	A	B	C	D	F_1	F_2	F_3	$F_к$
0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	0
2	0	0	1	0	0	0	0	0
3	0	0	1	1	0	0	0	0
4	0	1	0	0	0	0	0	0
5	0	1	0	1	1	0	0	0
6	0	1	1	0	0	0	0	1
7	0	1	1	1	0	0	0	0
8	1	0	0	0	0	0	0	0
9	1	0	0	1	0	0		
10	1	0	1	0	0	1		
11	1	0	1	1	0	1		
12	1	1	0	0	0	0		
13	1	1	0	1	1	0		
14	1	1	1	0	0	1		
15	1	1	1	1	0	1		

СДНF F_5

Старцев

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7 вар. $BC + AB\bar{C} + \bar{A}\bar{B}C$ Ванкугов 6872

		A	B	C	D	F_1	F_2	F_3	Σ
0	1	0	0	0	0	0	0	0	0
1	2	0	0	0	1	0	0	0	0
2	3	0	0	1	0	0	0	0	0
3	4	0	0	1	1	0	0	0	0
4	5	0	1	0	0	0	0	0	0
5	6	0	1	0	1	0	0	0	0
6	7	0	1	1	0	1	0	0	1
7	8	0	1	1	1	1	0	0	1
8	9	1	0	0	0	0	0	0	0
9	10	1	0	0	1	0	0	0	0
10	11	1	0	1	0	0	0	1	1
11	12	1	0	1	1	0	0	1	1
12	13	1	1	0	0	0	1	0	1
13	14	1	1	0	1	0	1	0	1
14	15	1	1	1	0	1	0	0	1
15		1	1	1	1	1	0	0	1

<u>СДНФ</u> $F(ABCD) = \bar{A}BC\bar{D} + \bar{A}BCD + A\bar{B}C\bar{D} + A\bar{B}CD + AB\bar{C}\bar{D} + A\bar{B}CD + ABC\bar{D} + ABCD$
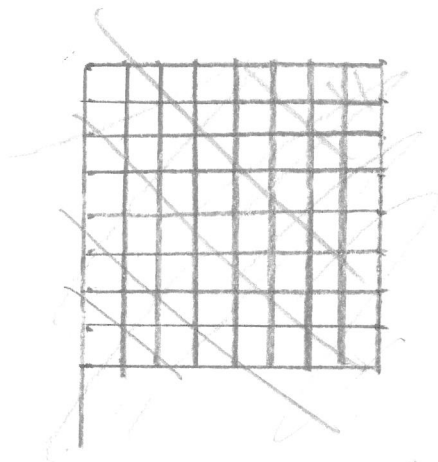
<u>СКНФ</u> $F(ABCD) = \overline{\bar{A}\bar{B}\bar{C}\bar{D}} \cdot (A+\bar{B}+\bar{C}+\bar{D})(\bar{A}+\bar{B}+\bar{C}+D)(\bar{A}+\bar{B}+C+\bar{D})(\bar{A}+\bar{B}+C+D)(\bar{A}+B+\bar{C}+\bar{D}) \approx$

$\cdot (A+\bar{B}+\bar{C}+\bar{D})(A+\bar{B}+\bar{C}+D)(\bar{A}+B+C+\bar{D})$

	$\overline{C}$	A	
0	2	10	8
1	3	11	9
5	7	15	13
4	6	14	12

D · B

Крылова А.Д. ГР72

$$\boxed{9\text{Вар}} = \underbrace{A\,\bar{B}}_{F_1} + \underbrace{BCD}_{F_2} + \underbrace{\bar{A}\,\bar{D}}_{F_3}$$

N	A	B	C	D	F_1	F_2	F_3	$\sum_i F_i$
0	0	0	0	0	0	0	1	1
1	0	0	0	1	0	0	0	0
2	0	0	1	0	0	0	1	1
3	0	0	1	1	0	0	0	0
4	0	1	0	0	0	0	1	1
5	0	1	0	1	0	0	0	0
6	0	1	1	0	0	0	1	1
7	0	1	1	1	0	1	0	1
8	1	0	0	0	1	0	1	1
9	1	0	0	1	1	0	0	1
10	1	0	1	0	1	0	1	1
11	1	0	1	1	1	0	0	1
12	1	1	0	0	0	0	1	1
13	1	1	0	1	0	0	0	0
14	1	1	1	0	0	0	1	1
15	1	1	1	1	0	1	0	0

СКНФ

A →
C →

8	10	2	0
12	14	6	4
13	15	7	5
9	11	3	1

B ↓
D

СDНФ

$$B\bar{C} + AB\bar{C} + A\bar{B}C = \bar{B}\bar{C} + \bar{A}BC + \bar{A}\bar{B}\bar{C}$$

	A	B	C	F_1
0	0	0	0	
1	0	0	0	
2	0	0	1	
3	0	0	1	
4	0	1	0	
5	0	1	1	
6	0	1	0	
7	0	1	1	
8	1	0	0	
9	1	0	0	
10	1	0	1	
11	1	0	0	
12	1	1	0	
13	1	1	0	
14	1	1	1	
15	1	1	1	

	A	B	C	F_1	F_2	F_3	F
0	0	0	0	1	0	0	1
1	0	0	1	0	1	0	1
2	0	1	0	0	0	1	1
3	0	1	1	0	0	0	0
4	1	0	0	1	0	0	1
5	1	0	1	0	0	0	0
6	1	1	0	0	0	0	0
7	1	1	1	0	0	0	0

$$\underbrace{\bar{A}\bar{B}C}_{F_1} + \underbrace{AB}_{F_2}$$

$$N6+\text{транс.}: \quad \overline{\overline{A}\,\overline{B}\,C + A\overline{D} + \overline{A}B\overline{D}} = \overline{A}B\overline{C} + \overline{A}D + ABD$$

	A	B	C	D	F₁ $\overline{A}B\overline{C}$	F₂ $\overline{A}D$	F₃ ABD	F₄ $\oplus$
0	0	0	0	0	0	0	0	0 1
1	0	0	0	1	0	1	0	1 1
2	0	0	1	0	0	0	0	0 1
3	0	0	1	1	0	1	0	1
4	0	1	0	0	1	0	0	1 1
5	0	1	0	1	1	1	0	1
6	0	1	1	0	0	0	0	0 1
7	0	1	1	1	0	1	0	1 1
8	1	0	0	0	0	0	0	0 1
9	1	0	0	1	0	0	0	0 1
10	1	0	1	0	0	0	0	0 1
11	1	0	1	1	0	0	0	0 1
12	1	1	0	0	0	0	0	0 1
13	1	1	0	1	0	0	1	1 0
14	1	1	1	0	0	0	1	0 1
15	1	1	1	1	0	0	1	1 0

Магорных В.

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	A	B	C	D	F_1	F_2	F_3	Σ	$A\bar{B}C + A\bar{D} + \bar{A}\bar{B}D$	
									СДНФ	СКНФ
0	0	0	0	0	0	0	1	1	$\bar{A}\bar{B}\bar{C}\bar{D}$	
1	0	0	0	1	0	0	0	0		$A+B+C+\bar{D}$
2	0	0	1	0	0	0	1	1	$\bar{A}\bar{B}C\bar{D}$	
3	0	0	1	1	0	0	0	0		$A+B+\bar{C}+\bar{D}$
4	0	1	0	0	0	0	0	0		$A+\bar{B}+C+D$
5	0	1	0	1	0	0	0	0		$A+\bar{B}+C+\bar{D}$
6	0	1	1	0	0	0	0	0		$A+\bar{B}+\bar{C}+D$
7	0	1	1	1	0	0	0	0		$A+\bar{B}+\bar{C}+\bar{D}$
8	1	0	0	0	0	1	0	1	$A\bar{B}\bar{C}D$	
9	1	0	0	1	0	1	0	1		$\bar{A}+B+C+\bar{D}$
10	1	0	1	0	1	0	0	1	$A\bar{B}C\bar{D}$	
11	1	0	1	1	1	0	0	1	$A\bar{B}C D$	
12	1	1	0	0	0	0	0	1	$A B\bar{C}\bar{D}$	
13	1	1	0	1	0	0	0	0		$\bar{A}+\bar{B}+C+\bar{D}$
14	1	1	1	0	0	1	0	1	$A B C\bar{D}$	
15	1	1	1	1	0	1	0	0		$\bar{A}+\bar{B}+\bar{C}+\bar{D}$

СДНФ сумма. СКНФ пр-е

СДНФ

		A		
	c			
				8
D 14	12			
B			0	2
11	10			

← СДНФ

	A	
c		
D		
B		

← СКНФ

Зверев 20

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$$\overline{A}\,\overline{B}C\overline{D} + A\overline{C}\overline{D} + B\overline{C}\overline{D}$$

№ (номер набора)	A	F_1 B	C	F_2 $\overline{D}$
0	0	0	0	1
1	0	0	1	0
2	0	1	0	0
3	0	1	1	1
4	1	0	0	0

F_3 — наи равен лучший.

$$\overline{A}\,\overline{B}C\overline{D}\;{}^{F_1} + A\overline{C}\overline{D}\;{}^{F_2} + B\overline{C}\overline{D}\;{}^{F_3}$$

№ наб.	A	B	C	D	F_1	F_2	F_3	F
0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	0
2	0	0	1	0	0	0	0	0
3	0	1	0	0	0	0	0	0
4	1	0	0	0	0	0	0	0
5	1	1	0	0	0	0	0	0
6	1	0	1	0	1	0	0	1
7	1	0	0	1	0	1	0	1
8	0	0	1	1	0	0	0	0
9	0	1	0	1	0	0	1	1
10	0	1	1	0	0	0	0	0
11	1	1	1	0	0	0	0	0
12	0	1	1	1	0	0	0	0
13	1	0	1	1	0	0	0	0
14	1	1	0	1	0	1	1	1
15	1	1	1	1	0	0	0	0

$$\bar{A}C + B\bar{A}\bar{C}\bar{D} + BD\bar{A}$$

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№	A	B	C	D	F_1	F_2	F_3	F
0	0	0	0	0				0
1	0	0	0	1	0	0	0	0
2	0	0	1	0	0	0	0	0
3	0	1	0	0	0	0	0	0
4	1	0	0	0	0	0	0	0
5	0	1	0	1	0	0	1	1
6	0	1	1	0	0	0	0	0
7	0	1	1	1	0	0	1	1
8	1	1	1	1	1	0	0	1
9	1	1	0	0	1	1	0	1
10	1	1	1	0	1	0	0	1
11	0	1	1	1	0	0	1	1
12	1	1	0	0	1	0	0	1
13	0	0	1	1	0	0	0	0
14	1	0	1	0	0	0	0	0
15	1	0	0	1	1	0	0	1

	A	B	C	D	F_1	F_2	F_3	F_K
0	0	0	0	0	0	0	0	0
1	0	0	0	1	0	0	0	0
2	0	0	1	0	0	0	0	0
3	0	0	1	1	0	0	0	0
4	0	1	0	0	0	0	0	0
5	0	1	0	1	1	0	0	1
6	0	1	1	0	0	0	0	0
8	0	1	1	1	0	0	0	0
8	1	0	0	0	0	0	0	0
9	1	0	0	1	0	0	1	1
10	1	0	1	0	0	1	1	1
11	1	0	1	1	0	1	1	1
12	1	1	0	0	0	0	1	0
13	1	1	0	1	1	0	0	1
14	1	1	1	0	0	1	0	1
15	1	1	1	1	0	1	0	1

F_K СДНF   A

0	0	1	0
0	0	1	1
1	0	1	1
0	0	1	0

F_1 СДНF

0	0	0	0
0	0	0	0
1	0	0	1
0	0	0	0

F_K СК HF $\bar{A}$

1	1	0	1
0	0	0	0
0	1	0	0
1	1	0	1

F_2 СДНФ

F_3 СДНФ