ABSTRACT

Toll road pricing system that originally implemented by now are use a manual system which had weakness. The weakness especially is the congestion at the entrance and exit toll gate and loss of time efficiency.

To finished the problem, it is need to design an automatic pricing system based on RFID at the entrance and the exit toll gate.

The design are propose to make the pricing system could do more easily. The systems are designed based on RFID which connected to microcontroller that uses AT89C51 and a personal computer with a Borland DELPHI programming based application. The use of RS232 and RS485 are to provide a serial communication between the microcontroller and personal computer that use COM1 port with 9600 bits per second data transfer speed.

Keywords: RFID, Microcontroller, Borland DELPHI, Serial Communication.