

Булевите функции в СъвДНФ:

$x_1$	$x_2$	$y_1$	$y_2$	$z_1$	$z_2$	$z_3$
0	0	0	0	0	0	0
0	0	0	1	0	0	1
0	0	1	0	0	1	0
0	0	1	1	0	1	1
0	1	0	0	0	0	1
0	1	0	1	0	1	0
0	1	1	0	0	1	1
0	1	1	1	1	0	0
1	0	0	0	0	1	0
1	0	0	1	0	1	1
1	0	1	0	1	0	0
1	0	1	1	1	0	1
1	1	0	0	0	1	1
1	1	0	1	1	0	0
1	1	1	0	1	0	1
1	1	1	1	1	1	0

$$z_1 = \overline{x_1}x_2y_1y_2 \vee x_1\overline{x_2}y_1\overline{y_2} \vee x_1\overline{x_2}y_1y_2 \vee x_1x_2\overline{y_1}y_2 \vee \\ x_1x_2y_1\overline{y_2} \vee x_1x_2y_1y_2$$

$$z_2 = \overline{x_1}\overline{x_2}y_1\overline{y_2} \vee \overline{x_1}\overline{x_2}y_1y_2 \vee \overline{x_1}x_2\overline{y_1}y_2 \vee \overline{x_1}x_2y_1\overline{y_2} \vee \\ x_1\overline{x_2}\overline{y_1}\overline{y_2} \vee x_1\overline{x_2}\overline{y_1}y_2 \vee x_1x_2\overline{y_1}\overline{y_2} \vee x_1x_2y_1\overline{y_2}$$

$$z_3 = \overline{x_1}\overline{x_2}\overline{y_1}y_2 \vee \overline{x_1}\overline{x_2}y_1y_2 \vee \overline{x_1}x_2\overline{y_1}\overline{y_2} \vee \overline{x_1}x_2y_1\overline{y_2} \vee \\ x_1\overline{x_2}\overline{y_1}y_2 \vee x_1\overline{x_2}y_1y_2 \vee x_1x_2\overline{y_1}\overline{y_2} \vee x_1x_2y_1\overline{y_2}$$

Двоичният суматор:

