ABSTRACT

Indonesia is a very densely populated country. With population growth every year, of course, population activity will also be even denser. The denser population activity in Indonesia, of course, is very dependent on transportation. This is because transportation is very important to facilitate human activities. One of the transportation that is often used by the community is train. This cannot be separated from the advantages possessed by this one transportation facility. Apart from its effectiveness, trains are also a fairly affordable means of transportation. A significant increase in the number of passengers must of course be accompanied by increased comfort for passengers. One of the ways to increase comfort for passengers is by providing the information needed by passengers in each car.

Telecommunication facilities as a means of conveying information are one of the obligatory means of rail-based mass transportation. This information is displayed on the PIDS (Passenger Information Display System). PIDS (Passenger Information Display System) is a digital information system that displays real-time information to passengers. so it is very important to design the On-Board Passenger Information Display according to the needs of passengers based on Ethernet communication.

Therefore, the aim of this final project is to design and make PIDS which functions to provide information in the form of train name, train number, carriage number, current position of the train, and the station the train is going to use GPS, Microcontroller, Micro SD Card Ethernet based communication.

Keywords: PIDS, Microcontroller, GPS, Ethernet.