

**DESIGN OF FREQUENCY RECONFIGURABLE 2 BY 8 LINEAR ARRAY
ANTENNA STRUCTURE**

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ABSTRACT

Reconfigurability in antenna system is a desired characteristic that has been the focus of much in recent year. This paper presents a frequency reconfigurable 2 by 8 linear array antenna structure integrated with radio frequency (RF) switches. The 2 by 8 corporate feed linear array antennas was existing designed at 2.4GHz and simulated by using of Computer Simulation Tool (CST). After fabricated, the prototype antenna was constructing with RF switching circuit. RF switching circuitry involves two RF PIN diodes which located on the left and right side feeding line of the antenna structure in order to activate array of patch. The four of frequency can be simply obtained by configured switching the PIN diodes on and off. The simulation and measurement result of frequency based on the different element array structure are presented.

TABLE OF CONTENTS

APPROVAL	i
DECLARATION	ii
ACKNOWLEDGEMENTS	iii
ABSTRACT	iv
LIST OF FIGURES	viii
LIST OF TABLES	x
LIST OF ABBREVIATIONS	xi

1. INTRODUCTION

1.1	Introduction	1
1.2	Problem Statement	2
1.3	Objective	3
1.4	Scope of Work	3
1.5	Structure of the project	4

2. LITERATURE REVIEW

2.1	Introduction	5
2.2	Research Paper Literature Review	5
2.2.1	An Overview of Reconfigurable Antenna	6
2.2.2	A Frequency Reconfigurable Micro strip Rectangular Patch Antenna Using Stubs	7
2.2.3	Reconfigurable Patch-Antenna Design for Wideband Wireless Communication Systems	7

2.2.4	Reconfigurable Linear Array Antenna with Beam Shaping At 5.8 GHZ	8
2.2.5	Reconfigurable Antenna for Wireless and Space	9
2.3	Antenna Fundamental	10
2.3.1	Voltage Standing Wave Ratio	10
2.3.2	Gain	11
2.3.3	Radiation Pattern	11
2.3.4	Return Loss	14
2.3.5	Antenna Efficiency	14
2.4	Reconfigurable Antenna Concept	15
2.5	Reconfigurable Technique and Classification Of Reconfigurable Antenna	16
2.6	Advantages of Reconfigurable Antennas	18
2.6.1	Voltage Standing Wave Ratio (VSWR)	
2.6.2	Lower front end processing	
2.6.3	Best candidate for software-defined ratio	
2.6.4	Multifunctional capabilities	
2.7	PIN Diode General Descriptions	19
2.8	PIN Diode Switches	20
2.9	PIN Diode Theory of Operation	20
 3. METHODOLOGY		
3.1	Introduction	23
3.2	Flow Chart of Design Methodology	25
3.3	Antenna Design	26
3.4	Design Consideration	28
3.5	RF Switches	29
3.6	RF Switching Circuit	31