ABSTRACT

There are so many home activities that must be done to keep it looking clean and tidy, especially on luxury housing. Obviously we can not do everything alone as it can be imagined how much time is spent for a very large house. Home automation system is starting to be applied now and are very helpful in the housework of course. Especially at the time wanted to open and close the garage door and set a garden lamp turn on or off. Residents just press a button on the remote and everything will be realized. Lots of components contained in the tool, but the very act is the RF transceiver.

In this tool there are two series of transmitter and receiver circuits. Transmitter circuit made originated from a pushbutton input is active low as connected with the ground. Input will be processed on ATMega-8535 using the language and will issue outputan BASCOM on TX and RX ports in accordance with the pushbutton is pressed. The output of the TX and RX ports ATMega-8535 can be directly connected with the RF tranceiver because it has a TTL. Then the RF tranceiver RF Transceiver will transmit to the receiver. At the receiver circuit, the data entered on the device receiver RF Transceiver will be processed by the microcontroller ATMega-8535. Then the output will yield 0 or 1 on a certain port and would give orders to the load.

Final Project In this writer make "Planning and Implementation of Home Automation System Using Microcontroller-Based RF Transceiver". It is hoped that these tools can work well and can support the passage of home automation at the elite and make the State of Indonesia is more advanced. Keywords: RF tranceiver, AVR Microcontroller ATMEGA8535, BASCOM (Basic Compiler)

Keywords: Light Emitting Diode (LED), Power, Photodetector, AVR Microcontroller ATMega8535, Liquid Chrystal Display (LCD)