

Arduino Development Board

Course Number : TTH2D3

CLO : 1

Week : 5-7

CLO#1 Student have the knowledge to explain microprocessor system

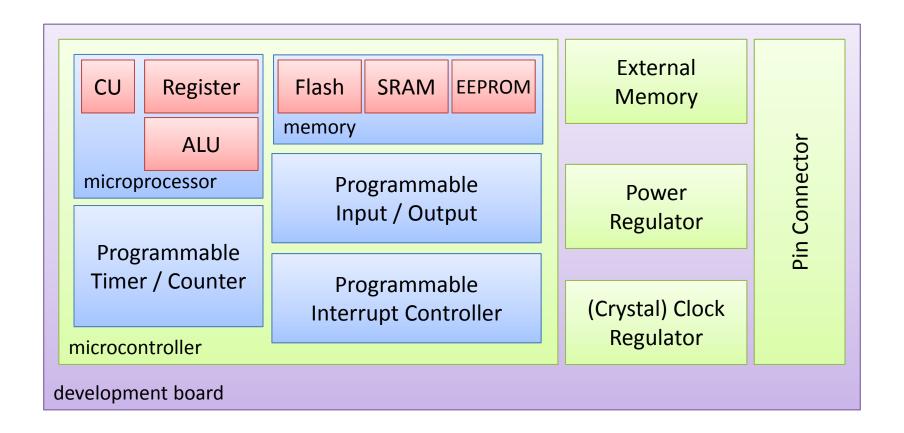
[C2] Understand the history of microprocessor and microcontroller

[C2] Understand the architecture of computer system

[C2] Understand the design of minimum system for microcontroller



What is the difference between μ P, μ C, and Development Board?





Arduino



Development Board





Arduino: Resources

http://www.arduino.cc

HOME PRODUCTS > BUY > DOWNLOAD LEARNING > FORUM MAKERS BLOG NEWSROOM > FC

http://www.arduino.org/products/boards/arduino-uno



WOULD YOU LIKE TO BUY AN ARDUINO?

Purchasing Arduino has never been easier!

Order now and start your project. Choose your Arduino from the nearest distributor or from our online store!



FIND A DISTRIBUTOR

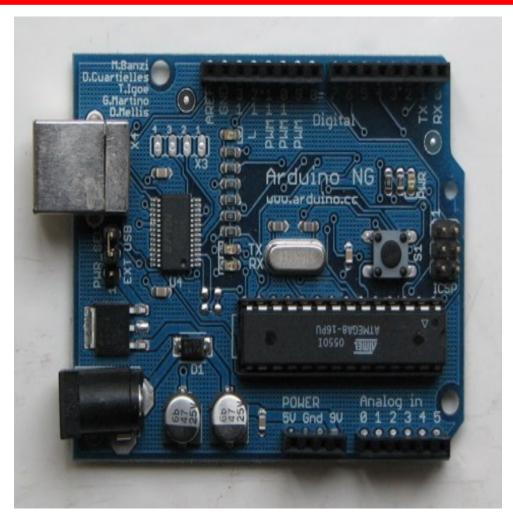
ONLINE STORE





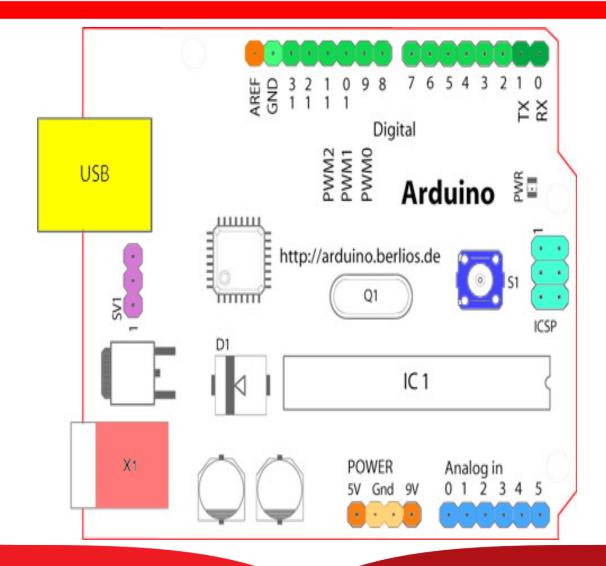
What is Arduino?

- Physical computing platform
- Open source
- "Hardware Abstracted"
 Wiring Language
- USB programmable
- Large community
- Inexpensive (\$31.95 from Sparkfun)





Arduino Board Overview





Arduino Official

Arduino boards

- Uno
- Mega 2560
- Mega ADK
- Ethernet
- BT
- LilyPad
- Fio
- Pro
- Nano
- Mini
- Pro Mini

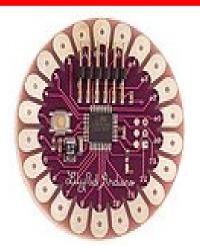
Arduino shields

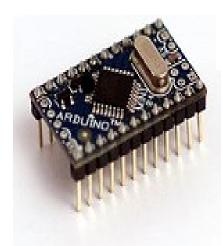
- Ethernet
- Wireless SD
- Wireless Proto
- Motor
- Proto

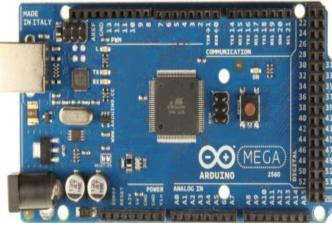


Arduino Boards





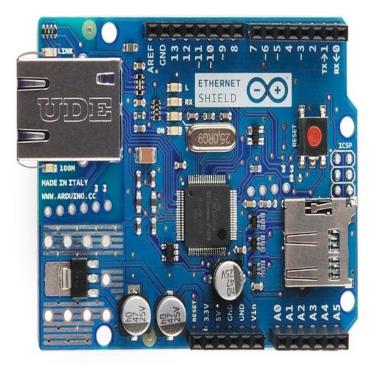






Arduino Shields



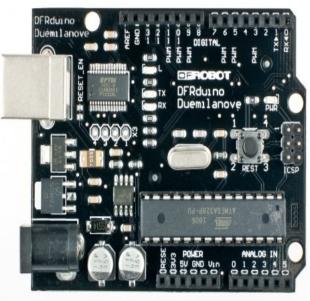




"Unofficial" Boards and Shields

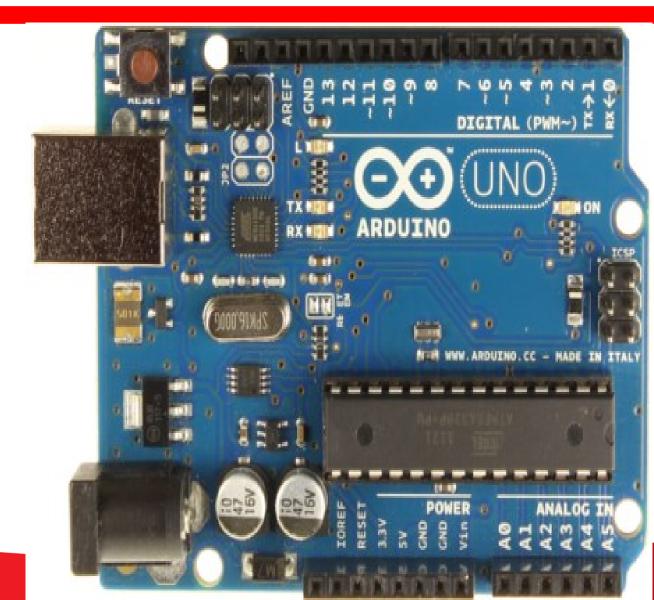
- Adafruit
- Sparkfun
- DFRobot
- Itead Studio
- etc







Arduino Uno: Physical Layout





Arduino IDE: Integrated Development Environment

```
oo sketch_jan13a | Arduino 1.8.0
File Edit Sketch Tools Help
  sketch jan13a
void setup() {
  // put your setup code here, to run once:
  // put your main code here, to run repeatedly:
                                                Arduino/Genuino Uno on COM1
```

- Arduino programming language based on Wiring (http://wiring.org.co)
- Arduino development environment based on Processing (http://www.processing.org)
- Source code = Sketches



"Official"

Arduino playground
 http://playground.arduino.cc/

Learning Arduino
 https://www.arduino.cc/en/Guide/HomePage



See you on next class