


Timing results: Output as expected

Waveforms → in LAB

Timing delays → as expected (see calculations)

GATES Primitive XOR	Assumed XOR = 2
• Delay XOR = 1	• Delay XOR = 2
• 1 bit FA = 2	• 1 bit FA = 4
• 4 bit RCA = 8	• 4 bit = 16
↓	↓
32 bit = $4 \times 8 = 32 \times 8 = 64$	32 = $4 \times 8 = 16 \times 8 = 128$ gate
↓	
C54	
↓	
	
32 gate	