# DESIGN OF TAPERED SLOT VIVALDI ANTENNA ARRAY USING FR4 SUBSTRATE

Thesis is presented in partial fulfillment for the award of the Bachelor of Engineering (Hons.) Electrical UNIVERSITITEKNOLOGI MARA (UiTM)

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#### ABSTRACT

These degree theses discuss the performance and behavior of Vivaldi antenna array for the ultra-wideband (UWB) frequency ranges. The design construction and characterization of the Vivaldi antenna by using two (2) different design but same array which is 1X2 arrays. The difference is the design of tapered slot wide end where the wide end of the tapered slot of the first design (TSA1) was to meet one another and another design (TSA2) is by adding space between wide end of the array. Then these antennas were constructed using FR4 substrates by using CST microwave software. The Vivaldi antenna produced that can be operated at X-band and using substrate that available and cheap.

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