

## ***ABSTRACT***

Consuming alcoholic beverages is one of the driving causes accidents. Breath analyser is a device that can detect alcohol levels in the body through the breath. The use of such devices is only used during a police raid drunk driver. Ignition Interlock Device / Breath Alcohol Ignition Interlock Device (IID / BAIID) is the development of a breath analyzer device that combines a breath analyzer device with the vehicle ignition lock system. This tool as a workaround to avoid the driver in a drunken condition.

In this final project will be made BAIID device that will be installed in the car. How it works is if the BAIID device driver has a high alcohol content then the driver can not start the car ignition system, if the driver's alcohol content is low then the driver can activate the ignition system of the car.

In designing BAIID can detect levels of BAC (Blood Alcohol Content) is detected on the breath of the driver's mouth to the distance between the mouth of the sensor up to 4 cm. The reading sensor has an average error of 3.793%.

**Keyword: Alcohol, BAIID, BAC**