

$$F(D, C, B, A) = \sum m(2, 3, 5, 6, 7, 8, 12, 13) + d(9, 14)$$

DC \ BA	00	01	11	10
00	0	0	1 ₃	1 ₂
01	0 ₄	1 ₅	0 ₇	1 ₆
11	1 ₁₂	1 ₁₃	0 ₁₅	X ₁₄
10	1 ₈	X ₉	0 ₁₁	0 ₁₀

Stage 1

DCBA	
0010	2
1000	8
0011	3
0101	5
0110	6
1100	12
1001	9
1101	13
1111	14

Stage 2

DCBA		D'C'B
001-	23	D'C'B
0-10	26	D'BA'
1-00	812	DB'A'
100-	89	DC'B'
-101	513	CB'A
110-	1213	DCB'
11-1	1314	
		DCA

$$F = D'C'B + DBA' + DB'A' + DC'B' + CB'A + DCB' + DCA$$

$$\text{cost} = 28$$

$$F = (B+A+D)(C+B+A')(B'+D')$$

$$\text{cost} = 14.$$