# A LOW YOME UNB MICROSTRIP ATTENNA BASED OF GIRO TAR PARCH TOPOLOGA WITH PARTIAL GROUND PLANE

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## A LOW VSWR UWB MICROSTRIP ANTENNA BASED ON CIRCULAR PATCH TOPOLOGY WITH PARTIAL GROUND PLANE

This thesis is presented in partial fulfillment for the award of the Bachelor of Electrical Engineering (Hons)

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### **ABSTRACT**

Ultra Wideband (UWB) Microstrip Antenna consisting of a circular monopole patch with 10dB return loss bandwidth from 4.42 to 7.72 GHz and with a maximum VSWR = 1.19 is proposed. This antenna has been designed on FR4 printed circuit board (PCB) with overall size of  $32 \times 32 \times 0.8 \text{ mm}^3$  and dielectric substrate  $\epsilon r = 4.7$ . This antenna operated at 5 GHz centre frequency and was designed by using CST Software based on the  $50\Omega$  characteristic impedance for the transmission line model.

# TABLE OF CONTENT

CHAPTER	<u>DESCRIPTION</u>	<b>PAGE</b>
	Declaration	i
	Dedication	iii
	Acknowledgment	iv
	Abstract	V
	Table of contents	vi
	List of tables	ix
	List of Figures	x
	Abbreviations	xi
1	INTRODUCTION	
	1.1 Background of study	1
	1.2 Problem Statement	5
	1.3 Objectives	5
	1.4 Scope of Project	6
	1.5 Project Organization	6
2	LITERATURE REVIEW	
	2.1 Introduction	8
	2.2 UWB Technology	8
	2.2.1 History of Ultra Wideband (UWB)	8
	2.2.2 Advantages and Disadvantages of UWB System	10
	2.3 Literature Review	1.1
	2.3.1 Microstrip Antenna	11
	2.3.2 Initial Works in UWB Antenna	12