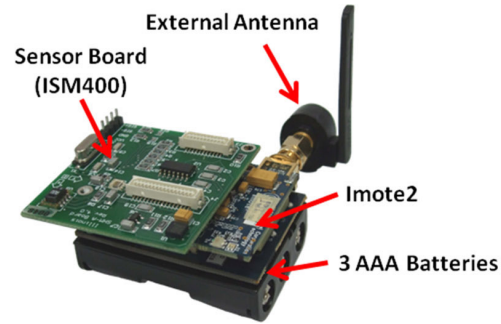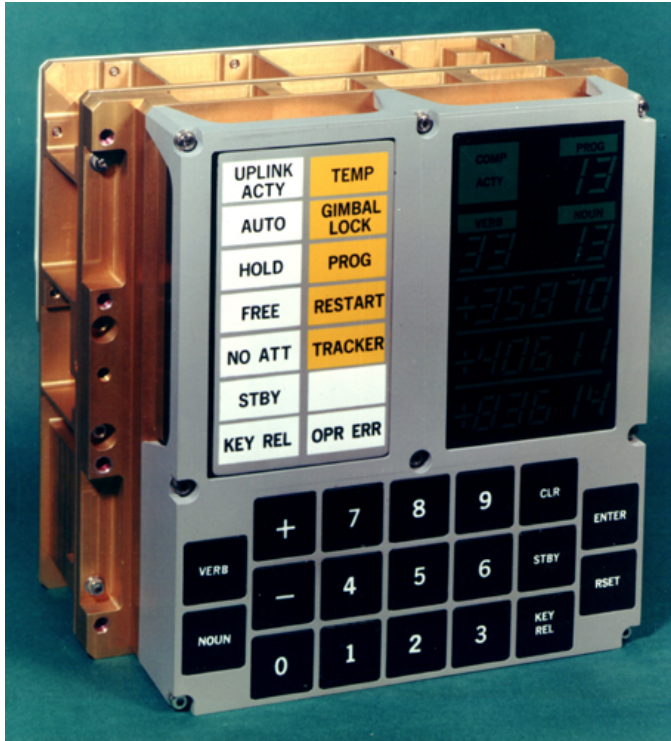# Embedded Systems

Definitions?

An embedded system is generally a **computational system** that has a **dedicated function**, has r**eal time constraints**, and is **deployed**.
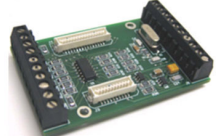
Which one is an embedded system?
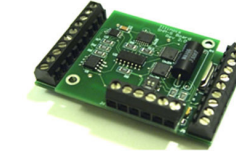

* Accepted Answers: Both, neither, either

More traditional embedded systems

Sensor Board (ISM400)

External Antenna

Imote2

3 AAA Batteries

High Sensitivity Acceleration (SHM-H) board

Data Acquisition (SHM-DAQ) board
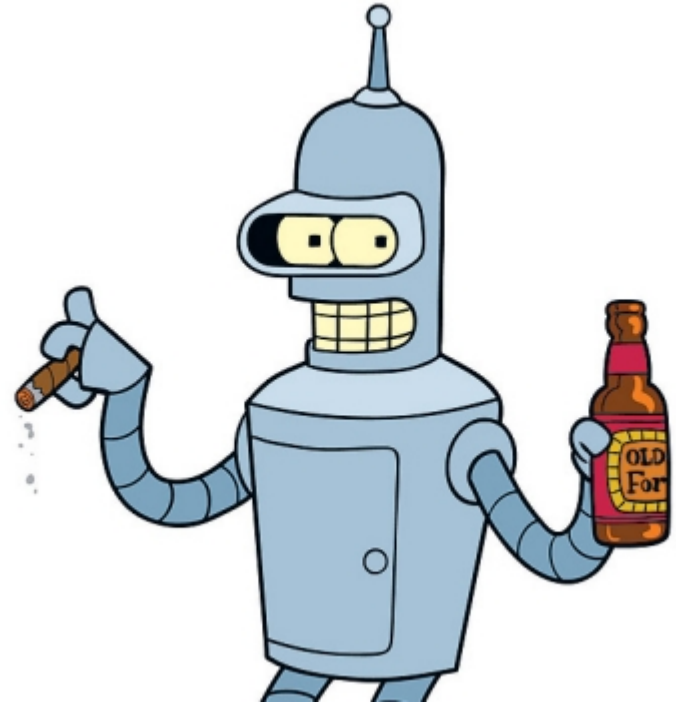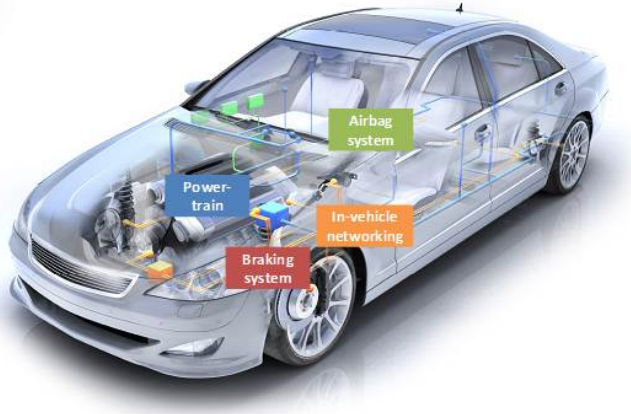
Strain (SHM-S) board

Wind Pressure (SHM-P) board

More traditional embedded systems

What components make up an embedded system?

Power Supply Management

Computation Core

Program / Data Memory

Processor

Timers / Interrupt Controller

GPIO's

Communication Bus: SPI, I2C

Analog (DAC, ADC)

Sensors

Comm (RF) (Bluetooth)

External Memory

Mechanical Components (Motors, Rotors, Solenoids...)

User / Application Interface
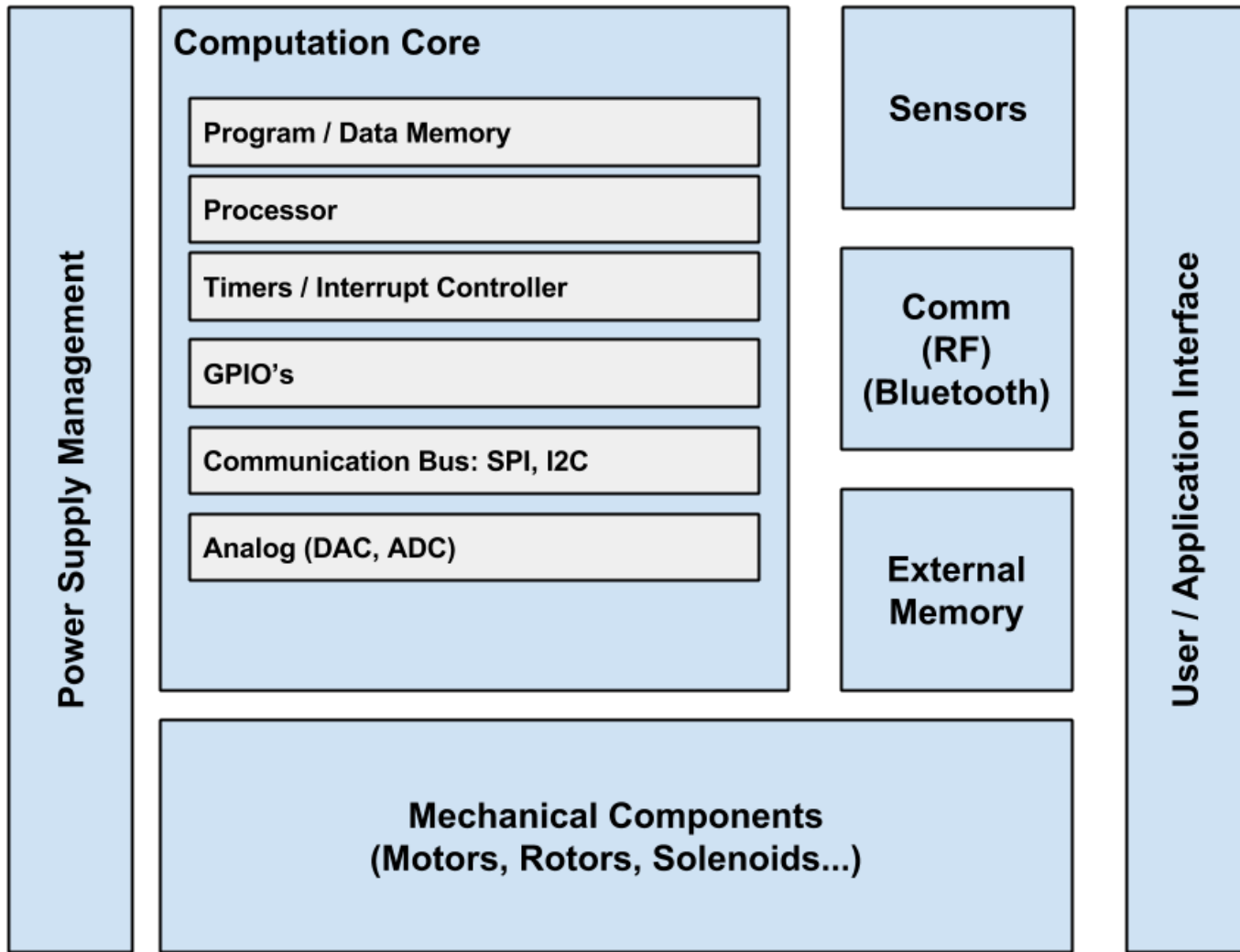
Class Activity:
Design an Embedded System

Wildlife tracking, small animals, what are the tradeoffs?

Activity monitoring?

Assignment, Homework...

- Deliverable #1 has been assigned
  Due Sept. 3rd

- Readings have been assigned

- Install Energia and make it work