

## **ABSTRACT**

*Communications technology can be realized with both, if the transmitting device, a reliable support for the process of data transmission. These include the existence of an amplifier at the receiver device, which functions as a power amplifier power is required to be fulfilled. But an amplifier not only amplify the information signals, but also the noise signals generated by the amplifier itself.*

*Final project was discussed about the design and realization of prototype devices low pelting amplifier (LNA) using a second similar amplifier (twins) and a hybrid that works at the center frequency of 1800 MHz. Having specifications such as Noise figure <2db, Gain <10dB. This LNA is designed with a stable amplifier uses transistors that are not stable (conditionally stable) the stability rate should be investigated first. Hybrid is needed to produce a wider bandwidth. While the passive components used include inductors and capacitors required for impedance matching.*

*This final project to produce a prototype LNA with the appropriate specifications. This final project is expected to be a reference for the realization of a receiver device at a frequency of 1800 MHz as well as transfer of learning in the field of microwaves.*

*Keywords: amplifier, low noise, 1800 MHz.*