ABSTRACT

Radio Detecting and Ranging (radar) to detect and provide information about the existence of the target. Radar technology could be used for military purposes or the conventional world. Active and passive radar differentiated based on the source signal. Radar a passive radar that utilizes existing signal without radiates. Signal which can be used include radio waves Frequency Modulation (FM). excess of passive radar detection is not recognized by the target and can be directly applied in the field without having to license the use of the frequency

In this final project simulated passive radar using FM frequencies where RTL2832U used as a model of passive radar. Two modules RTL2832U used as a receiver and with the help of GNU Radio software.

Output Passive radar of the test results, it was found that passive radar that can be modeled detect an object as expected by using the concept of cross correlation and Doppler effect. When the radar detects no object then there is a shift in frequency doppler. When the radar detects an object then a doppler shift.

Keywords: passive radar, SDR, GNU Radio, frequency FM, doppler radar.