DESIGN OF MICROSTRIP LOWPASS FILTER AT 3 GHz FOR WIRELESS COMMUNICATIONS

This thesis is presented as a partial fulfilment for the award of the
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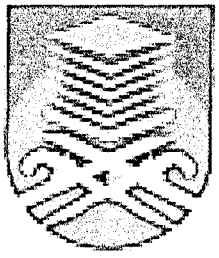

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ABSTRACT

The purposes of this project are to design, simulate, fabricate and measuring the output response of the Microstrip Lowpass Filter. The filter is intended to operate with cut-off frequency of 3 GHz, a stopband attenuation of 30 dB and 0.5 dB of passband attenuation. The ripple passband is to be 0.0432 dB. The major design process is aided by CAD packages called *HP/Eesof Libra* and *Sonnet Lite*. The microstrip laminates used as *'Duroid/Rogers 5872'* with 0.5 mm substrate thickness and relative permittivity ξ_r equal to 2.33. The filter is then measured using a *Wiltron Scalar Network Analyzer* to obtain its characteristics.

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