ABSTRACT

Traffic jam is one of problem usually found in big city. The traffic light are the

solution to resolve about traffic jam. But, the timing of traffic light that are not in accordance

with the condition will also cause a traffic jam. Currently, set of the time of traffic light still do

in traffic light is located.

On this final project, is created a sistem that can remote the traffic light. To easily

programing controller sistem, we used sistem on chip namely Intel Galileo. In the order to

increase range from PC to sistem on chip, the connector used is Ethernet cable, then it could

be improve the range. In the order to increase the number of controller, PC and Sistem on chip

are connected to Switch device, and then control Sistem on Chip based on IP Address.

On this final project, Grapchical user interface for remotely traffic light controller is

successfully add new setting for traffic light controller. Time is entered into the GUI

successfully run by Intel Galileo. In emergency mode setting, GUI successfully to send a

command to turn on the green light on the track desirable. Size of data sent from the GUI to

every one intersection which has four lane is 26 Byte and size of data sent from the GUI to

every one intersection which has three lane is 24 Byte. The time required to perform the

delivery of the GUI to intel Galileo approximately one second.

Keywords: Traffic light Controller, Computer, Sistem on Chip, Graphical User Interface

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