

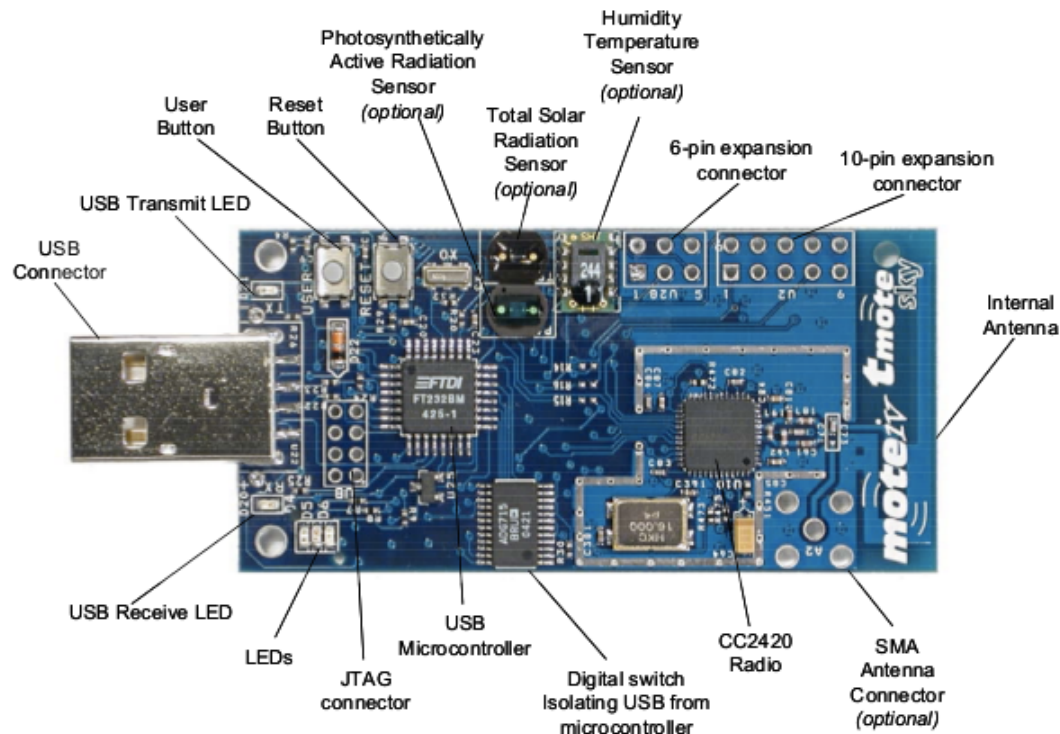
Actuation & Control Overview

Hardware Platforms in Contiki OS

- Through the previous tutorials, you already know how to write a Hello World application, and run it via the terminal or as an emulated Tmote Sky node in Cooja
- In fact, when running the Hello World application, a Tmote Sky node is an IoT node that only has a simple printing “Hello World” functionality
- Contiki supports many hardware platforms, and Tmote Sky is one of the most representative ones, so we introduce it next, as most of our exercises will run on this platform in Cooja

Tmote Sky Mote

- Platform for extremely low power, high data-rate sensor network applications
- Integrated sensors, button, actuator(LEDs), radio, antenna, and microcontroller capabilities



LEDs, Buttons and Timers

- Actuators and controllers are important parts of IoT hardware, and there are many types of actuators and controllers
- LEDs and buttons are integrated on the Tmote Sky, and Contiki OS provides timers for triggering events
- LEDs represent a kind of actuator, and buttons and timers are two types of controllers
- Next tutorials will show you how to write simple applications using LEDs, buttons and timers