**Department of Computer Science and Engineering**
Premier University

EEE 310 : Communication Engineering Laboratory

# Project Proposal Report

## Amplitude Shift Keying (ASK)

### Submitted by

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**Remarks**

# Introduction :

Amplitude Shift Keying (ASK) is a digital modulation technique where the amplitude of a carrier signal is varied according to the binary data being transmitted. This project focuses on the design and implementation of the ASK modulation process to explore its efficiency and applications in digital communication systems.

# Objectives :

The main objectives of this project are to:

- Understand the principles of ASK modulation.

- Design and develop an ASK modulator.

- Simulate and analyze the performance of the ASK modulator.

- Evaluate the efficiency of ASK modulation in various scenarios.
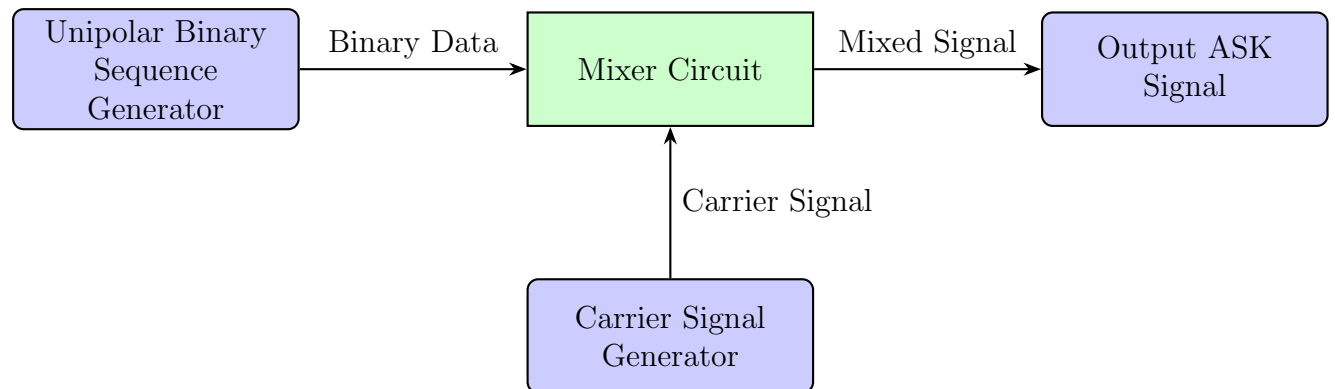
# Block Diagram :



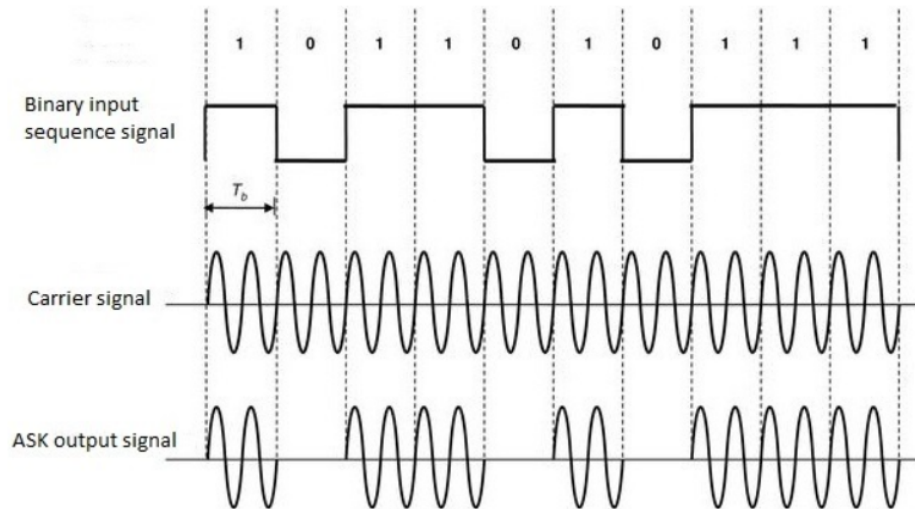Figure 1: Block Diagram of ASK Modulation

## ASK Modulation Waveforms :



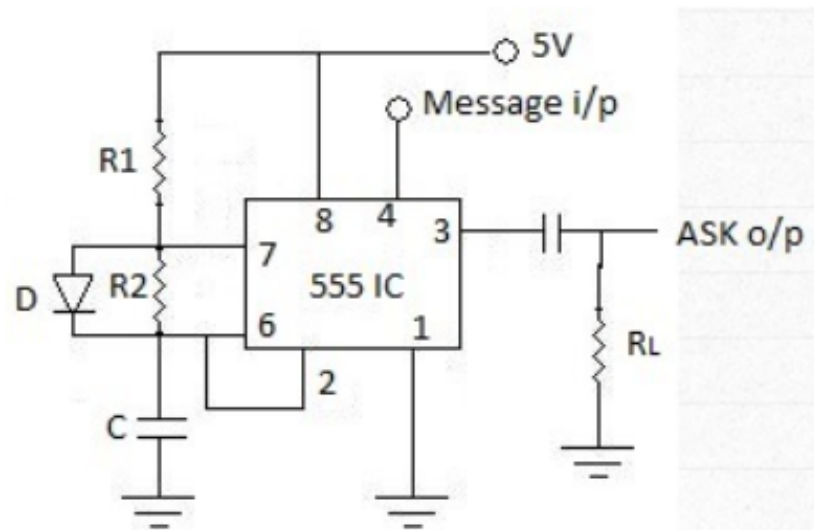**Fig 02 : ASK Modulation Waveforms**

## Circuit Diagram :



**Fig 03 : ASK Modulation Circuit**

## Conclusion :

In conclusion, this project successfully designed and simulated an ASK modulator, providing valuable insights into its practical applications and performance characteristics in digital communication. ASK modulation's versatility and effectiveness in transmitting binary data through amplitude variation were clearly demonstrated. Its straightforward implementation and robust performance across different conditions highlight its enduring relevance in modern telecommunications.