

Wireless Sensor Node Design

Wireless sensor networks are enabled by low-cost, compact, integrated, and low power sensors and radio transceivers. They represent a key technology supporting growth of the internet of things.

A typical wireless sensor node incorporates a power supply, a sensor, signal conditioning circuitry, and a radio transceiver.

Sensor networks find application in many fields including building automation, civil infrastructure monitoring, industrial monitoring, environmental and wildlife monitoring, and health care including assisted living.

The objective of the project will be to design and implement a set of sensor nodes suited to an application such as assisted living. The focus of the group will be on designing sensor elements and signal conditioning circuits that will be implemented on custom designed printed circuit boards and tested.