

FR. Conceicao Rodrigues College of Engineering
Department of Computer Engineering

11.Implement SIPO andPIPO shift register using 74194

1. Course, Subject & Experiment Details

Academic Year	2023 -24	Estimated Time	Experiment No. 11– 02 Hours
Course & Semester	S.E. (Computers) – Sem . III	Subject Name	Digital Logic & Computer Organization and Architecture
Chapter No.	3	Chapter Title	Processor Organization and Architecture
Experiment Type	Hardware	Subject Code	CSC304

Rubrics

Roll No.	Date of performance 16-10-2023	Timeline (2)	Practical Skill & Applied Knowledge (4)	Output (4)	Total (10)
9928	Date of Submission				

2. Aim & Objective of Experiment

To study different modes of operation of universal shift register by using IC 74194

3. Problem Statement

Implement SISO & PISO using 74194

4. Hardware Required

A) Breadboard , Power Supply, Connecting wires.

B) Components: IC 74194,LEDs

5.Brief Theoretical Description

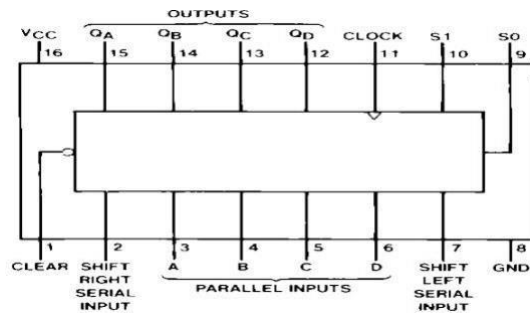
IC 74194 is an MSI 4 bit bidirectional parallel in parallel out shift register.

Its contents may be shifted in either of two directions. Left (QD to QA) or right (QA to QD) depending on control input application

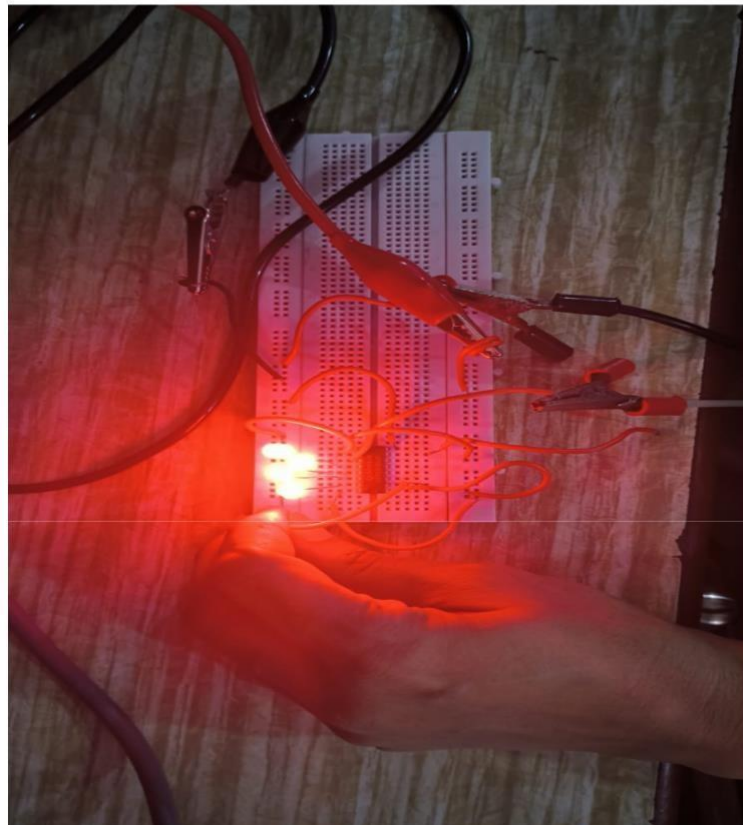
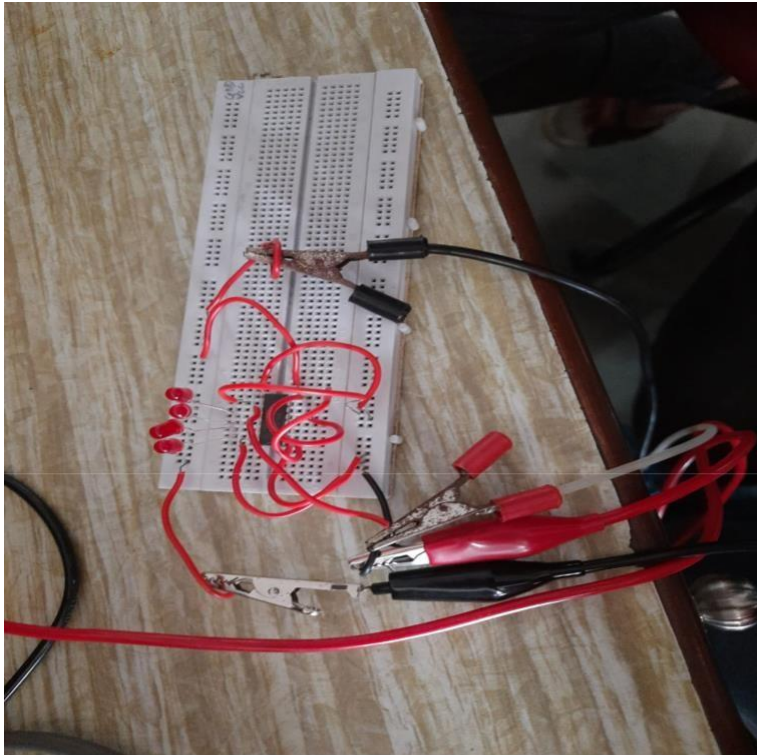
FUNCTION TABLE (74194))

Function	Inputs		Next state				Clear
	S1	S0	QA	QB	QC	QD	
Hold	0	0	QA	QB	QC	QD	1
Shift right	0	1	Rin	QA	QB	QC	1
Shift left	1	0	QB	QC	QD	Lin	1
load	1	1	A	B	C	D	1
clear	X	X	0	0	0	0	0

IC 74194



6. Screenshots of Experiment :



7. **Conclusion:**

Therefore different modes of operation of universal shift register by using IC 74194 is understood.