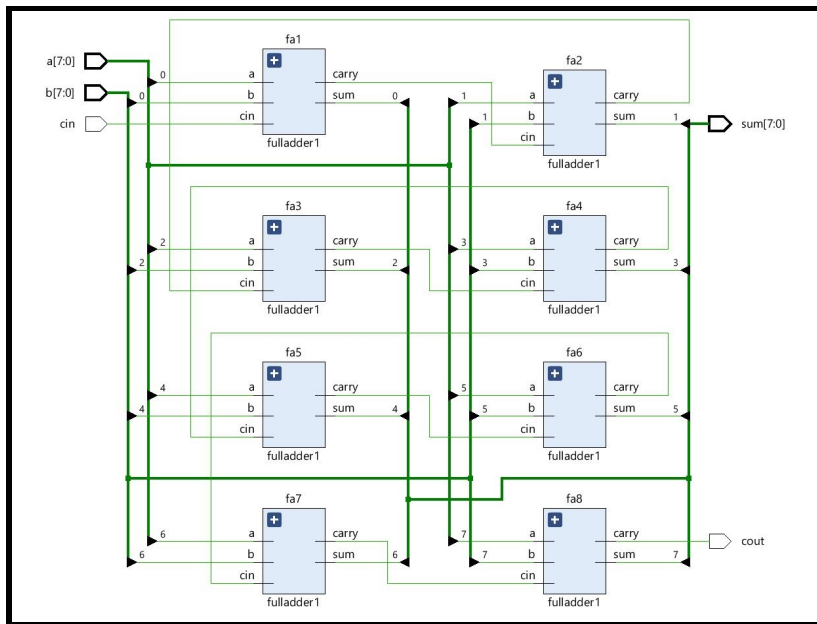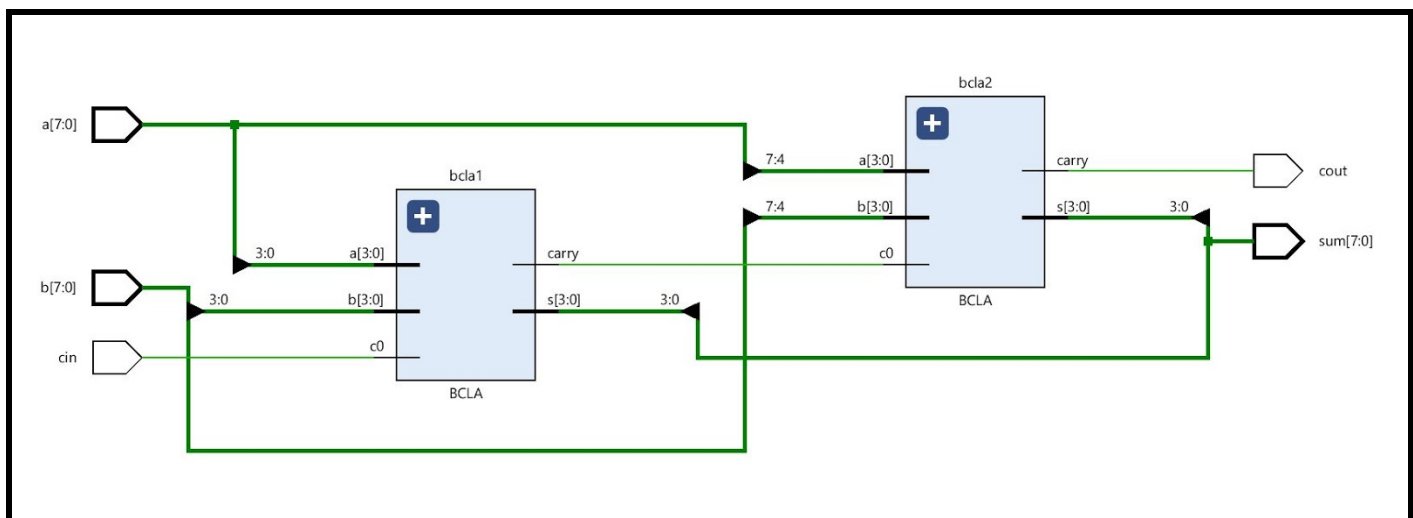# VERILOG DESIGN OF BINARY ADDERS
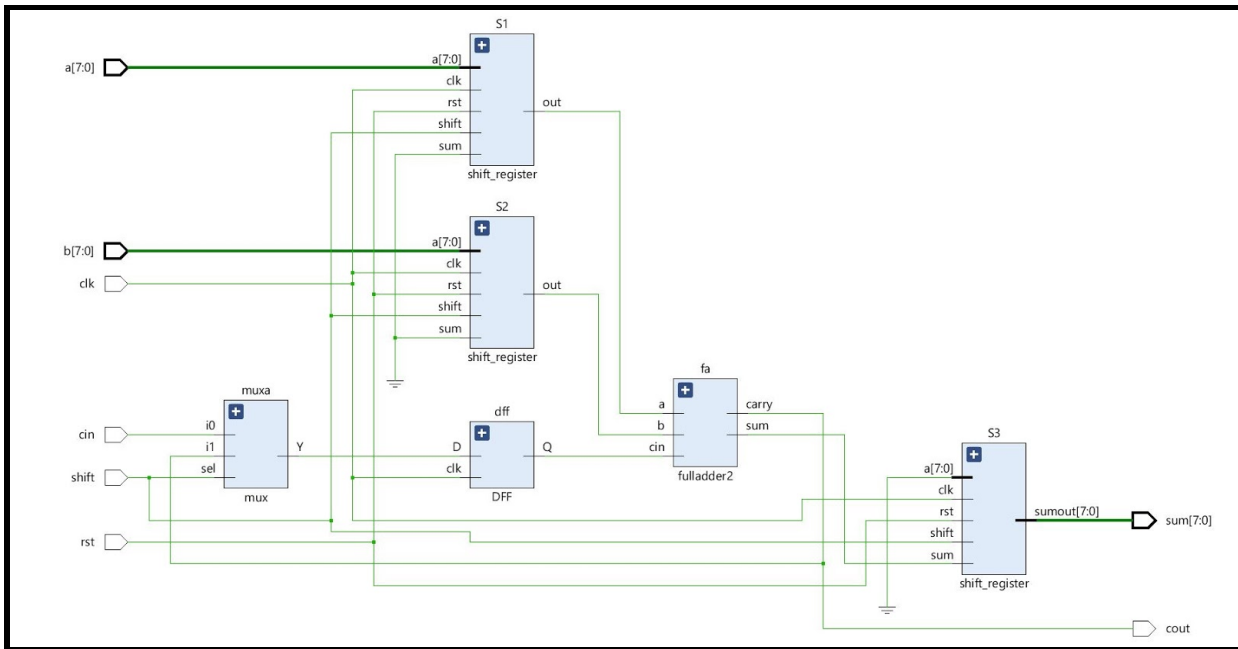
Schematic Diagrams :

Ripple Carry Binary Adder

Hybrid Binary Adder

Bit Serial Binary Adder

COMPARISON

Board Used: Nexys4 DDR

TYPE OF ADDER	HARDWARE REQUIREMENTS	CRITICAL PATH DELAY
Ripple Carry Adder	8 Slice LUTs, 26 Bonded IOB	7.118 ns
Hybrid Adder	8 Slice LUTs, 26 Bonded IOB	7.118 ns
Bit Serial Adder	18 Slice LUTs, 25 Slice Registers, 29 Bonded IOB, 1 BUFGCTRL	4.991 ns