

A PARALLEL COUPLED-LINE BANDPASS FILTER

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ABSTRACT

In this work, a bandpass filter using parallel coupled resonators was designed at centre frequency of 5.8 GHz using Butterworth method. The filter was implemented on the epoxy laminate with relative permittivity, $\epsilon_r = 3.48$ with substrate thickness 1.524 mm. All the designing and simulation of the filter was carried out with the aid of an electromagnetic simulator, CST STUDIO SUITE (CST) and Advanced Design System (ADS). The design and simulation of the bandpass filter is based on the specification of the parameter of the filter. The performance of the filter was then evaluated based on the values, the Comparisons between measured and simulated values of the parameter of the filter were carried out and it was observed that all these values were very close with each other.

TABLE OF CONTENTS

TITLE	PAGE
DECLARATION.....	iii
ACKNOWLEDGEMENT.....	iv
ABSTRACT.....	v
TABLE OF CONTENT.....	vi
LIST OF FIGURES.....	ix
LIST OF TABLE.....	x
LIST OF ABBREVIATION.....	xi
INTRODUCTION	
1.1 INTRODUCTION.....	1
1.2 BACKGROUND OF THE PROJECT.....	1
1.3 OBJECTIVE.....	3
1.4 SCOPE OF WORK.....	3
1.5 ORGANIZATION OF PROJECT.....	4
LITERATURE REVIEW	
2.1 INTRODUCTION.....	5
2.2 FILTER THEORY.....	5
2.3 MICROSTRIP FILTER THEORY.....	8

2.4 FILTER RESPONSE.....	10
2.5 PARELLEL COUPLE-LINE BANDPASS FILTER.....	11
2.6 ELECTROMAGNETIC SIMULATOR, CST AND ADS.....	12
2.7 PREVIOUS WORK.....	13

METHODOLOGY

3.1 INTRODUCTION.....	14
3.2 DESIGN PROCEDURES.....	14
3.3 DESIGNING DISTRIBUTION ELEMENT.....	16
3.4 TUNING.....	25
3.5 FILTER DESIGN.....	26
3.5.1 STEP TO DESIGN A PARALLEL COUPLED-LINE BANDPASS FILTER.....	26
3.5.2 STEP TO DESIGN INPUT AND OUTPUT PORT.....	30
3.5.3 STEP TO SIMULATE THE FILTER.....	32
3.6 FABRICATION.....	34
3.6.1 SOLDERING PROCESS.....	34
3.7 MEASURING PROCESS.....	35