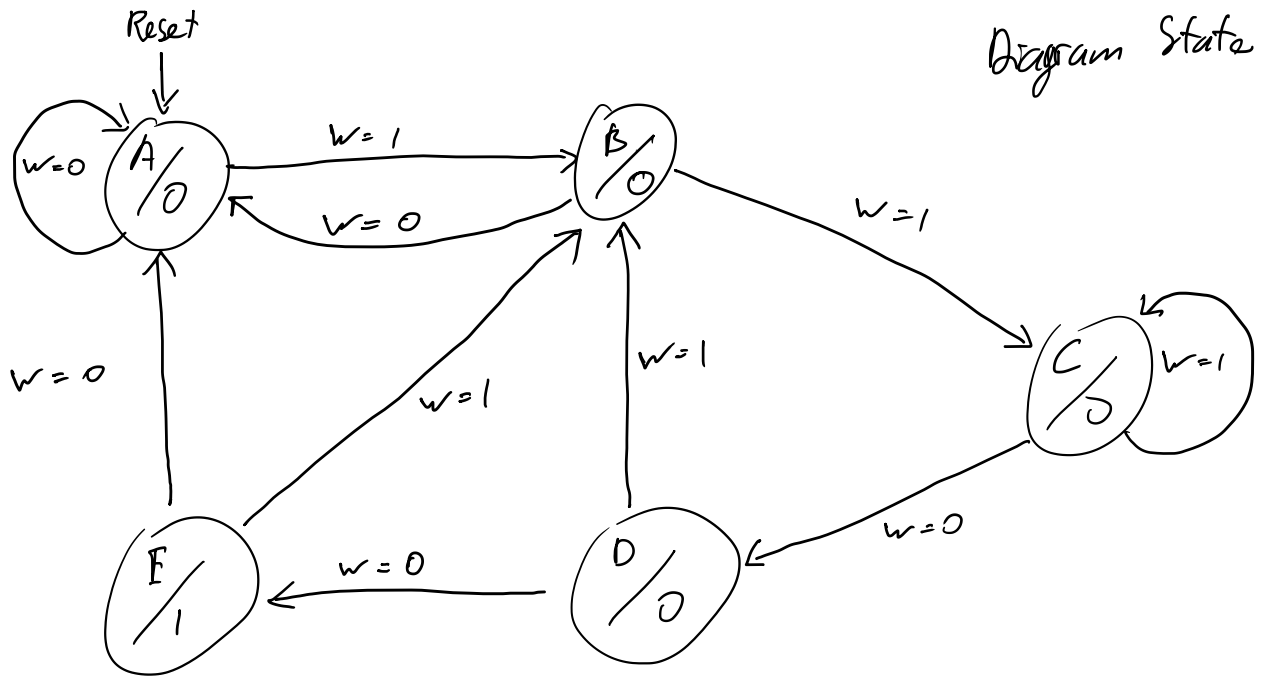
M. Hasyim Abdillah P. 1101191095 TT-43-11

Detektor bit 1100 (model moore) $state_c = 4 + 1 = 5$

Diagram State :



Simulasi

1	_	Reset	
2	1	_	B
3	1	1 _	C
4	1	1 1 _	C
5	1	1 1 0 _	D
6	1	1 1 0 1 _	B

1	_	A	
2	1	_	B
3	1	1 _	C
4	1	1 0 _	D
5	1	1 0 0 _	E
6	1	1 0 0 1 _	B

a) Tabel Representasi State

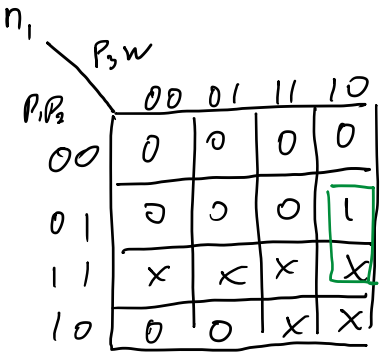
NS ← n_1, n_2, n_3

PS	NS w=0	NS w=1	Z
A	A	B	0
B	A	C	0
C	D	C	0
D	E	B	0
E	A	B	1

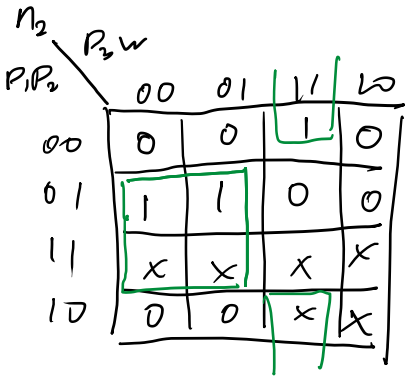
=>

PS	NS w=0	NS w=1	Z
000	000	001	0
001	000	010	0
010	011	010	0
011	100	001	0
100	000	001	1
101	xxx	xxx	x
110	xxx	xxx	x
111	xxx	xxx	x
$P_1\ P_2\ P_3$	$n_1\ n_2\ n_3$	$n_1\ n_2\ n_3$	

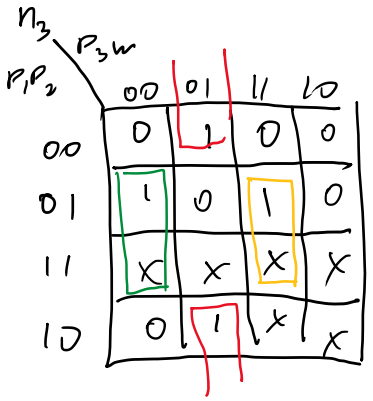
2) K-Map



$n_1 = P_2 P_3 \bar{W}$



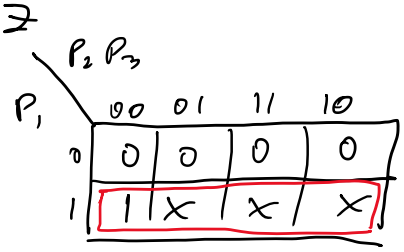
$n_2 = P_2 \bar{P}_3 + \bar{P}_2 P_3 W$



$n_3 = \bar{P}_2 \bar{P}_3 W + P_2 \bar{P}_3 \bar{W} + P_2 P_3 W$

$n_3 = \bar{P}_2 \bar{P}_3 W + P_2 (\bar{P}_3 \bar{W} + P_3 W)$

$n_3 = \bar{P}_2 \bar{P}_3 W + P_2 (\overline{P_3 \oplus W})$



$Z = P_1$

2) Rangkaian Sekuensial