



MUFE
MARMARA UNIVERSITY - FACULTY OF ENGINEERING
ROBOTICS TEAM

Konu Başlıkları

- **Arduino Nedir?**
- **Arduino Öncesi**
- **Arduino Çeşitleri**
- **Arduino Uno**
- **Arduino Shield'lar**

Arduino Nedir?

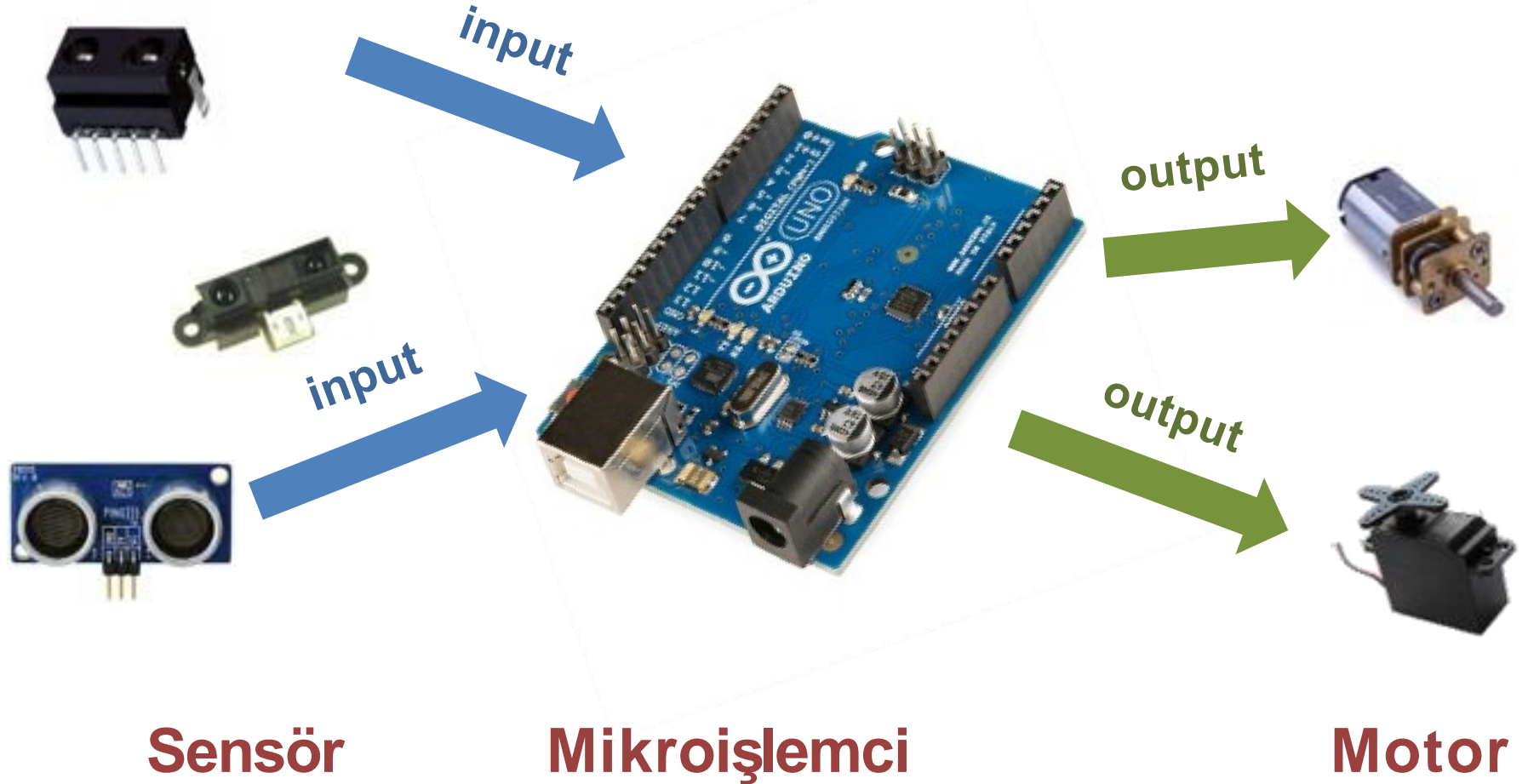


Arduino Nedir?

- Algılama
- Hareket
- Enerji
- Zeka



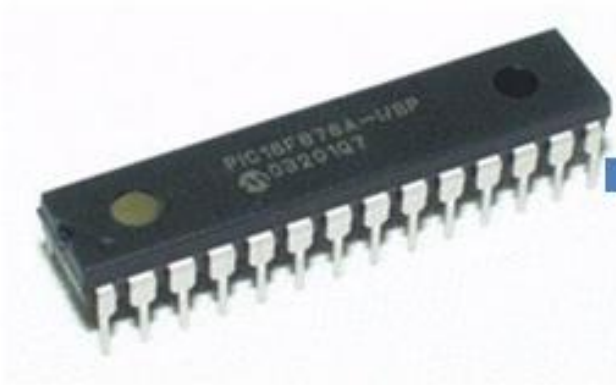
Arduino Nedir?



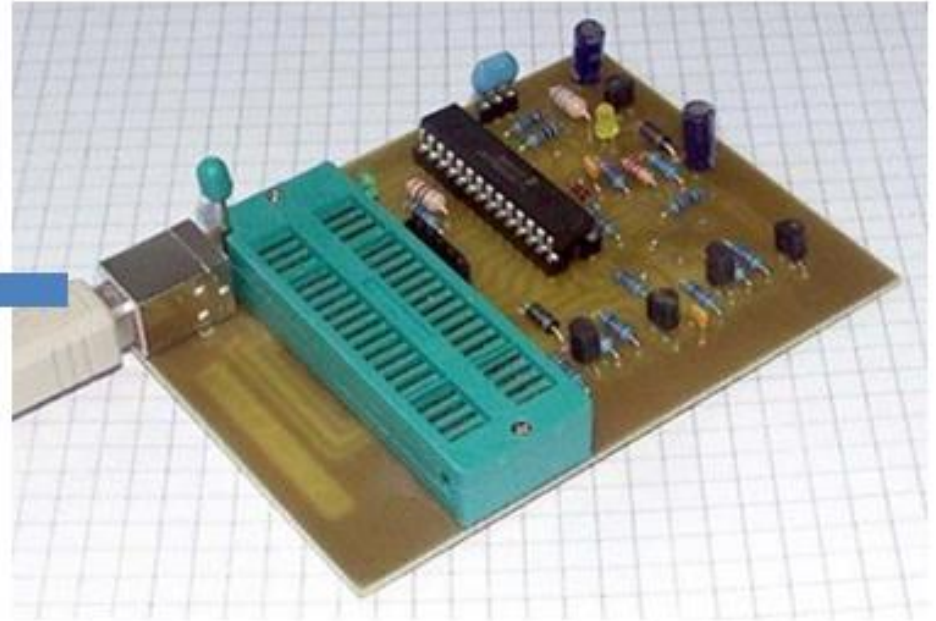
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Arduino'dan Önce

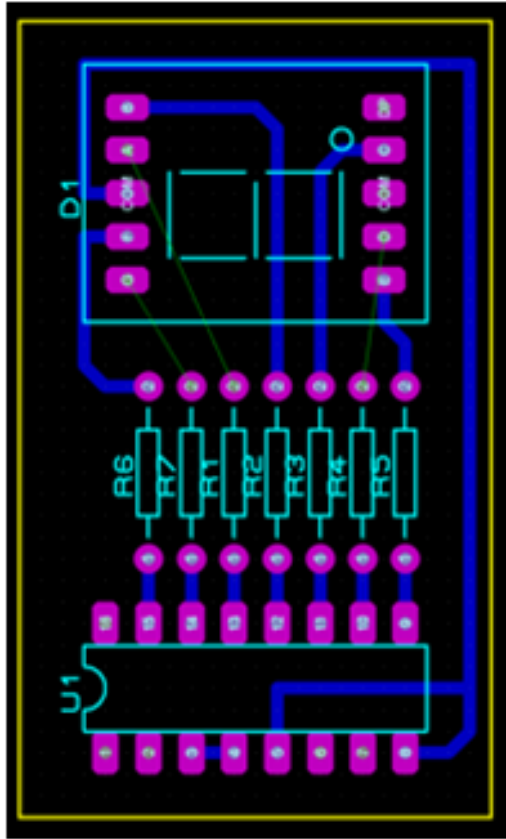


16F876A
Microcontroller

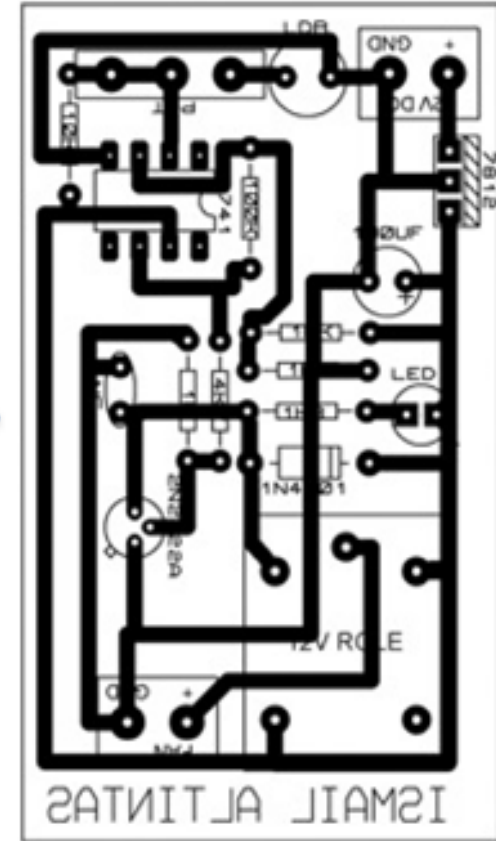
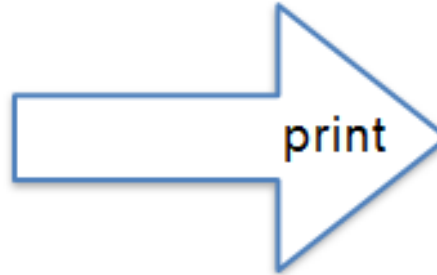


USB Pic Programlayıcı

Arduino'dan Önce

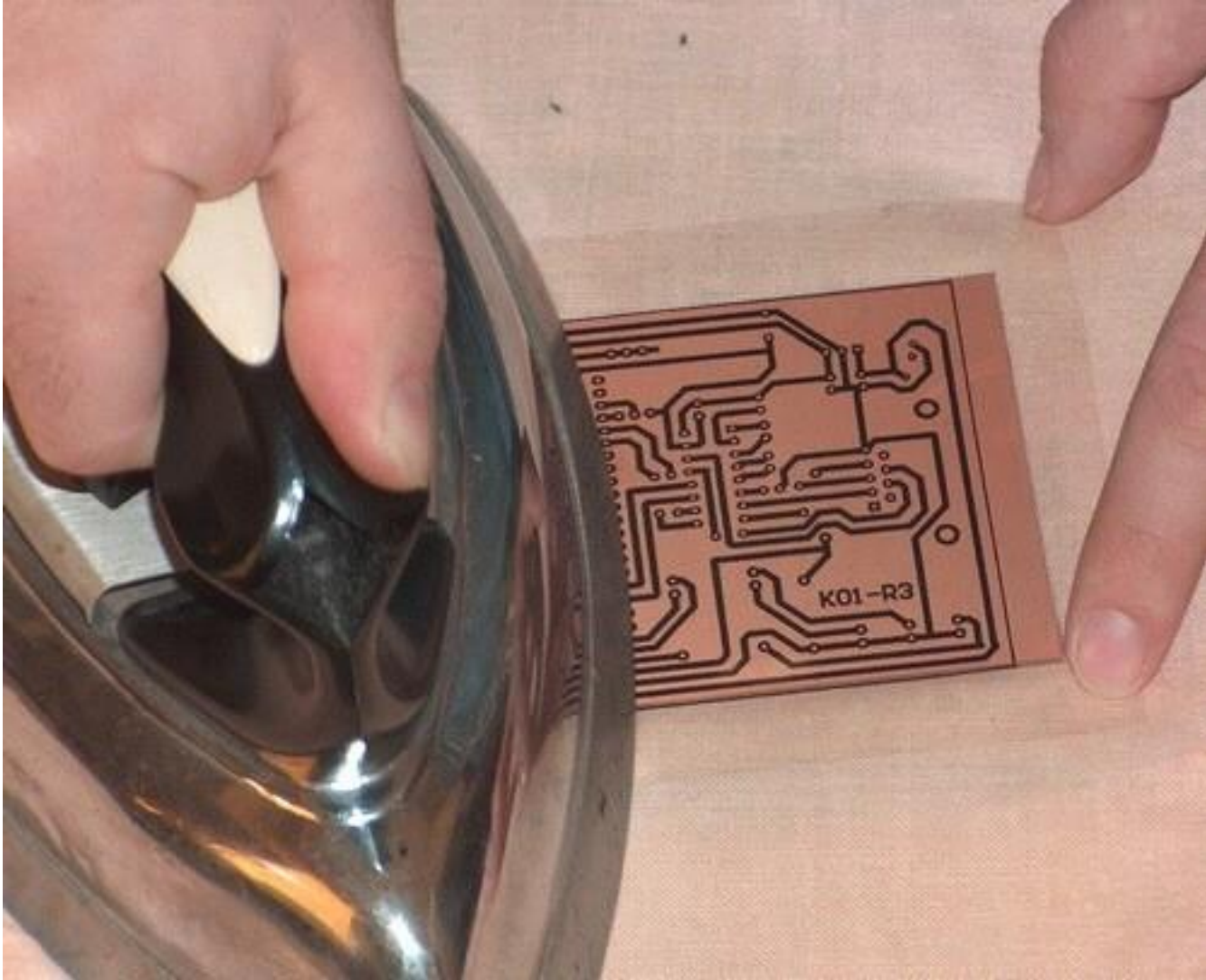


Proteus - Ares



Kağıt

Arduino'dan Önce



Arduino'dan Önce



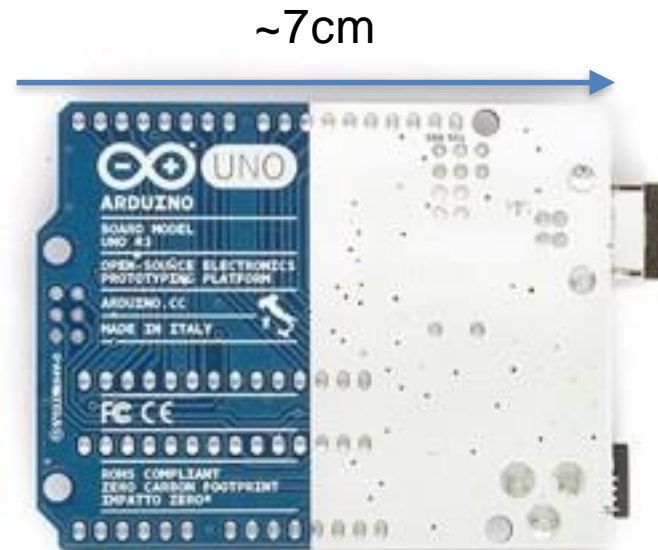
Neden Arduino?

- ★Stabilite
- ★Tasarım
- ★Kolay Kod Atmak
- ★Kolay Programlama
- ★Kaynak ve Library Desteği
- ★Ücret

Neden Arduino?



~11cm



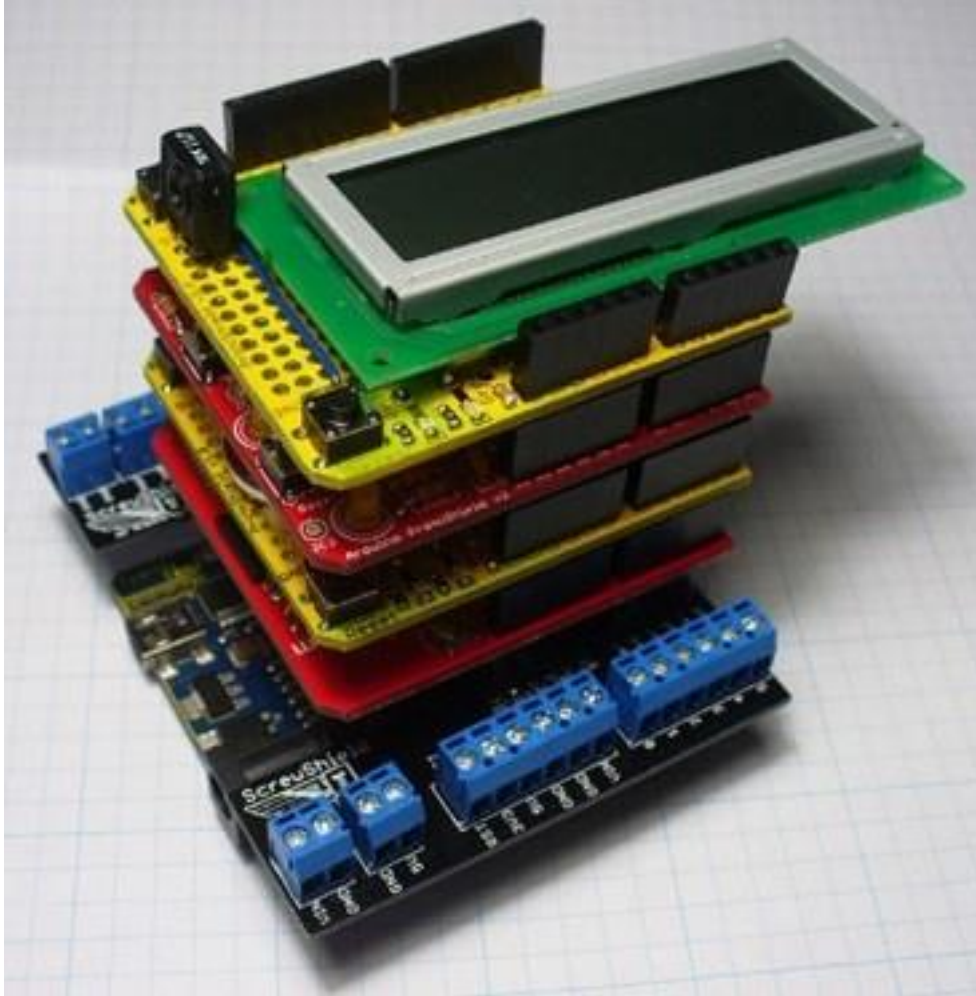
~7cm

Neden Arduino?



USB Kablo

Neden Arduino?



✳Open Source Community

✳Shield

✳IDE

✳Library

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- **Arduino Çeşitleri?**
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Arduino Çeşitleri



UNO



Mega 2560

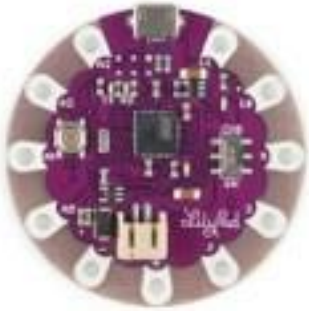


Mini



Nano

Arduino Çeşitleri



LilyPad



Esplora



Robot

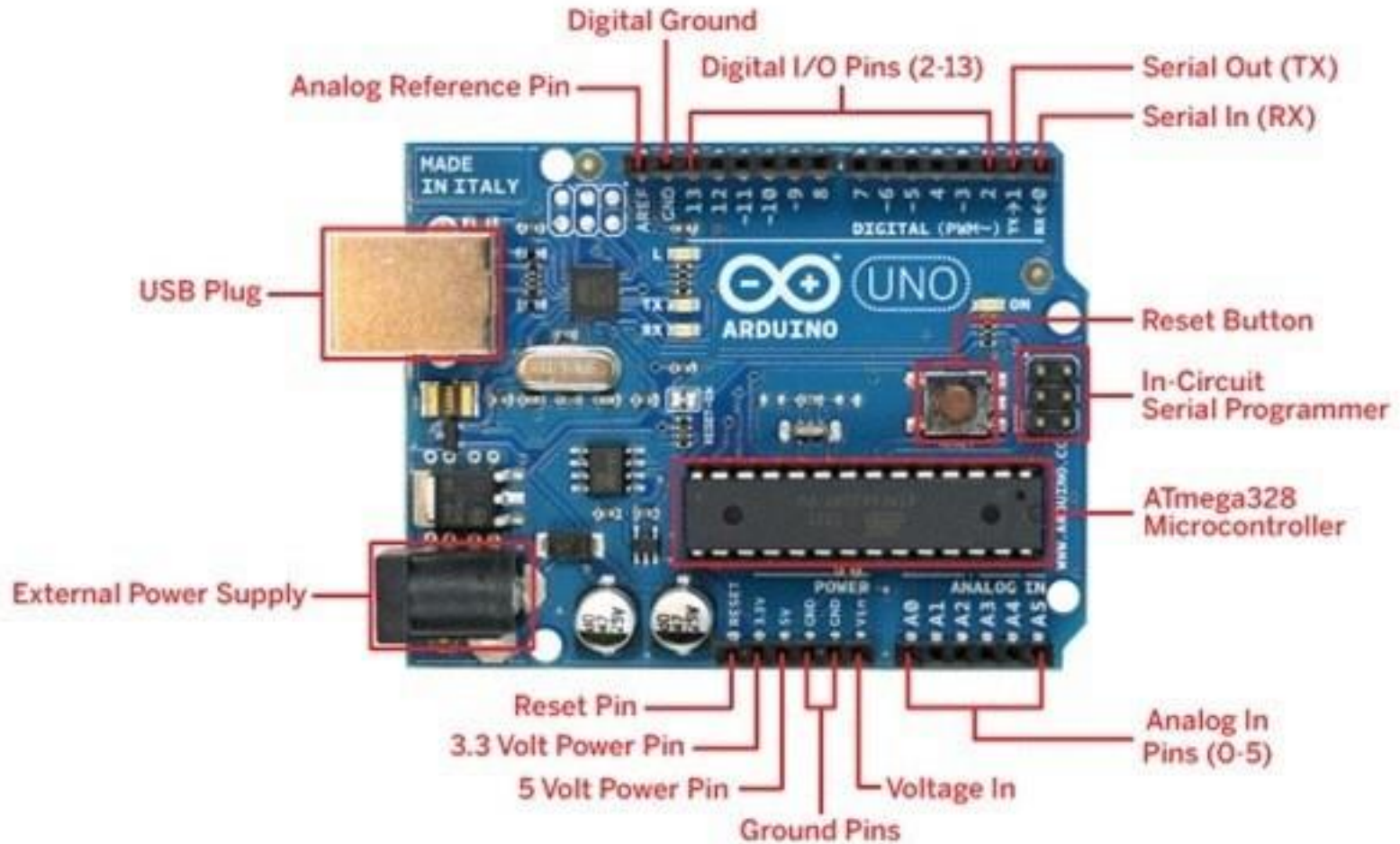


Arduino Tre

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Arduino UNO



Arduino UNO

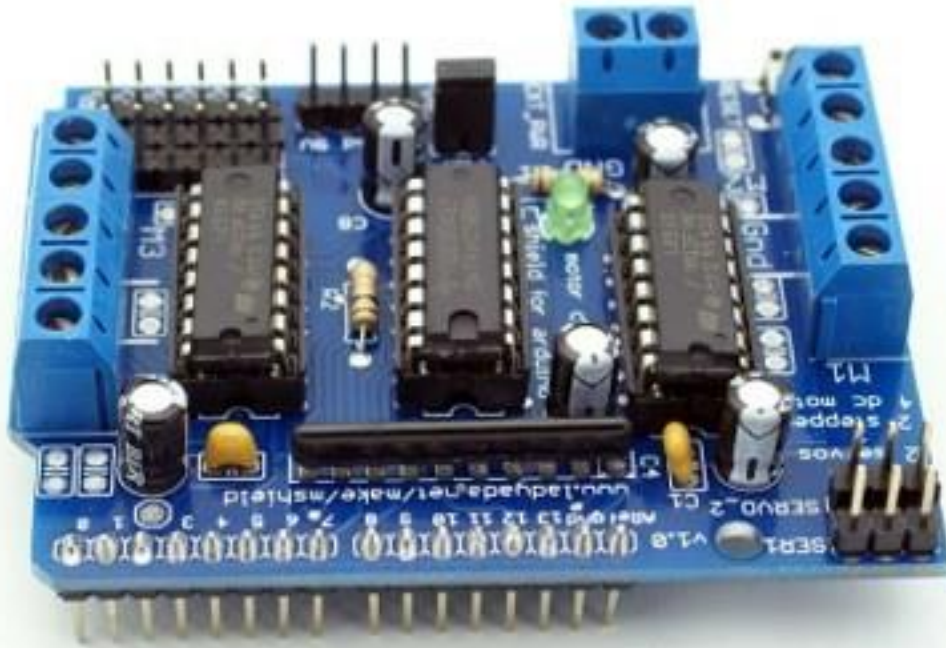
Microcontroller	ATmega328
Operating Voltage	5V
Input Voltage	7-12V
Input Voltage (limits)	6-20V
Digital I/O Pins	14 (of which 6 provide PWM output)
Analog Input Pins	6
DC Current per I/O Pin	40 mA
DC Current for 3.3V Pin	50 mA
Flash Memory	32 KB (ATmega328) 0.5 KB used by bootloader
SRAM	2 KB (ATmega328)
EEPROM	1 KB (ATmega328)
Clock Speed	16 MHz



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Arduino Shield'lar



Motor Shield



Proto Shield

Arduino Shield'lar



GSM Shield



Wifi Shield

Sorularınız?