

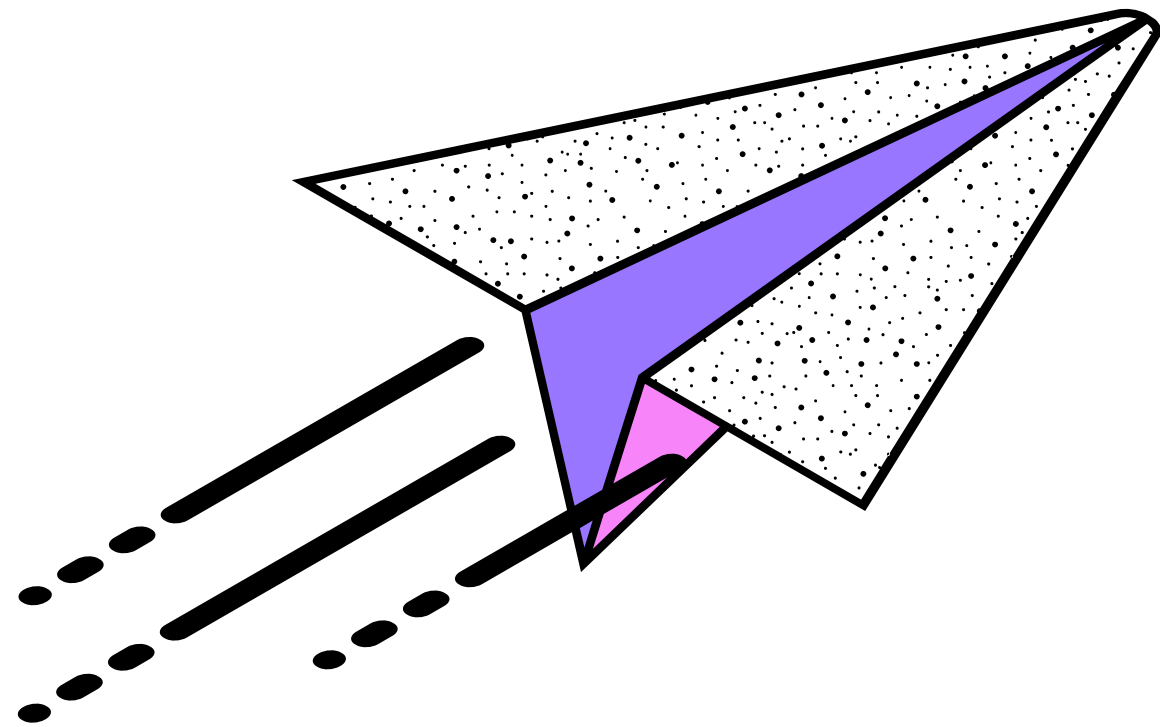
Motion Detection: Exploring IC7490 and IC7448

DISCOVER THE FASCINATING WORLD OF MOTION DETECTION AND HOW IC7490 AND IC7448 PLAY PIVOTAL ROLES IN THIS TECHNOLOGY. JOIN US ON THIS JOURNEY OF INNOVATION AND APPLICATIONS

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Introduction



Explanation of motion detection

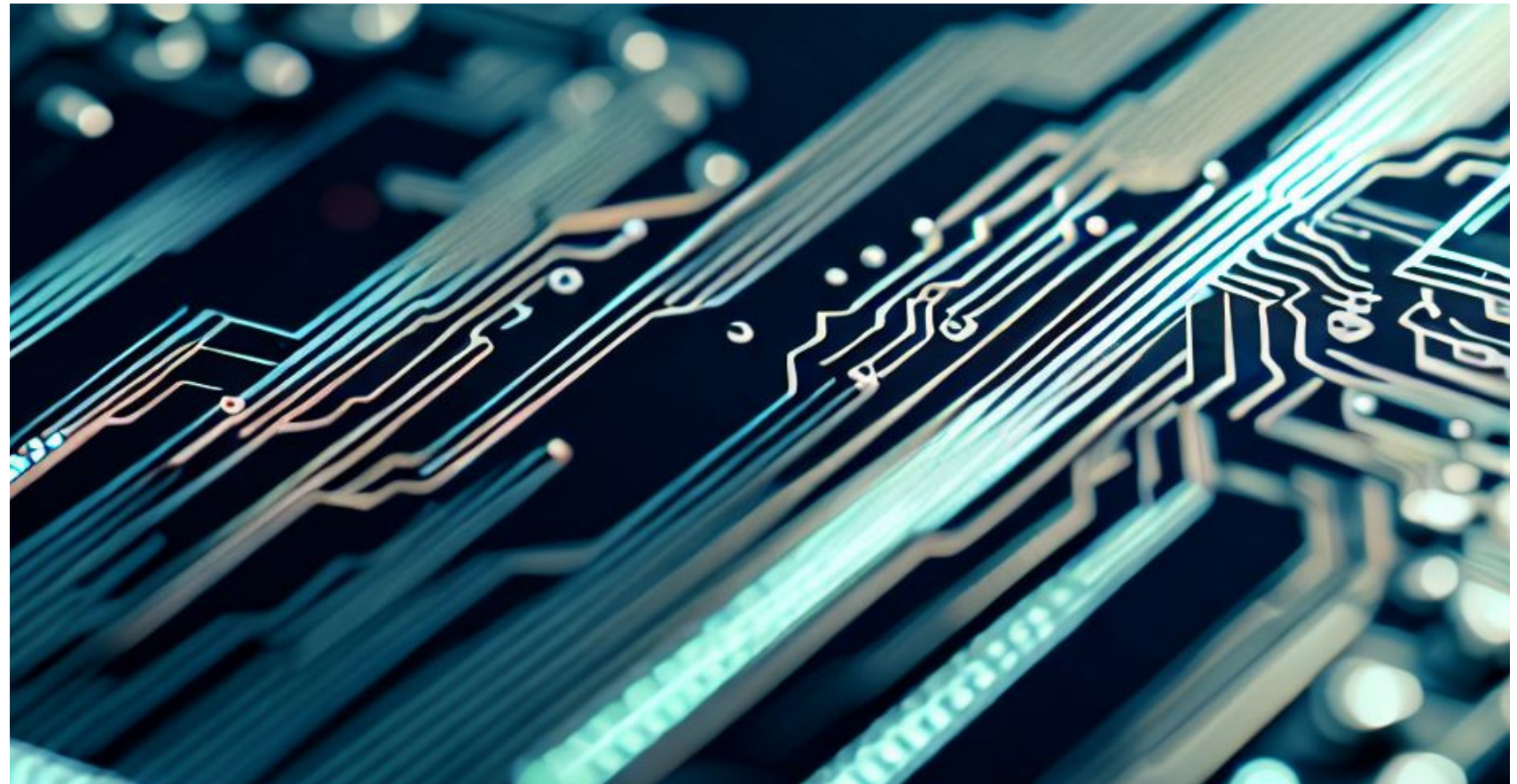
Importance of motion detection in various applications

Testing and Troubleshooting

Application

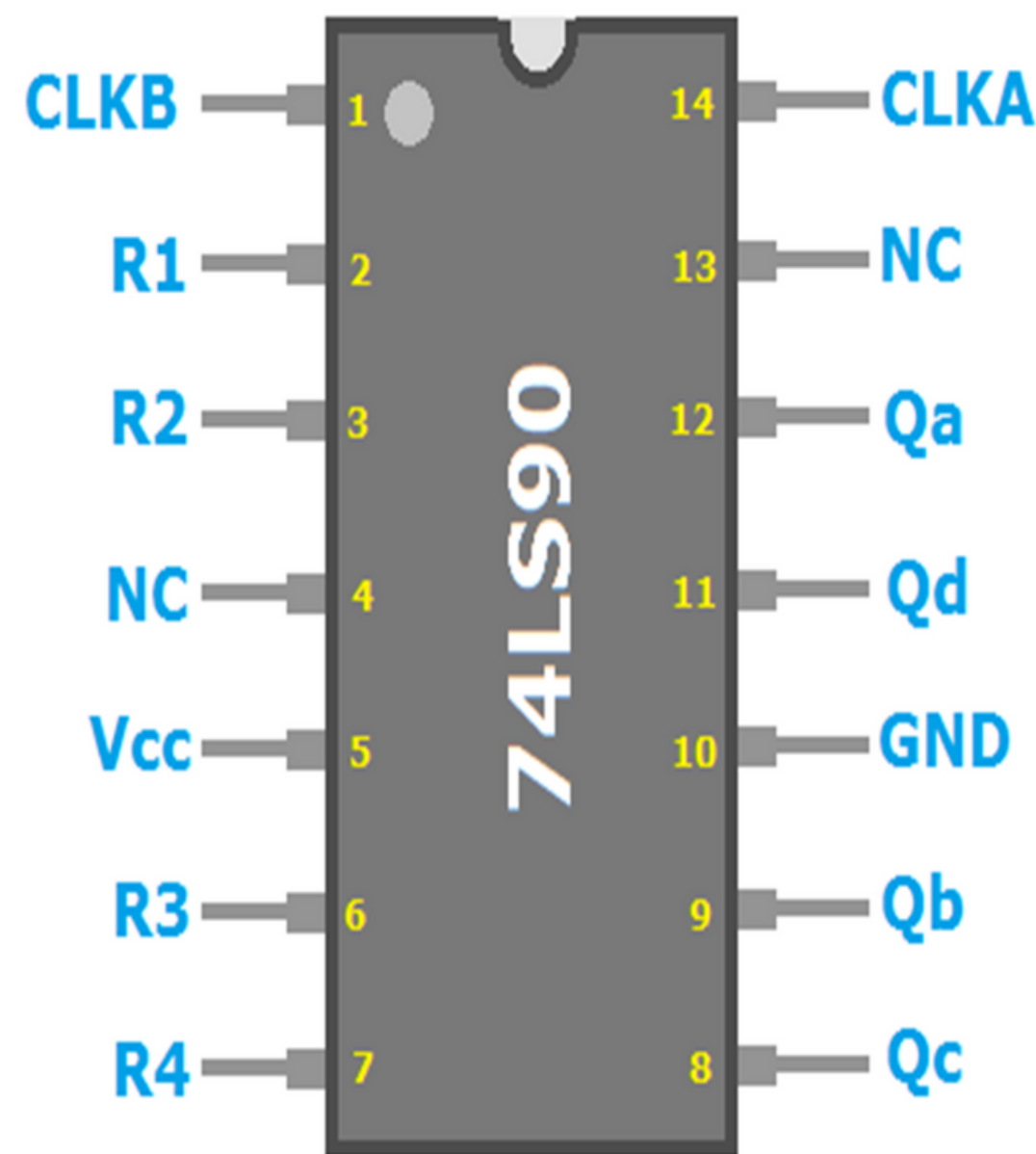
IC7490

Overview and Functionality
Uncover the capabilities and features of IC7490, a crucial component in motion detection circuits.



Connection and Working
Learn how to properly connect and utilize IC7490 in motion detection circuits for accurate motion sensing

BCD (binary coded decimal) counter

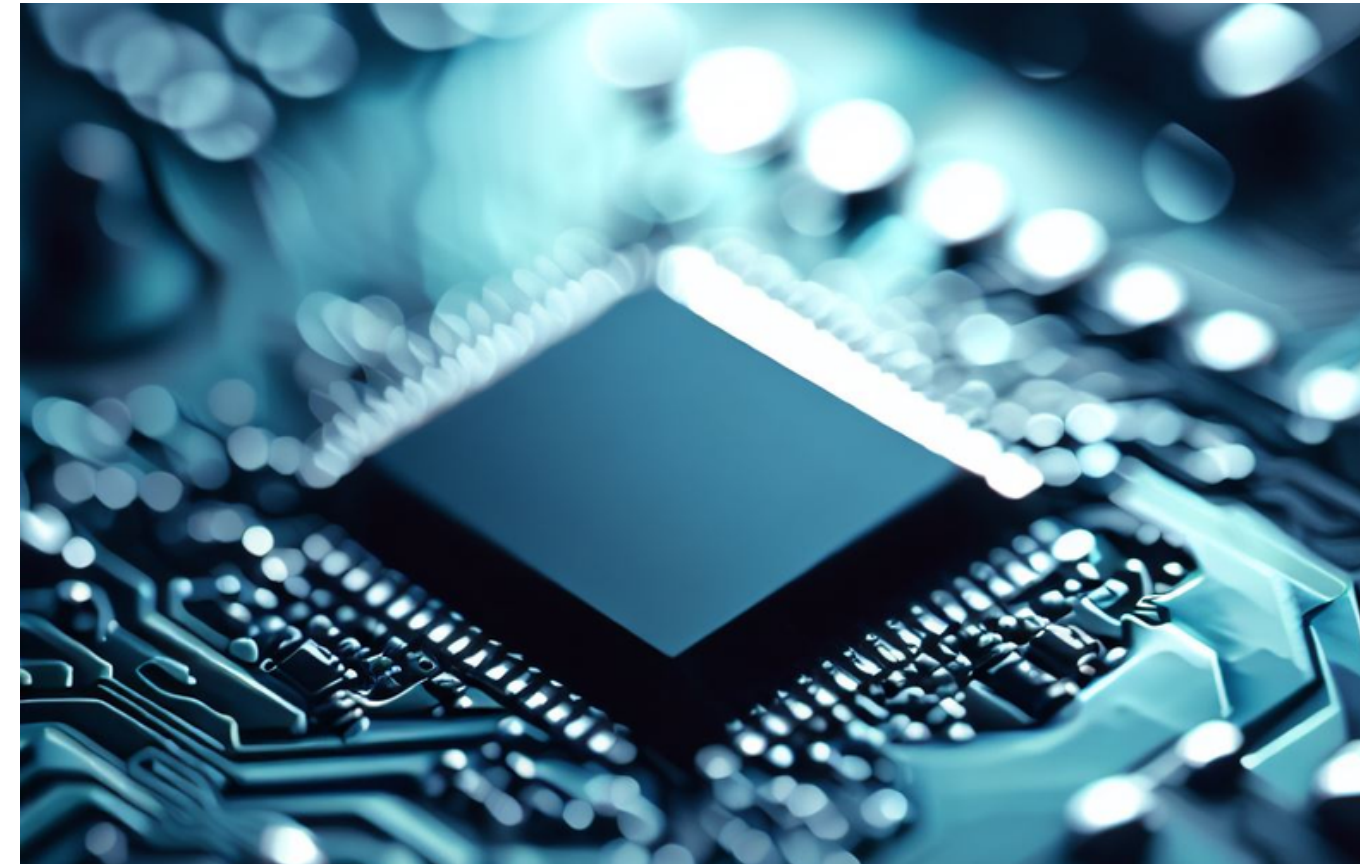


IC 7490 Pin Diagram

Count	Qd	Qc	Qb	Qa
(Start) 0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
(New Cycle) 10	0	0	0	0

IC7448

Discover the purpose and role of IC7448 in motion detection circuits, enhancing the functionality of the overall system

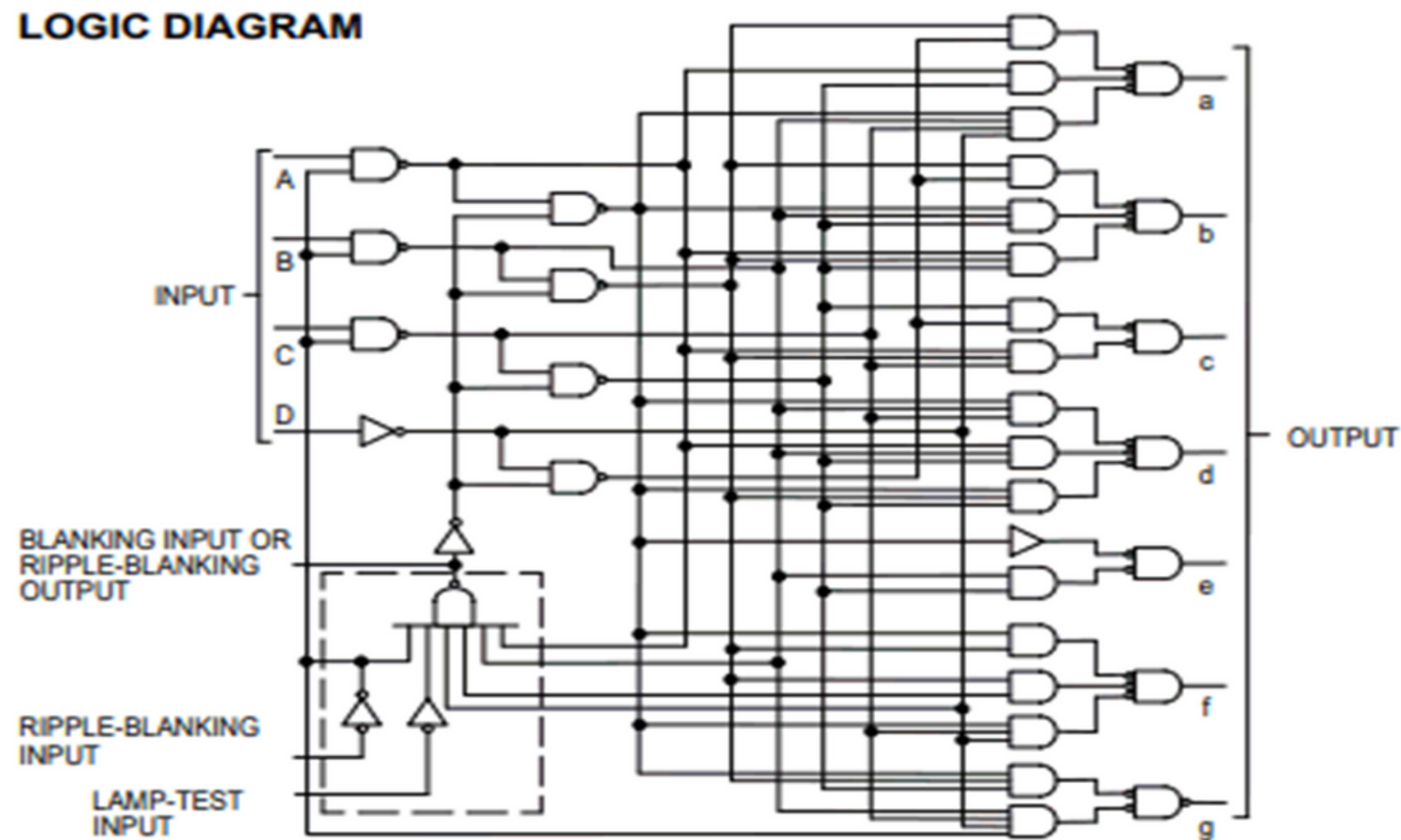


Importance in Motion Detection
Explore how IC7448 contributes to the accurate detection and identification of motion signals in various applications

CONNECTION DIAGRAM DIP (TOP VIEW)



LOGIC DIAGRAM



Circuit Design

1

Step-by-Step Guide

Basic voice service
Follow a comprehensive guide to build a motion detection circuit using IC7490 and IC7448, ensuring precise motion sensing.

2

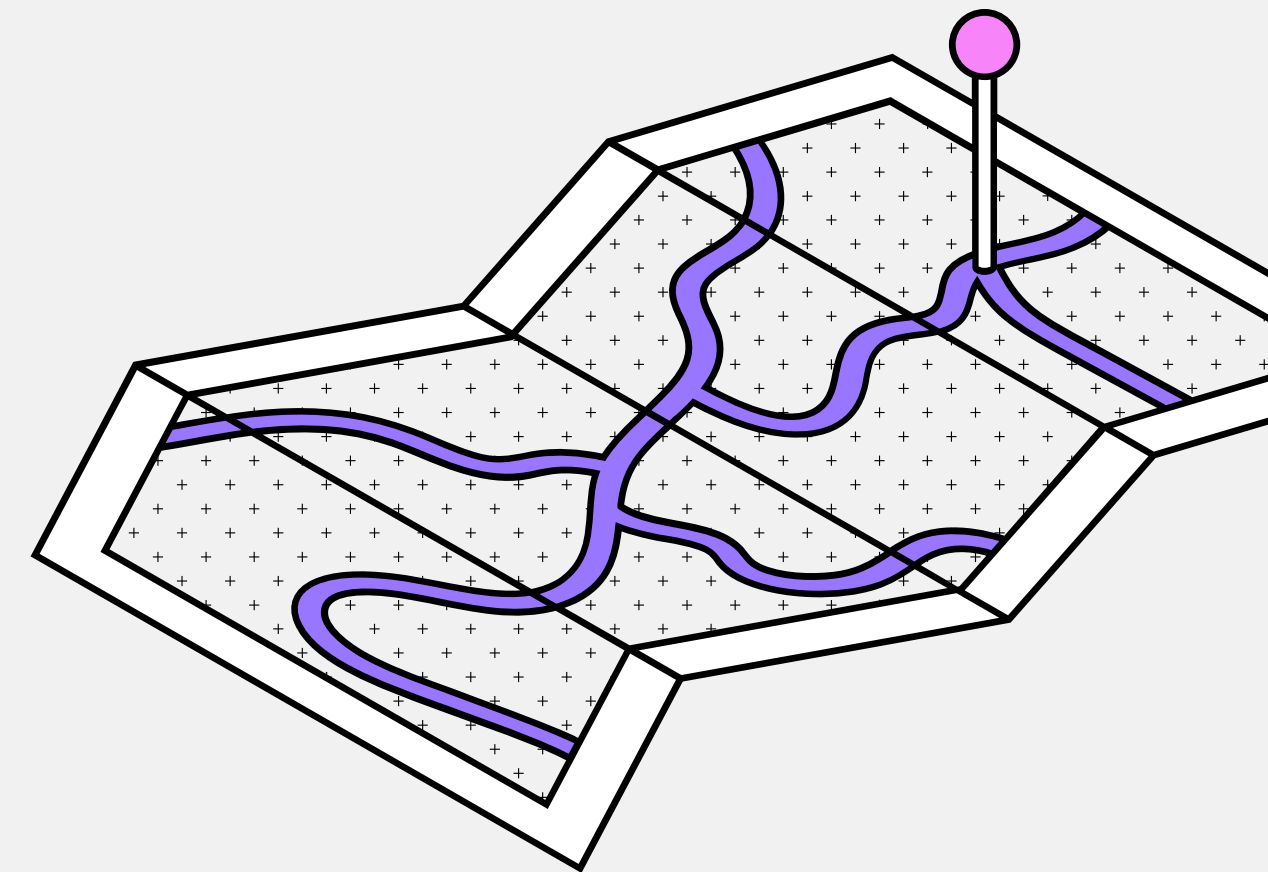
Explanation of Circuit Diagram

Get insights into the intricacies of the circuit diagram, including component selection for optimal performance.

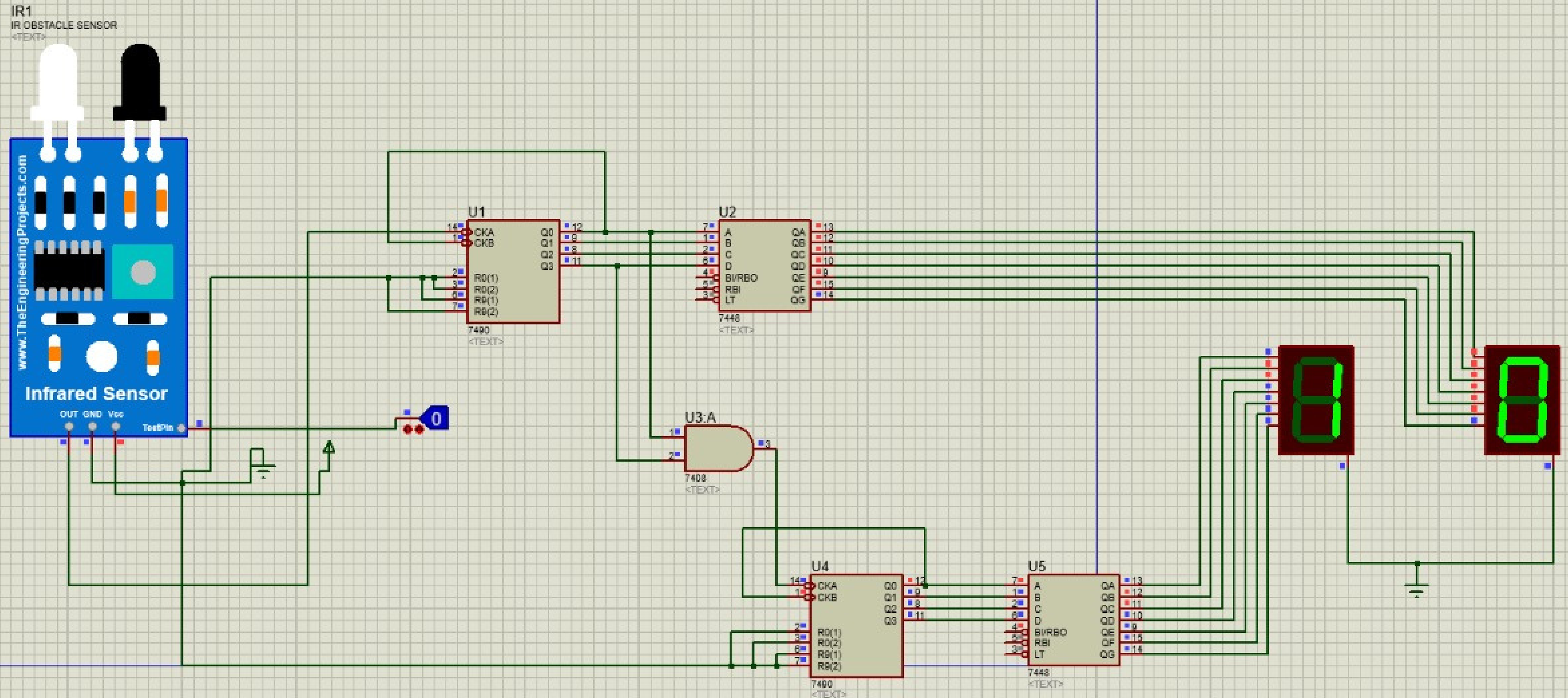
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Component Selection

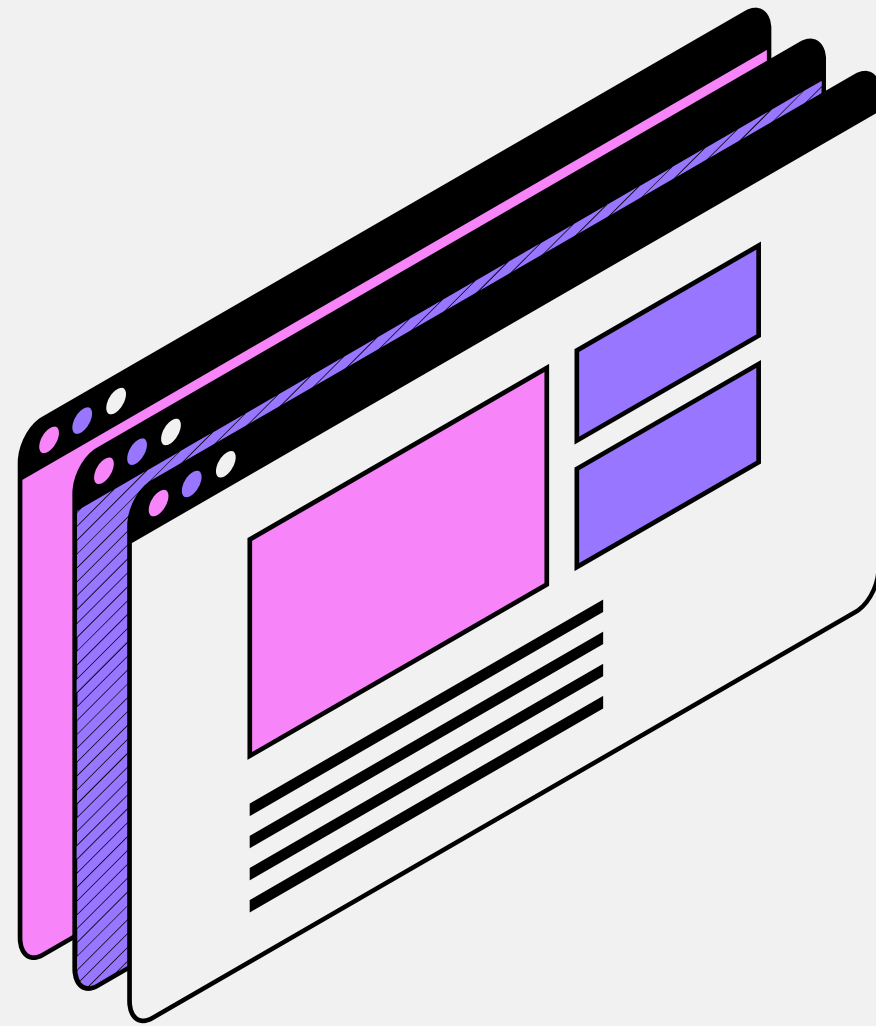
Understand the criteria and considerations for selecting components in motion detection circuits, maximizing functionality and reliability.



Simulation



Testing and Troubleshooting



Methods for Testing

Explore effective testing techniques to validate the functionality and accuracy of motion detection circuits.

Troubleshooting Techniques

Learn common troubleshooting methods and solutions to address circuit issues, ensuring smooth operation.



Applications

Versatility

Discover the wide range of fields and industries where motion detection using IC7490 and IC7448 can be applied, revolutionizing automation and security systems.

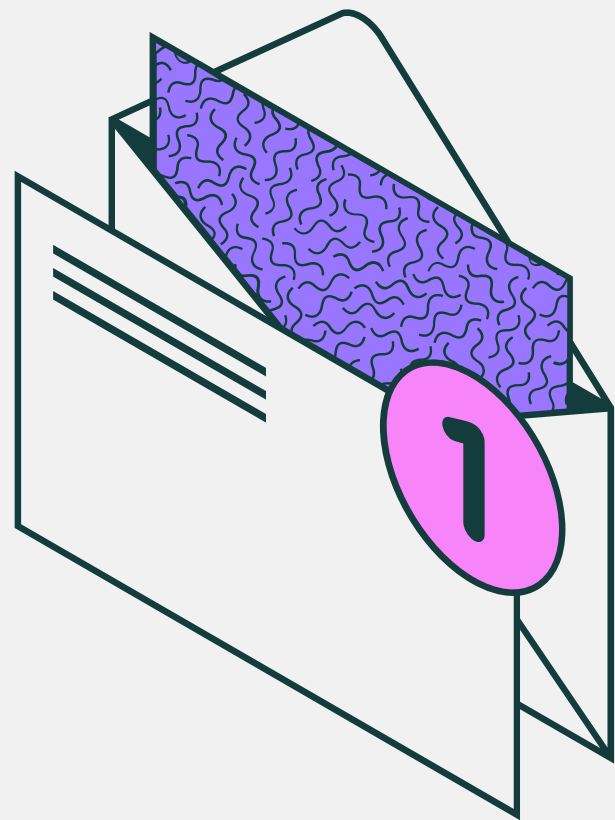
Practical Examples

Explore practical applications and benefits of motion detection technology, from smart homes to industrial automation.

Conclusion

Recap of Key Points

Summarize the critical concepts discussed and highlight the impact of motion detection technology in various domains.



Future Prospects

Delve into the promising future of motion detection technology, envisioning its potential evolution and widespread adoption.