

Assignment No.1

Aim: Study of Raspberry Pi Beagle board
Arduino and other micro controller

Theory

Study of Raspberry Pi

Raspberry Pi is a series of small single board comp developed by Raspberry Pi Foundation to promote teaching of basic computer science in school & in developing countries

A Raspberry Pi 0 with smaller size & reduced I/O & general purpose i/o capabilities was released in Nov. is for US\$ Raspberry Pi 3 model B was released in Feb 16 & has on board wifi Bluetooth & USB port capabilities. Processor speed ranges from 700Mhz to 1.2GHz for Pi3 on board memory ranges from 256 MB to 16 GB. Ram

Raspberry Pi3 Model B.

In 2006 early concepts of Raspberry Pi were based on ARMel ARM926T microcontroller. The computer is inspired by Atmel's BOC micro of 1981. The 1st ARM prototype version of computer was promoted in package same size as USB memory stick

Study of Beagle Board

The Beagle board is low power open source single board computer produced by Texas Instruments in association with Digi-Key. New Element 14. The board was developed by small team at engineering educational board that could be used in college around

Raspberry Pi 3 Model B

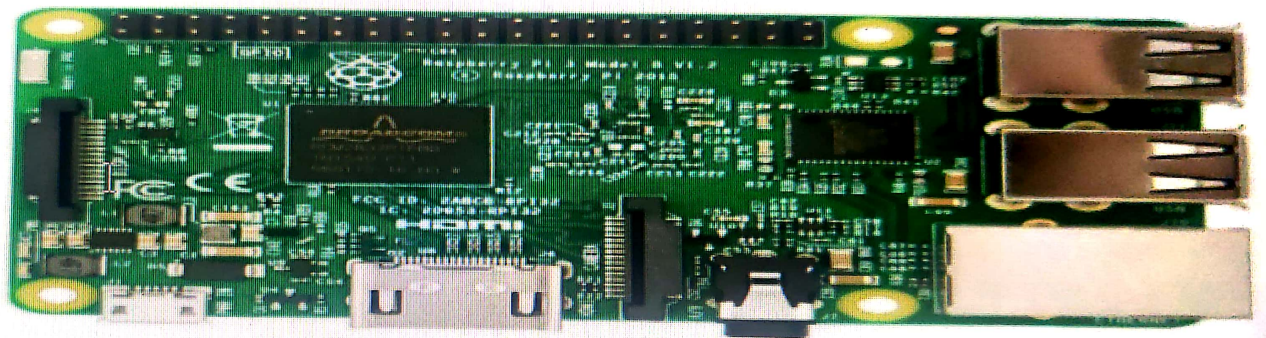


Fig.1. Raspberry Pi3 Kit

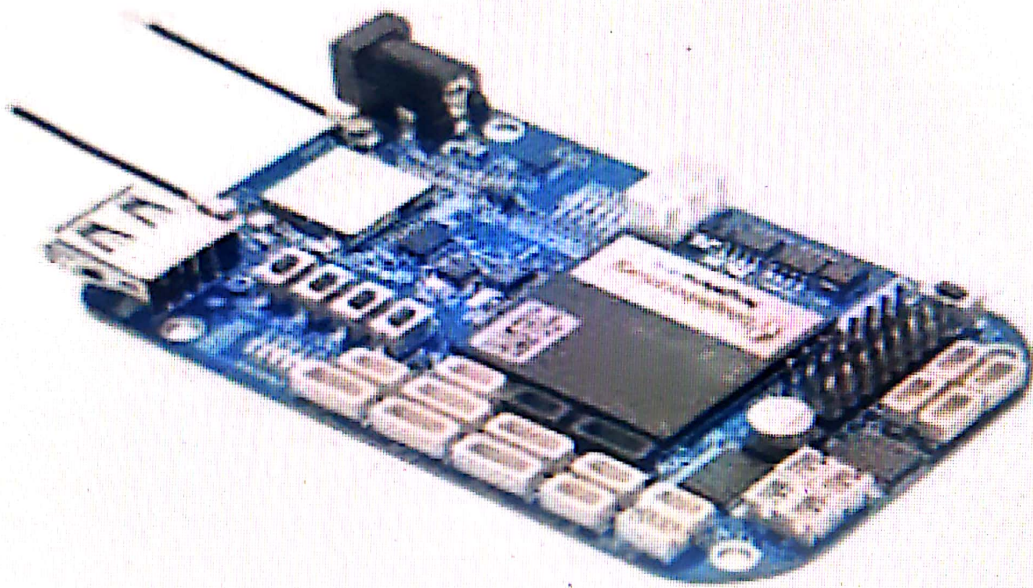
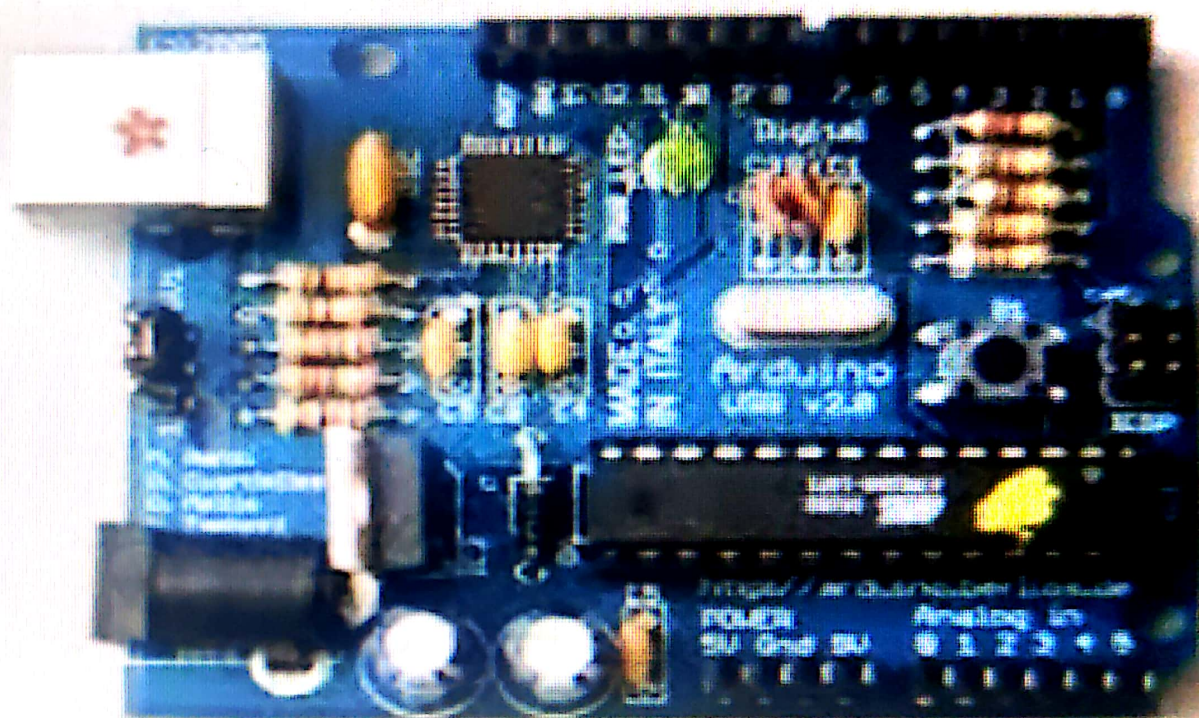


Fig.2.Beagle Bone Kit



to teach Open source HW, SW capabilities
The board was designed using cadence tools
& cadence allegro for PCB manufacturing
no simulation software was used.

Study of Arduino

- The Arduino project started at Intercom Design Institute Gurgaon
- The initial Arduino team consisted of Massimo Banzi, David Cuatrecasas, Tom Igoe, David Mellis but Barragan was not invited to participate
- Adafruit Industries a New York City supplier of Arduino boards parts & assemblies estimated in mid 2011 that over 3000 official Arduino have been commercially produced & in 2013 that 700,000 official boards were in users hands.
- In April 2017 wired reported that musk heard published his record on his company website personal listed in accounts a even an Italian business.

Conclusion

Thus we have studied history of Raspberry Pi Beagle board and Arduino.