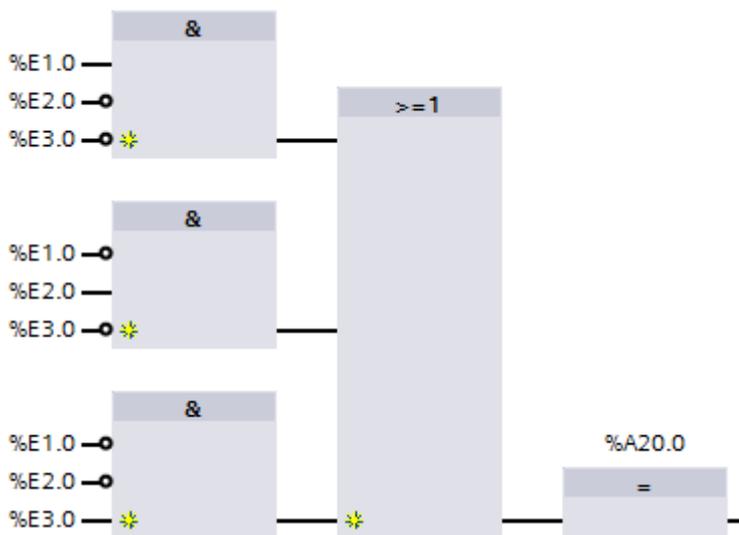


### Beispiel 1: Verknüpfung von zwei Operanden nach XOR



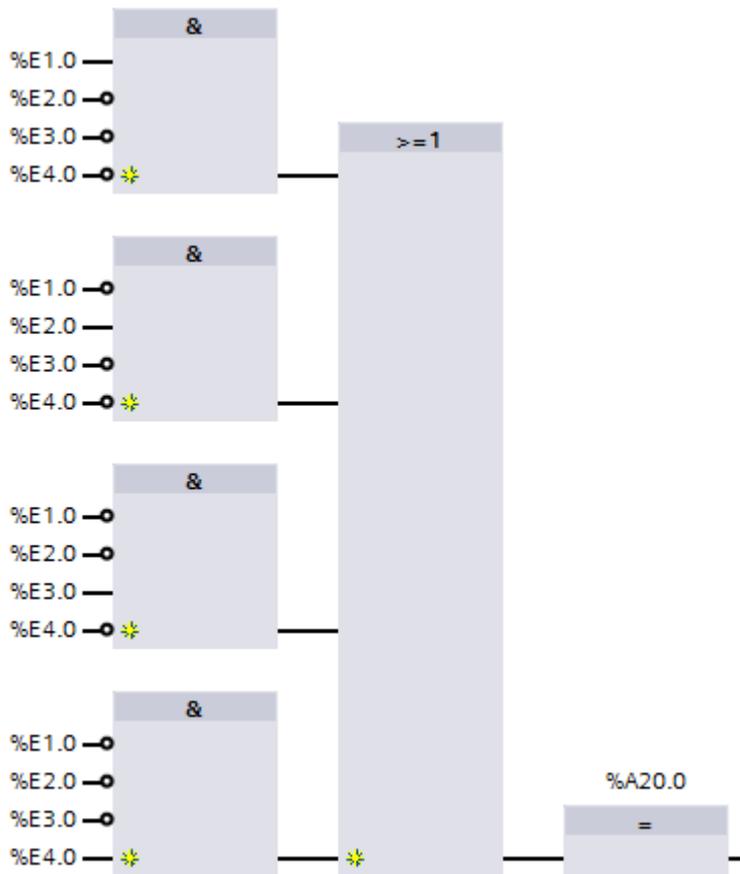
| Verknüpfungstabelle |      |          |
|---------------------|------|----------|
| E1.0                | E2.0 | A20.0    |
| 0                   | 0    | <b>0</b> |
| 0                   | 1    | <b>1</b> |
| 1                   | 0    | <b>1</b> |
| 1                   | 1    | <b>0</b> |

### Beispiel 2: Verknüpfung von drei Operanden nach XOR



| Verknüpfungstabelle |      |      |          |
|---------------------|------|------|----------|
| E1.0                | E2.0 | E3.0 | A20.0    |
| 0                   | 0    | 0    | <b>0</b> |
| 0                   | 0    | 1    | <b>1</b> |
| 0                   | 1    | 0    | <b>1</b> |
| 0                   | 1    | 1    | <b>0</b> |
| 1                   | 0    | 0    | <b>1</b> |
| 1                   | 0    | 1    | <b>0</b> |
| 1                   | 1    | 0    | <b>0</b> |
| 1                   | 1    | 1    | <b>0</b> |

Beispiel 3: Verknüpfung von vier Operanden nach XOR



| Verknüpfungstabelle |      |      |       |       |
|---------------------|------|------|-------|-------|
| E1.0                | E2.0 | E3.0 | E.4.0 | A20.0 |
| 0                   | 0    | 0    | 0     | 0     |
| 0                   | 0    | 0    | 1     | 1     |
| 0                   | 0    | 1    | 0     | 1     |
| 0                   | 0    | 1    | 1     | 0     |
| 0                   | 1    | 0    | 0     | 1     |
| 0                   | 1    | 0    | 1     | 0     |
| 0                   | 1    | 1    | 0     | 0     |
| 0                   | 1    | 1    | 1     | 0     |
| 1                   | 0    | 0    | 0     | 1     |
| 1                   | 0    | 0    | 1     | 0     |
| 1                   | 0    | 1    | 0     | 0     |
| 1                   | 0    | 1    | 1     | 0     |
| 1                   | 1    | 0    | 0     | 0     |
| 1                   | 1    | 0    | 1     | 0     |
| 1                   | 1    | 1    | 0     | 0     |
| 1                   | 1    | 1    | 1     | 0     |

#### Beispiel 4: Verknüpfung von zwei Operanden nach XOR (2 x negiert)



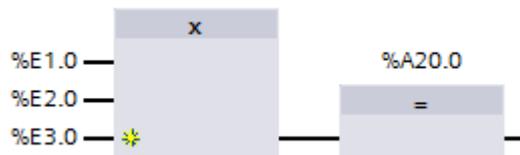
| Verknüpfungstabelle |      |          |
|---------------------|------|----------|
| E1.0                | E2.0 | A20.0    |
| 0                   | 0    | <b>0</b> |
| 0                   | 1    | <b>1</b> |
| 1                   | 0    | <b>1</b> |
| 1                   | 1    | <b>0</b> |

#### Beispiel 5: Verknüpfung von zwei Operanden nach XOR (1xnegiert)



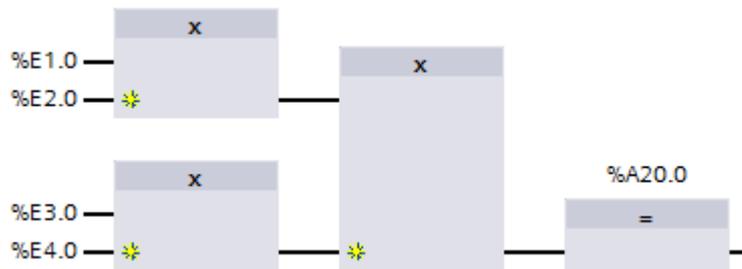
| Verknüpfungstabelle |      |          |
|---------------------|------|----------|
| E1.0                | E2.0 | A20.0    |
| 0                   | 0    | <b>1</b> |
| 0                   | 1    | <b>0</b> |
| 1                   | 0    | <b>0</b> |
| 1                   | 1    | <b>1</b> |

Beispiel 6: Verknüpfung von drei Operanden mit XOR (ungültig)



| Verknüpfungstabelle |      |      |          |
|---------------------|------|------|----------|
| E1.0                | E2.0 | E3.0 | A20.0    |
| 0                   | 0    | 0    | <b>0</b> |
| 0                   | 0    | 1    | <b>1</b> |
| 0                   | 1    | 0    | <b>1</b> |
| 0                   | 1    | 1    | <b>0</b> |
| 1                   | 0    | 0    | <b>1</b> |
| 1                   | 0    | 1    | <b>0</b> |
| 1                   | 1    | 0    | <b>0</b> |
| 1                   | 1    | 1    | <b>1</b> |

**Beispiel 7: Verknüpfung von vier Operanden nach XOR (ungültig)**



| Verknüpfungstabelle |      |      |       |       |
|---------------------|------|------|-------|-------|
| E1.0                | E2.0 | E3.0 | E.4.0 | A20.0 |
| 0                   | 0    | 0    | 0     | 0     |
| 0                   | 0    | 0    | 1     | 1     |
| 0                   | 0    | 1    | 0     | 1     |
| 0                   | 0    | 1    | 1     | 0     |
| 0                   | 1    | 0    | 0     | 1     |
| 0                   | 1    | 0    | 1     | 0     |
| 0                   | 1    | 1    | 0     | 0     |
| 0                   | 1    | 1    | 1     | 1     |
| 1                   | 0    | 0    | 0     | 1     |
| 1                   | 0    | 0    | 1     | 0     |
| 1                   | 0    | 1    | 0     | 0     |
| 1                   | 0    | 1    | 1     | 1     |
| 1                   | 1    | 0    | 0     | 0     |
| 1                   | 1    | 0    | 1     | 1     |
| 1                   | 1    | 1    | 0     | 1     |
| 1                   | 1    | 1    | 1     | 0     |

## Übung: Verknüpfung von vier Operanden nach XOR



| E1.0 | E2.0 | E3.0 | E.4.0 | A20.0 |
|------|------|------|-------|-------|
| 0    | 0    | 0    | 0     |       |
| 0    | 0    | 0    | 1     |       |
| 0    | 0    | 1    | 0     |       |
| 0    | 0    | 1    | 1     |       |
| 0    | 1    | 0    | 0     |       |
| 0    | 1    | 0    | 1     |       |
| 0    | 1    | 1    | 0     |       |
| 0    | 1    | 1    | 1     |       |
| 1    | 0    | 0    | 0     |       |
| 1    | 0    | 0    | 1     |       |
| 1    | 0    | 1    | 0     |       |
| 1    | 0    | 1    | 1     |       |
| 1    | 1    | 0    | 0     |       |
| 1    | 1    | 0    | 1     |       |
| 1    | 1    | 1    | 0     |       |
| 1    | 1    | 1    | 1     |       |

## Lösung

|       |      |      |      |       |
|-------|------|------|------|-------|
| 0     | 1    | 1    | 1    | 1     |
| 1     | 0    | 1    | 1    | 1     |
| 1     | 1    | 0    | 1    | 1     |
| 0     | 0    | 0    | 1    | 1     |
| 1     | 1    | 1    | 0    | 1     |
| 0     | 0    | 1    | 0    | 1     |
| 0     | 1    | 0    | 0    | 1     |
| 1     | 0    | 0    | 0    | 1     |
| 1     | 1    | 1    | 1    | 0     |
| 0     | 0    | 1    | 1    | 0     |
| 0     | 1    | 0    | 1    | 0     |
| 1     | 0    | 0    | 1    | 0     |
| 0     | 1    | 1    | 0    | 0     |
| 1     | 0    | 1    | 0    | 0     |
| 1     | 1    | 0    | 0    | 0     |
| 0     | 0    | 0    | 0    | 0     |
| 0     | 0    | 0    | 0    | 0     |
| A20.0 | E1.0 | E2.0 | E3.0 | E.4.0 |

Verknüpfungstabelle