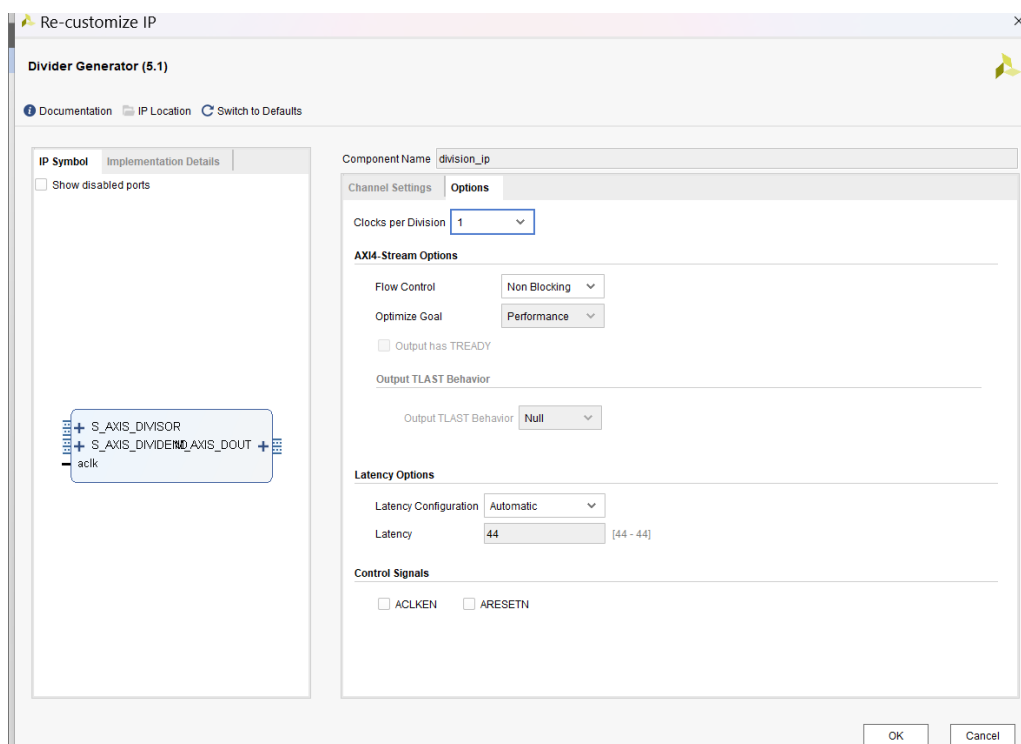
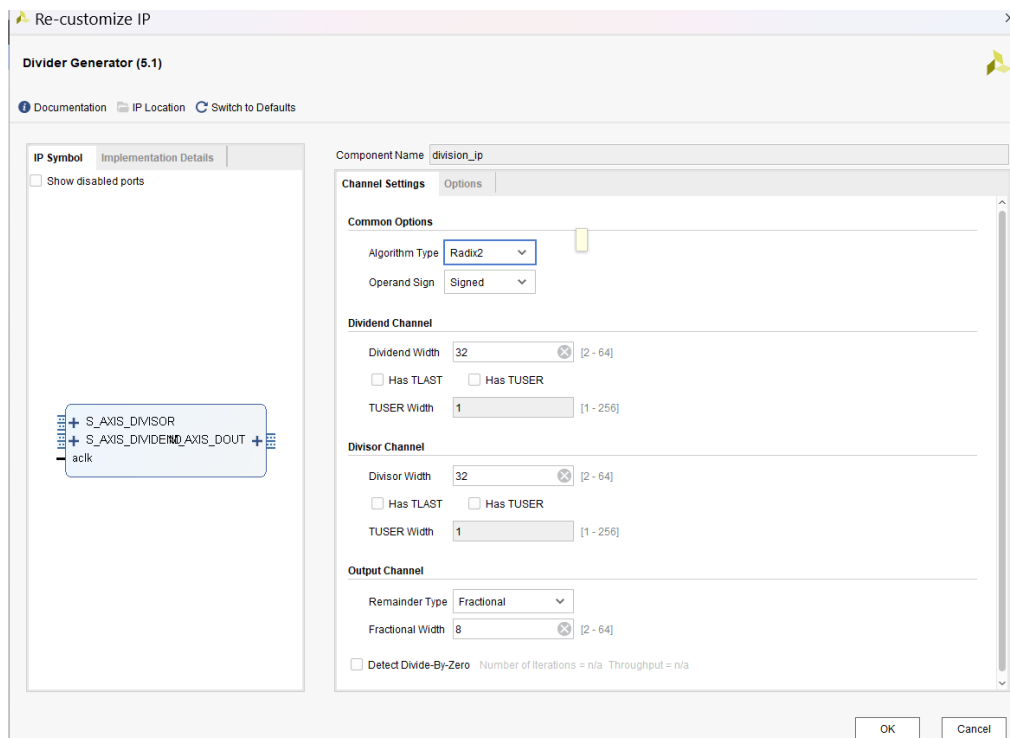


Inside the Sobel module there is a DIVIDER GENERATOR instantiation named `division_ip`.

For creating the instance follow the steps:

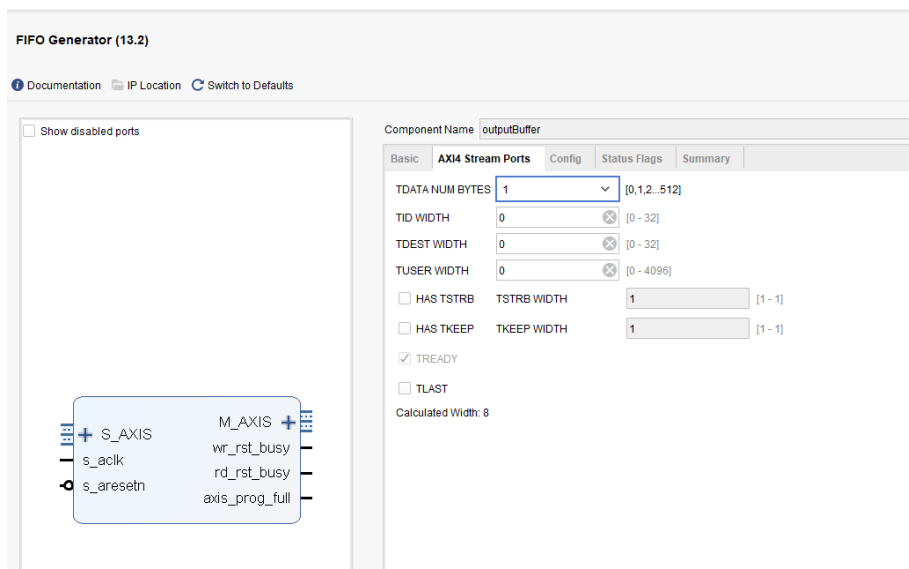
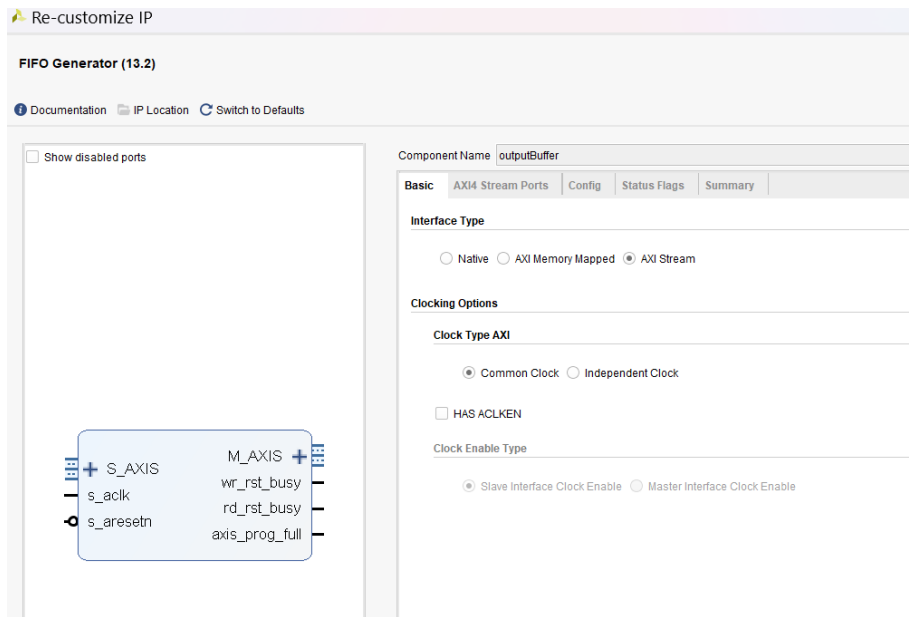
Go to IP Catalog in project manager >>> search for divider generator IP >>> make its settings as shown below



NB – change the component name as division_ip

We also want to instantiate an output buffer, for these follow the steps:

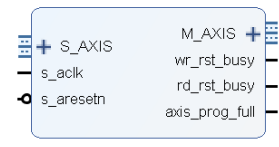
Go to IP Catalog in project manager >>> search for fifo generator IP
>>> make its settings as shown below



FIFO Generator (13.2)

Documentation IP Location Switch to Defaults

Show disabled ports



Component Name outputBuffer

Basic	AXI4 Stream Ports	Config	Status Flags	Summary
TDATANUM BYTES <input type="text" value="1"/> [0,1,2...512]				
TID WIDTH <input type="text" value="0"/> [0 - 32]				
TDEST WIDTH <input type="text" value="0"/> [0 - 32]				
TUSER WIDTH <input type="text" value="0"/> [0 - 4096]				
<input type="checkbox"/> HAS TSTRB TSTRB WIDTH <input type="text" value="1"/> [1 - 1]				
<input type="checkbox"/> HAS TKEEP TKEEP WIDTH <input type="text" value="1"/> [1 - 1]				
<input checked="" type="checkbox"/> TREADY				
<input type="checkbox"/> TLAST				
Calculated Width: 8				

FIFO Generator (13.2)

Documentation IP Location Switch to Defaults

Show disabled ports



Component Name outputBuffer

Basic	AXI4 Stream Ports	Config	Status Flags	Summary
Configuration Options				
<input checked="" type="radio"/> FIFO <input type="radio"/> Register Slice				
FIFO Options				
FIFO Implementation Type <input type="text" value="Common Clock Block RAM"/>				
FIFO Application Type				
<input checked="" type="radio"/> Data FIFO <input type="radio"/> Packet FIFO <input type="radio"/> Low Latency Data FIFO				
Latency : 2				
FIFO Width: 8 FIFO Depth <input type="text" value="16"/> Actual FIFO Depth : 18				
ECC And Output Register Options				
<input type="checkbox"/> ECC <input type="checkbox"/> Single Bit Error Injection <input type="checkbox"/> Double Bit Error Injection				
<input type="checkbox"/> Embedded Registers				
Data Threshold Parameters				
Programmable Full Type <input type="text" value="Single Programmable Full Threshold Constant"/>				
Full Threshold Assert Value <input type="text" value="8"/> [5 - 15]				
Programmable Empty Type <input type="text" value="No Programmable Empty Threshold"/>				
<input type="checkbox"/> Provide FIFO Occupancy Data Counts				

FIFO Generator (13.2)

Documentation IP Location Switch to Defaults

Show disabled ports



Component Name outputBuffer

Basic	AXI4 Stream Ports	Config	Status Flags	Summary
FIFO Generator Summary				
Selected Simulation Model				
Interface Type : AXI Stream				
Model Generated : Behavioral Model				
Clocking Summary				
Clocking Scheme: Common Clock				
AXI Stream Summary				
Configuration Type : FIFO Memory Type: Block RAM				
Application Type Data FIFO BRAM Resource (s) (18K/36K) : 1/0				
Width/Depth 8 / 18 Latency : 2				
AXI Stream Additional Features Summary				
Occupancy Data Count Not Selected				
Interrupt Flag (UnderFlow/OverFlow) Not Selected / Not Selected				