DLD PROJECT PROPOSAL



Project Title:

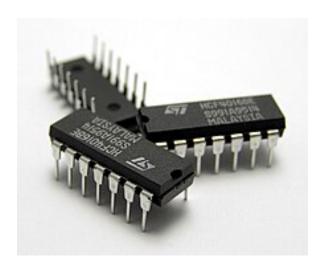
IC Tester

Group Members

23K-0817 Hassan Mustafa 23K-3033 Uzair Haroon 23K-2001 Muzammil Siddiqui 23K-0800 Muhammad Mufeez

COMPONENTS LIST

- > ICS
 - o And (74-08)
 - o OR (74-32)
 - o NOT (72-04)
 - Demultiplexer (72-139)
- ➤ Batteries (1.5v)
- ➤ Voltage Regulators (5v)
- ➤ Jumper Wires
- > Breadboard
- ➤ Dip Switches



OBJECTIVE

"

The IC Tester aims to identify various types of ICs and can even

"

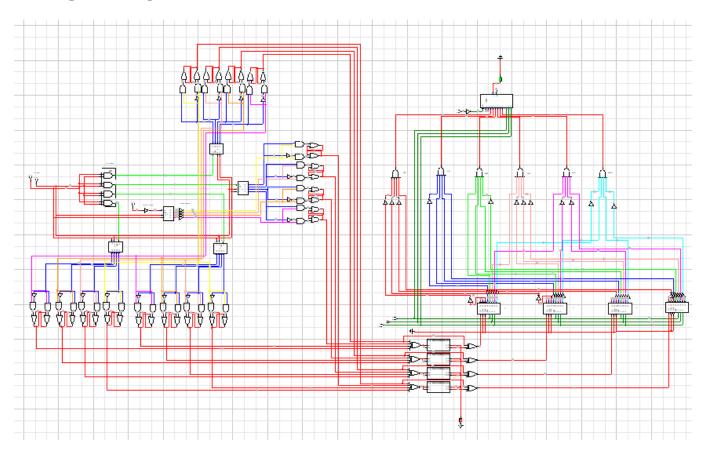
check for faulty ICs in the circuit.

ABSTRACT

In this lab project, an integrated circuit (IC) tester was developed to address the need for efficient and reliable testing of ICs commonly used in electronic systems. The tester was designed to provide comprehensive testing capabilities, including functionality verification that is fault detection, and it can even differentiate between the types of IC. This project aims to cover a major portion of our DLD course outline, including advanced logic building using logic gates (AND, OR, NOT), demultiplexers, and

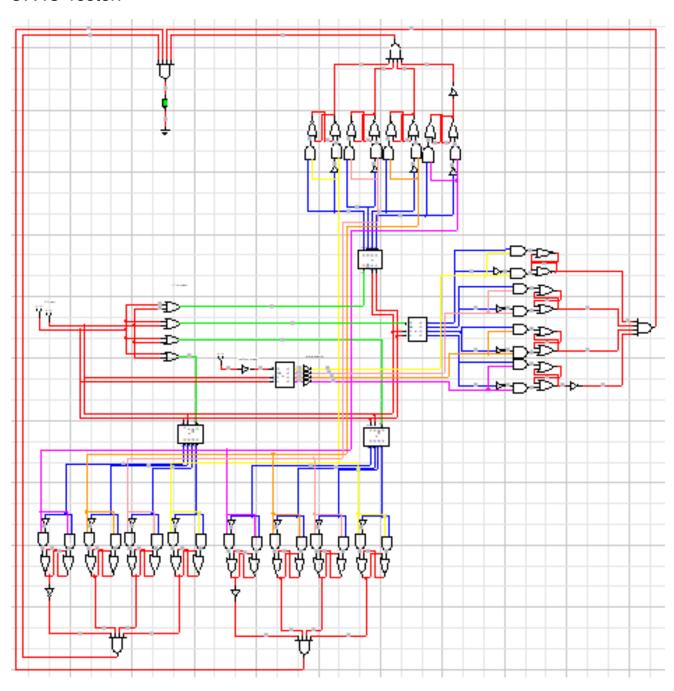
voltage regulators. It also includes the practical implementation of these concepts using a breadboard, batteries, IC, and jumper wires. The software **Logic Works 5** was used to formulate the circuit diagram representing the concept behind the project.

CIRCUIT DIAGRAM:

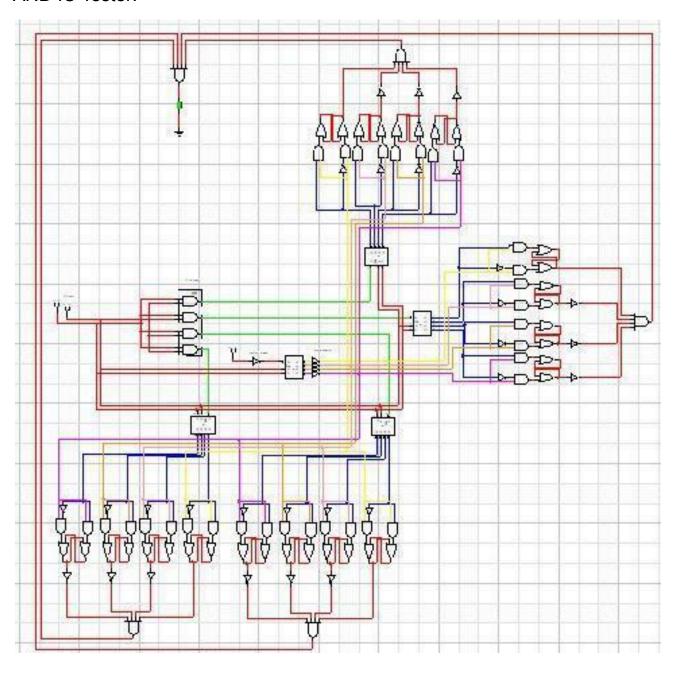


Circuit diagram to test for individual IC:

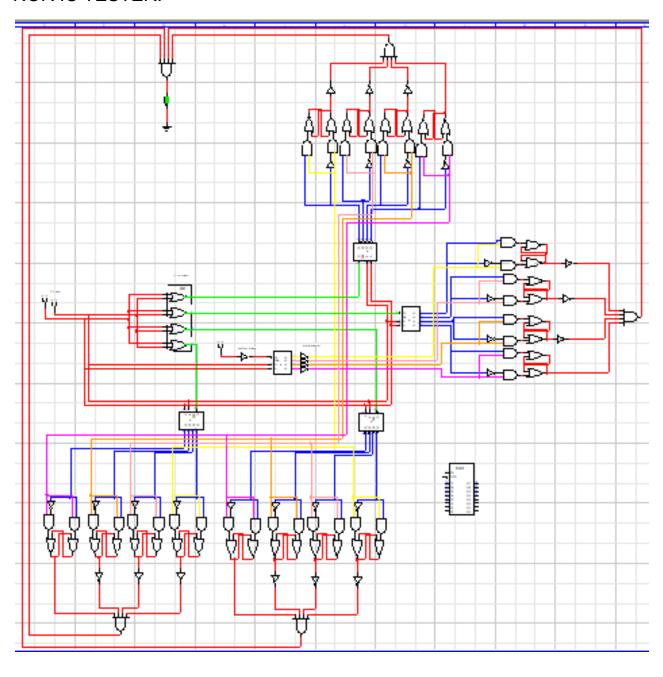
OR IC Tester:



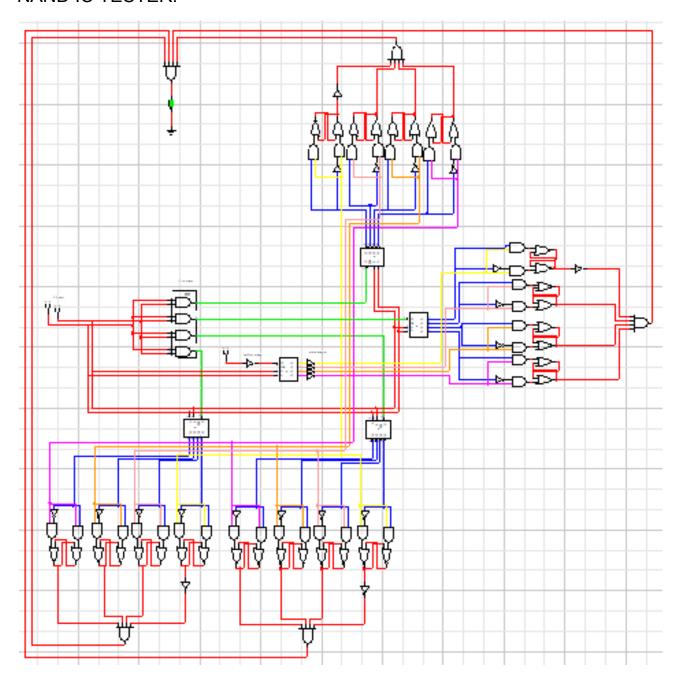
AND IC Tester:



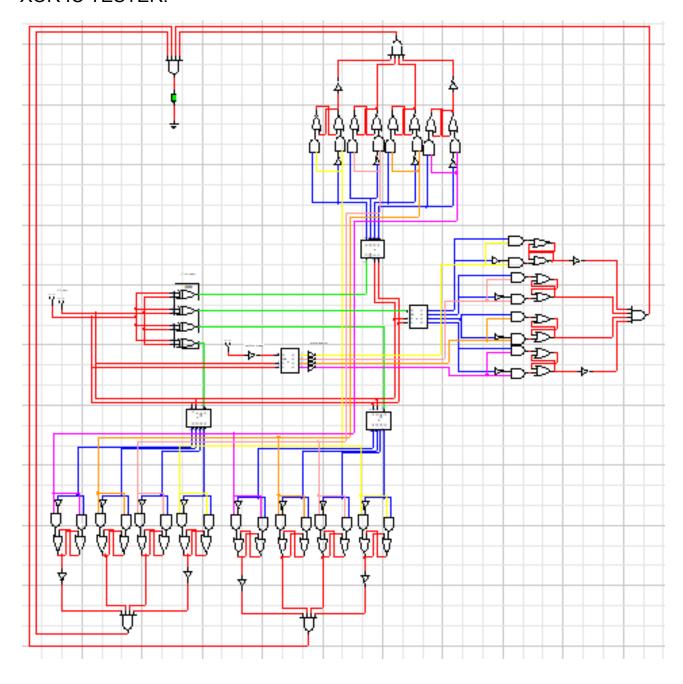
NOR IC TESTER:



NAND IC TESTER:



XOR IC TESTER:



XNOR IC TESTER:

