

## ABSTRACT

Internet of Things (IoT) is the new era of computational intelligence that links every device in the world. One of things that's needed in IoT is an embedded intelligence in microcontroller which function as processing brain. However, the intelligence implementation of microcontroller is still limited in intelligence processing of data sensor to do specific action.

The purpose of this research is developing smart device to be able to establish a connecting to the internet using 3G network and system intelligence to register automation in the server.

The smart device that have been made able to automatic connected to 3G network through sim card detection. In addition, can registration to the server and able to get database allocation compatible with device ID. The result of the testing device is the time needed to *sim card* detection is 0.46 second and the connected to the internet is 17.961 second.

**Keyword : Internet of Things, Micocontroller, 3G Module, Smart Device, Intelligence System**