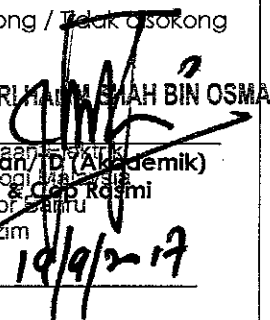


FAKULTI: FAKULTI KEJURUTERAAN ELEKTRIK
TAJUK: PERMOHONAN PELANJUTAN PEMBETULAN TESIS

BUTIRAN PELAJAR	KETERANGAN PELAJAR	ULASAN DAN TINDAKAN FAKULTI	KELULUSAN															
NAMA : LIM MENG CHUAN NO K/P @ ISID : 830721025535 NO MATRIK : ME123045 PROGRAM : SARJANA KEJURUTERAAN (ELEKTRIK) JENIS PENGAJIAN : PENYELIDIKAN BENTUK PENDAFTARAN : SEPENUH MASA PENYELIA : PROF. MADYA IR. DR. SHARUL KAMAL BIN ABDUL RAHIM PENYELIA BERSAMA : DR. MOHAMAD RIJAL BIN HAMID BIL SEM: 8 / 8 (SEMESTER 1, SESI 2016/2017) STATUS : PEPERIKSAAN PEMERIKSA LUAR: PROF. DR. MD RAFIQUIL ISLAM (IIUM) PEMERIKSA DALAM: PROF. DR. MOHAMAD KAMAL BIN A. RAHIM PENGERUSI: PROF. IR. DR. ABU SAHMAH BIN MOHD SUPA'AT MUKASURAT : 1/1	1.1 Pelajar mendaftar pengajian secara separuh masa pada semester 2012/2013-2. Pelajar bekerja di INTEL, Pulau Pinang. 1.2 Pelajar telah menjalani peperiksaan lisan dan perlu menghantar tesis bagi tujuan pembetulan tesis. 1.3 Kronologi pelajar adalah seperti berikut : <table border="1"> <thead> <tr> <th>Bil</th> <th>Tarikh</th> <th>Perkara</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>23/01/2017</td> <td>Pelajar menghantar tesis bagi tujuan peperiksaan lisan.</td> </tr> <tr> <td>2</td> <td>10/07/2017</td> <td>Peperiksaan lisan dijalankan. Pelajar mendapat keputusan b2 (3 bulan).</td> </tr> <tr> <td>4</td> <td>10/10/2017</td> <td>Tarikh akhir pelajar perlu menghantar pembetulan tesis ke fakulti.</td> </tr> <tr> <td>5</td> <td>10/09/2017</td> <td>Pelajar menghantar surat permohonan untuk melanjutkan penghantaran pembetulan tesis pada 10/11/17.</td> </tr> </tbody> </table> 1.4 Pelajar memohon masa tambahan masa selama 1 bulan atas sebab yang berikut : - Tambahan beban tugas di tempat kerja, INTEL, Pulau Pinang. - Perlu lebih masa untuk memperbaiki tesis di bahagian bab 4 dan 5. - Perlu membuat kajian lanjutan untuk skop kerja tambahan.	Bil	Tarikh	Perkara	1	23/01/2017	Pelajar menghantar tesis bagi tujuan peperiksaan lisan.	2	10/07/2017	Peperiksaan lisan dijalankan. Pelajar mendapat keputusan b2 (3 bulan).	4	10/10/2017	Tarikh akhir pelajar perlu menghantar pembetulan tesis ke fakulti.	5	10/09/2017	Pelajar menghantar surat permohonan untuk melanjutkan penghantaran pembetulan tesis pada 10/11/17.	1.1 Mesyuarat Jawatankuasa Akademik Fakulti yang telah diadakan pada 19 September 2017 telah menyokong permohonan pelanjutan pembetulan tesis pelajar selama 1 (satu) bulan ke Mesyuarat JAPSU. 1.2 Lampiran dokumen yang berkaitan fakulti - Surat permohonan perlanjutan tarikh pembetulan tesis 3/10/17 disokong oleh penyelia. UTM Johor Darul Takzim - Salinan butiran perancangan pembetulan tesis.	Disokong / Tidak disokong  PROF. DR. JOHARI HAMID SHAH BIN OSMAN Dekan Fakulti Kejuruteraan Elektrik Universiti Teknologi Malaysia 81300 UTM Johor Darul Takzim Tarikh : 19/9/2017 Setuju / Tidak Setuju (Ulasan) _____ _____ Pengerusi Mesyuarat Jawatankuasa Akademik Pengajian Siswazah Universiti (JAPSU) & Cop Rasmi Tarikh : _____
Bil	Tarikh	Perkara																
1	23/01/2017	Pelajar menghantar tesis bagi tujuan peperiksaan lisan.																
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Pengurus Akademik Pasca Siswazah

Fakulti Kejuruteraan Elektrik

Universiti Teknologi Malaysia

81310 Skudai, Johor Bahru.

7 SEPTEMBER 2017

Tuan,

RAYUAN PERMOHONAN MELANJUTKAN TEMPOH PEMBETULAN TESIS

Merujuk kepada perkara di atas saya, nama saya LIM MENG CHUAN (MEE123045) ingin membuat rayuan berkenaan tempoh tesis (Monopole Frequency Reconfigurable Antenna for Wireless Communication) saya yang telah dijadualkan sbelum atau pada 10 Oktober 2017.

2. Untuk makluman pihak tuan, saya adalah seorang pelajar separuh masa sambil bekerja di industri. Baru-baru ini, rakan sekerja saya telah pergi ke Amerika selama 2 bulan untuk urusan kerja. Oleh itu, beban kerja saya sudah bertambah dan tidak ada masa secukup untuk saya fokus dalam pembetulan tesis.

3. Disamping itu, ada beberapa pembetulan diperlukan banyak masa untuk bacaan dan kefahaman untuk tambahan skop kerja tersebut justeru masa lebih untuk melengkapkan kerja tersebut.

4. Saya amat memerlukan tempoh masa lanjutan untuk saya memperbaiki tesis terutamanya bahagian bab 4 dan 5. Saya juga perlu memastikan kualiti tesis mencapai pawai yang ditetapkan oleh UTM. Butir-butir situasi pembetulan tesis saya dikepilkan sekali dengan surat rayuan ini.

Saya amat menghargai sekiranya Tuan dapat mempertimbangkan permohonan saya untuk melanjutkan tempoh penghantaran tesis selama sebulan dari 10 Oktober hingga 10 November 2017. Kerjasama pihak tuan amat saya hargai.

Sekian, terima kasih.

Yang benar,

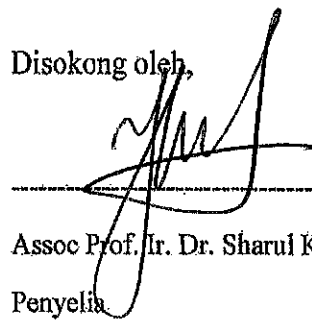


Lim Meng Chuan

Pelajar Master (012-5705958)

meng.chuan.lim@intel.com

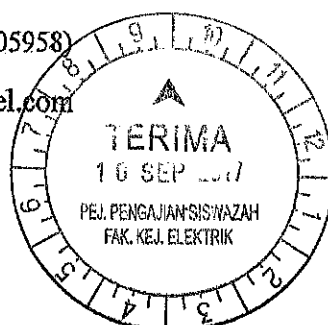
Disokong oleh,



Assoc Prof. Ir. Dr. Sharul Kamal Abd Rahim

Penyelia

sharulkamal@fke.utm.my



Required Corrections Based on Chapters

Title

Corrections Required	Amendments Made	Location
Title	Design of Frequency Reconfigurable Antenna Using Ellipse-Shaped Patch with Defected Ground Structure	Cover page

Abstract

Corrections Required	Amendments Made	Location
Specify frequency in design	Done	
Parameters achieved in reconfigurable frequency	Done	
Internal		
Specify the operating frequency and discuss the performance for each design in term of bandwidth, gain frequency and etc.	Done	
External		
The objective and methodology should be clear in abstract	Done	
Achieved frequency bands should be mentioned (3-6GHz)	Done	
Comparison between FR-4 and semi-transparent should be stated	Done	

Chapter 1

Corrections Required	Amendments Made	Location
Objective too general. Revise clearly	Not Done	
Internal		
Objective not clear and do not answer the conclusion	Not Done	
External		

Chapter 2

Corrections Required	Amendments Made	Location
Viva Session Report		
Explain microstrip and planar antenna. Need to revamp. Fundamental on monopole antenna to Clearly explain	Updated in 2.2 with included Microstrip, planar monopole and printed monopole antenna	
UWB antenna wrong interpretation need to revamp.	2.7.1 Revised type of UWB antenna. UWB antenna literature [25] removed and replaced with suitable literature	
Need to revamp all in chapter 2 to	Revamped according internal thesis	

avoid misreading to the readers (See internal examiner thesis for corrections)		
Internal		
The literature review need to revamp especially on the UWB antenna.	Removed Ref [24] due to wrong interpret Microstrip antenna and replaced printed UWB antenna as literature	
Should focus more on reconfigurable antenna for wideband to narrowband	All literature for frequency reconfigurable antennas were focused on wideband to narrowband in 2.5.2	
Wrong interpret microstrip antenna. Differentiate between microstrip and planar monopole antenna	Updated in 2.2 with included Microstrip, planar monopole and printed monopole antenna	
Need to include fundamental of DGS theory	Updated in 2.6 Defected Ground Structure	
Didn't see any research gap why this E-shape has been chosen	Not Done	
Differentiate between S_{11} and return loss	Updated in Appendix D-Glossary	
Definition of wideband antenna	Updated in Appendix D-Glossary	
External		
Author may propose this structure from [26] which is a circular. Obtain results can be compared with [26] as benchmarking.	Not Done	
Semi-transparent concept has been introduced in chapter 5, however the concept has not been addressed in Literature review	Added literature in ref [64]	

Chapter 3

Corrections Required	Amendments Made	Location
Viva Session Report		
Overall ok		
Add more on flow chart on monopole antenna to clearly explanation (Refer to internal examiner report and thesis)	Done correction. Below is the details.	
Internal		
Elaborate more detail in term of Flow chart for each section or process such as the flow chart for the design	Added Figure 3.9 Fabrication process flow chart	
Flow chart of dielectric measurement	Added Figure 3.2 (b) Dielectric constant measurement flow chart	
Flow chart of simulation, fabrication and measurement	Added Figure 3.4 (a) Parameter sweep flow chart	
3.2 Design Methodology: Rewrite with proper sentences	Done correction	
3.3 Design Specification: Design change to Material	Done correction	

3.4 Glass (2mm) Dielectric Constant Measurement: Show the flow chart	Added Figure 3.2 (b) Dielectric constant measurement flow chart	
3.4 Not clear antenna measurement setup	Stated in 3.7 Testing and measurement process	
3.5 Simulation Tool: Put the flow chart on frequency sweep	Added Figure 3.4 (a) Parameter sweep flow chart	
Figure 3.5: Spelling mistake e-field and fairfield	Done correction	
3.6 Fabrication Process: Fabrication flow chart/ XX	Added Figure 3.9 Fabrication process flow chart	
Figure 3.15: Anechoic Chamber 1 and 3.16: Anechoic Chamber 2 need to remove out 1 of them	Removed Figure 3.16 Anechoic Chamber 2	
External		
Each optimization should focus towards achieving some objectives and suggest to put step-by-step for optimizing -Annular ring -Pair of square ring -E-Shape defected ground structure	Not Done	

Chapter 4

Corrections Required	Amendments Made	Location
Viva Session Report		
Need to support with the fundamental study and mathematical analysis to support your design parameters.	Added in 4.2.1	
Optimization needed of UWB antenna	Removed rectangular patch since no optimization	
DGS need to be elaborated further	Added DGS in 4.3.1 and 4.4	
Internal		
Change title name for conventional materials	Done correction	
Grammatical mistake for archive instead of achieve	Done throughout thesis	
4.1: Introduction: Grammar mistake for will be integrated	Changed to 'is integrated'	
4.2.1 Antenna Design (UWB): explain how it works	Explained antenna works and added equation for UWB	
4.2.2 Parametric Study: explain detail for the study	Explained further for the study	
Figure 4.2: Comparison of each design (No optimized)	Removed rectangular patch due to no optimized	
Figure 4.3, 4.4, 4.6, 4.32, 4.33, 4.34: Not return loss instead of reflection coefficient	Changed the term from return loss to reflection coefficient	
Figure 4.4: Explain why cut the ground plane base on simulation result	Explained the advantage for cut the ground plane	

4.3.1: Antenna Design: No mention about DGS in this design	Added before and after implementation of DGS wideband antenna	
Figure 4.16: Shift no enough?	Not Done	
Table 4.6: State 1 BW: 63% (simulated) and 68% (measured) is it wideband?	Based on The Handbook of Antenna Design wideband is 40% band. Updated in Appendix D	
Figure 4.19: Why the cross-polar is high?	Re-normalized the cross-polar.	
4.4.1 Antenna Design: Stub study the concept of DGS for this study before implementation into the antenna what is the wideband bandwidth this	Added study before and after of DGS implementation wideband antenna	
Figure 4.25: PIN Diode configuration picture make it bigger	Done correction	
4.5 Summary: Grammatical mistake at a CPW ground plane	Done correction	
Need to explain for each design why the bandwidth expended and how the wideband changed to narrowband	Not Done	
What parameters effect and to explain the fundamental of antenna and other bandstop/ bandpass characteristics	Not Done	
External		
Analysis is adequate in most of the results. Some analysis can be changed to more focus towards conclusion.	Not Done	
Analysis of introducing and simulating of pairs of annular rings, stubs and pairs of square resonators are too elaborating and needs to be more concise and focused, especially 4.3.1, 4.3.2 and 4.4.2	Not Done	

Chapter 5

Corrections Required	Amendments Made	Location
Viva Session Report		
Comparison has been done until other materials. Good to be referred.	Stated in 5.2.3 Investigation of various materials	
Return loss S_{11} need to be converted in the positive	Done correction	
Internal		
5.2.4 : Title grammatical mistake Reconfigurability instead of Reconfigurability	Done correction	
5.2.5: Explain why DGS and why slotted??	Added explanation	
Table 5.6: Reflection Coefficient, S_{11} values missing negative sign	Done correction	

5.2.6: Show the parametric study with L and W configuration in the graph	Added L and W configuration parametric study	
Why not full transparent?	Explained in 5.2.1 Wideband semi-transparent antenna and 5.2.3 Investigation of various materials	
What is the fundamental of E Slot in this structure?	Not Done	
External		
Justify and mention early why in semi-transparent material, it has used E-shape DGS while rings and square resonators used with FR-4	Added justification for annular ring and square resonator compared with E-Shape DGS in 5.1 Introduction	

Chapter 6

Corrections Required	Amendments Made	Location
Ok		
Internal		
6.1 Conclusion: Grammatical mistake archived	Done correction	
External		
No comment		

Other comments

Corrections Required	Amendments Made	Location
Internal		
Please refer to the thesis/ comment from examiners.	Done correction	
External		
Title of chapter-4 and chapter-5 should be changed to shorter form with reflection of contents	Not Done	