## ABSTRACT

Telecommunication technology is served for supporting user to still keep in touch without the distance problem. Having an easy communication, user want something more which is quality from service are given. Information quality where are sent and received, is the important thing in far distance communication beside information has a high speed access.

Basically far distance communication is very fragile with noise which is getting in the near environment. That noise can make the decrease of information quality which is received by user. In other hand, information which is sent from the side of transmitter is not same with information which is received from the side of receiver.

Seeing the thing above, low noise amplifier which amplifies the weak signal in the side of receiver, is one of the answer to give the good quality information for user. With the guaranty of quality information, so user can get the satisfied from the service which is given.

A LNA with BFR93A on frequency 100 MHz – 1000 MHz which value of parametry is *noise figure*  $\leq$  1,54 dB, *gain*  $\leq$  8,19 dB, impedansi terminal *input*  $\leq$  61,41+j4,2  $\Omega$  dan impedansi *output*  $\leq$  26,82+j6,147  $\Omega$ , *transducer power gain* = 28.6692dB, *operating power gain* = 30.5520dB, *available power gain* = 29.3142dB

Key Word: Quality, Noise, Low Noise Amplifier