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#### adder fp tb screenshot:

```
op: 0
Y: Sign: 0 Exponent: 11111111 Mantissa: 11111111111111111111111111
A: Sign: 0 Exponent: 01111111 Mantissa: 1000000000000100000001
op: 0
Y: Sign: 0 Exponent: 10000000 Mantissa: 0000000000001000000001
0 :qo
op: 1
Y: Sign: 0 Exponent: 11111111 Mantissa: 11111111111111111111111111
op: 1
Y: Sign: 0 Exponent: 11111111 Mantissa: 11111111111111111111111111
op: 1
```

#### multiplier\_fp\_tb\_screenshot:

```
B: Sign: 0 Exponent: 10000011 Mantissa: 01000000000000000000000
B: Sign: 0 Exponent: 11001000 Mantissa: 1100000101110000000000
A: Sign: 0 Exponent: 10111111 Mantissa: 1001100001000000000000
B: Sign: 0 Exponent: 10110101 Mantissa: 01001000010100000000000
Y: Sign: 0 Exponent: 11110110 Mantissa: 0000101110010001100101
Y: Sign: 1 Exponent: 10000101 Mantissa: 11100000000000000000000
A: Sign: 1 Exponent: 10111111 Mantissa: 1001100001000000000000
B: Sign: 1 Exponent: 10110101 Mantissa: 0100100001010000000000
Y: Sign: 0 Exponent: 11110110 Mantissa: 0000101110010001100101
B: Sign: 0 Exponent: 10110101 Mantissa: 010010000101111111111111
Y: Sign: 0 Exponent: 11110110 Mantissa: 10000110110011110001010
B: Sign: 0 Exponent: 10110101 Mantissa: 01001000010111111111111
B: Sign: 0 Exponent: 10110101 Mantissa: 010010000101111111111111
```

# adder\_fp\_utilization:

Graph   Table					
Available Utilization					
53200 1.02					
106400 0.14					
200 50.50					
32 3.13					
1					

## multiplier\_fp\_utilization:

Utilization	Post-Synthesis   Post-Implementation					
Graph   Table						
Resource	Utilization	Available	Utilization			
LUT	251	53200	0.47			
FF	144	106400	0.14			
DSP	2	220	0.91			
IO	100	200	50.00			
BUFG	1	32	3.13			

### total\_utilization:

Sum of adder_fp and multiplier_fp Utilization					
Resource	Utilization	Available	Utilization %		
LUT	796	53200	1.49%		
FF	291	106400	0.28%		
DSP	2	220	0.91%		
IO	201	200	100.50%		
BUFG	2	32	6.26%		