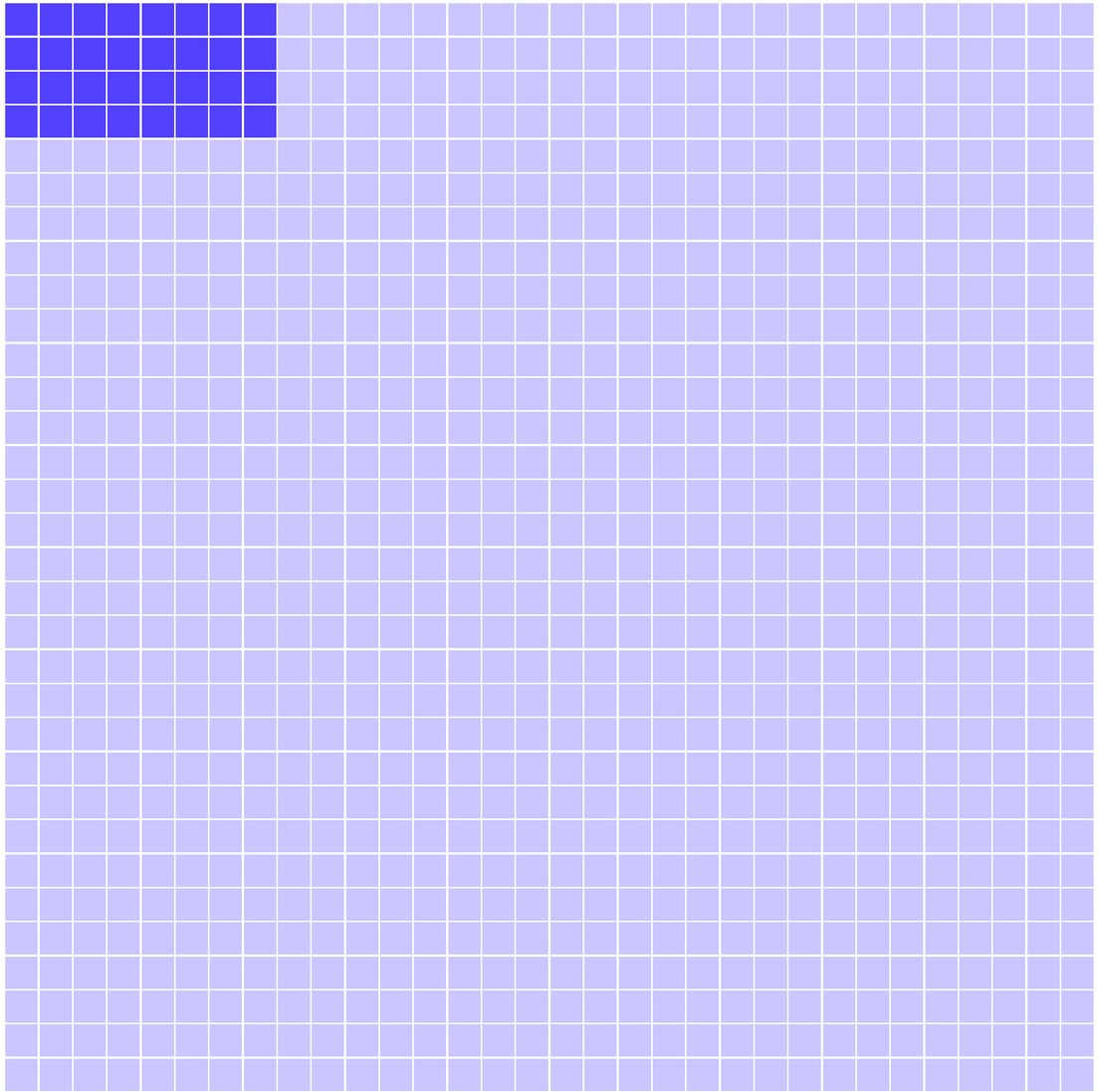
IKB

1.024 Bytes

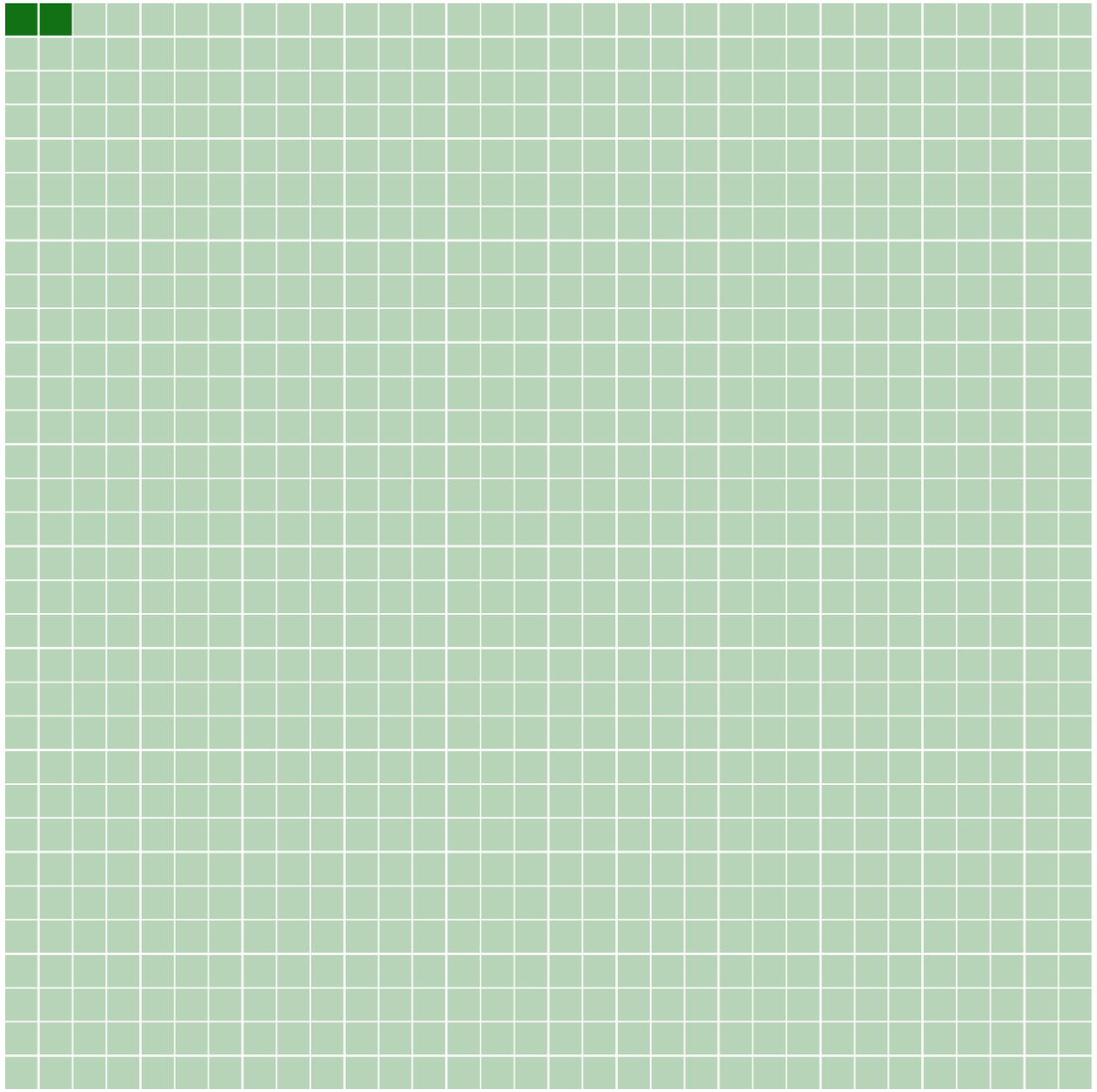
32kB Flash



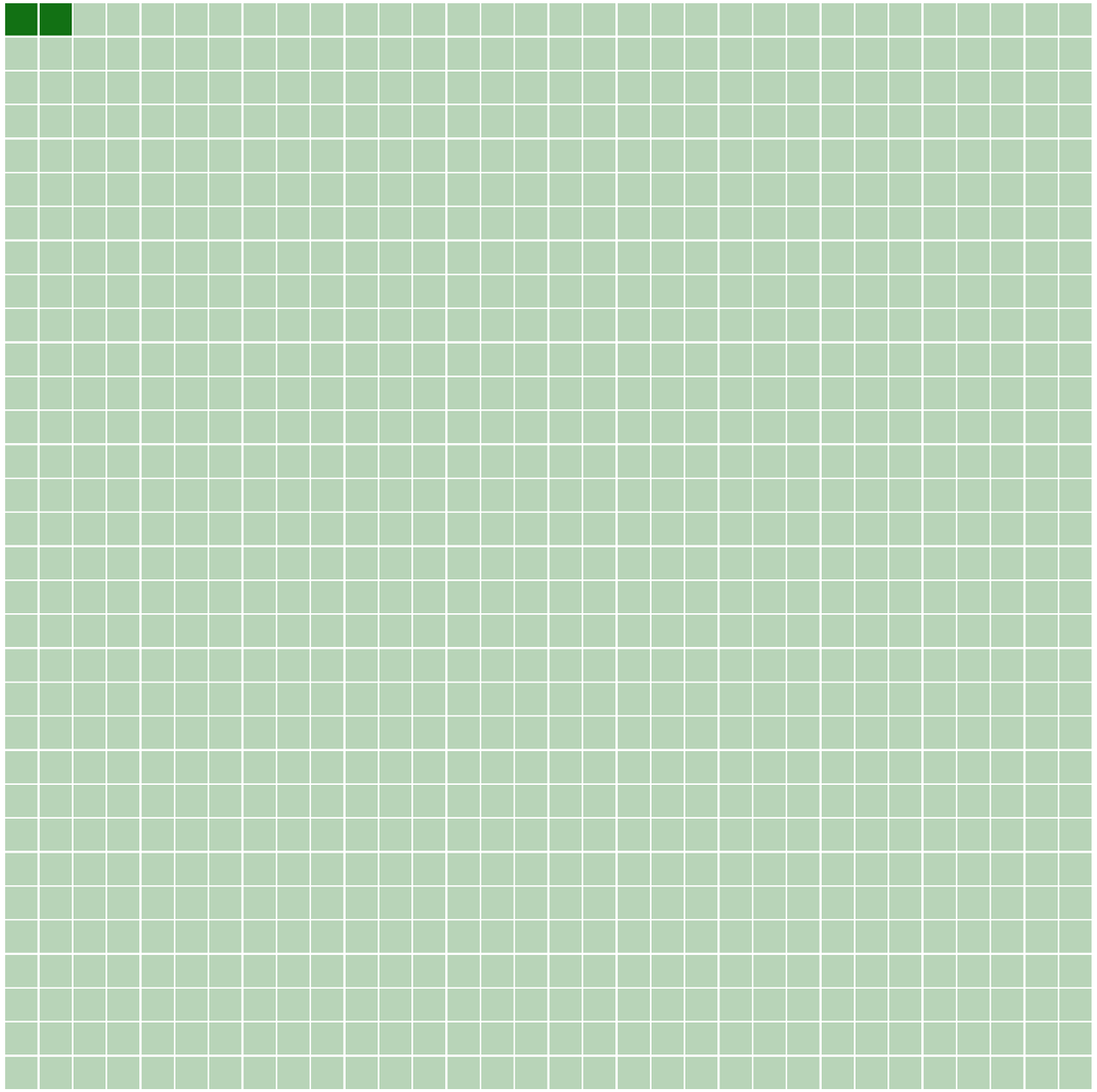
32.768 Bytes Flash



2kB SRAM



2.048 Bytes SRAM



Arduino.app

Sketch

.ino

.pde

Wiring

Wiring

cpp

asm

Hallo Macoun

Hallo Macoun.ino

```
//
//   00: Hallo Macoun
//

void setup() {
    // läuft genau ein mal
}

void loop() {
   // läuft für immer
}

// EOF
```

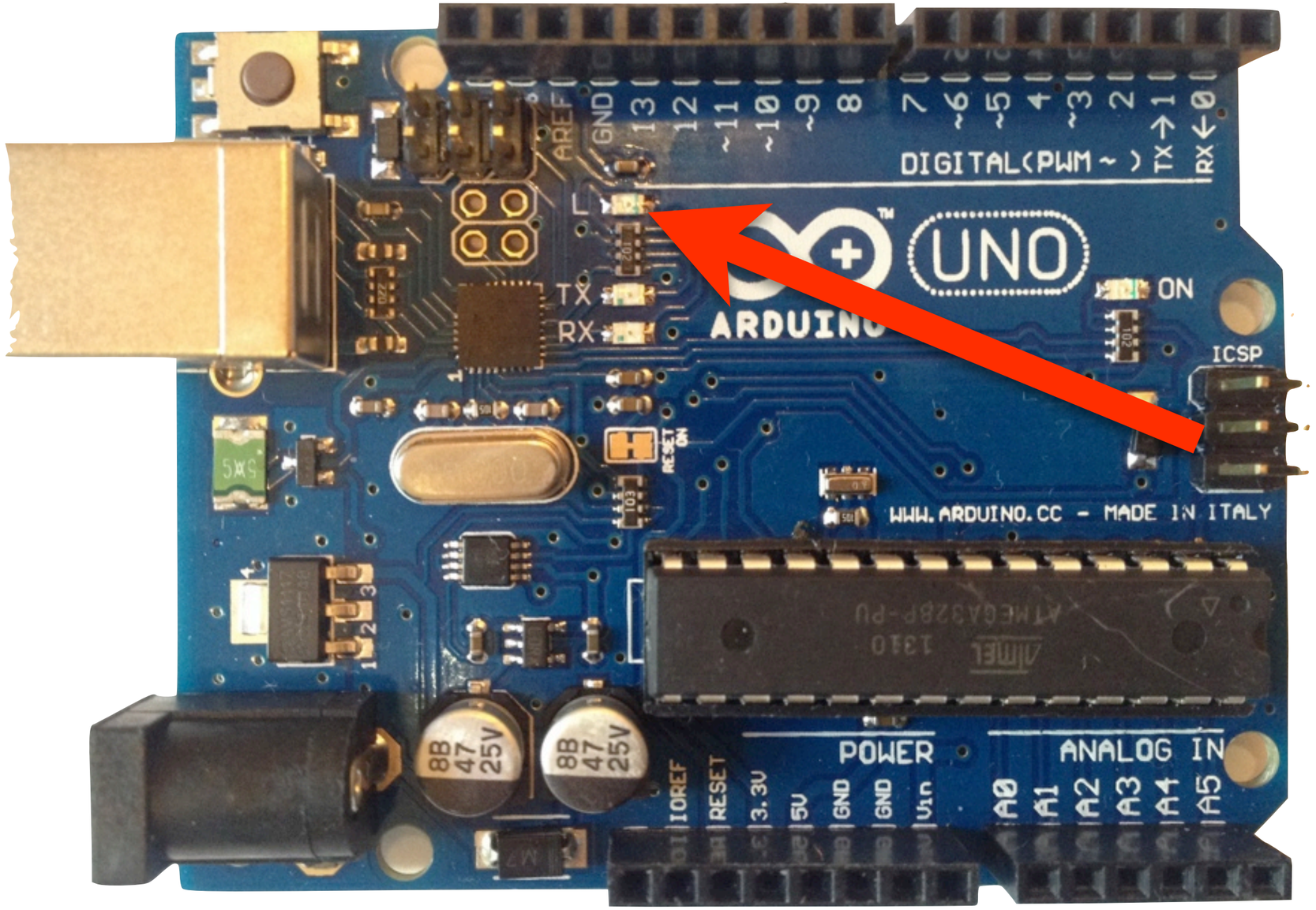
```
//
//   00: Hallo Macoun
//

void setup() {
    // läuft genau ein mal
}

void loop() {
   // läuft für immer
}

// EOF
```

```
//
//   00: Hallo Macoun
//

void setup() {
    // läuft genau ein mal
}

void loop() {
   // läuft für immer
}

// EOF
```

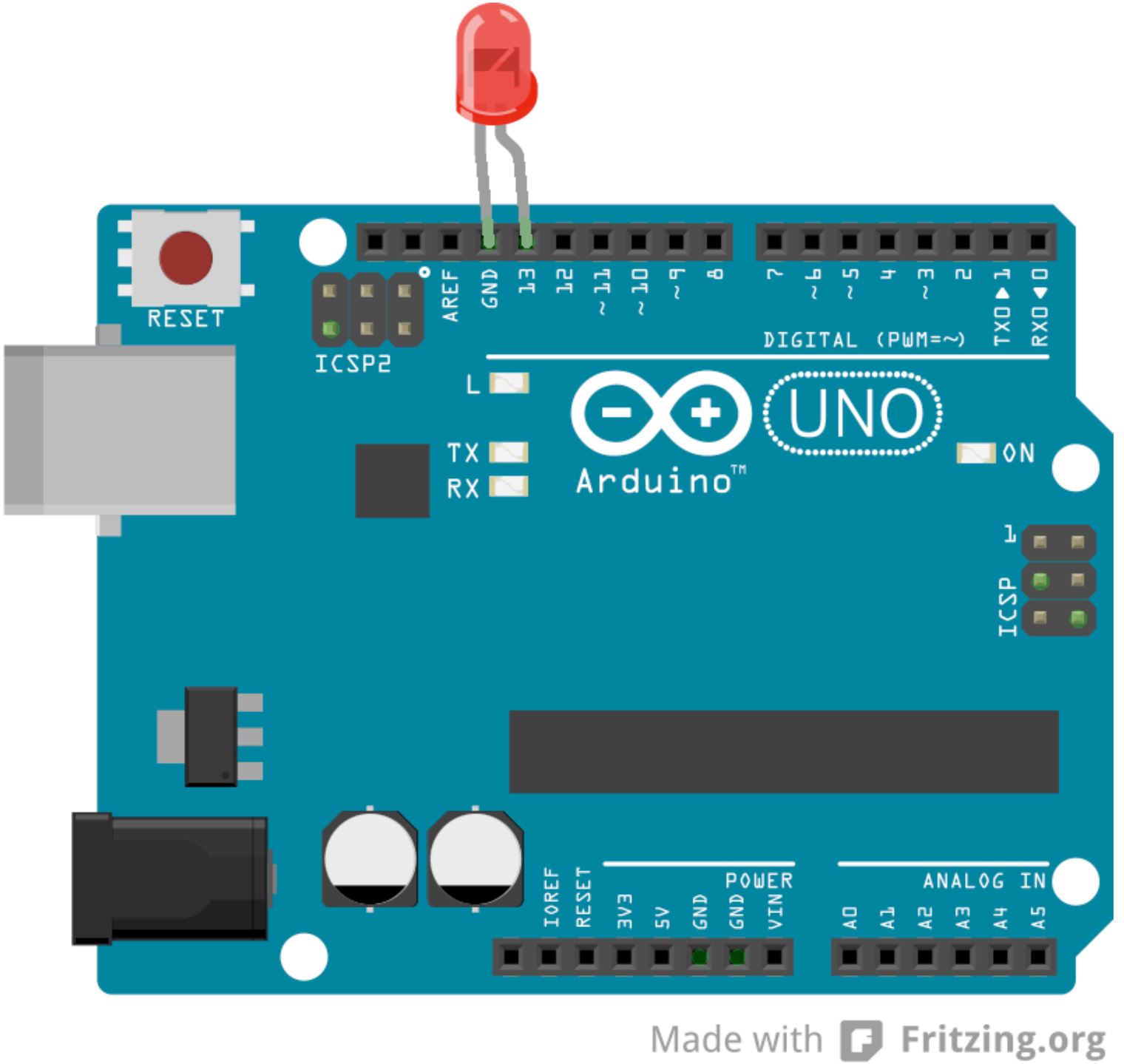
```
//
//   01: Hallo Macoun
//

int led = 13;

void setup() {
    pinMode(led, OUTPUT);
}

void loop() {
  digitalWrite(led, HIGH);
  delay(1000);
  digitalWrite(led, LOW);
  delay(1000);
```

```
//
//   01: Hallo Macoun
//

int led = 13;

void setup() {
    pinMode(led, OUTPUT);
}

void loop() {
  digitalWrite(led, HIGH);
  delay(1000);
  digitalWrite(led, LOW);
  delay(1000);
}
```

```
//
//   01: Hallo Macoun
//

int led = 13;

void setup() {
    pinMode(led, OUTPUT);
}

void loop() {
  digitalWrite(led, HIGH);
  delay(1000);
  digitalWrite(led, LOW);
  delay(1000);
}
```


DIGITAL(PWM~)
UNO
ARDUINO
ON
ICSP
WWW.ARDUINO.CC - MADE IN ITALY
POWER
ANALOG IN
L
TX
RX

```
//
//   01: Hallo Macoun
//

int led = 13;

void setup() {
    pinMode(led, OUTPUT);
}

void loop() {
  digitalWrite(led, HIGH);
  delay(1000);
  digitalWrite(led, LOW);
  delay(1000);
}
```


RESET
ICSP2
AREF
GND
13
12
~11
~10
~9
8
7
~6
~5
4
~3
2
TX→1
RX←0
DIGITAL (PWM=~)
L
TX
RX
Arduino™
UNO
ON
ICSP
IOREF
RESET
3V3
5V
GND
GND
VIN
POWER
A0
A1
A2
A3
A4
A5
ANALOG IN
Made with Fritzing.org

```
//
// 02: Hallo Potentiometer
//

int LEDPin = 13;
int potiPin = 0;

void setup() {
    pinMode(LEDPin, OUTPUT);
}

void loop() {
    digitalWrite(LEDPin, HIGH);
    delay(analogRead(potiPin));
    digitalWrite(LEDPin, LOW);
    delay(analogRead(potiPin));
}
```

```
//
// 02: Hallo Potentiometer
//

int LEDPin = 13;
int potiPin = 0;

void setup() {
    pinMode(LEDPin, OUTPUT);
}

void loop() {
    digitalWrite(LEDPin, HIGH);
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    digitalWrite(LEDPin, LOW);
    delay(analogRead(potiPin));
}
```

```
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// 02: Hallo Potentiometer
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void loop() {
    digitalWrite(LEDPin, HIGH);
    delay(analogRead(potiPin));
    digitalWrite(LEDPin, LOW);
    delay(analogRead(potiPin));
}
```

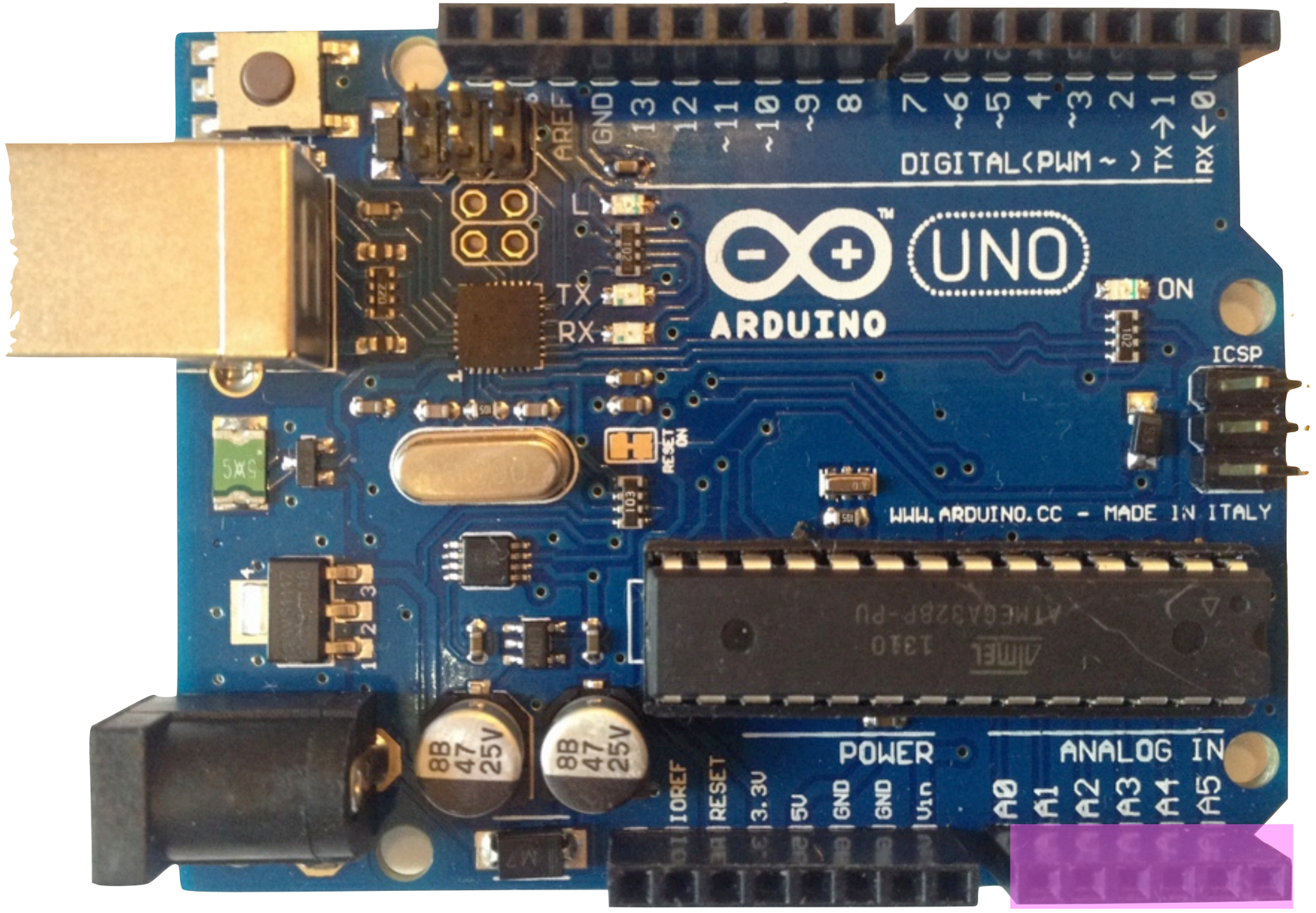
DIGITAL(PWM~)
UNO
ARDUINO
ON
ICSP
WWW.ARDUINO.CC - MADE IN ITALY
POWER
ANALOG IN
AREF
GND
RESET
3.3V
5V
GND
GND
Vin
A0
A1
A2
A3
A4
A5
TX
RX
L

```
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    digitalWrite(LEDPin, LOW);
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    digitalWrite(LEDPin, LOW);
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```

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    digitalWrite(LEDPin, LOW);
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```

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    digitalWrite(LEDPin, LOW);
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```

```
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    digitalWrite(LEDPin, LOW);
    delay(analogRead(potiPin));
}
```

```
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// 02: Hallo Potentiometer
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}

void loop() {
    digitalWrite(LEDPin, HIGH);
    delay(analogRead(potiPin));
    digitalWrite(LEDPin, LOW);
    delay(analogRead(potiPin));
}
```
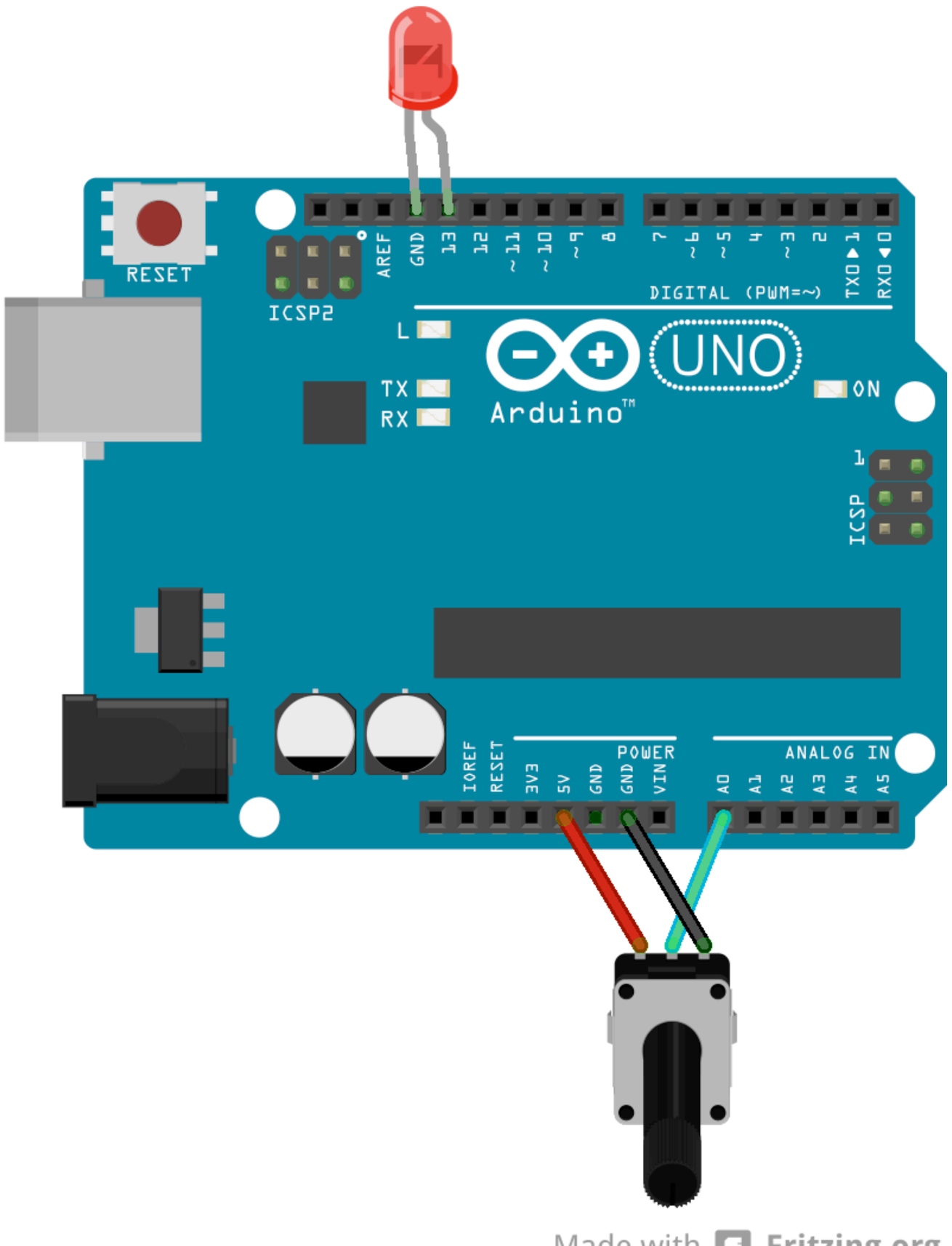
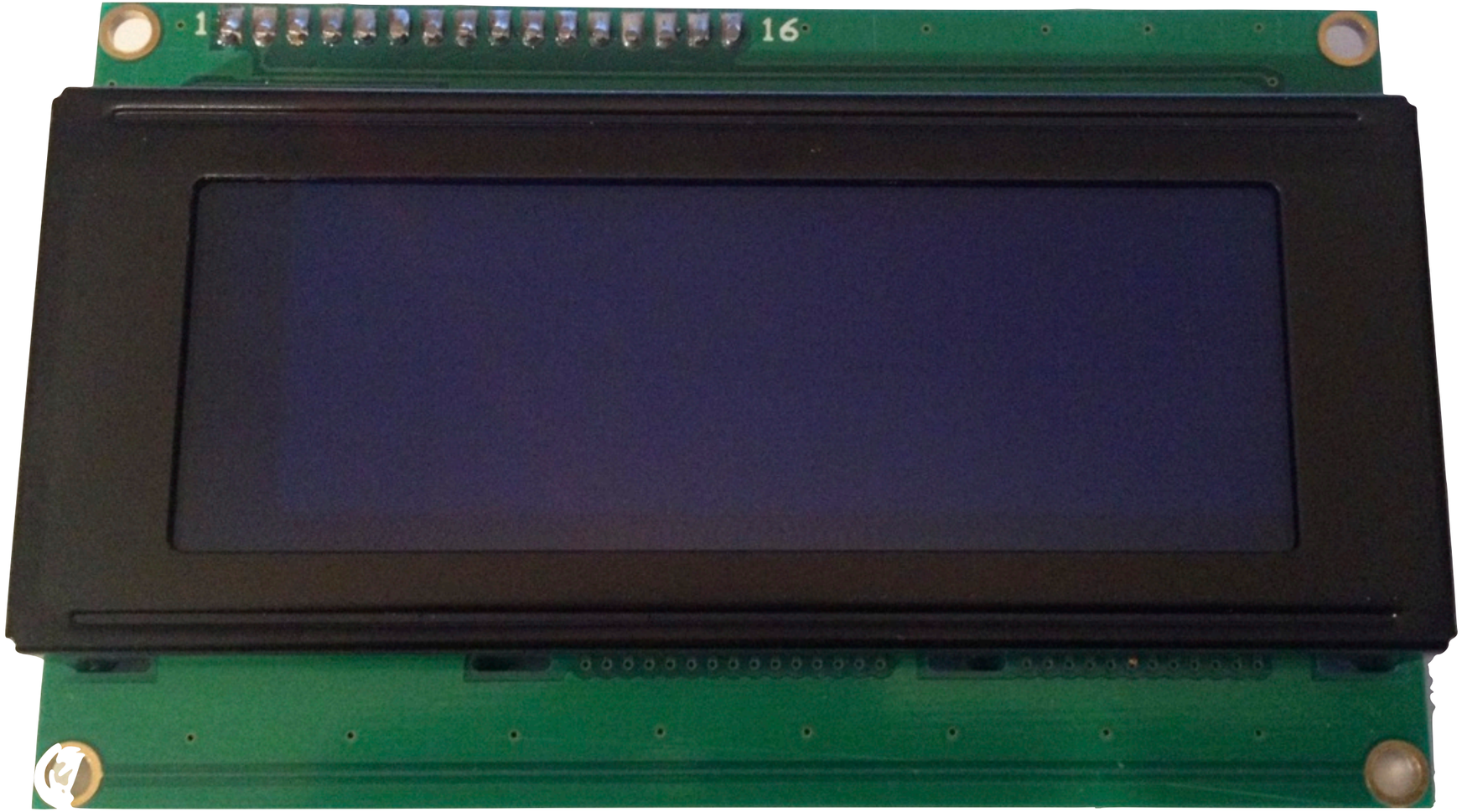
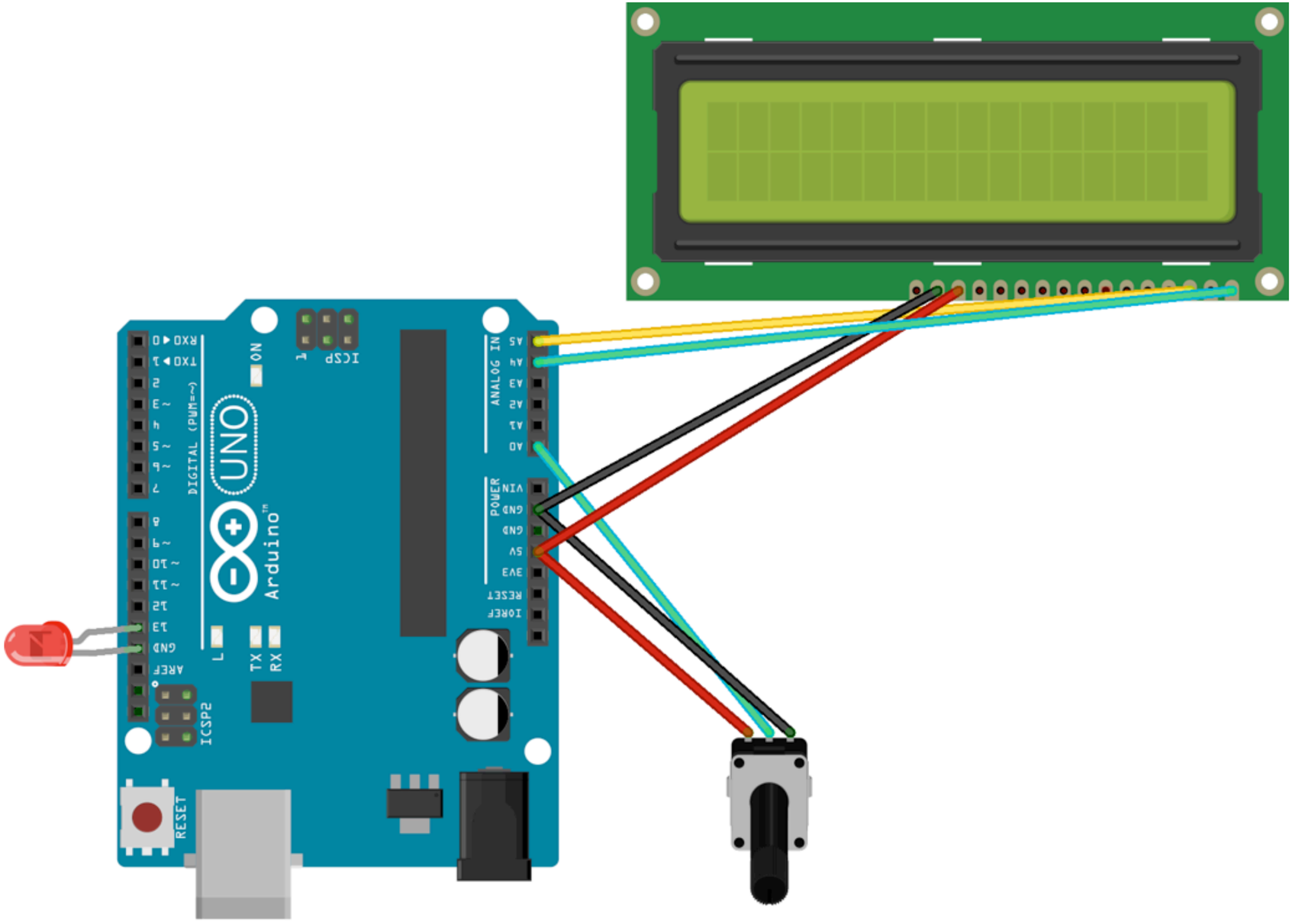




1
16

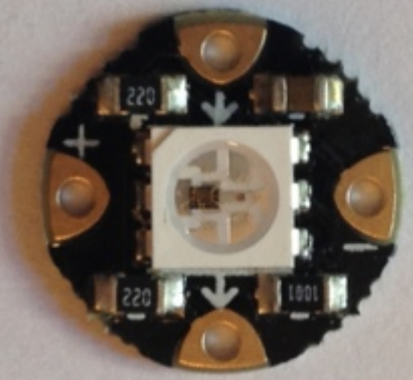
```
 //DFRobot.com
//Compatible with the Arduino IDE 1.0
//Library version:1.1
#include <Wire.h>
#include <LiquidCrystal_I2C.h>

LiquidCrystal_I2C lcd(0x27,20,4);
// set the LCD address to 0x27

int potiPin = 0;
int val = 0;

void setup()
{
  lcd.init(); // initialize the lcd

  // Print a message to the LCD.
  lcd.backlight();
  lcd.print("Hello, world!");
  delay(1000);
  lcd.clear();
  lcd.setCursor(0,0);
  lcd.print("Poti: ");
  lcd.setCursor(5,0);
}
```

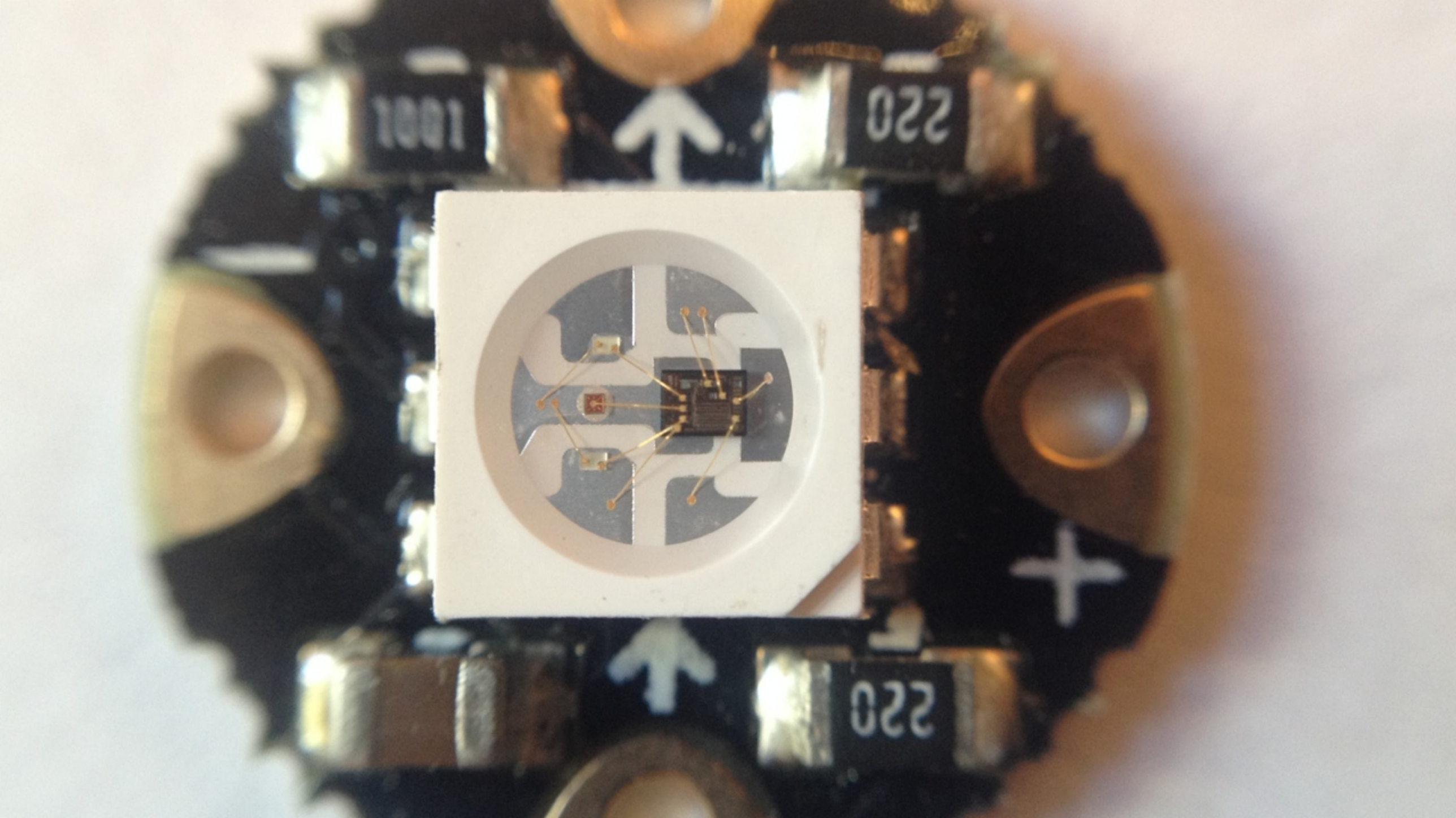
```
// Round it goes
void loop()
{
   val = analogRead(potiPin);
   lcd.print(val);
}
```

```
// Round it goes
void loop()
{
   val = analogRead(potiPin);

   if (val < 10){
       lcd.print(" ");
   }
   if (val < 100){
       lcd.print(" ");
   }

   lcd.print(val);
   lcd.setCursor(5,0);
}
```



LEDs


220
220
1001

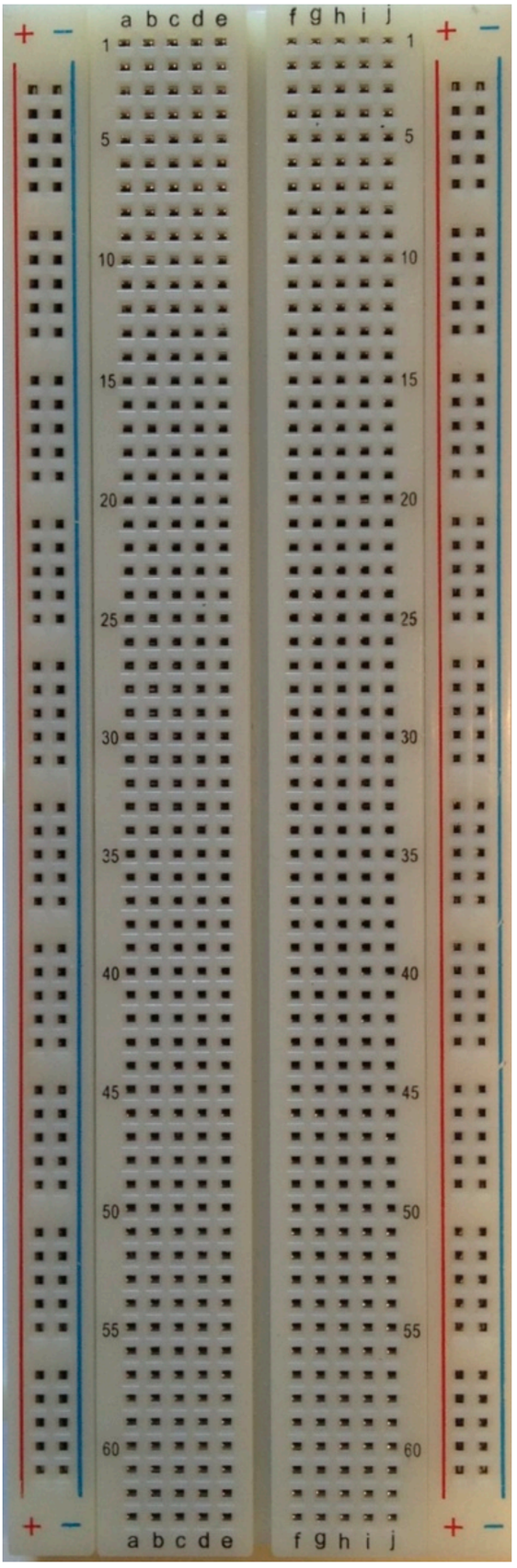

1001
220
220

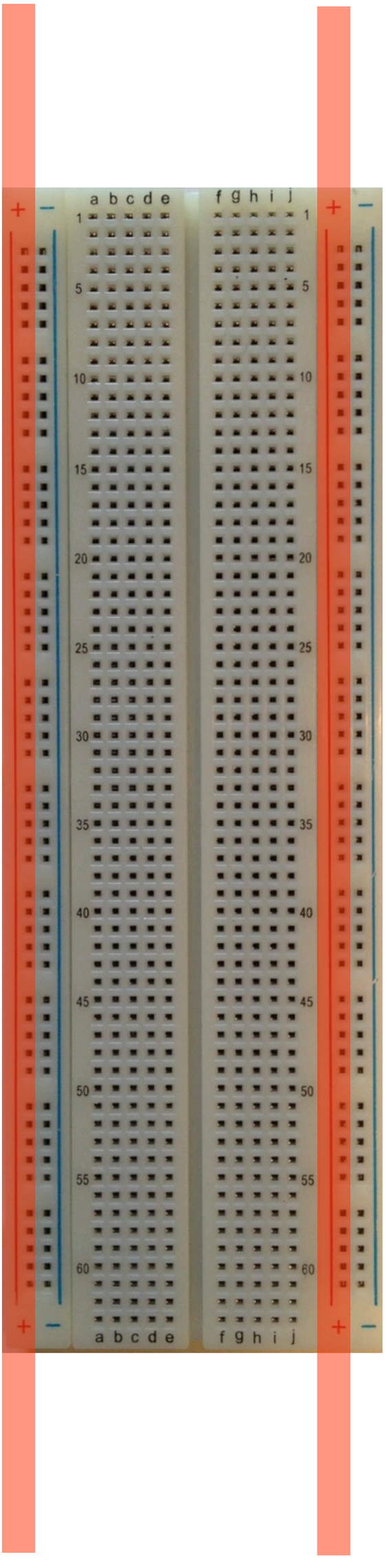

GND
DOUT
4-7VDC
GND
High Density NeoPixel
adafruit
INDUSTRIES
GND
DIN
4-7VDC
GND

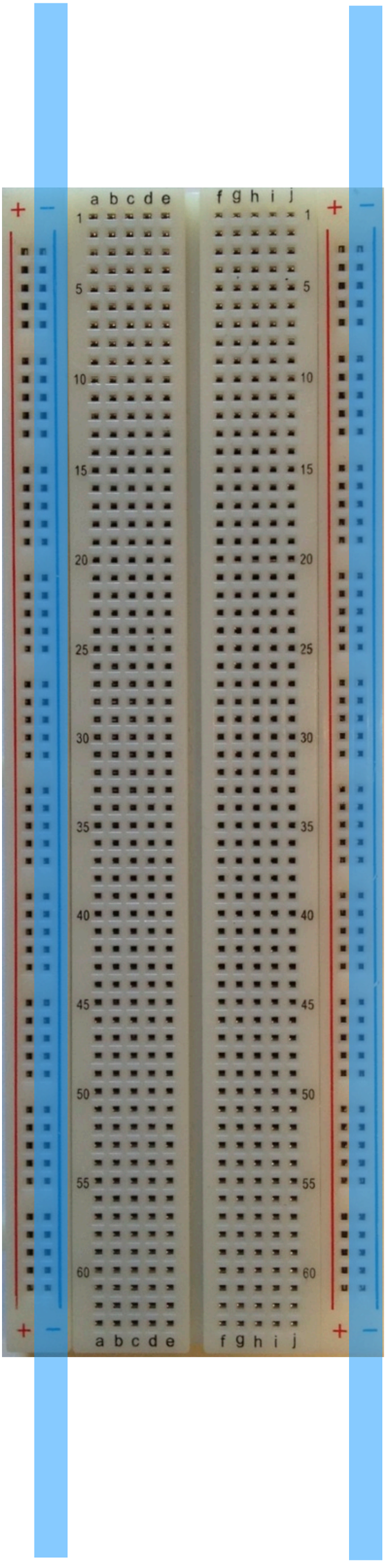

VCC
DIN
OUT
Gnd

Praktisches

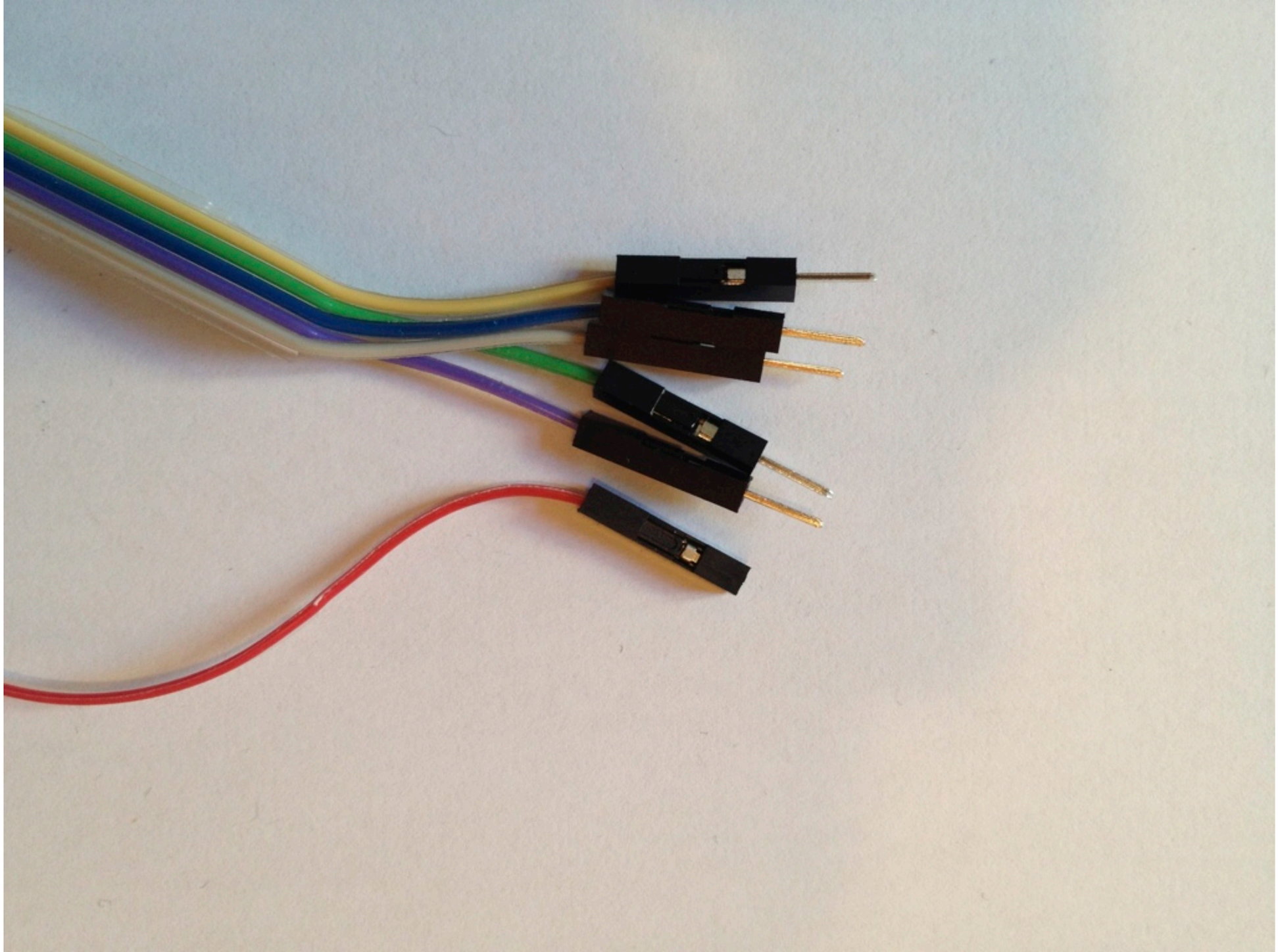
Hardware

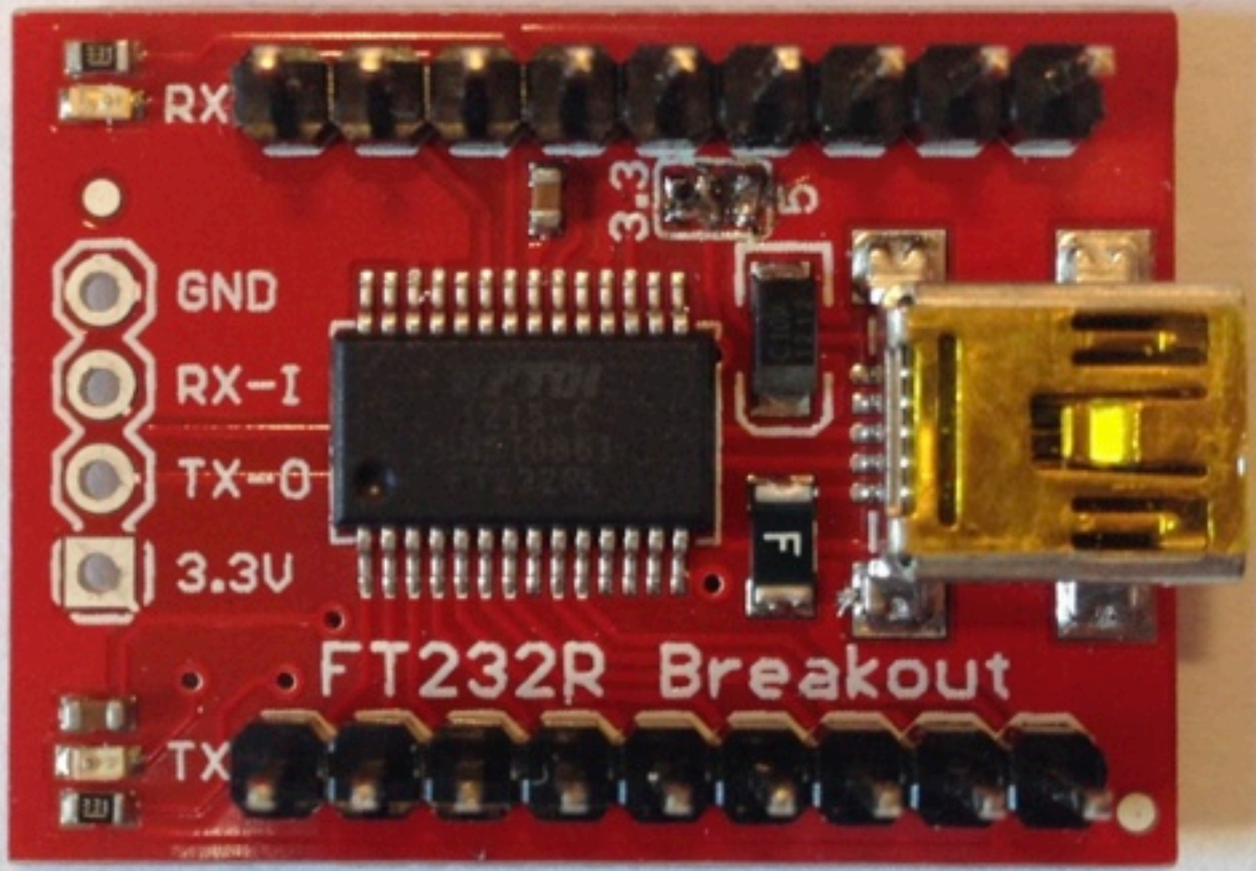

a b c d e
f g h i j
1
5
10
15
20
25
30
35
40
45
50
55
60

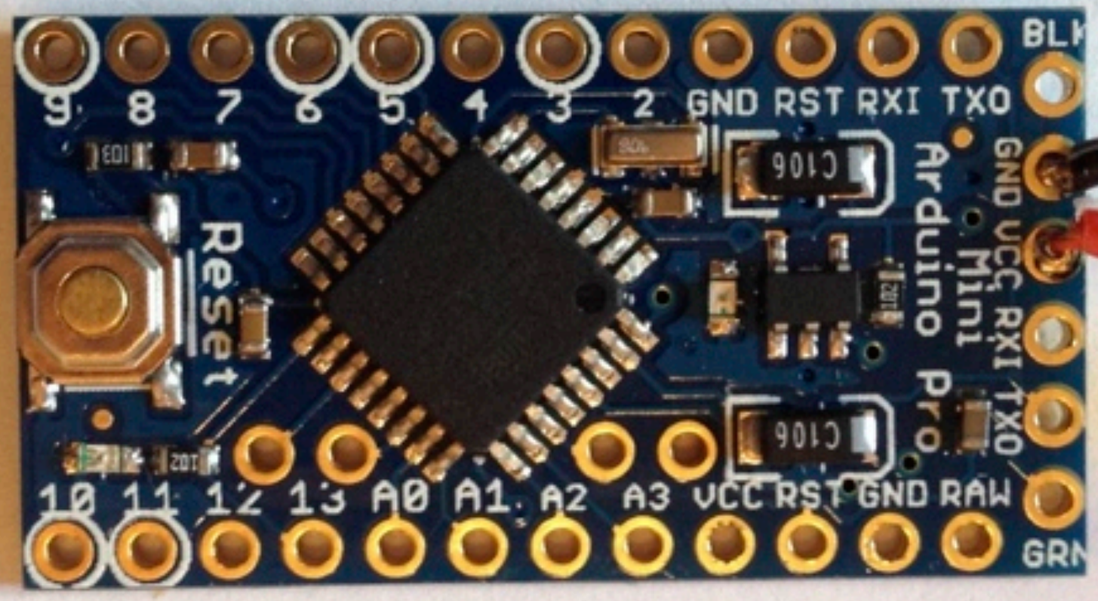

a b c d e
f g h i j
1
5
10
15
20
25
30
35
40
45
50
55
60
+
−

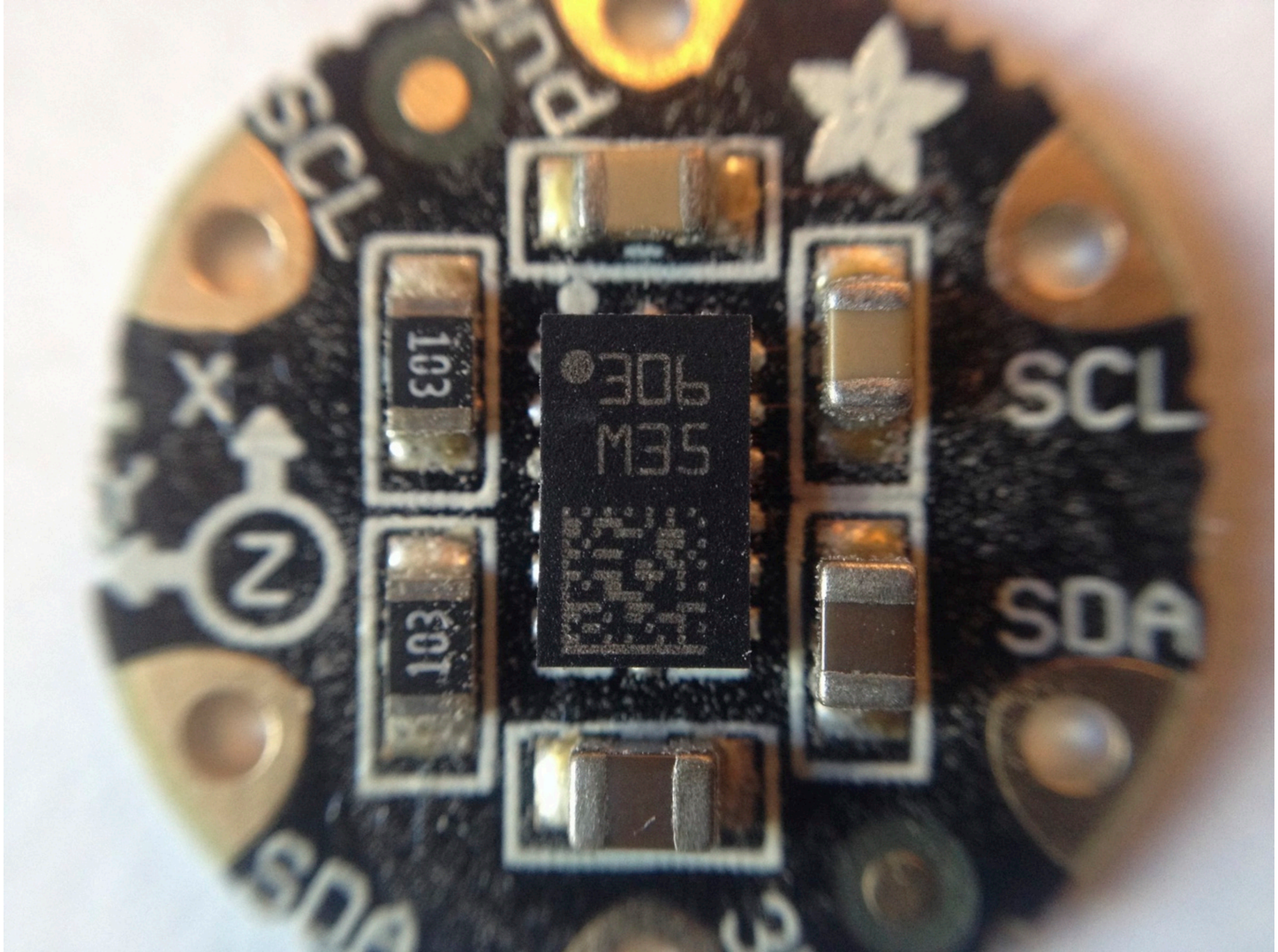

a b c d e
f g h i j
1
5
10
15
20
25
30
35
40
45
50
55
60
+
−


+
−
a b c d
1
5




RX
3.3
5
GND
RX-I
TX-O
3.3V
FT232R Breakout
TX


9 8 7 6 5 4 3 2 GND RST RXI TXO
Reset
Arduino Pro Mini
GND VCC RXI TXO
10 11 12 13 A0 A1 A2 A3 VCC RST GND RAW


SCL
SDA
103
103
306
M35
SCL
SDA


DIGITAL MULTIMETER
-000
EIN
AUS
eumig
hFE
E
B
C
PNP
NPN
Ω
200
2K
20K
200K
2M
20M
hFE
V⎓
200m
2
20
200
1000
200µ
2m
20m
200m
2
20µ 20
A⎓
700
200
20
2
200m
V~
20
20µ
2
200m
20m
2m
200µ
A~
CE
Vm / V~
1000V / 700V
MAX
500V MAX
MAX
20A
UNGESICHERT
MAX
2A
V/Ω

Feuer

Schrumpfschlauch

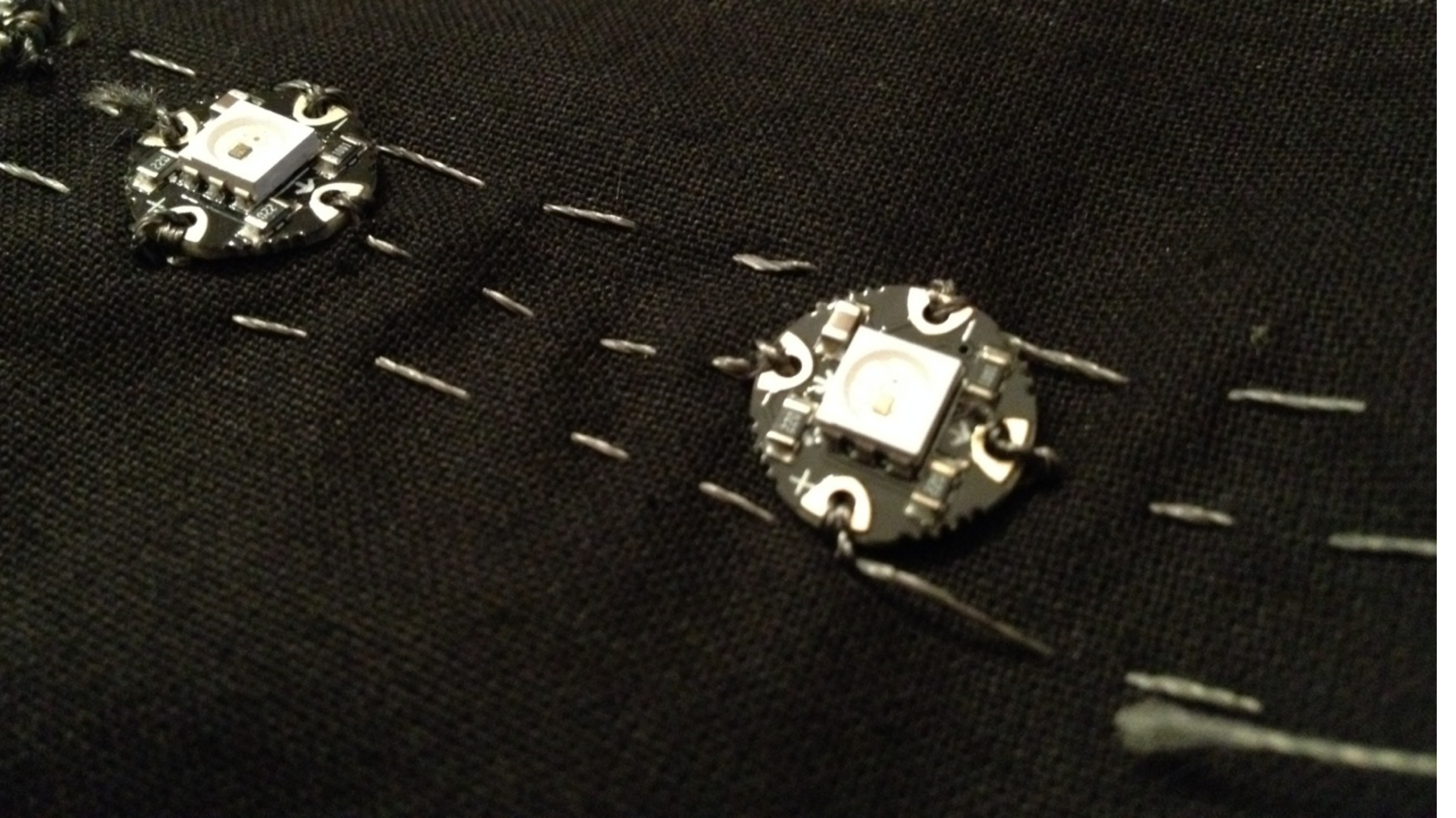
B.L.I.N.K.


Roland
cuttr @metalab
Benutzung nur nach Einschulung.
CAMM-1
CUT ALONG THE GROOVE

B.L.I.N.K.


B.L.I.N.K.


L.L.N




B.L.I.N.K.


B.L.I.N.K.

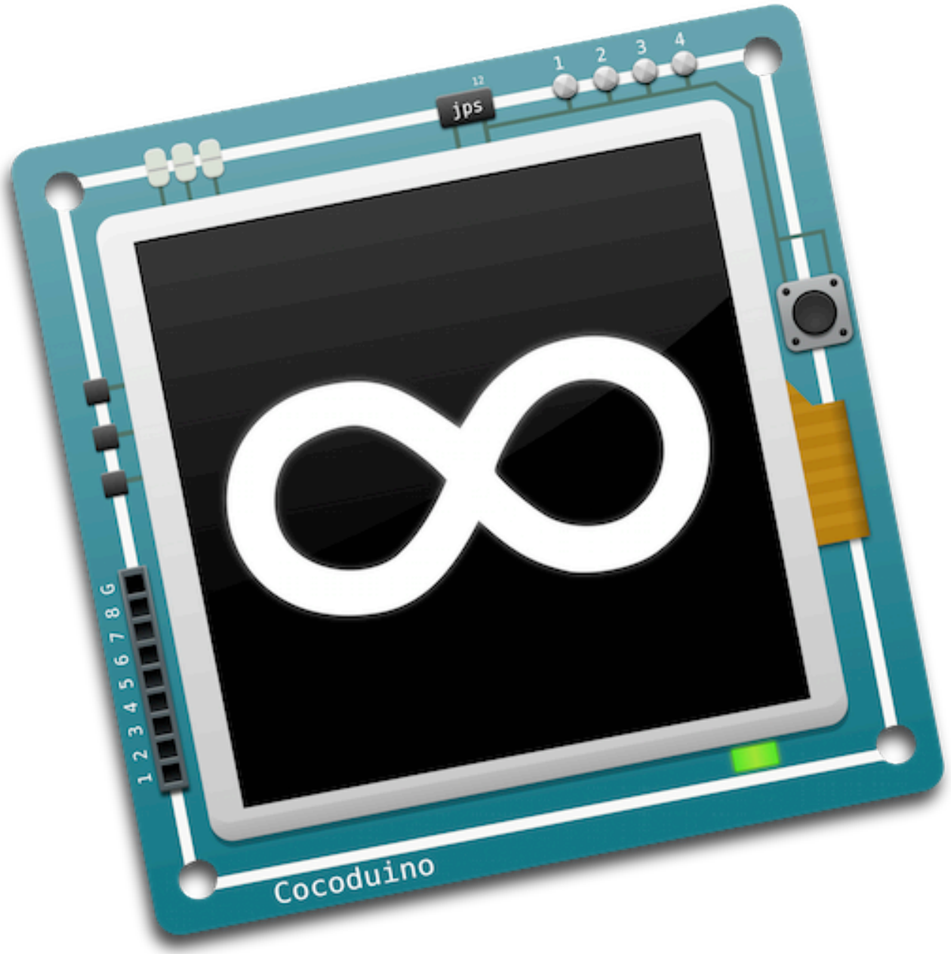

B.L.I.N.K.

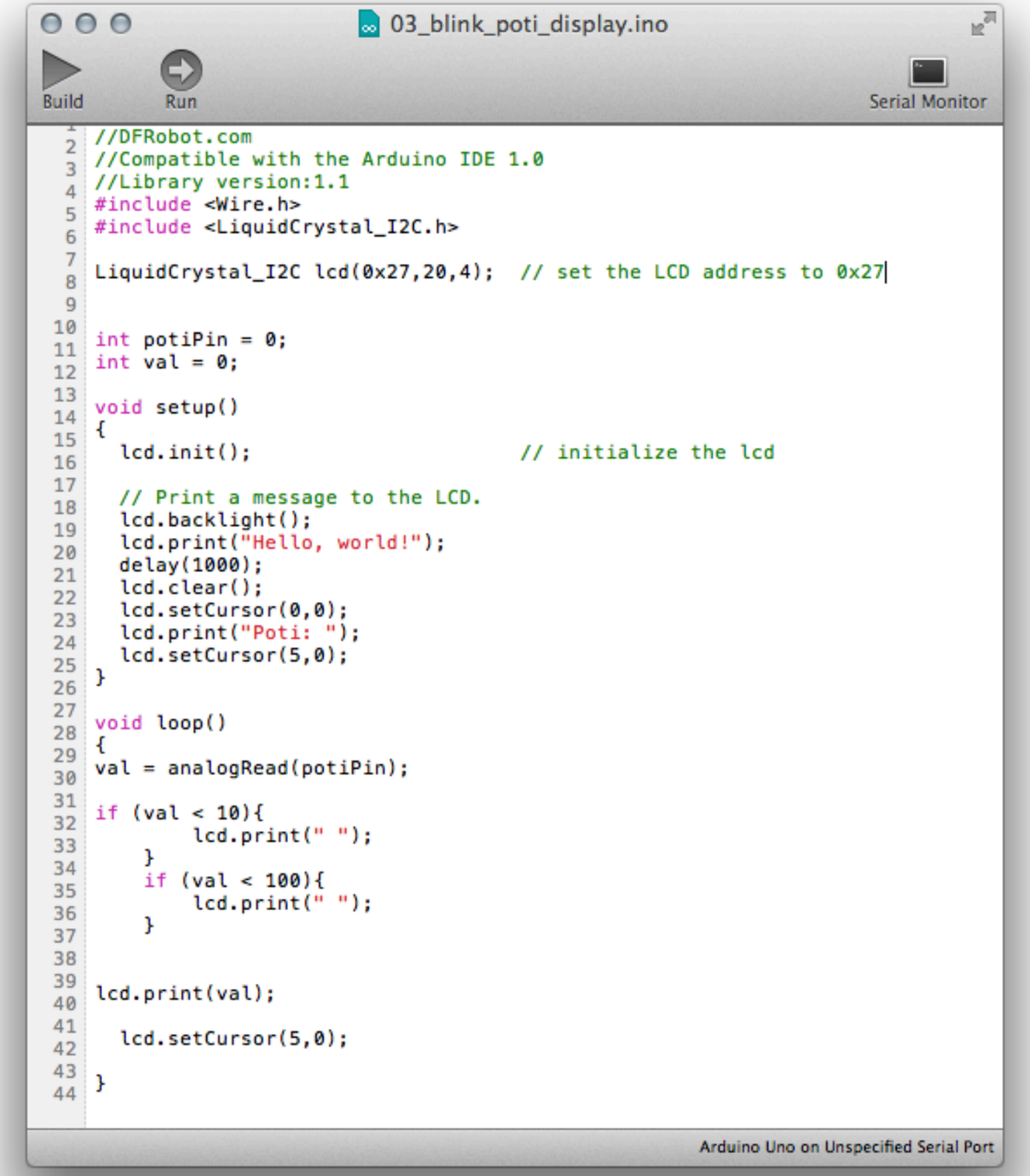

B.L.I.N.K.

Software

Arduino.app

Cocoduino.app




03_blink_poti_display.ino
Build
Run
Serial Monitor
//DFRobot.com
//Compatible with the Arduino IDE 1.0
//Library version:1.1
#include <Wire.h>
#include <LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(0x27,20,4); // set the LCD address to 0x27
int potiPin = 0;
int val = 0;
void setup()
{
lcd.init();   // initialize the lcd
// Print a message to the LCD.
lcd.backlight();
lcd.print("Hello, world!");
delay(1000);
lcd.clear();
lcd.setCursor(0,0);
lcd.print("Poti: ");
lcd.setCursor(5,0);
}
void loop()
{
val = analogRead(potiPin);
if (val < 10){
lcd.print(" ");
}
if (val < 100){
lcd.print(" ");
}
lcd.print(val);
lcd.setCursor(5,0);
}
Arduino Uno on Unspecified Serial Port

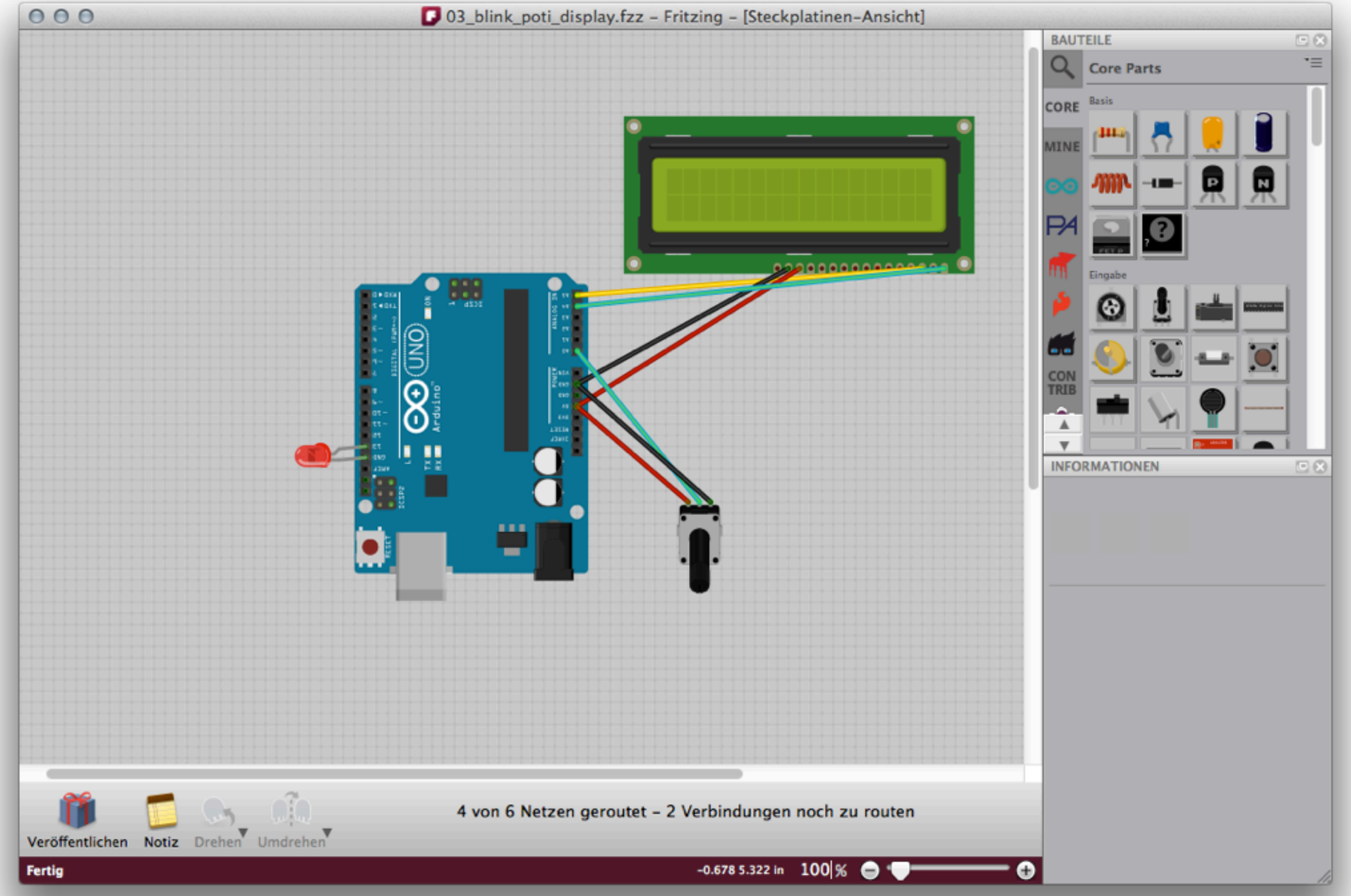
Sublime Text 2.app

ST2-Arduino

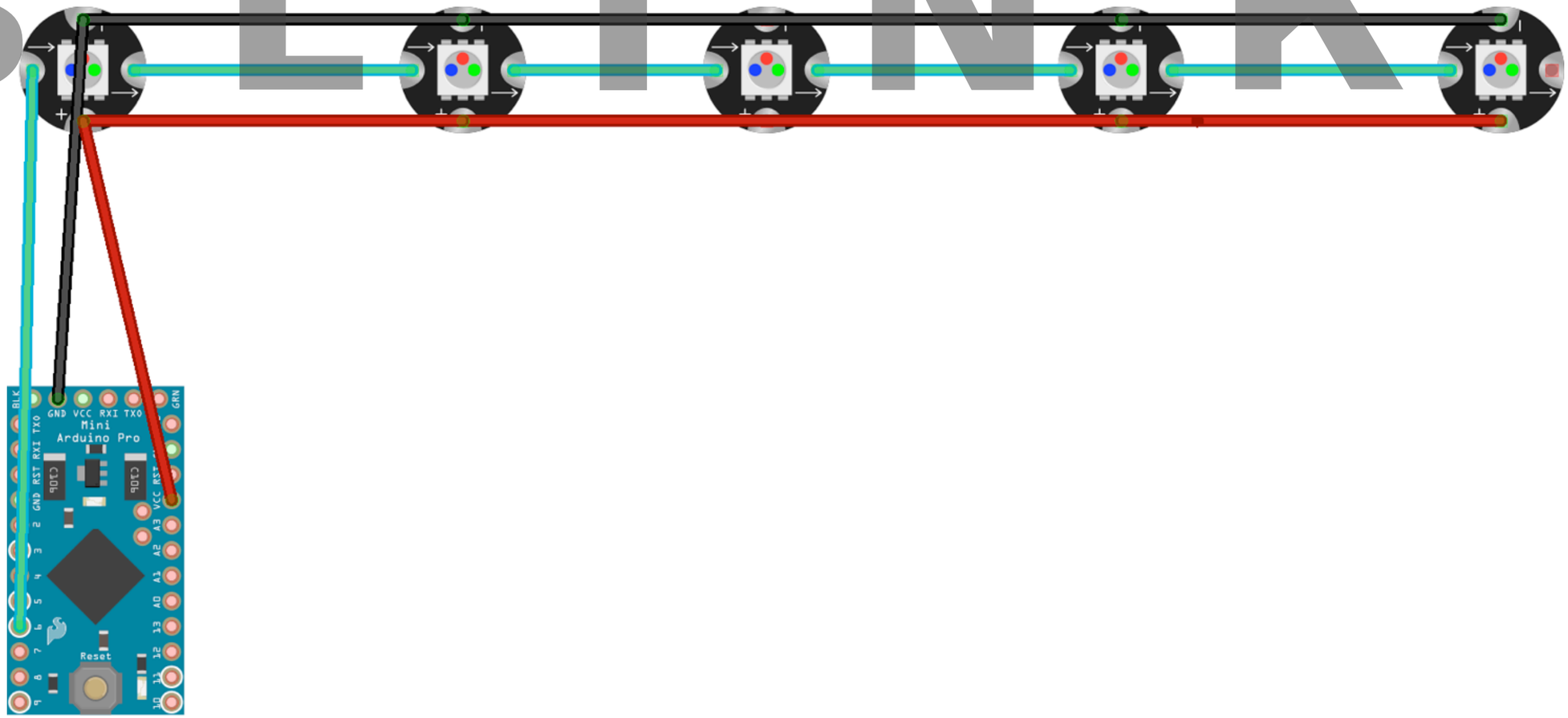
$ ino

Dash.app

Fritzing


03_blink_poti_display.fzz – Fritzing – [Steckplatinen-Ansicht]
BAUTEILE
Core Parts
CORE
MINE
CON TRIB
Basis
Eingabe
INFORMATIONEN
Veröffentlichen
Notiz
Drehen
Umdrehen
4 von 6 Netzen geroutet – 2 Verbindungen noch zu routen
Fertig
-0.678 5.322 in
100 %

B L I N K



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Microcontroller


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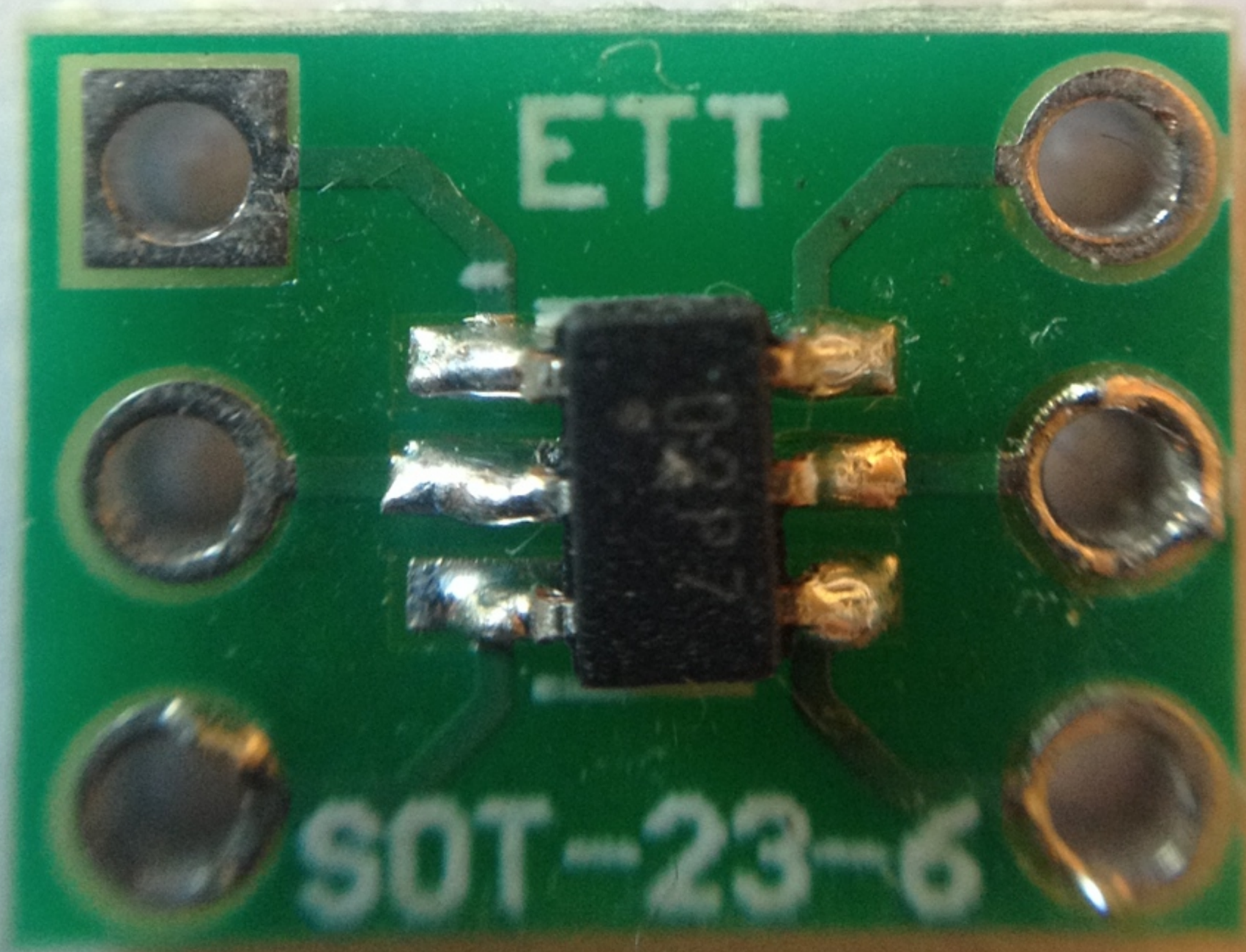
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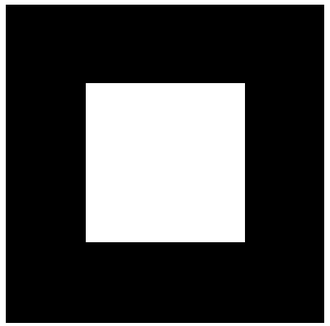
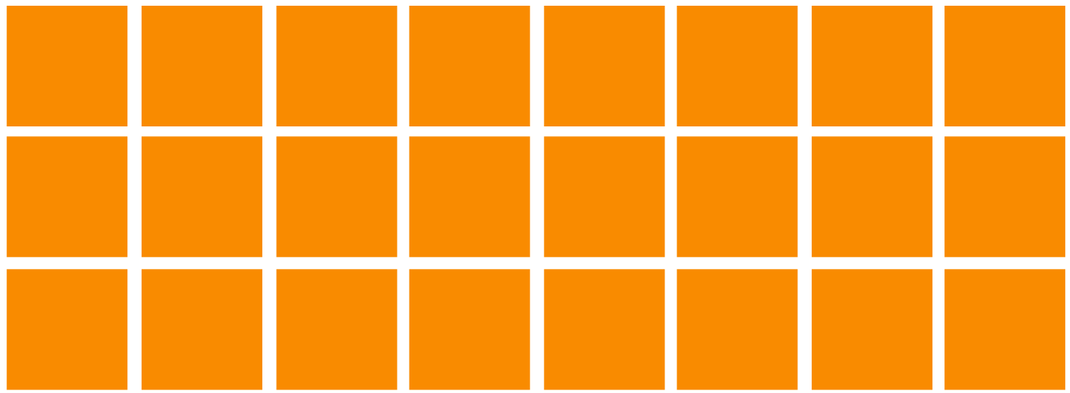
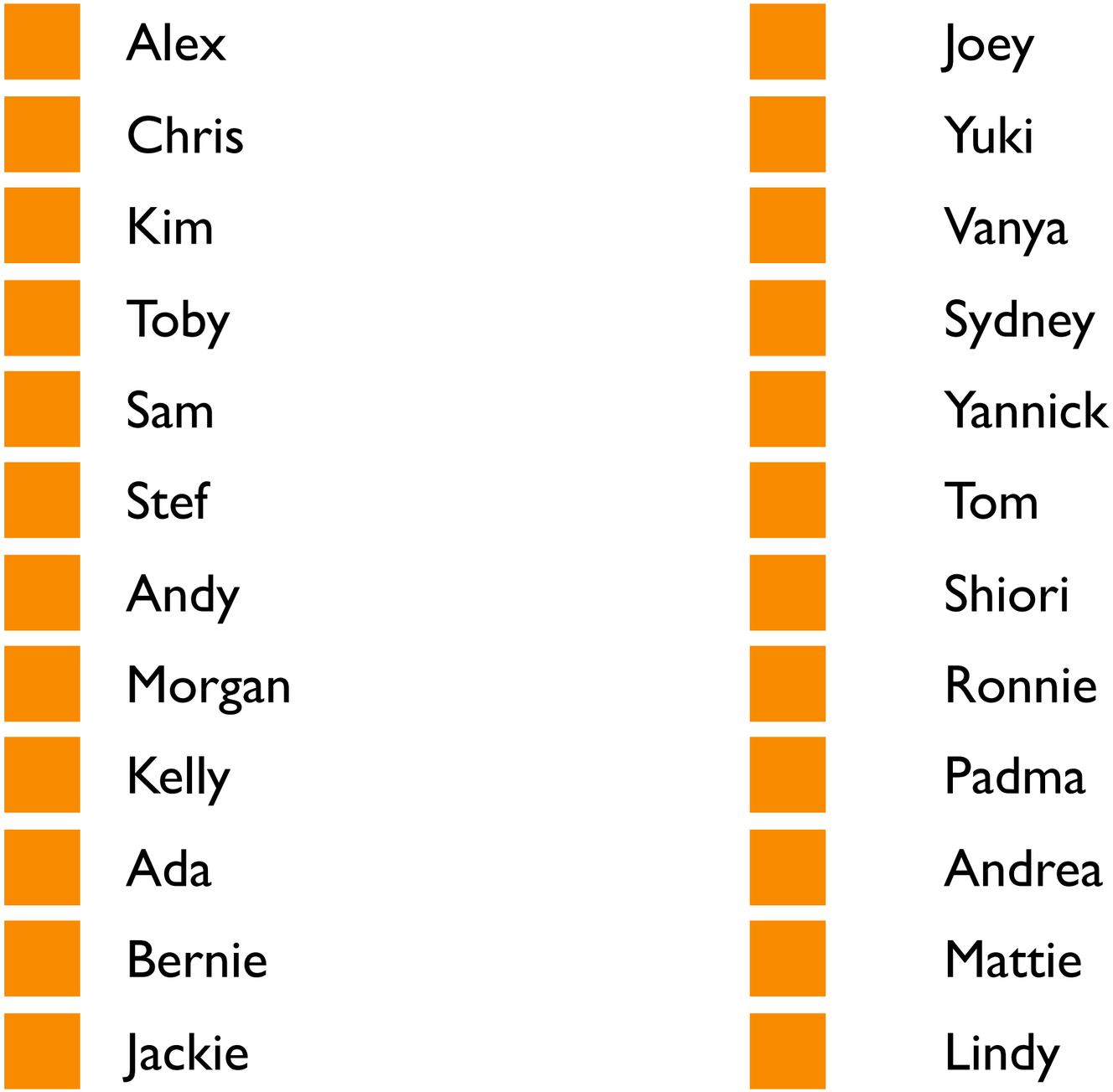
1 CPU 4MHz



1 Byte

24 Bytes

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