

ABSTRACT

One of the technological developments in the automotive field is the presence of the On Board Diagnostic-II (OBD-II) which facilitates the transfer of data from the Engine Control Unit (ECU) which has sensors that regulate the car's electricity such as RPM, temperature, ignition, transmission and whatnot. Communication between ECU and OBD-II requires a protocol where each protocol standard varies depending on the type and type of vehicle itself.

Damage to the vehicle is a condition that is certain to occur. This is caused by several factors, and to find out the factors that cause damage to the vehicle takes a long time. In this study a system was built that can be used by the driver to determine the condition of the vehicle and can diagnose and determine the condition of the vehicle. Implementation of OBD-II can also be linked to Internet of Thing (IoT) where data recorded by OBD-II can be typed into the cloud server. The parameters recorded between are Load, Temperature, Speed, RPM, and Throttle. Data that has been read is then stored and sent to cloud domainesia in the database.

The process of recording data can be done but there is a difference in the value obtained between the serial monitor and the database on each parameter. As with Load has an average value of 1.2 with a standard error of 0.39 for temperature parameters having an average value of 0.46 with a standard error of 0.22 for RPM and Speed parameters having an average of 45,9 km/h and 2.73 km/h and standard error 16,99 and 0,83 and for Throttle parameters have an average of 1.16 with a standard error of 0.33.

Keywords: On Board Diagnostics, Database, Engine Control Unit