

Embedded System Technology

- **Topic**
- **1. Embedded System**
- **2. Embedded Processor**
- **3. Embedded Boards**
- **4. Power Supply**
- **5. Signal Levels**
- **6. Analog/Digital Signal**
- **7. Development Ecosystems**
- **8. ADC/DAC**
- **9. Basic environment sensors**
- **10. UART, SPI, I2C ,RS232**
- **11. Display**

Embedded System

- What is an Embedded System?

An embedded system is a product which is controlled by a computer inside it, but whose overall function is not computing.

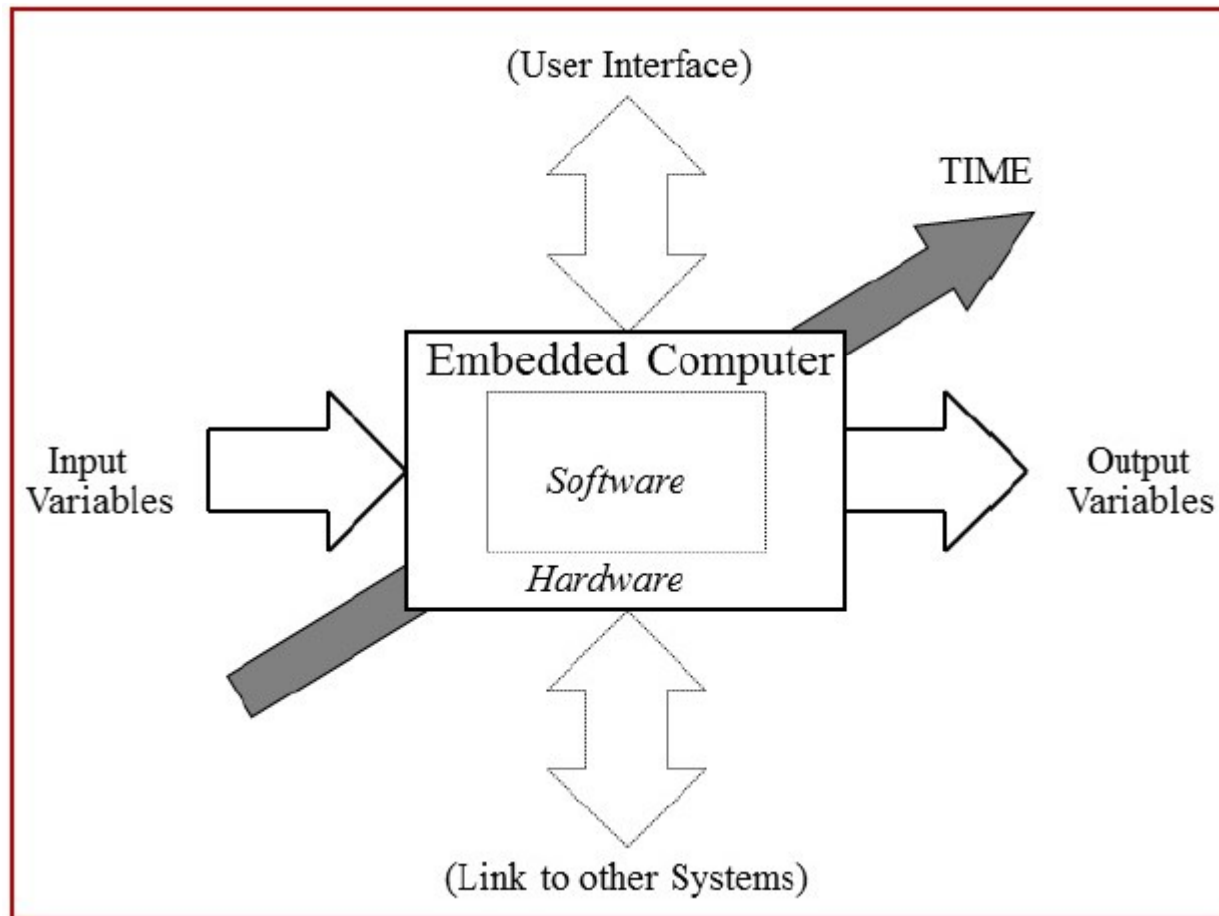
- Example

washing machines

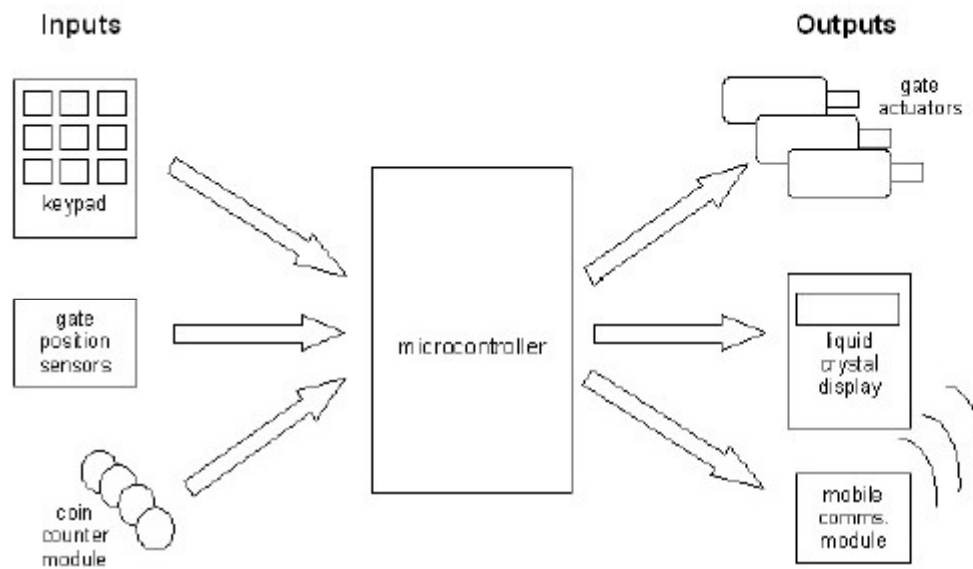
office equipment

car engine management

Embedded System

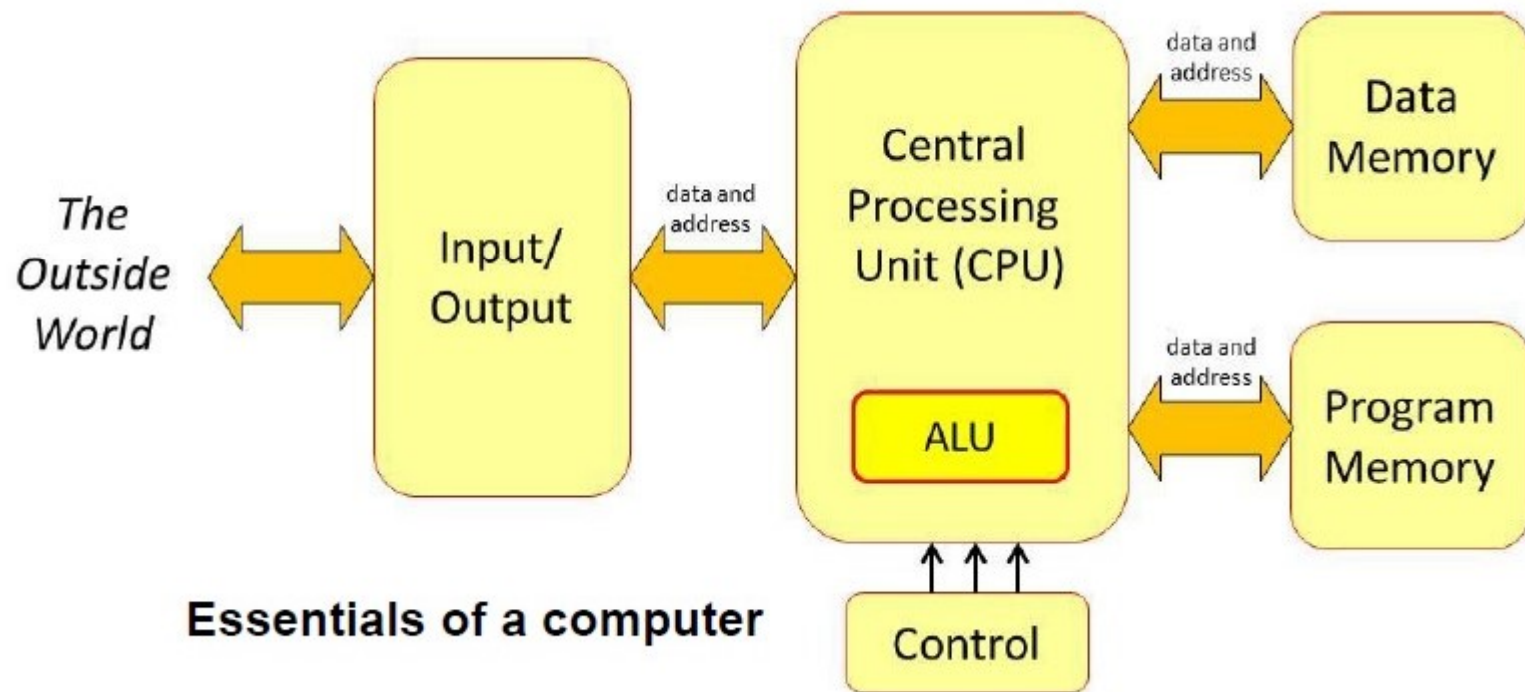


Snack Vending Machine



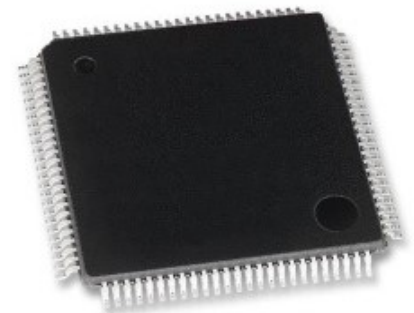
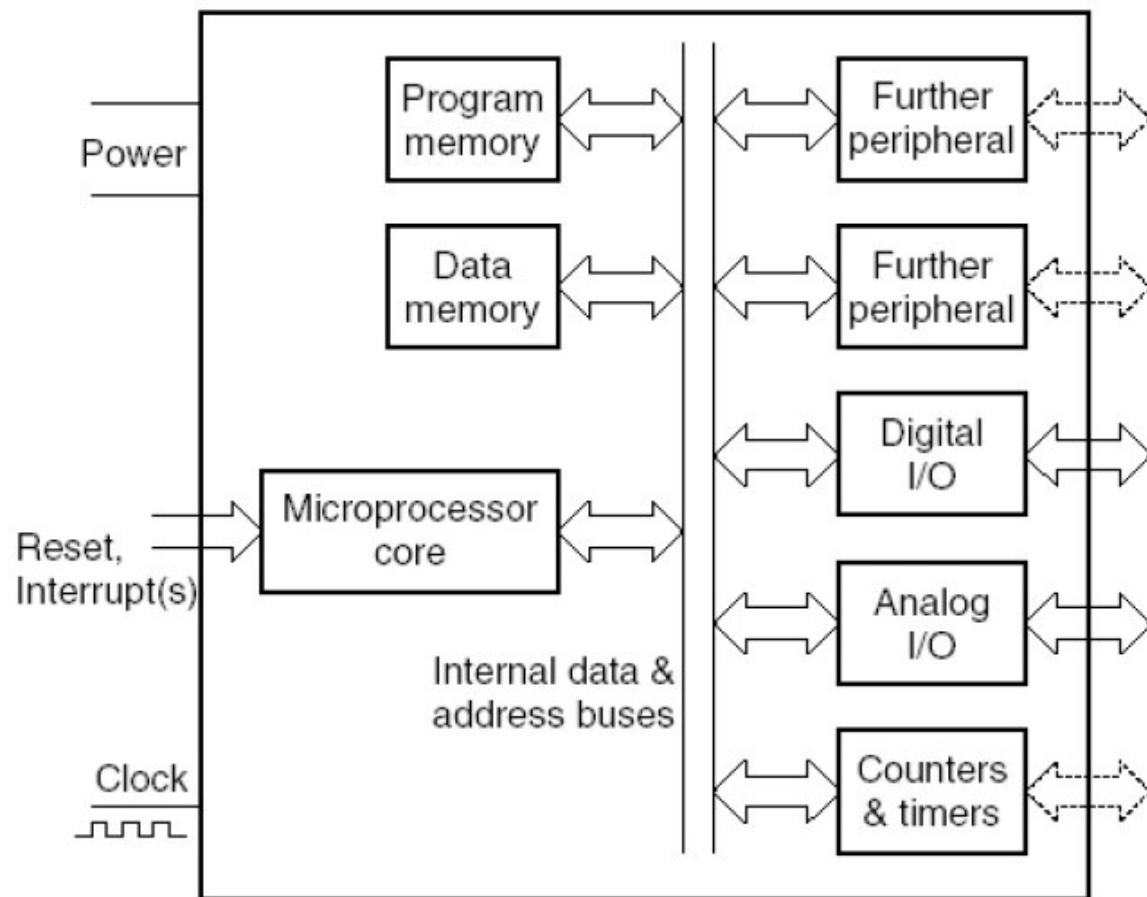
Computer and Microcontrollers

- Computer System

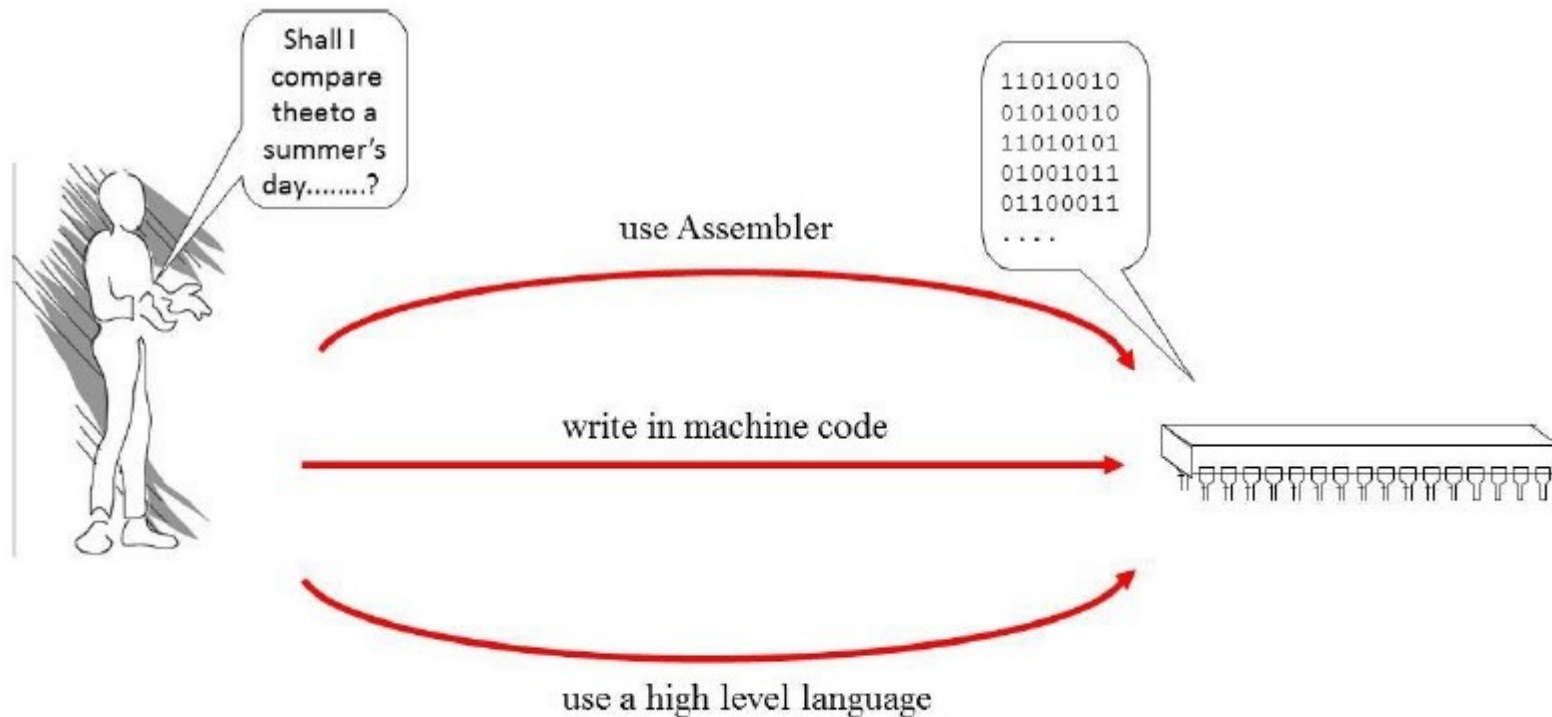


Computer and Microcontrollers

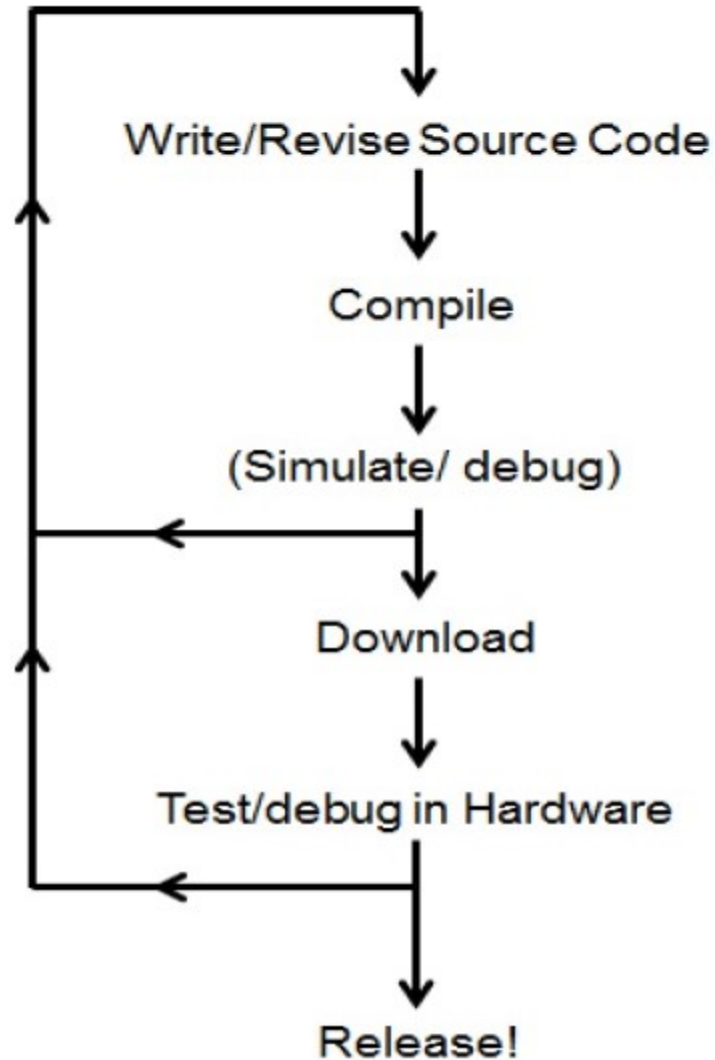
- Microcontrollers



Development Processes



The Development Cycle



Assignment #1

- อธิบายทำงานของ Segway Personal Transporter