

FACULTY OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA TERENGGANU

FINAL REPORT OF DIPLOMA PROJECT

SMART WATER IRRIGATION

MARCH 2015

MOHAMAD AMIRUL BIN MOHAMAD BASRI 2012629528 MOHAMMAD FAZRUL ASHRAF BIN MOHS FAZIL 2012857796 KHAIRUL NIZAM BIN MOHD NOOR 2012405698

SIR ABDUL HAFIZ BIN KASSIM

AUTHOR'S DECLARATION

"I declare this report entitled "SMART WATER IRRIGATION" is the result of our 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"

Name	: Mohamad Amirul Bin Mohamad Basri			
Student ID No : 2012857796				
Program	: Electrical Engineering(Electronic)			
Faculty	: Electrical Engineering			
Signature	:			
Date	: March 2015			

Name : Mohamad Fazrul Ashraf Bin Mohd Fazil

Student ID No : 2012629528

Program : Electrical Engineering(Electronic)

Faculty : Electrical Engineering

Signature

: Kull

Date : March 2015

ACKNOWLEDGEMENT

Alhamdulillah, gratitude given from us the humble servant of Allah S.W.T, the almighty, most knowledgeable, the creator of all thing in the world. Peace and blessing of Allah S.W.T upon his messenger, Prophet Muhammad SAW who has guide and show us the right path from succumb in the looming darkness of the world is desire.

Special thanks to our supervisor for this project, Abdul Hafiz Bin Kassim for all the supporting ideas, guidance and kindness for all this time to help us finished this project. Without his help, our progress will become slower than anticipated and we might not notice our mistake in every part of the work. Thank you for making time for our group even when he always busy with work and family.

Not forgotten, a handful of gratitude for friends and lecture that provide us with many information, ideas, and opinions. Motivation and suggestion from all of you are the reason this project is completed with satisfaction. Moreover, thank you for lending equipment and guide from our lab technician regarding the PCB board. Moreover, thank you to all panel and judge that give us a good comment and graded our project.

Once again, we want to thank all of the people that involve in completing this project and this final report successfully.

v

ABSTRACT

Today's modern lifestyle required people to gain a progressive life. Time is an essence that can never be brought back. Nowadays, a successful agriculture business needs people to invest a lot of time to obtain the achievement. Most important feature in agriculture is the irrigation system, a good irrigation bring a much better result. Therefore, this project gave birth to Smart Water Irrigation which mainly focused on saving and accuracy time for watering. Arduino Uno is use as an indicator for the progression of the project. The benefit of this project is every types of agriculture can used it as the cost is lower and easy to maintenance.

.

TABLE OF CONTENTS

	-
DECLARATION	i
AUTHOR DECLARATION	ii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
ABSTRAK	vi
TABLE OF CONTENTS	vii
LIST OF FIGURES	x
LIST OF TABLE	xii
LIST OF ABREVIATIONS	xiii

CHAPTER ONE: INTRODUCTION

1.1	Introduction	1
1.2	Problem Statements	1
1.3	Aim and Objectives	2
1.4	Scope of Project	2

Page