1. **What is IoT (Internet Of things)?**

The Internet of Things (IoT) refers to interconnected devices that communicate and exchange data over the internet, enabling remote monitoring, control, and automation of various systems and processes.

2. Arduino Uno?

The Arduino Uno is a popular microcontroller board based on the ATmega328P. It features digital and analog I/O pins, USB connection, power jack, and easy-to-use programming via the Arduino IDE.

www.eTechnophiles.com
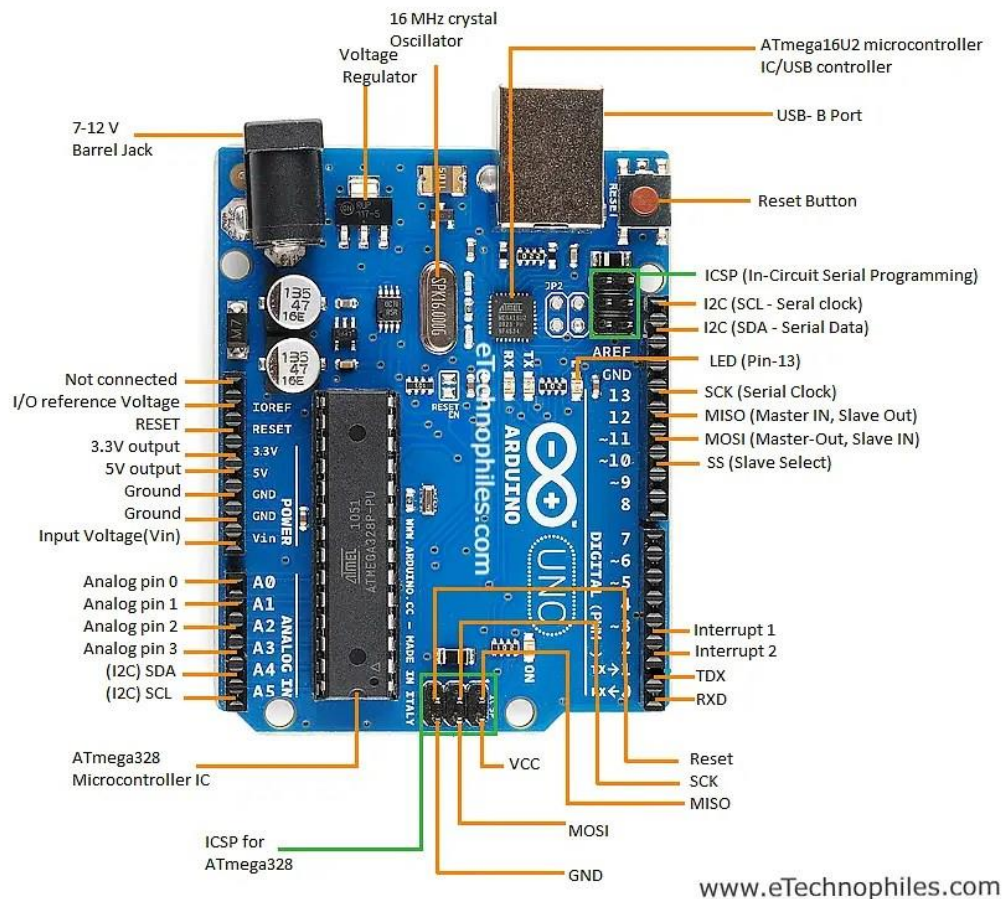
3. Arduino Uno PIN Configuration?

The Arduino Uno has a variety of pins for different purposes:

1. Digital Pins (0-13): Used for digital I/O operations.

2. Analog Pins (A0-A5): Used for analog input.

3. Power Pins:

   - 3.3V, 5V: Power output.

   - GND: Ground.

   - Vin: Input voltage to the Arduino when using an external power source.

4. PWM Pins (~3, ~5, ~6, ~9, ~10, ~11): Digital pins with PWM (Pulse Width Modulation) output.

5. Special Pins:

   - RX (0) and TX (1): Serial communication.

   - AREF: Reference voltage for analog inputs.

   - Reset: Resets the microcontroller.

These pins allow the Arduino Uno to interface with a variety of sensors, actuators, and other electronic components.

4. Sensor Integration?

Exploring different sensors and their roles in weather monitoring.

1. DHT 22 Sensor: The DHT22 is a digital sensor for measuring temperature and humidity, offering high accuracy and reliable data for various applications.
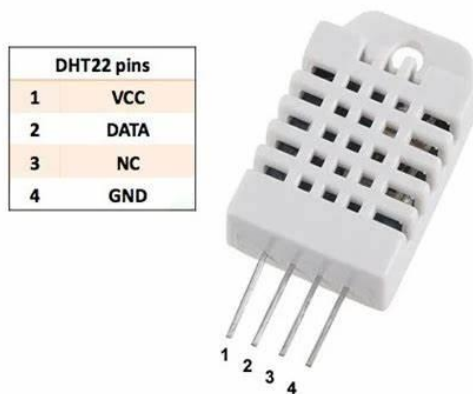
2. MicroSD Card Module: The microSD card module enables Arduino to read and write data to a microSD card, useful for data logging and storage.
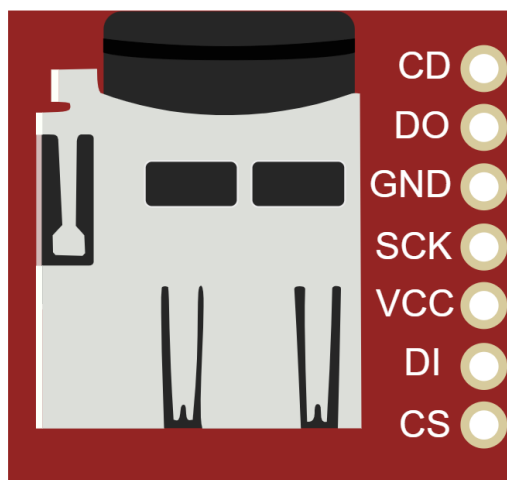
Pin names

Name	Description
CD	Card detect *
DO	SPI data output (MISO)
GND	Ground
SCK	SPI clock
VCC	Voltage supply
DI	SPI data input (MOSI)
CS	Chip select