

Design and Implementation of Embedded Telemetry System for Moving Vehicle Performance Monitoring

This project is concerned with design and implementation of both embedded microcontroller and telemetry systems for mobile vehicles performance monitoring. To accomplish this;

First, is to design and implementation of wireless digital communication transceiver system (telemetry system) for wireless data link. This project is intended to provide a practical framework to design and realize wireless digital communication system. Frequency shift keying technique and others are to be investigated and utilized for designing the transceiver. A computer simulation and hardware implementation of FSK, ... are to be carried out.

Second, an embedded microcontroller system is to be designed and implemented to acquire, interface, and process data from various analog and digital sensors. Real time recorded data are to be stored on external storage devices while being transferred wirelessly to another ground/mobile station.

Visualizing and displaying recorded/transferred data are to be carried out in the integration an assembly phase.