ABSTRACT

Filter is a device used to filter frequency area of work by passing the desired frequency (pass band) and drown out unwanted frequencies (stop band). Frequency to be passed in accordance with the type of filter used with different characteristics. While VSAT (Very Small Aperture Terminal) is a receiver station with a signal from the satellite receiver antenna shaped disc with a diameter of less than three meters, where satellites using C-band, which has a frequency range 3,7GHz to 4,2GHz downlink and uplink 5,925GHz up 6,425GHz. Therefore, in this final project is to design and simulate a bandpass filter that works in the frequency range of VSAT uplink, which is 595MHz to 6425MHz.

This type of filter is designed and simulated Bandpass Filters where the filter is a type of filter FIR (Finite Impulse Response), the method used in the FIR filter is a method windowing, in which the method of windowing is being used then only two methods of windowing is windowing hanning and windowing rectangular.

Keywords: *Bandpass Filter, VSAT (Very Small Aperture Terminal), C-Band, FIR (Finite Impulse Response), and Windowing.*