Abstract

DC motor is given voltage DC motors that moving by changing the electric voltage into a continous rotation motion . Continuous movement in motor speed was influenced by the voltage level that entered on the motor so it can generate the speed of rotation that we want. But a large motors required an additional circuit as a special driver in order to generate a bigger voltage and a bigger current .One way to get a large voltage was by using a *DC to DC converter* ..

DC to DC converter is a tool that can change the value of output voltage becomes larger or smaller than the input voltage..*DC to DC converter* that is used in this final project is a *boost converter* where the magnitude of the resulting output voltage will exceed the input voltage to the circuit.To get a output voltage that larger than the input voltages we can control it using PWM signals that can activate the gate on the switches contained in the circuit, which causes the energy produced in *boost converter* is greater than the input.

In this final project *DC to DC converter* system using the *boost converter* method.The output voltage that we get from the *boost converter* will be converterd into a voltage that can drive a DC motor which is in Lab Control with the capacity of motor 200 volt 9 ampere, with the controlling voltage at the *Boost converter* using a microcontroller ATMega 8535.

Keywords : *DC to DC converter, Boost converter, Microcontroller*