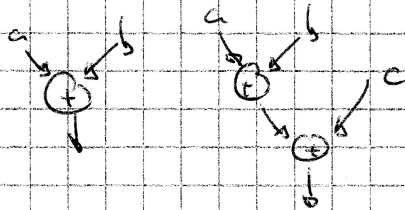


Kombinatorische Multioperandenaddition



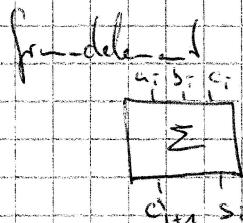
Anwendg: Additions-Tripelprodukte bei Multiplikation

Bsp:

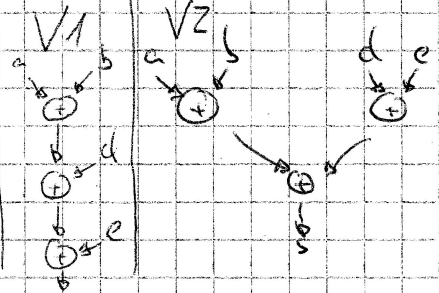
$$\begin{array}{r}
 0011 \cdot 0111 \\
 0011 \\
 + 0011 \\
 + 0011 \\
 \hline
 10101
 \end{array}$$

Bsp: Addition von 4 Operanden mit 4 Dualstellen

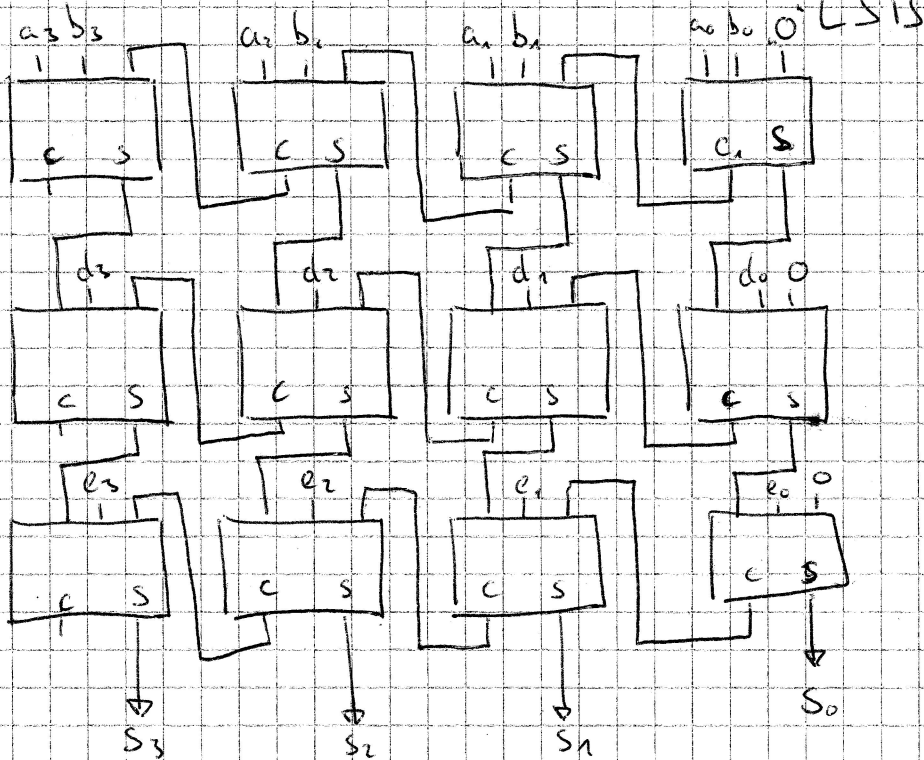
Variante: Kettenschaltung mit Ripple Carry Addierer



$a_3 a_2 a_1 a_0$
 $b_3 b_2 b_1 b_0$
 $d_3 d_2 d_1 d_0$
 $e_3 e_2 e_1 e_0$



V1 MSB



length

$a_i, b_i, c_i \rightarrow 2\Delta$
 $a_i, b_i, c_{i+1} \rightarrow 3\Delta$
 $c_i \rightarrow c_{i+1} 2\Delta$
 $c_i \rightarrow s_i 1\Delta$
 $2\Delta + 2\Delta + 3\Delta$
 $+ 2\Delta + 2\Delta + 1\Delta$
 $= 12\Delta$