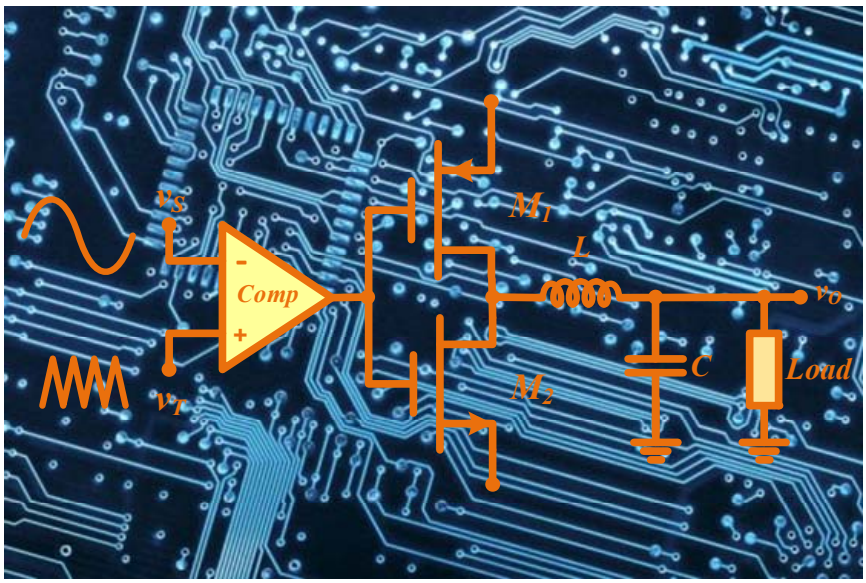
# Laboratory Manual for Electronic Circuits - 2

## Experiments in Electronics Fundamentals

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# Preface

Laboratory Manual for Electronic Circuits - 2 is prepared for the students taking the electronic circuit course which is EEE329 Linear Integrated Circuits offered in the Electrical and Electronics Engineering Department at Çukurova University. The content covers the course materials taught in the department. The manual is mainly intended to verify theory taught in the electronic courses in the laboratory.

This manual is divided into two parts as follows:

Section 1 introduces the laboratory rules.

Section 2 is devoted to experiments involving the analog electronic circuits which are taught in EEE329. It contains nine experiments, and it starts with current mirror circuit and active loads. The following two experiments are subjected on basic BJT and MOS differential amplifiers. The next four experiments are subjected on op-amp parameters and circuits such as amplifiers, precision rectifiers, and integrator circuits. The last two experiments are subjected on power amplifiers and voltage regulators, respectively.

Each experiment contains the following parts:

*Objective:* The purpose of the experiment is given.

*Theory:* The complementary information about the theory related to the experiment.

*Preliminary:* Detailed analysis of the experiment and should be completed before coming to the laboratory.

*Experimental Procedure:* Containing a relatively structured set of steps for performing the experiment.

*Conclusion:* This section is included for the evaluation of the differences between the theoretical and experimental results.

*Equipment List:* Lists of components and standard equipments which DMM, Oscilloscope, signal generator, and a prototyping board.

Appendix includes the data sheets for the components used in the experiments.

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Assist. Prof. Dr. Murat AKSOY

# Contents

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