Synthesis Report for 'mul_8'

General Information

Date: Tue Mar 14 19:32:41 2023

Version: 2017.4 (Build 2086221 on Fri Dec 15 21:13:33 MST 2017)

Project: assignment1
Solution: solution1
Product family: zynq

Target device: xc7z020clg484-1

Performance Estimates

• Timing (ns)

• Summary

| Clock | Target | Estimated | Uncertainty | |
|--------|--------|-----------|-------------|--|
| ap_clk | 10.00 | 4.17 | 1.25 | |

- Latency (clock cycles)
 - Summary

| Tymo | rval | Inte | Latency | | | | |
|------|------|------|---------|-----|--|--|--|
| Туре | max | min | max | min | | | |
| none | 0 | 0 | 0 | 0 | | | |

- Detail
 - Instance

N/A

Loop

N/A

Utilization Estimates

• Summary

| Name | BRAM_18K | DSP48E | FF | LUT |
|------------|----------|--------|----------|-----|
| DSP | - | - | - | - |
| Expression | - | 0 | 0 | 41 |
| FIFO | - | - | - | - |
| | - | | <u> </u> | |

| Instance | - | - | - | - |
|-----------------|-----|-----|--------|-------|
| Memory | - | - | - | - |
| Multiplexer | - | - | - | - |
| Register | - | - | - | - |
| Total | 0 | 0 | 0 | 41 |
| Available | 280 | 220 | 106400 | 53200 |
| Utilization (%) | 0 | 0 | 0 | ~0 |

• Detail

• Instance

N/A

• **DSP48**

N/A

• Memory

N/A

• FIFO

N/A

• Expression

| Variable Name | Operation | DSP48E | FF | LUT | Bitwidth P0 | Bitwidth P1 |
|---------------|-----------|--------|----|-----|-------------|-------------|
| С | * | 0 | 0 | 41 | 8 | 8 |
| Total | 1 | 0 | 0 | 41 | 8 | 8 |

• Multiplexer

N/A

• Register

N/A

Interface

• Summary

| RTL Ports | Dir | Bits | Pr | otoc | ol | Source Object | C Type |
|-----------|-----|------|-----|------|----|---------------|--------------|
| ap_start | in | 1 | ap_ | ctrl | hs | mul_8 | return value |
| | | | | | | | |

| ap_done | out | 1 | ap_ctrl_hs | mul_8 | return value |
|----------|-----|----|------------|-------|--------------|
| ap_idle | out | 1 | ap_ctrl_hs | mul_8 | return value |
| ap_ready | out | 1 | ap_ctrl_hs | mul_8 | return value |
| A | in | 8 | ap_none | A | scalar |
| В | in | 8 | ap_none | В | scalar |
| С | out | 16 | ap_none | C | pointer |