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Performance Report (Assignment 5 Multiplier on FPGA)

Unsigned binary array multiplier, Two's Complement Combinational Binary multiplier, Booth's Multiplier

Booth's Multiplier :

Hardware Used :

# Adders/Subtractors		: 2
8-bit adder carry in		: 2
# Counters	: 1	
4-bit up counter		: 1
# Registers	: 25	
Flip-Flops	: 25	
# Comparators		: 1
4-bit comparator less		: 1
# Multiplexers	: 2	
1-bit 4-to-1 multiplexer		: 1
8-bit 4-to-1 multiplexer		: 1

Time Delay : 7.440ns

Two's Complement Combinational Binary Multiplier :

Hardware Used :

# Adders/Subtractors		: 3
16-bit adder	: 1	
8-bit adder	: 2	
# Xors	: 113	
1-bit xor2	: 113	

Time Delay :   40.384ns

Unsigned Binary Array Multiplier :

Hardware Used :
Macro Statistics

# Xors	: 112
1-bit xor2	: 112

Time Delay   :   36.600ns