

Smart IoT Parking wireless Sensor - For Smart Campus Project

Abstract:

One of the fundamental requirements from a Smart Campus Transportation implementation and deployment is the ability of the campus to take responsibility and globally manage the traffic as whole inside the campus physical boundaries. This management should then serve both campus applications (such as events organizations or security needs) as well as guests that enters or plans to arrive. This can be achieved by improved monitoring and ability to supply on-line valuable information gathered from Internet-of-Things (IoT) sensors and gateways that are installed all over the campus area.





Goals:

- Develop Smart Sensor Driver (see below in green). The driver will indicate to the Wireless Control Unit (Yellow) when car is present in parking slot or not. The implementation must be reliable and prevent false alarms.
- The driver will work in polling mode i.e will poll the sensor in a pre-defined time (default: 1 min).
- The driver will be implemented on TI low power micro-controller (MSP430xx family) using IAR embedded workbench.



Requirements:

Basic Networking Course, Real time Programming

Guided By:

