# 8-Bit 2:1 Multiplexer

## Pin Description

|  |  |
| --- | --- |
| A0-A7 | Input A connector |
| B0-B7 | Input B connector |
| Z1A-Z1D | MUX 1 (U2) |
| Z2A-Z2D | MUX 2 (U1) |
| O0-O7 | Output connector |

## Additional Components

|  |  |
| --- | --- |
| LED | LED, Yellow, 5mm |
| C1 | 0.5F Capacitor |
| R1 | 330 Ohm Resistor |

Additional components are not visualized on the breadboard.

## Key Pin Locations

|  |  |
| --- | --- |
| A6 | 59-E |
| B6 | 49-E |
| MUX 1 – Pin 1 | 39-F |
| MUX 2 – Pin 1 | 29-F |
| O6 | 19-E |
| MUX 1+ | 39-(A-D) |
| MUX 2+ | 29-(A-D) |
| CONTROL LINE | 8-(F-J) |
| LED+ | 8-D |

Breadboard must bridge both 5V and GND rails on the left side. The control line entry point must be on the right side. Positive rail must be north.