## SMART ELECTROMECHANICAL DUSTBIN FOR DRY PARTICLE

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A project report submitted in partial fulfillment of the requirements for the award of the degree of Diploma of Electrical Engineering Electronics.

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APRIL 2015

"I declare that this report entitled "*Smart Electromechanical Dustbin For Dry Particle*" is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree."

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### ACKNOWLEDGEMENT

In the name of ALLAH S.W.T The Most Gracious and Most Merciful – peace and blessing of ALLAH be on his last messenger, Prophet Muhammad S.A.W. who has shown us the right way through the darkness of ignorance.

Alhamdulillah and thankful to ALLAH S.W.T for give us strength and enough time to overcome the problem that we faced during this final year project. Firstly we felt very grateful because at last we successfully completed this project until this stage. We would like to say a big thanks to those people that involved in helping us to complete this project.

Special thanks to our supervisor, Mr. Raja Mohd Noor Hafizi Bin Raja Daud of his kindness, support and concern towards us. Without him our project would not be finish and thank you also for his willingness to lend us some of his time to help us with the progress of our work.

Special thanks to our Coordinator Final Year Project (II) EEE368, Madam Siti Aishah Binti Che Kar and Madam Nazuha Binti Fadzal for giving us many chances to complete this project at this stage successfully even after having to endure so many obstacles. Besides that, we also like to show our appreciation to all lecturers and staffs from Faculty of Electrical Engineering for all of their cooperation, encouragement and sharing the knowledge in order to complete this project.

Another special thanks to our friends who are willing to help us during the process to finish this project and their support. In completing this project, we have learned the value of cooperation, toleration and patient in order to complete this project. Lastly, we would also like to thank everyone that makes it possible for us to complete this project.

#### ABSTRACT

"Smart Electromechanical Dustbin For Dry Particle" contains one (1) motor which is wiper motor, centre lock car, digital infrared and liquid crystal display (LCD). The project is built because to upgrade in terms of versatility, security and comfort that will facilitate our daily lives. In this project, three types of circuits are combined which are power circuit (forward and reverse), voltage regulator circuit and control circuit. First, DC wiper motor can move up and down. Basic operation of this project is when digital infrared detect any particle, circuit will be trigger up and the centre lock car will lock flip flop door on dustbin and LCD will display some word to guide user when use this dustbin. After that, wiper motor will move up and down based on coding setting in PIC. At last, when the dustbin are totally full, wiper motor are not move up and down and centre lock car will lock the flip flop door and LCD will display some word to give information to user about that dustbin. Smart Electromechanical Dustbin For Dry Particle was proved can be a very useful tool in daily life.

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