



The diagram shows a voltage divider circuit. A +12 V source is connected to a 50 K resistor. The other end of this resistor is connected to the non-inverting input of an LM335 sensor. The LM335 sensor is also connected to ground. A 10 K resistor is connected between the output of the LM335 sensor and ground. The output of the LM335 sensor is also connected to the non-inverting input, forming a feedback loop.

| Truth Table | MUX Selectors | | | | |
|----------------|----------------|----------------|----------------|----------------|----------------|
| Selected Brick | S ₄ | S ₃ | S ₂ | S ₁ | S ₀ |
| Temp 1 | 0 | 0 | 0 | 0 | 0 |
| Temp 2 | 0 | 0 | 0 | 0 | 1 |
| Temp 3 | 0 | 0 | 0 | 1 | 0 |
| Temp 4 | 0 | 0 | 0 | 1 | 1 |
| Temp 5 | 0 | 0 | 1 | 0 | 0 |
| Temp 6 | 0 | 0 | 1 | 0 | 1 |
| Temp 7 | 0 | 0 | 1 | 1 | 0 |
| Temp 8 | 0 | 0 | 1 | 1 | 1 |
| Temp 9 | 0 | 1 | 0 | 0 | 0 |
| Temp 10 | 0 | 1 | 0 | 0 | 1 |
| Temp 11 | 0 | 1 | 0 | 1 | 0 |
| Temp 12 | 0 | 1 | 0 | 1 | 1 |
| Temp 13 | 0 | 1 | 1 | 0 | 0 |
| Temp 14 | 0 | 1 | 1 | 0 | 1 |
| Temp 15 | 0 | 1 | 1 | 1 | 0 |
| Temp 16 | 0 | 1 | 1 | 1 | 1 |
| Temp 17 | 1 | 0 | 0 | 0 | 0 |
| Temp 18 | 1 | 0 | 0 | 0 | 1 |
| Temp 19 | 1 | 0 | 0 | 1 | 0 |
| Temp 20 | 1 | 0 | 0 | 1 | 1 |
| Temp 21 | 1 | 0 | 1 | 0 | 0 |
| Temp 22 | 1 | 0 | 1 | 0 | 1 |
| Temp 23 | 1 | 0 | 1 | 1 | 0 |
| Temp 24 | 1 | 0 | 1 | 1 | 1 |
| Temp 25 | 1 | 1 | 0 | 0 | 0 |
| Temp 26 | 1 | 1 | 0 | 0 | 1 |
| Temp 27 | 1 | 1 | 0 | 1 | 0 |
| Temp 28 | 1 | 1 | 0 | 1 | 1 |
| Temp 29 | 1 | 1 | 1 | 0 | 0 |
| Temp 30 | 1 | 1 | 1 | 0 | 1 |
| Temp 31 | 1 | 1 | 1 | 1 | 0 |
| Temp 32 | 1 | 1 | 1 | 1 | 1 |

