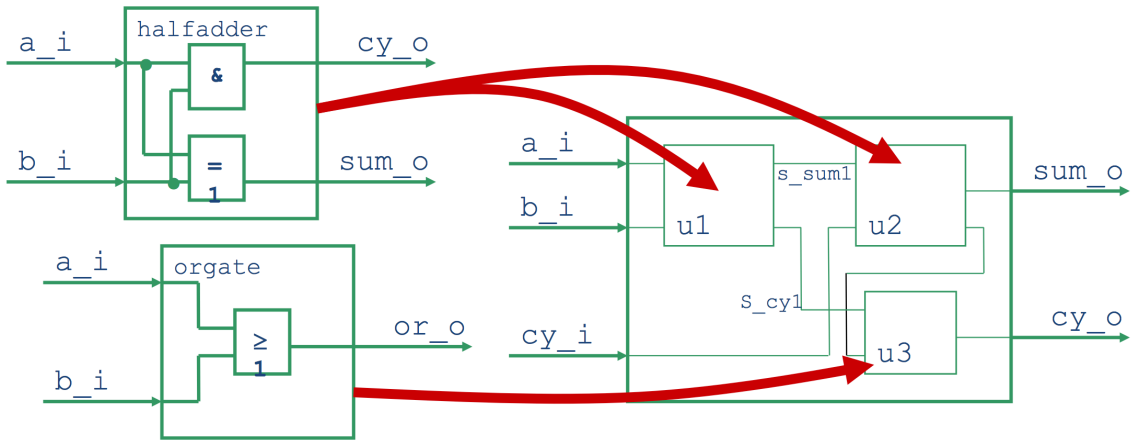
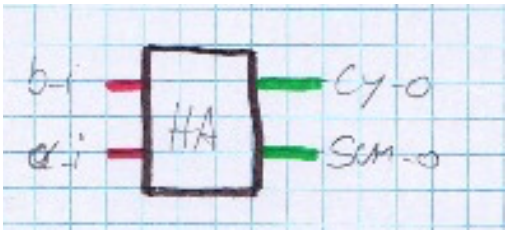
Fulladder, Volladdierer



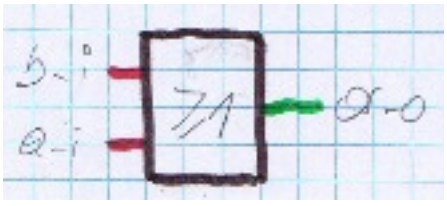
Half Adder, Halbaddierer



a_i	b_i	sum_o	cy_o
0	0	0	0
0	1	0	1
1	0	0	1
1	1	1	0

sum_o = a_i XOR b_i
cy_o = a_i AND b_i

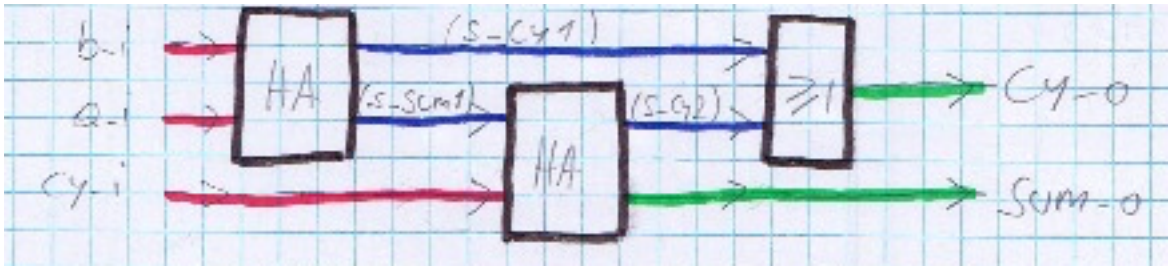
Orgate, Oder-Gatter



a_i	b_i	a_o
0	0	0
0	1	1
1	0	1
1	1	1

a_o = a_i OR b_i

Aufbau Volladdierer



#	cy_i	b_i	a_i	cy_o	sum_o
0	0	0	0	0	0
1	0	0	1	0	1
2	0	1	0	0	1
3	0	1	1	1	0
4	1	0	0	0	1
5	1	0	1	1	0
6	1	1	0	1	0
7	1	1	1	1	1

sum_o = (b_i XOR a_i) XOR cy_i
cy_o = (b_i AND a_i) OR (sum_1 AND cy_i)