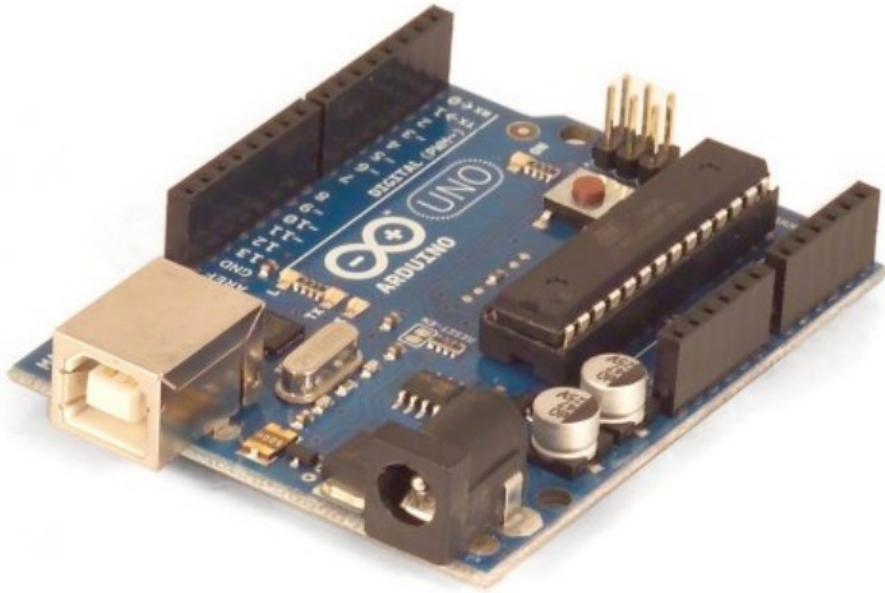


What is it that we do?

- Boards
- Software development tools
- Documentation

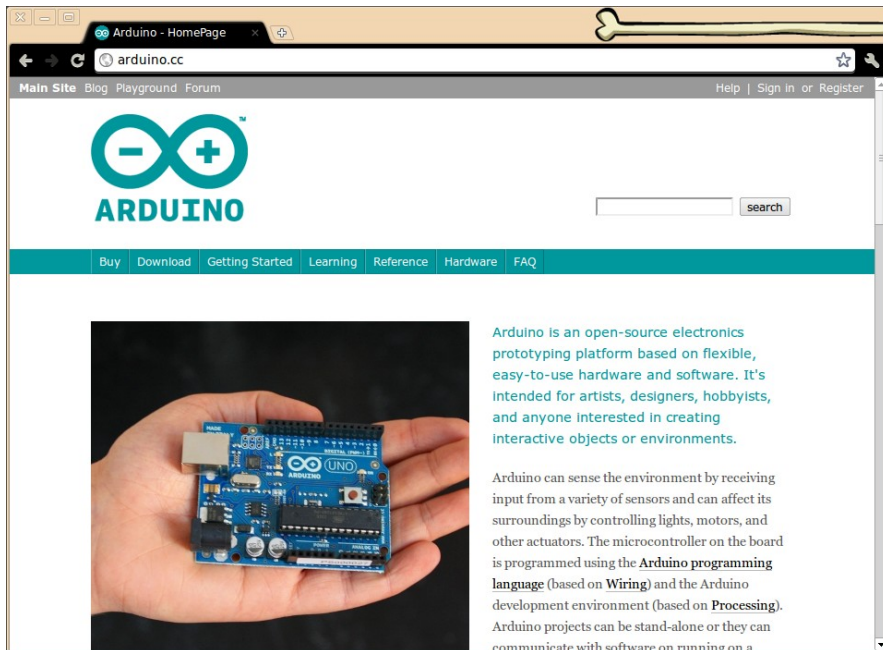


```
Blink | Arduino 0021
File Edit Sketch Tools Help
Blink
/*
  Blink
  Turns on an LED on for one second, then off for one second, repeatedly.

  This example code is in the public domain.
  */

void setup() {
  // initialize the digital pin as an output.
  // Pin 13 has an LED connected on most Arduino boards:
  pinMode(13, OUTPUT);
}

void loop() {
  digitalWrite(13, HIGH); // set the LED on
  delay(1000);           // wait for a second
  digitalWrite(13, LOW); // set the LED off
  delay(1000);           // wait for a second
}
1
```



Community

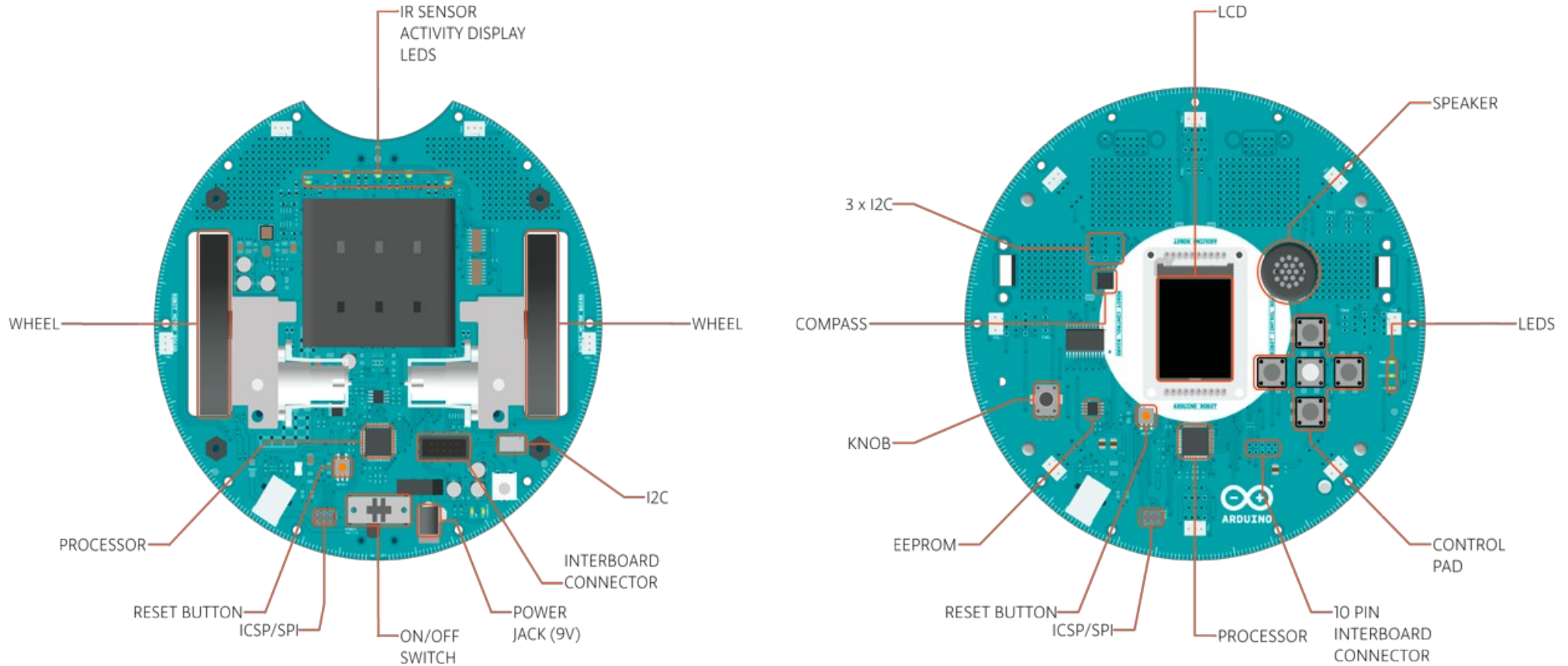
What ever it is we do, we try to ...

- Help people getting started with technology
- Create a coherent development and educational experience
- Incorporate user feedback into our R&D
- Answer complex questions within new computing paradigms: embedded, ubiquitous, palpable, wearable ...
- Break the magic 2,8 rule

Lemme give you some examples

- Making an educational robot
- Designing course curriculum for 24 schools
- Creating connected home appliances

Let's face it: they are complex beings



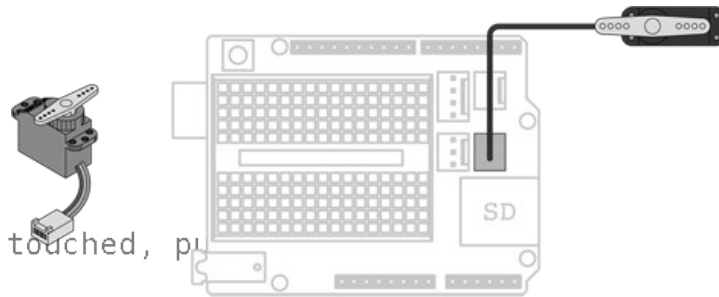
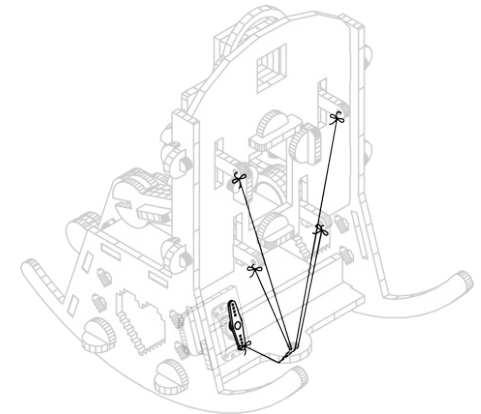
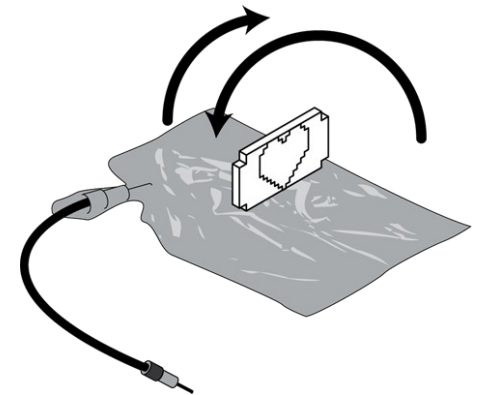
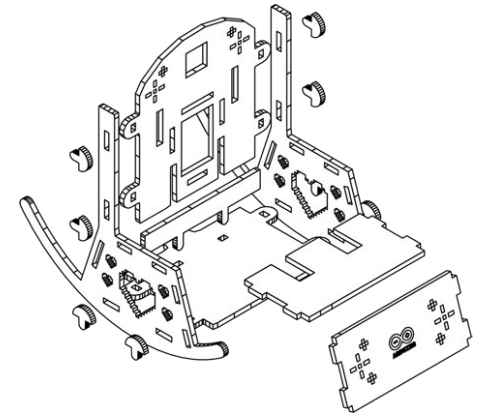
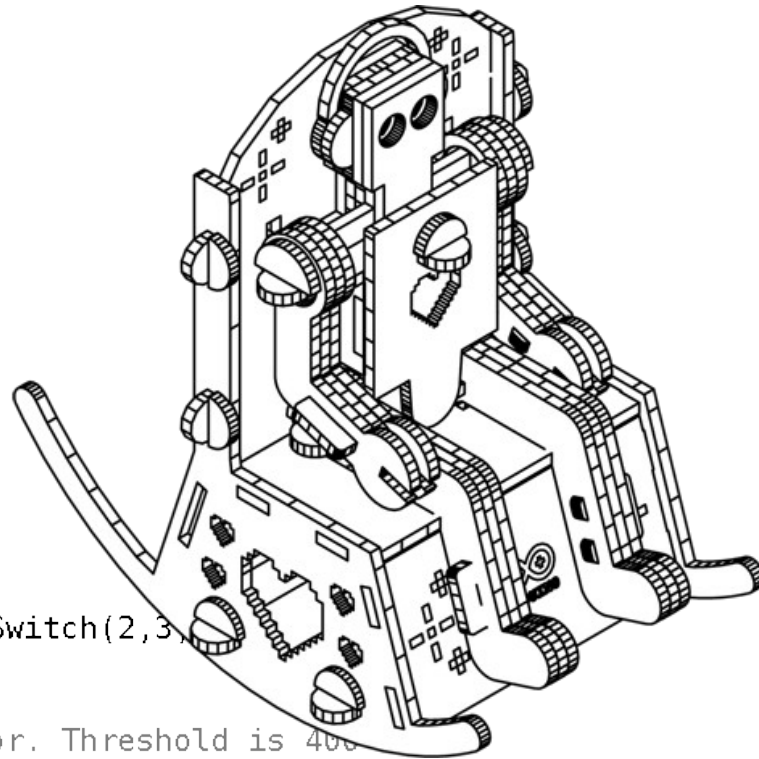
Creating curriculum for schools



Educational experiment

- 24 schools
- Over 500 kids
- 4 w introduction
- Critique based PBL: 5 prj / w / school
(this means: each week $(3 + 5) * 24$ experiments would be made)
- 9 w project building (Easter on the way)
- Closing event: the Tech Faire with ~80 prj

What we did this time?



```
//Declare the capacitive sensor
CapacitiveSwitch sensor=CapacitiveSwitch(2,3)

void setup(){
  //initialize the capacitive sensor. Threshold is 400
  sensor.config(400);

  //initialize the servo motor
  pull.attach(9);
}
void loop(){
  if(sensor.getState()){
    //If the capacitive sensor is touched, pu
    pull.write(0);
  }else{
    //Otherwise, loosen the strings
```

That is what we did but ... $x (5 + 3) x 4$

... it took us just one month to get ready



SandS FP7-ICT-2011-8

- 8 partners
- Create white labelled home appliances
- Connect to a shared network infrastructure
- Share high level abstract recipes
- A recipe: “wash strawberry stain”
- Yet another one: “make perfect cupcake”



ATLAS

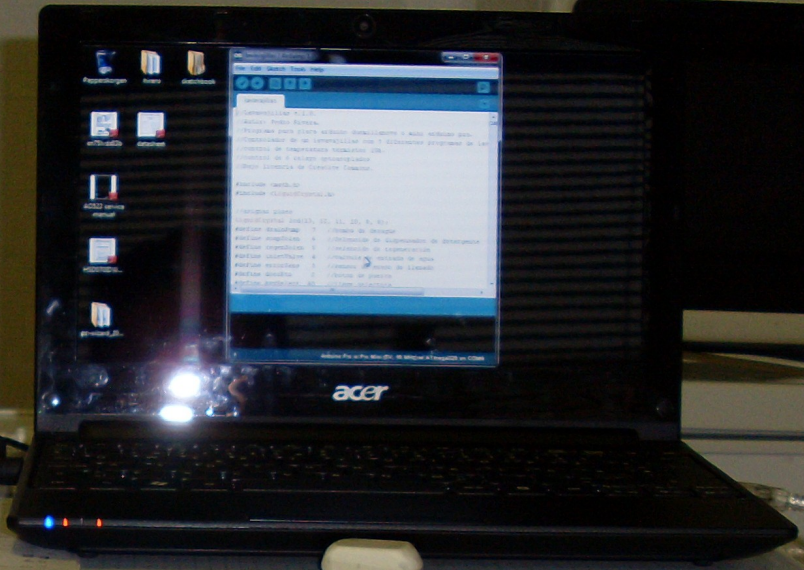
Lavado Fuerte
Lavando
Temperatura: 59° C

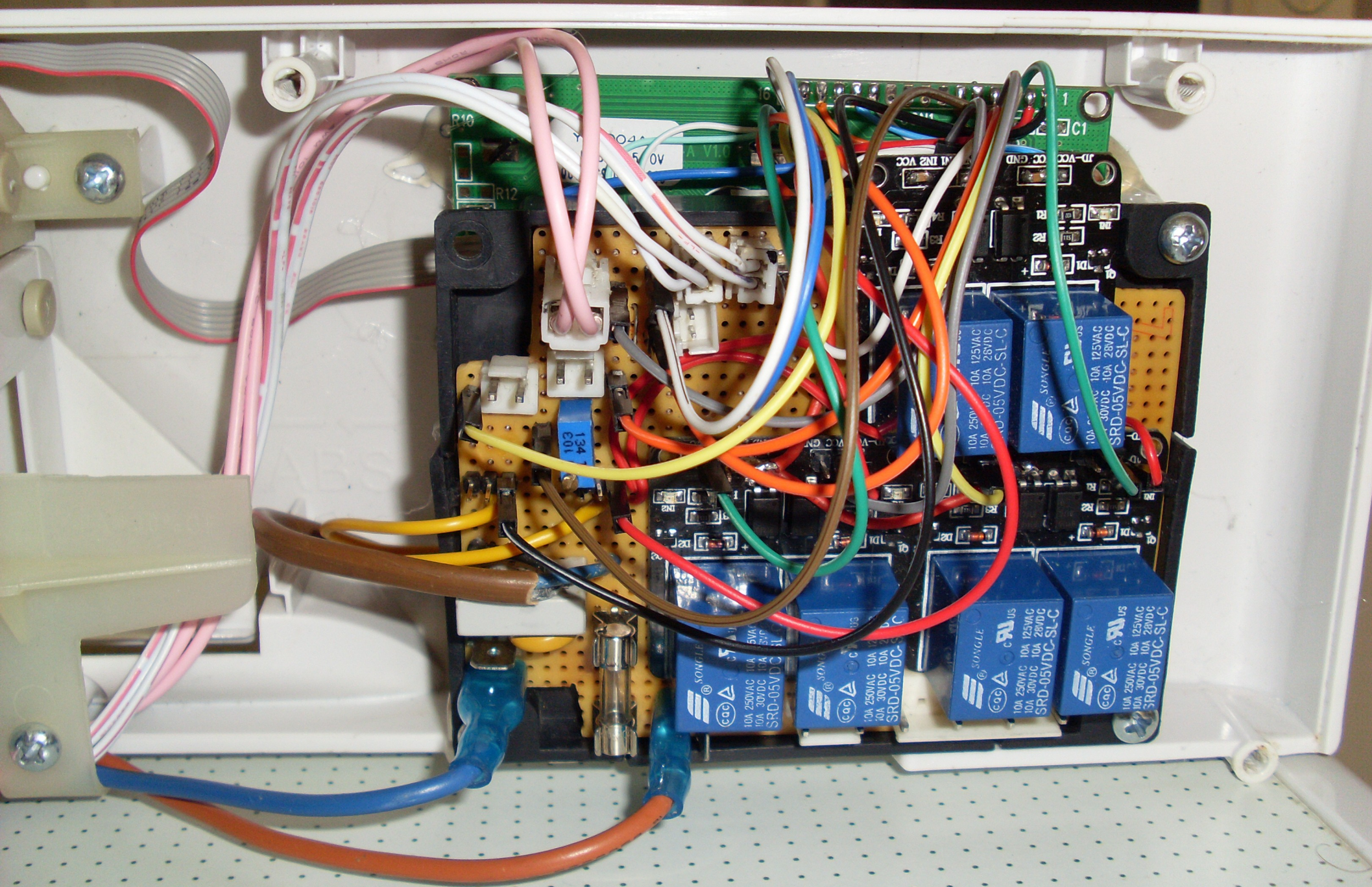


PROG 1

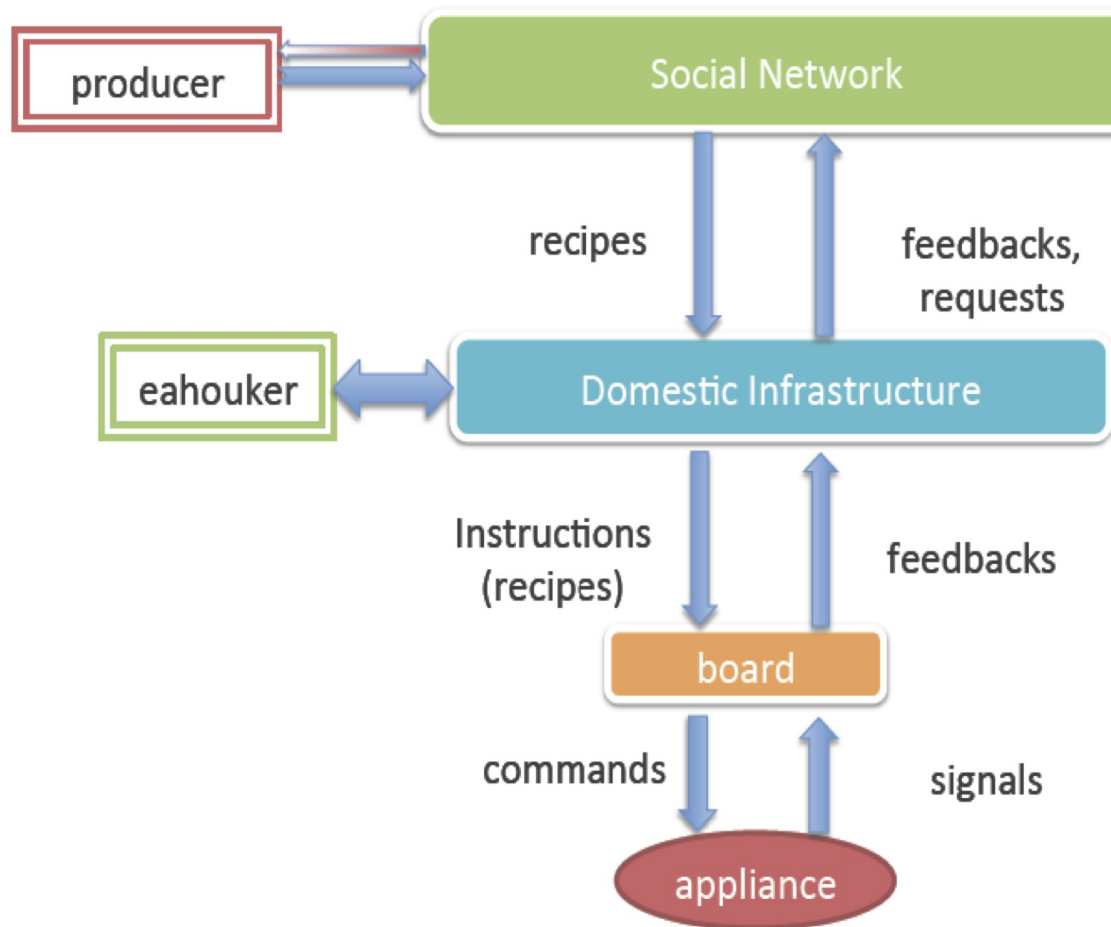


1

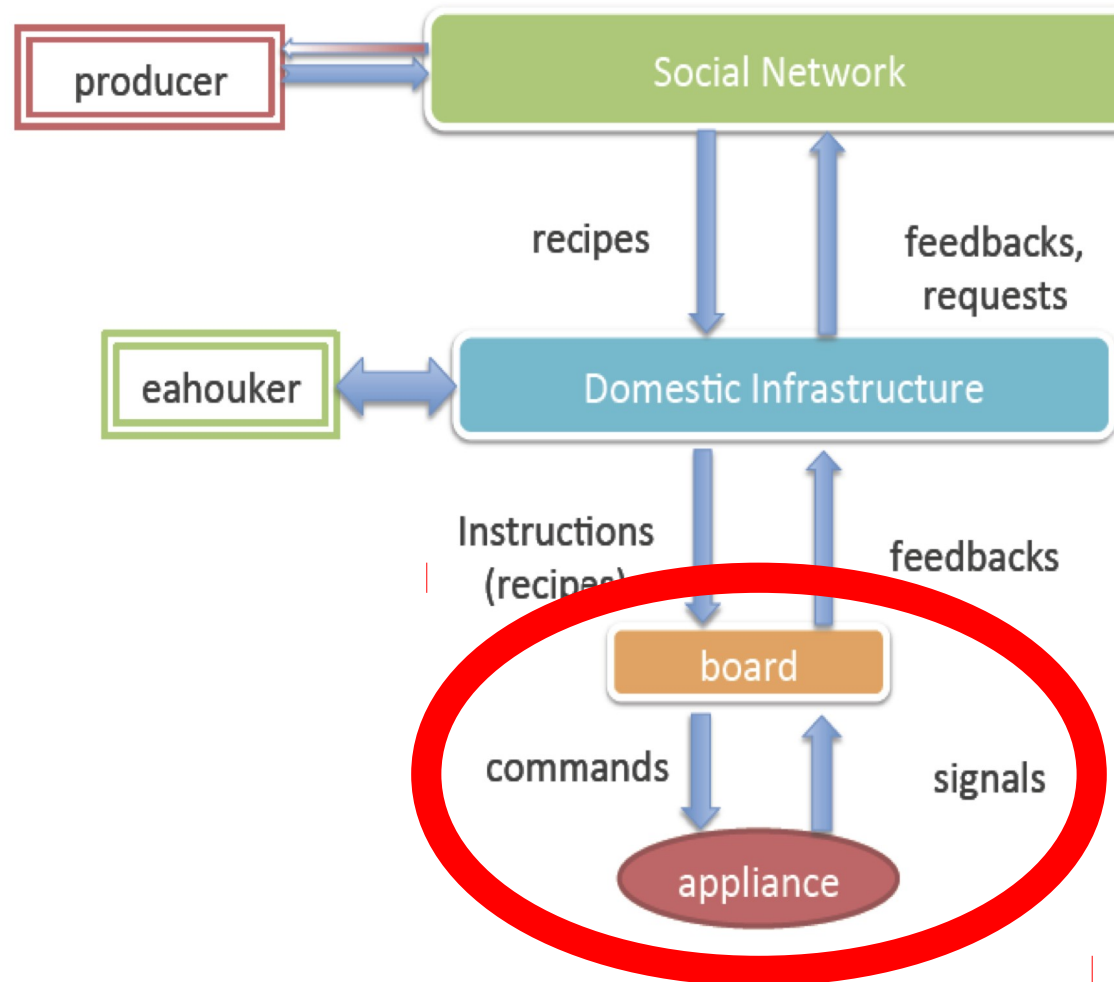




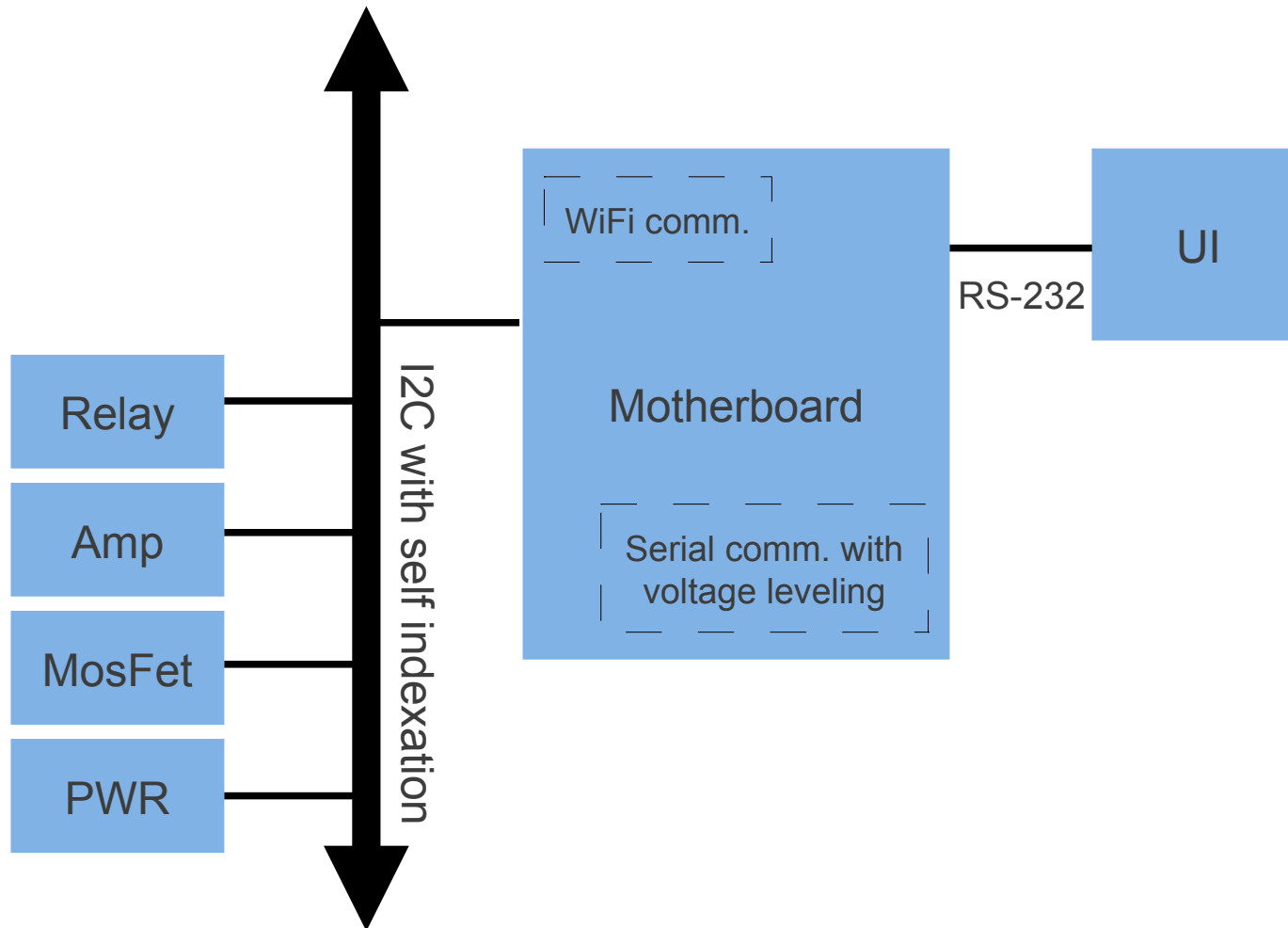
In engineering terms ...

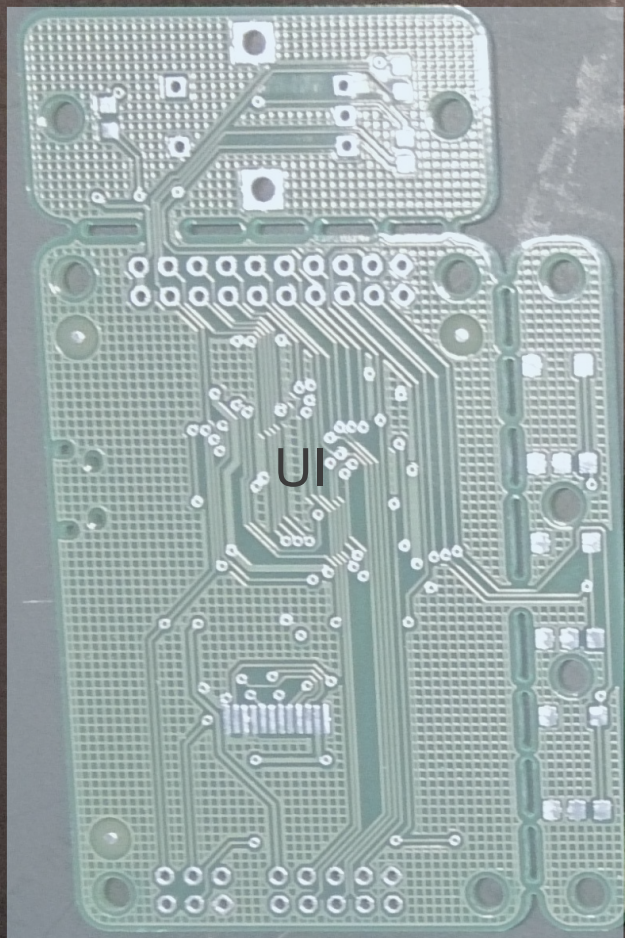


... and we are focusing on ...

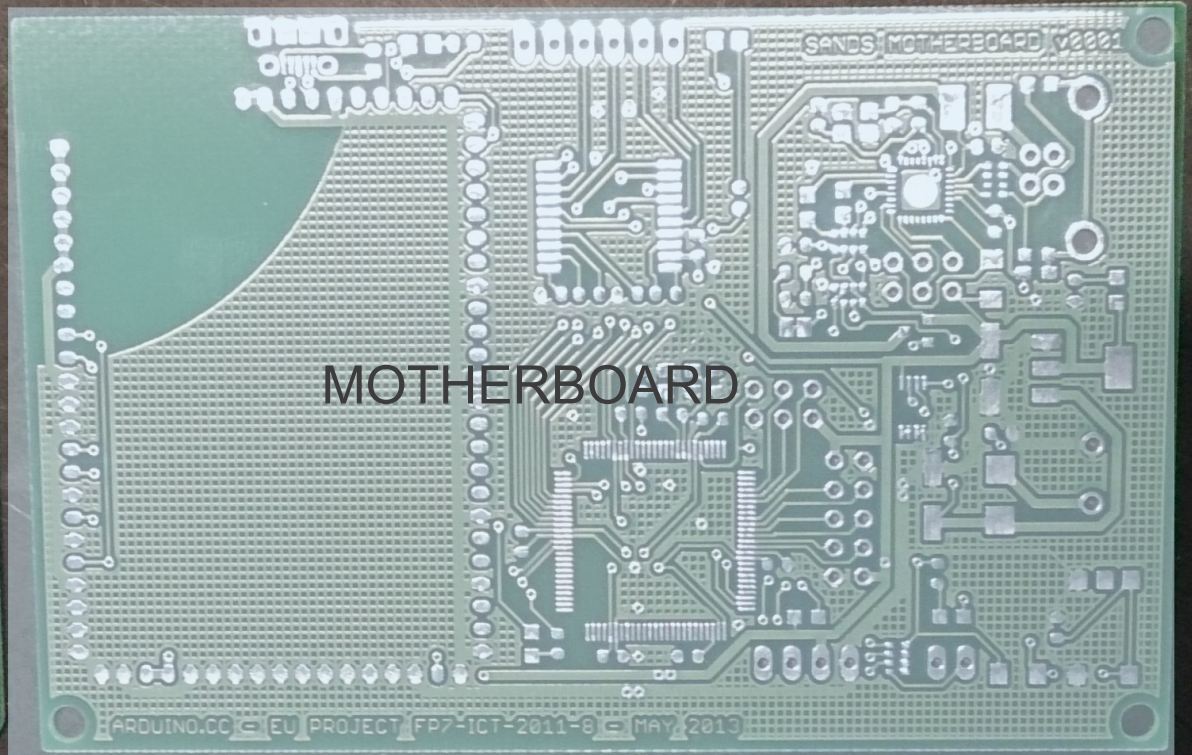


... or ...

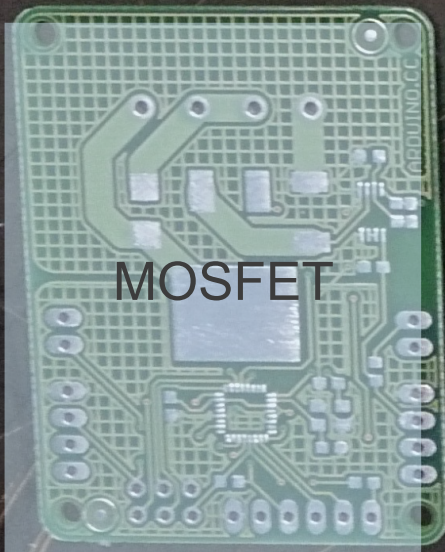




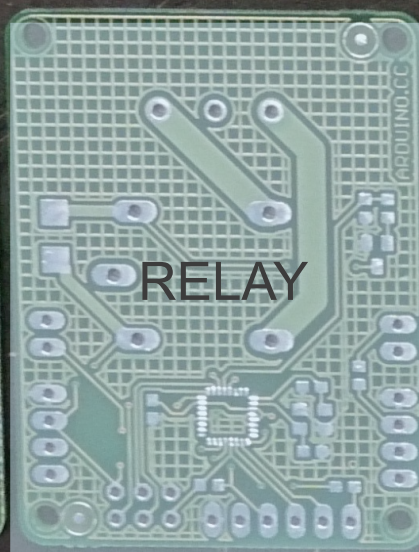
UI



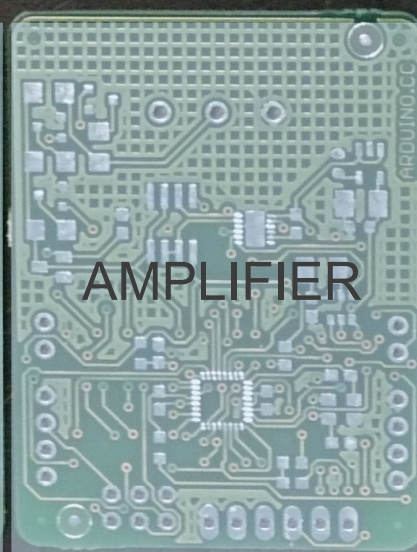
MOTHERBOARD



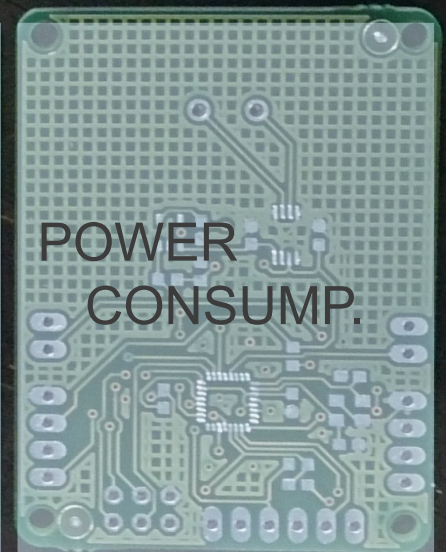
MOSFET



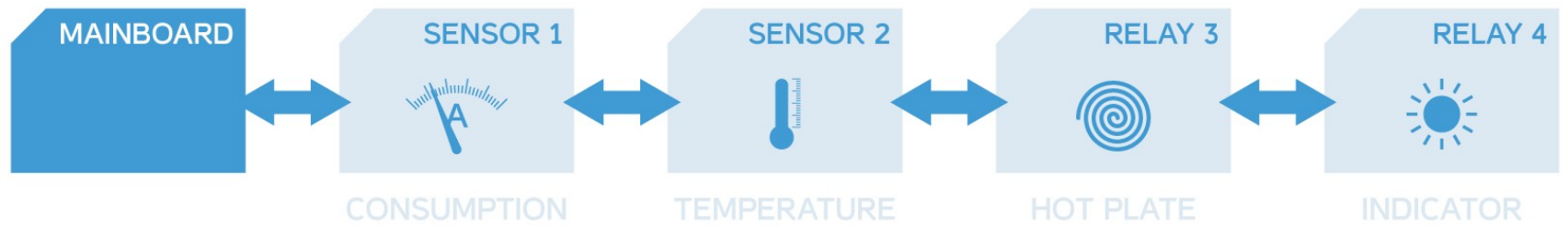
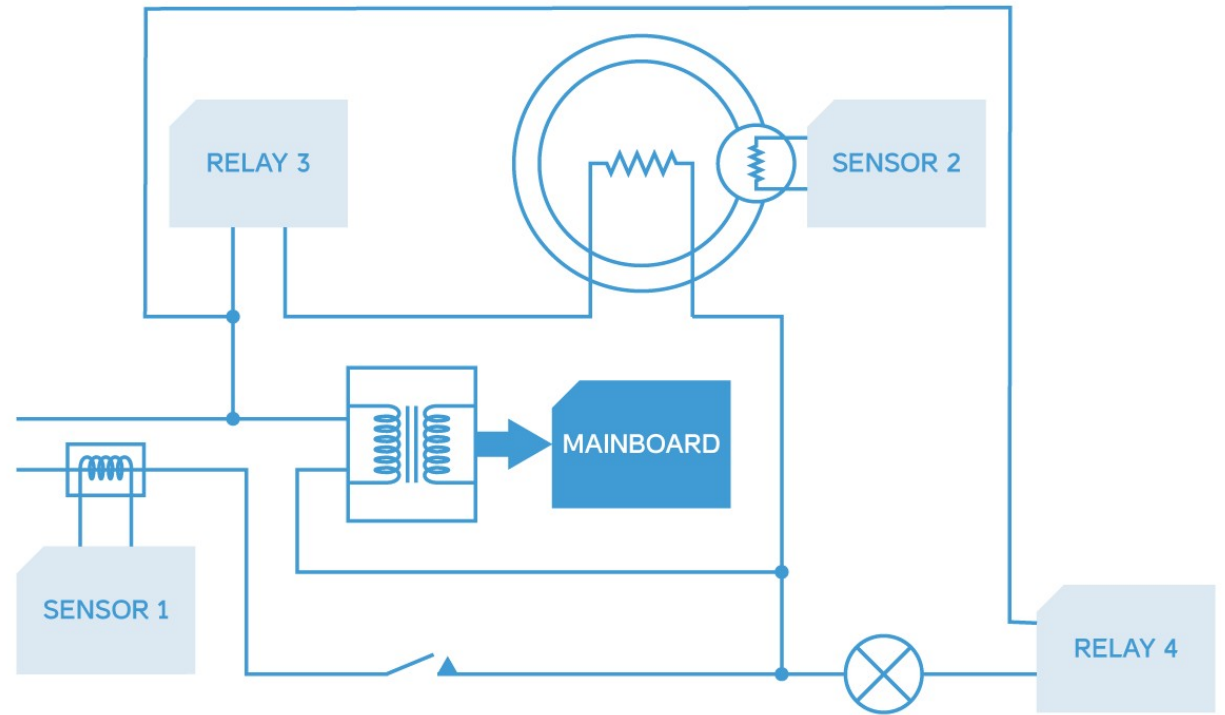
RELAY



AMPLIFIER



POWER
CONSUMP.

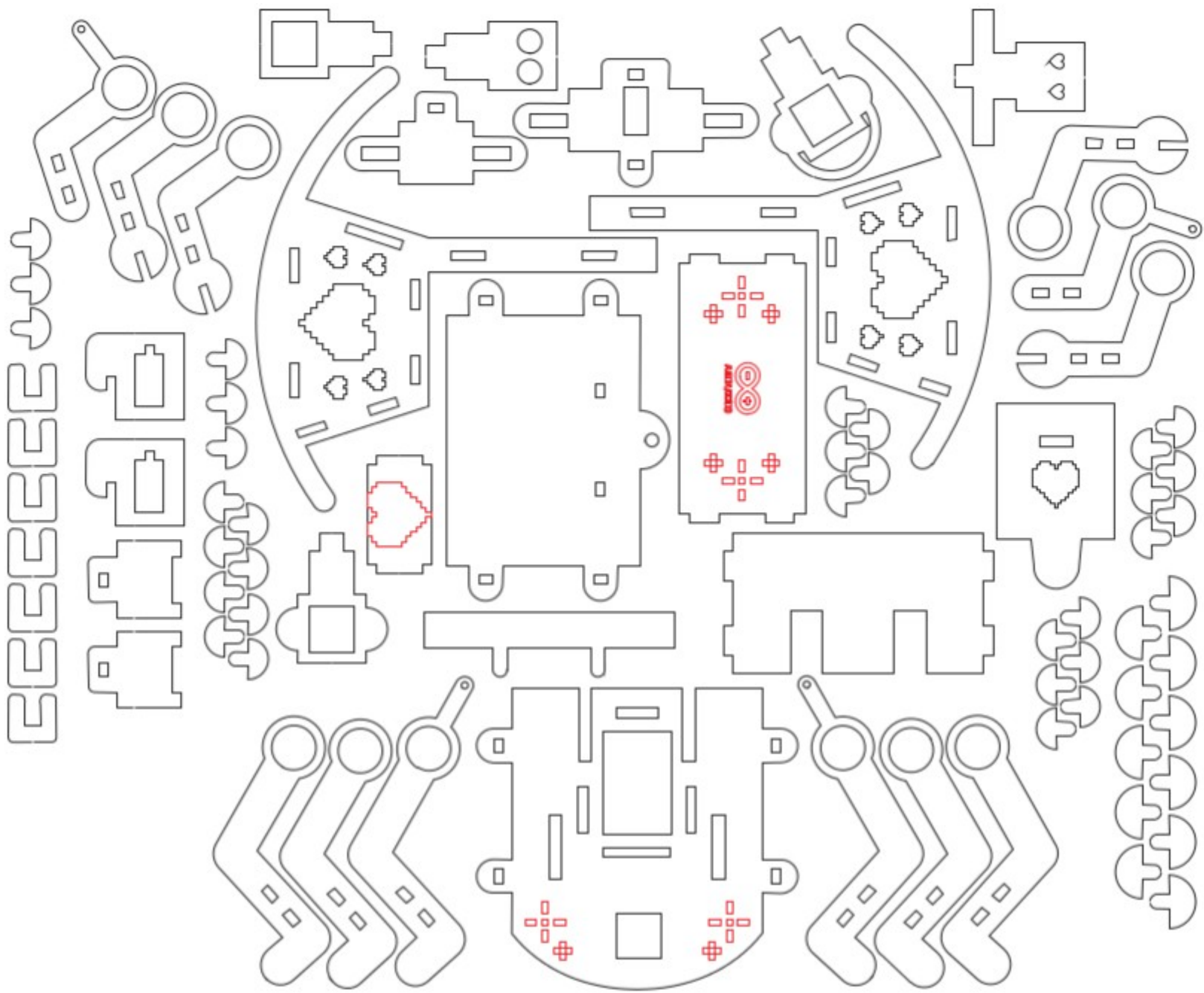


... and you know what the officer asked?

- All of these? The I2C protocol with self indexation, the motherboard, the standard protocol to get the linux part of your board to talk to the AVR core, the modules ...

... are all of those open source?

Oh yes, I forgot to tell you ...



Arduino - We do open ... stuff

