

Amplifier Design App for the Android Platform

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ABSTRACT

The design of transistor-based amplifiers can be a difficult and time consuming process. The aim of the project was to develop a mobile phone application which could assist engineers in the design of amplifiers by generating amplifier circuit diagrams which meet a specification of the desired characteristics of an amplifier – such as its gain and bandwidth - provided by the user. An application with the novel functionality of being able to generate multi-stage amplifiers based on a user's specification was successfully developed, and testing of the application showed that the application was capable of generating high-quality multi-stage amplifier circuits which fully fulfil user specifications.

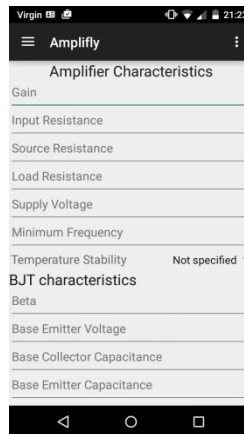


Figure 1. Amplifier Specification Screen

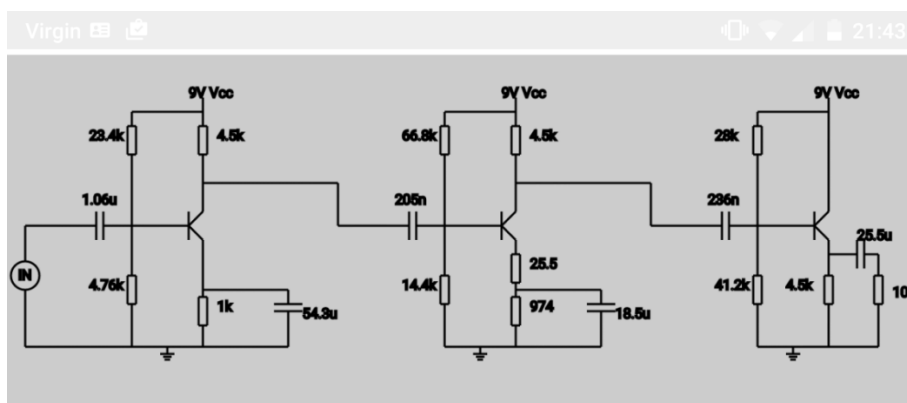


Figure 2. Three stage amplifier with output buffer

N Gibson, Amplifier Design App for the Android Platform, *Proc. 15th School Conf. for Annual Research Projects*, V F Ruiz (Ed), University of Reading, 24th May 2016.