

# Lab 1 Post - Nick Molo

## 9.1

A and B are the redundant sensors. C is the low priority sensor, and D is the high priority sensor.

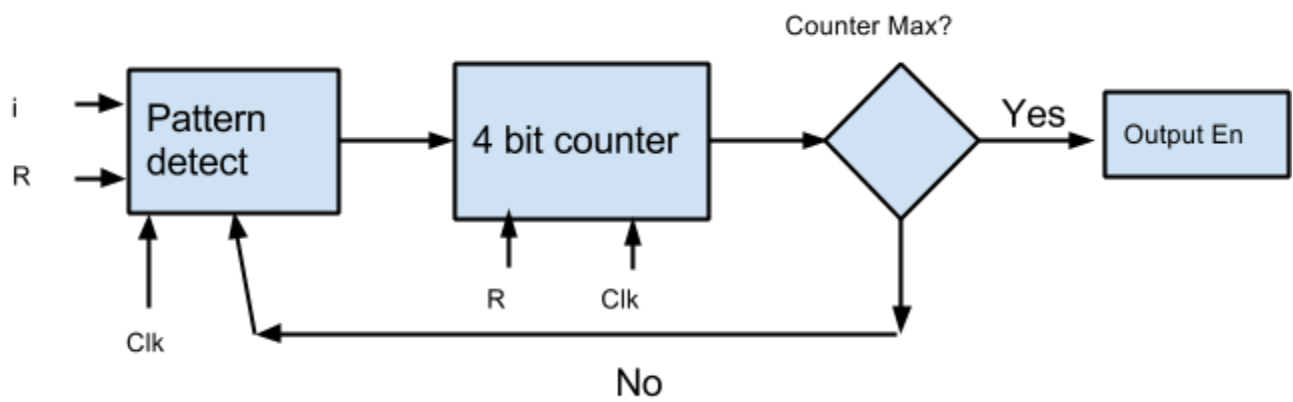
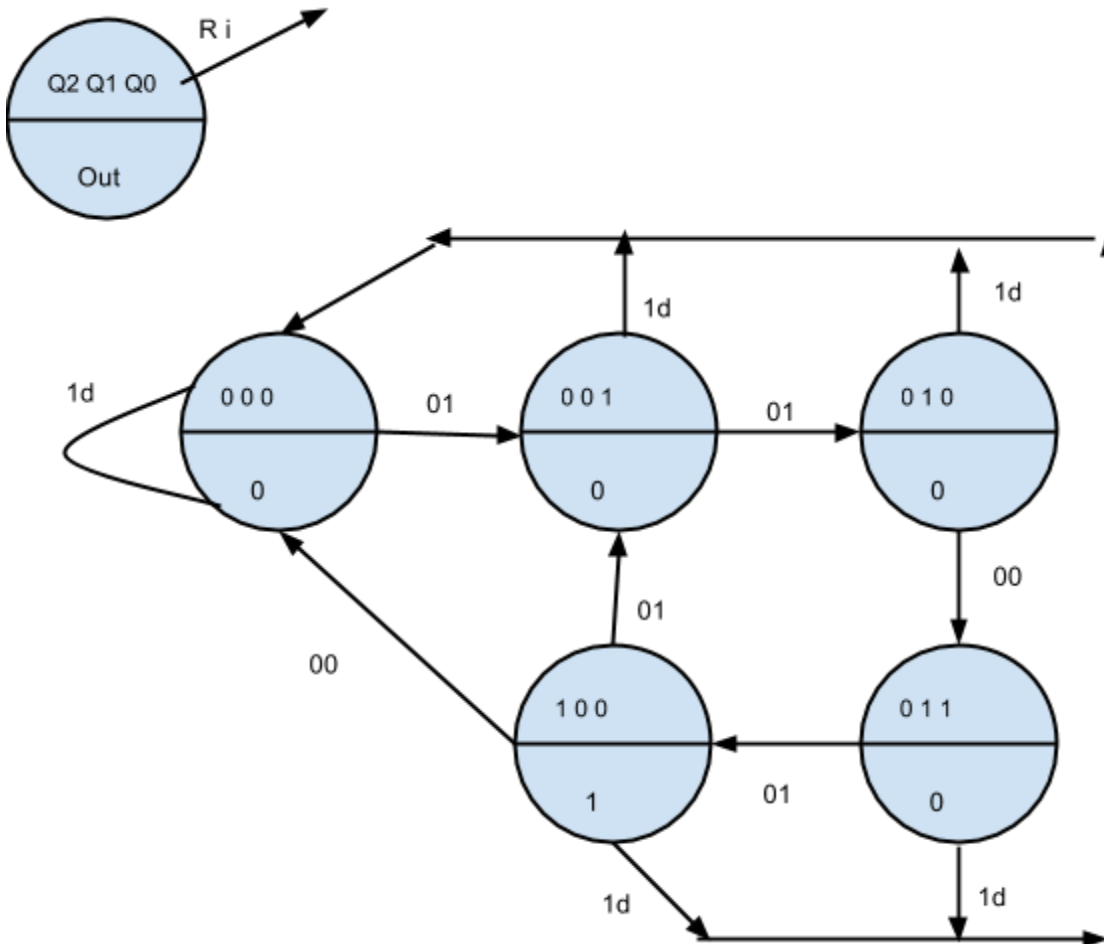
|   |    |    |    |    |    |
|---|----|----|----|----|----|
|   |    |    | A  | B  |    |
|   |    | 00 | 01 | 11 | 10 |
| C | 00 | 0  | 0  | 0  | 0  |
| D | 01 | 1  | 1  | 1  | 1  |
|   | 11 | 1  | 1  | 1  | 1  |
|   | 10 | 0  | 1  | 1  | 1  |

| A | B | C | D | F(ABCD) |
|---|---|---|---|---------|
| 0 | 0 | 0 | 0 | 0       |
| 0 | 0 | 0 | 1 | 1       |
| 0 | 0 | 1 | 0 | 0       |
|   | 0 | 1 | 1 | 1       |
| 0 | 1 | 0 | 0 | 0       |
| 0 | 1 | 0 | 1 | 1       |
| 0 | 1 | 1 | 0 | 1       |
| 0 | 1 | 1 | 1 | 1       |
| 1 | 0 | 0 | 0 | 0       |
| 1 | 0 | 0 | 1 | 1       |
| 1 | 0 | 1 | 0 | 1       |
| 1 | 0 | 1 | 1 | 1       |
| 1 | 1 | 0 | 0 | 0       |
| 1 | 1 | 0 | 1 | 1       |
| 1 | 1 | 1 | 0 | 1       |
| 1 | 1 | 1 | 1 | 1       |

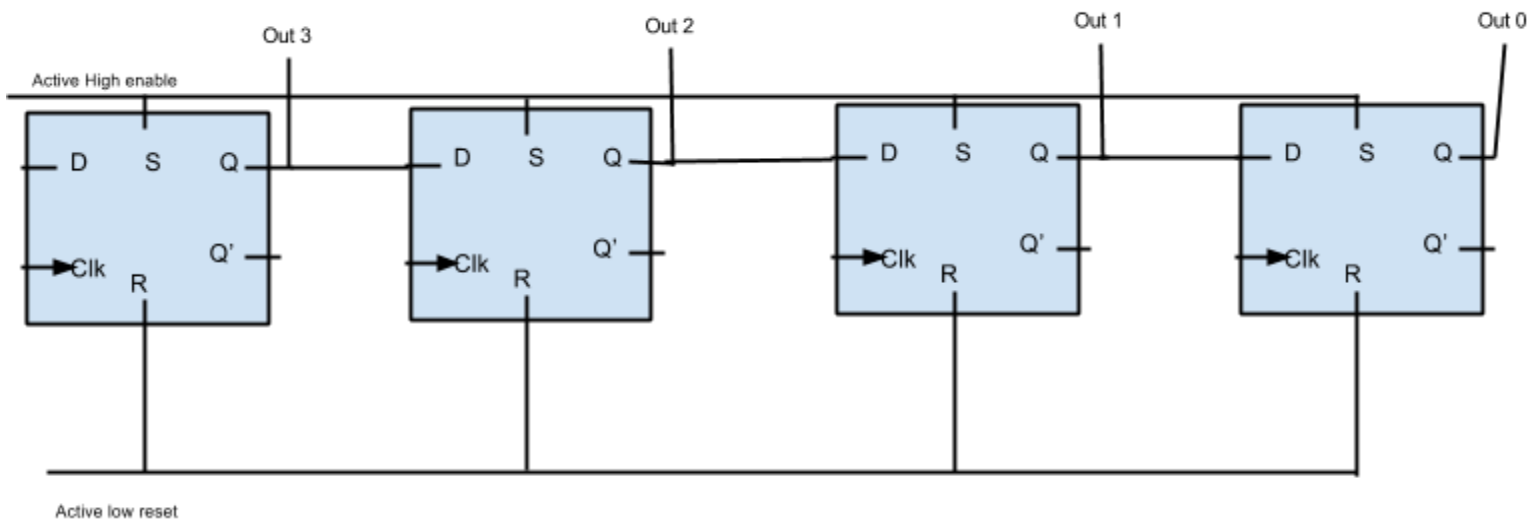
Sum of Products :  $D + BC + AC$

## 9.2

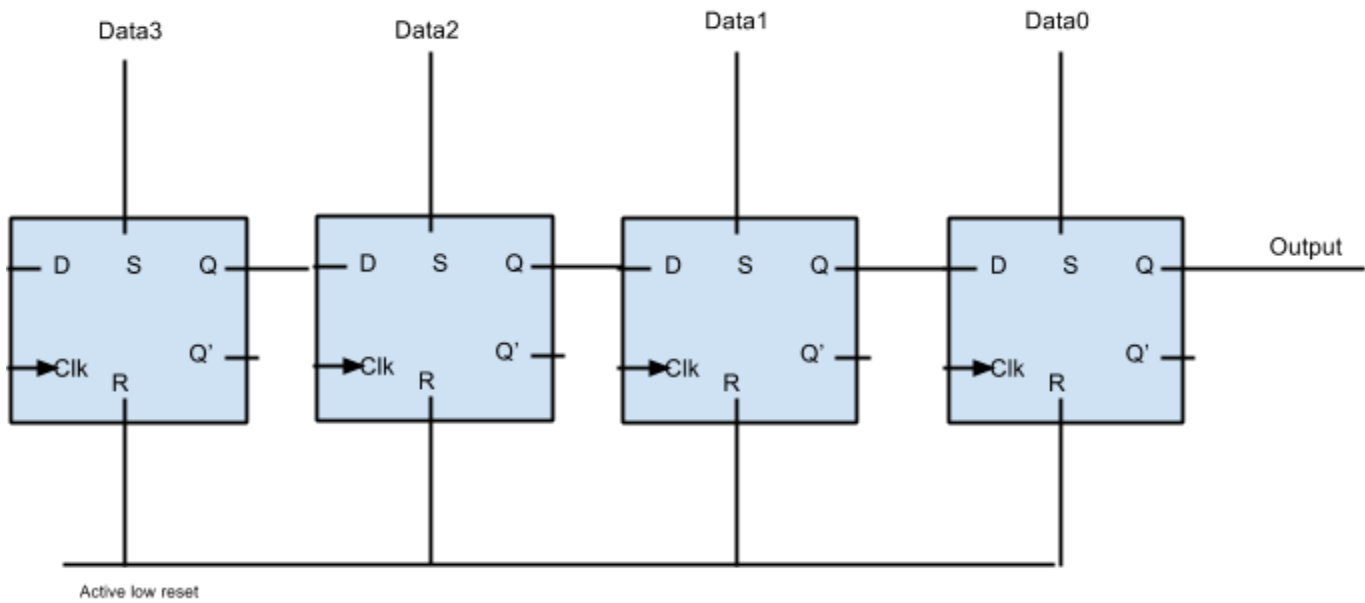
Moore Model



### 9.3.1



### 9.3.2



### 9.3.3

