Raspberry Pi

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Introduction
to Raspberry
Pi

Raspberry Pi
Specifications

Advantages
and
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Raspberry Pi
Board
Diagram

References

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- A low cost, open computer to give kids access to computers that they could experiment with.
- Can be connected to TVs and USB KB+mouse.
- Also has GPIO so can be used for robotics.
- Linux based OS, therefore transparent working. It makes it easy to understand the concepts.
- Powered off cell phone power adaptors.

- HDMI + Composite video out
- Powered off 5V, 700ma(500ma on Model A)
- 700Mhz ARM v6 Broadcomm CPU+GPU.
- 512 MB RAM (256MB on Model A)
- Boots off SD card for filesystem
- Measures 85.60mm x 56mm x 21mm (or roughly 3.37 x 2.21 x 0.83), with a little overlap for the SD card and connectors which project over the edges. It weighs 45g.

Multiple Columns

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Advantages

- A large RAM + Storage which enables us to perform more advanced algorithms
- Easy to debug.
- Easy and quick change in programs possible.
- A large number of softwares available for linux that work on the Pi
- Successful with a large number of GUI
- Network connectivity and remote access

Disadvantages

- Not Real Time
- Not advisable for those not well versed with Linux .
- No analog inputs, not protected GPIO
- Not as many pins as Arduino Uno.
- Very low input voltage tolerance (4.8-5.2V)

Raspberry Pi Board Diagram

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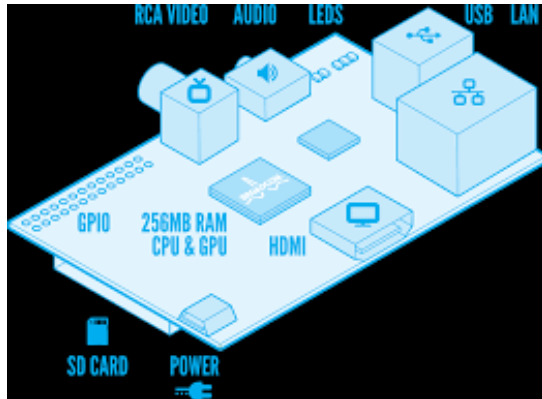Disadvantages

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References

Figure:

References

- https://www.raspberrypi.org/help/faqs/
- http://www.adafruit.com/category/105