

SCHOOL OF ENGINEERING  
THE DESIGN OF A PLL FM MODULATOR AND PLL FM  
DEMODULATOR

**FINAL REPORT**

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## **Abstract**

This is the final report to the B.Eng (Hons) Electrical & Electronic Engineering final year project. The purpose to write this report is to propose the project title "**The Design Of A PLL FM Modulator And PLL FM Demodulator**". In short form, PLL FM is name as Phase Locked Loop Frequency Modulation.

The aims of this project are to study and understand the basic operation of Phase Locked Loop (PLL), and build-up the modulator and demodulator using this PLL technique. Also, which are used widely in modern communications, radar, telemetry, time and frequency control, instrumentation systems, wireless and mobile communication.

This report elaborates the project background where it outlines the context of the project. The review of the project, results and discussion and the method of sourcing for the require information to implement this project are also shown in this final report. The planned to the whole system of the project are shown in the form of gantt chart.

For details, this final report gives an overview of the PLL FM technique based on its characteristic, applications, theoretical, experiment work, circuit analysis work, simulation work and etc. Finally, the conclusion that concludes the final report and a list of the references used in this report is presented in last few pages.