

## ***ABSTRACT***

*Antenna is a part of radio communication system. Its function is for release electromagnetic wave to propagation space or vice versa. Besides, it also can match between the line intrinsic impedance and propagation intrinsic impedance. Antenna, which is one of the most important part of radio communication system, has developed a lot, from quality and form.*

*In this Project, had been implemented Tricula Twin Strip Unidirectional Chebyshev Antenna Prototype Frequency Range 2000 MHz $\pm$ 500 MHz,  $Z_T=50\ \Omega$ . This antenna consist of tricola with two strip line which were interpolated with dielektrics substance the chebyshev transformer. For efficiently application of antenna can made wideband antenna for a lot of application. The range frequency antenna wich used to services DCS-1800 frequency, CDMA 1900, UMTS 2100, W-LAN and another application.*

*To be based on measure and test antenna that implemented has bandwidth specification 1644.67 MHz or 82 % at limited VSWR  $\leq 1.5$  with antenna impedance is  $(47.33 + j0.248)\ \Omega$  at 2205.33 MHz, unidirectional radiation pattern, ellipse polarization, and gain reach until 9.93 dBi in frequency 2205.33 MHz*

*The Project hoped become prototype can be use that the function maximally.*

*Keywords : Tricola Antenna, Transformator  $\lambda/4$  Chebyshev, Two Strip Line*