ABSTRACT

In Communication, Information is very Important to be exchanged, research has been held for sending the information effectively and efficiently. One of devices to transmit the signal to user is called "repeater".

The main function of repeater system is to receive signal from transmitter to be transmitted again. Especially, this device is used to strengthen the weak signal which is caused by obstacles, shadowing by others around its areas and "free space loss". This Final Project is made by using prototype test result which have been applied in another previous Final Project, then designed to construct "repeater system". Repeater System Consists of: Antennas, circulator, LNA(Low Noise Amplifier), and HPA(High Power Amplifier). Output frequency from every prototype is matched. So, this repeater system will work in the same frequency. Prototype which needed to be matched in the centre frequency is HPA. So, this prototype must be redesigned with centre frequency 1900 Mhz, and it can product long bandwidth with high gain.

Keyword: Antennas, Circulator, LNA, HPA