ABSTRACT

Vehicles are not spared from the accident. Accidents caused by many factors such as the driver's negligence in driving, poor road conditions or the poor vehicle condition. Accident have adverse effect to ourselves and the other driver. According to Police Chief Regulation of the Republic of Indonesia Number 22 Year 2009 regarding Traffic and Road Transportation article 204, paragraph 2 "Motor vehicles must generally be equipped with technology update traffic accidents to the central control system of traffic safety and road transport", so the police need a tool that can provide an update will be an occurrence of the accident.

In the forensic process required data from vehicles and data from the environment around the scene. The data is deemed necessary to obtain a fact on the incident or accident experienced. The data will be obtained by making scenes, interviewing witnesses and observing environmental conditions. Therefore, support data is very much needed for an investigation or forensic process

So with the LIDAR for forensic applications can help to know the causes of the accident. In this case, the LIDAR sensor that will be used is v.3-Lite LIDAR sensor, the sensor has a range of 0-40 m this is fits to detect a distance to the other vehicle. To detect the occurrence of an accident or collision then used ADXL Accelerometer sensor 345 and a Honda Mobilio RS to get the data recording OBD-II. Data from the sensors will be acquired by a board that uses Arduino MEGA 2560 and will be stored using the SD card.

Keywords: *Accident, Forensic, LIDAR, OBD-II, Accelerometer, SD card*