

Should we make a master slave  
we could use the  $\overline{Q}$

PS	ins	W	NS	Best cut
A	0000001	0	B	0000010
A	0000001	1	F	0001000000
B	0000010	0	C	
B	0000010	1	F	
C	00000100	0	D	
C	00000100	1	F	
D	000001000	0	E	
D	000001000	1	F	
E	0000010000	0	E	
E	0000010000	1	F	
F	0000100000	0	B	
F	0000100000	1	G	
G	00010000000	0	B	
G	00010000000	1	H	
H	000100000000	0	B	
H	000100000000	1	I	
I	0100000000000	0	B	
I	0100000000000	1	I	1000000000000

A 11 > -

Remain in same

Tied to Output  
State Den 17  
CWE

<http://download.terasic.com/downloads/cd-rom/de10-standard/>

$$B = A\bar{a} + F\bar{in} + G\bar{in} + H\bar{in} + I\bar{in}$$

$$C = B\bar{in}$$

$$D = C\bar{in}$$

$$E = D\bar{in} + E\bar{in}$$

$$F = A\bar{in} + B\bar{in} + C\bar{in} + D\bar{in} + E\bar{in}$$

$$G = F\bar{in}$$

$$H = G \text{ in}$$

$$I = H \text{ in}$$

$$\text{Out } 6,4 = \bar{E} + \bar{I}$$

$$A = \text{rest}$$

Part 3



2 4-bit

0<sub>s</sub>

1<sub>s</sub>

4

