

## ABSTRACT

Many obstacles that are often encountered in daily life - days. No exception too, to the vehicle important which hurry up and race against the time. For example is a fire engine. Where such vehicles must be capable of proper time come where the incident (fire). Although already equipped with a siren for help open the road, but it is not unusual for this kind of vehicles stuck in traffic or queuing at a red light (in the traffic light stopped). And narrow the time owned by the vehicle can be wasted with useless, just because it was trapped in the traffic light queue.

So this project is realized in a prototype tool that can automatically adjust the traffic lights to avoid traffic jams and traffic light queues of the firefighting vehicles, which must to maximize their short time. This things are consists of four main parts. First, the arrival of fire trucks detector (RF transceiver Rx), then the signal transmitter on the car body of a fire engine (RF transceiver Tx), microcontroller that will regulate traffic light, and a prototype of traffic light. Where arrangements were made with the system interruptions resulting from reception of data on the RF transceiver  $R_x$ . So that, the fire engine are able to minimize the time that always wasted on the way to their destination or fire.

Keywords: microcontroller, RF transceiver, Automatic Traffic Light.