

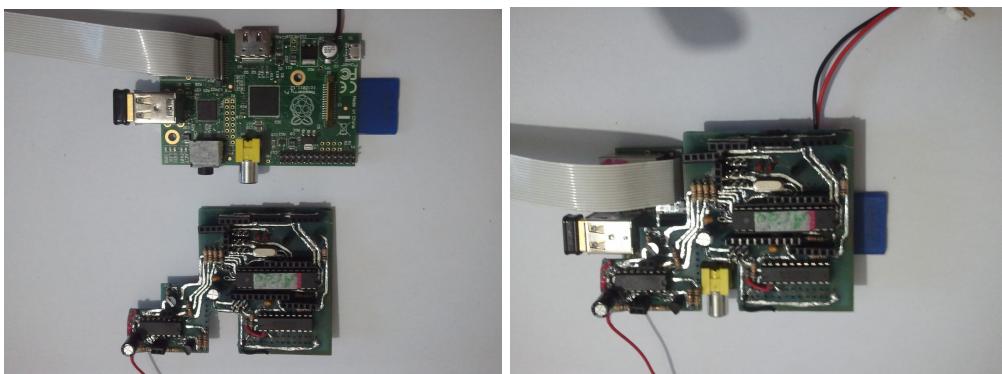


**TurtlePi**

### ***Programming and Electronics Learning Robotics kit, for students.***

TurtlePi is designed as a learning and research-experimenting robotics kit. It can be used for students from 12 year old to universities and colleges. kit is entirely modular, wide variety of sensors can be connected easily as a modules and actuators presented as a modules too. Robot contains two main board one is arduino compatible control board and another is raspberry pi computer, arduino control board is designed as shield for Raspberry Pi.

On this picture you can see Raspberry Pi computer with arduino control board.



Arduino board can be used as standalone control board, without Raspberry Pi computer and can perform low level tasks such as path planning, obstacle avoidance, line following, remote control. In addition with Raspberry Pi computer, robot gets much more complex functionality such as: object/face recognition, speech synthesis, Speech Recognition, dynamic programming and etc.

robotics kit can be controlled and programmed wirelessly,

In final design, robotics kit can be programmed with wide variety programming languages (python, javascript, c, c++, perl, c#) and visual languages like [Google Blockly](#) and [Scratch](#).

### **First Prototype**

## 1) [Video](#)



## Final Design

