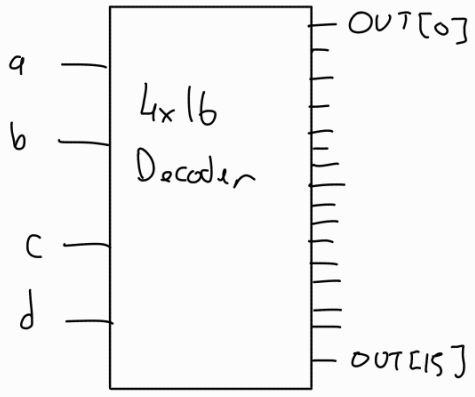

Minterms:

$f_0 = bd = abcd + a'bcd + abc'd + a'bc'd$ (15, 7, 13, 5)

$f_1 = a'bc + ab'd + ac'd + bcd'$

$= a'bcd + a'bcd' + ab'c'd + ab'cd + abc'd + abcd'$ (7, 6, 9, 11, 13, 14)

$f_2 = ab'cd' + ab'cd + abcd'$ (10, 11, 14)

$f_3 = abcd$ (15)

IN3	IN2	IN1	IN0	O15	O14	O13	O12	O11	O10	O9	O8	O7	O6	O5	O4	O3	O2	O1	O0	Minterm
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	a'b'c'd'
0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	a'b'c'd
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	a'b'cd'
0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	a'b'cd
0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	a'bc'd'
0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	a'bc'd
0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	a'bcd'
0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	a'bcd
1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	ab'c'd'
1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	ab'c'd
1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	ab'cd'
1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	ab'cd
1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	abc'd'
1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	abc'd
1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	abcd'
1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	abcd

$f_0 = OUT[5] + OUT[7] + OUT[13] + OUT[15]$

$f_1 = OUT[6] + OUT[7] + OUT[9] + OUT[11] + OUT[13] + OUT[14]$

$f_2 = OUT[10] + OUT[11] + OUT[14]$

$f_3 = OUT[15]$