D-DOT SENSOR

Thesis is presented in partial fulfilment for the award of the

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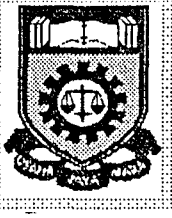

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ABSTRACT

The inventions of communication equipments such as radio, television, video, telephone, computers and many more are really useful to us. These equipments contribute us in wide variety in our life besides providing the entertainment, news and other facilities and services. However, sometimes these equipments are unable to perform the best when they are being disturbed by other signals and their performance is degraded. The problems are referred to as *interference* and *noise.*

Interference and noise will disturb the signal and reducing the accuracy of electronic receivers. Examples, the image on television may suddenly disturbed when a motorcycle passing near the house, or the voice of a radio suddenly vibrates when somebody switch on a blender machine in the kitchen. I, through my project named *D-dot Sensor* will explain and expose all these later on how all these happen.

This project is only to sense those problems, then certain actions or precautions can be taken when the magnitude of interference is determined. If we do not know the magnitude of interference, it's not that easy to design the term filters as our alternative of filtering out the interference and noise.

The quantity that we need to measure are inherently analogue. For information, the vast majority of physical sensors are also analogue as well. In chapter 2, the types of interference and it sources will be explained toward understanding the principles and the problems that might created by these interference. In chapter 3, the basic overview about D-Dot Sensor will be discussed. All pertinent circuits which facilitate upon accomplishment of the sensor such as differentiator, balun and amplifier will be included. In chapter 4, the details about hardware configurations, real testing and performance of the D-Dot Sensor will be elaborated.

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