

**DESIGN OF LOW NOISE AMPLIFIER FOR MULTI-
STANDARD RECEIVER OPERATING
IN THE FREQUENCY BAND OF
1.6 GHZ TO 2.2 GHZ**

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Abstract

A single ended wideband Low noise amplifier is designed to operate in frequency band of 1.6 GHz to 2.2 GHz. In this design inductively degenerated common source topology is used to achieve design specifications. An inductively shunt peaking component is added to improve the bandwidth requirement. The detail analysis and simulation using Advance Design System (Agilent) is presented. The designed low noise amplifier achieves a power gain of 19.551 dB with 0.479 dB noise figure and IIP_3 of -2.047 dBm.