ABSTRACT

DC motor is one of motor type which could be operated using DC voltages source. The industrial world that growth so fast need more electrical motor to support. The industrial process, both DC motor and AC motor.

This final project presents uses motor DC for aplication speed control of DC motor in order that mobile robot can straight walk at same voltage and different rotation, with uses Optocoupler function as detect motor's rotation and Pulse Width Modulation (PWM) will get speed of right motor and left motor and fuzzy logic control is implemented on a personal computer, while the program is made in Pbasic at Basic Stamp.

The testing result showed that with a = 5, b = 5, x = 0.8, y = 0.6 will get right motor's PWM = 70 and left motor's = 252 so mobile robot can straight walk.

Kata kunci : DC Motor, Optocoupler, PWM, Fuzzy, Basic Stamp.