

UWB MONOPOLE CIRCULAR PATCH ANTENNA WITH PARABOLIC GROUND PLANE

**Thesis is presented in partial fulfillment for the award of the
Bachelor of Engineering (Hons.) Electronic (Communication)**

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JAN 2012

ACKNOWLEDGEMENT

All praise is to Allah S.W.T, The Most Gracious and The Most Merciful that has given me the strength, ability and patient to complete this Final Year Project.

I would like to convey my deepest gratitude, appreciation and thankful to my lovely project supervisor, En. Idnin Pasya bin Ibrahim, who have been really determine to make sure that I am getting the most important information about my final project and for his invaluable suggestion, guidance, advise discussions and willing in sharing the knowledge towards for the completion and success of this project.

I also like to thanks most of the technicians from Microwave Technology Center Laboratory, for rendering their professional skills to help me in VNA test measurement and lab assistant in microwave laboratory that help me during setting up and testing the antenna using Antenna Training System.

Also to express my appreciation to my family, especially to my father and mother for give me a lot of support until I finish my study. And to thanks to my friends who has support and given their free time to help me especially for all Electrical Engineering student major in Communication. May ALLAH S.W.T bless and reward them for their generosity.

ABSTRACT

Ultra Wide Band (UWB) wireless communication offers a radically different approach to wireless communication compared to conventional narrow band system. These paper reports on the design of an antenna structure composed of a circular patch with parabolic ground structure. The antenna has a dimension size of 26mmx 33mm. The antenna effectively covers the 3.1 to 10.6 GHz UWB frequency bands which has been approved by Federal Communication Commission for UWB unlicensed operation. Prototype of the antenna is design, fabricated and tested using Vector Network Analyzer (VNA). The antenna has a VSWR<2 over the UWB frequency band. The measure VSWR and radiation pattern indicate the suitability of this antenna for UWB application.

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