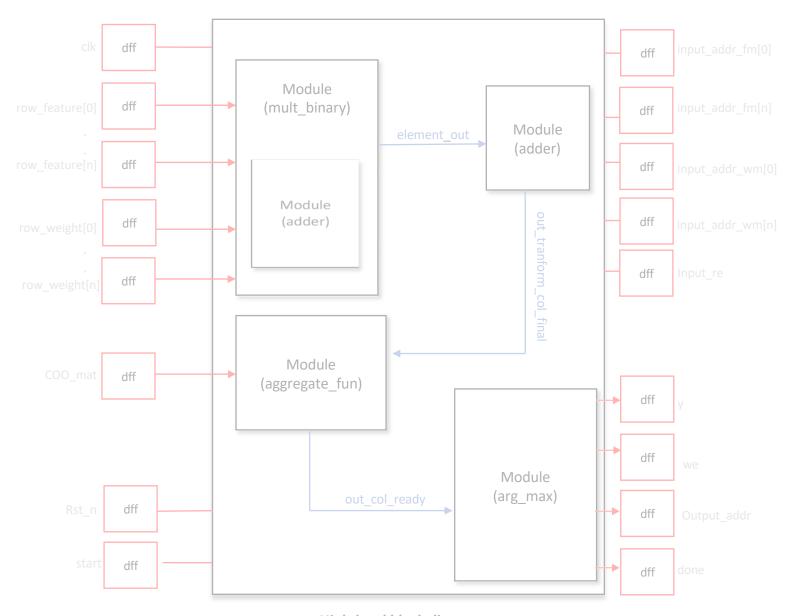
# **EEE 525**

LAB 4

#### Milestone2 Report

### **Architecture/High-level Block Diagram:**

Module (gcn)

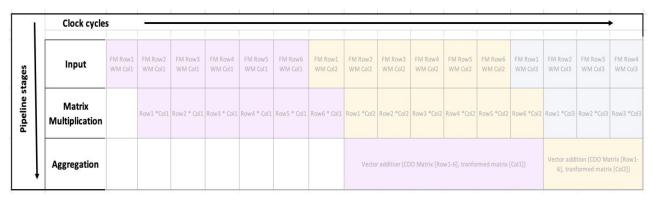


High-level block diagram

### > Design decisions: (with 1-2 appropriate figures)

We have designed the GCN module for a node classification application as follows:

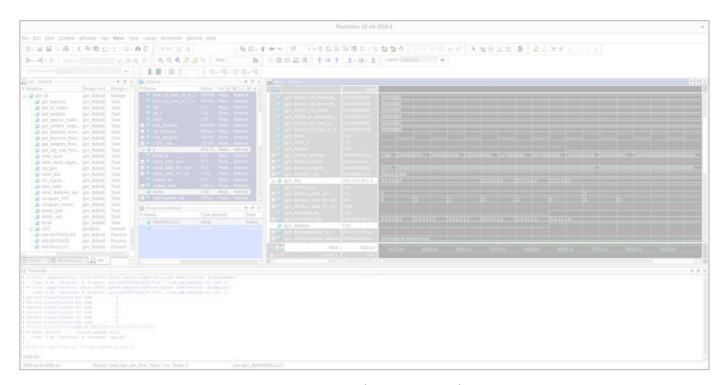
- O XXX.
- O XXX:



Representation of pipeline stages in design

### > Total Latency:

- o Total Latency: xxx ns, at the clock frequency of xxx MHz.
- Screenshot of Modelsim:



post APR simulations screenshot

#### > Power:

Total Power (From Innovus): xx mW

```
Total Power

Total Internal Power:
Total Switching Power:
Total Leakage Power:
Total Power:
```

#### > Area:

Standard cells + Filler cells: xxx mm²

```
Floorplan/Placement Information

Total area of Standard cells:

Total area of Macros:

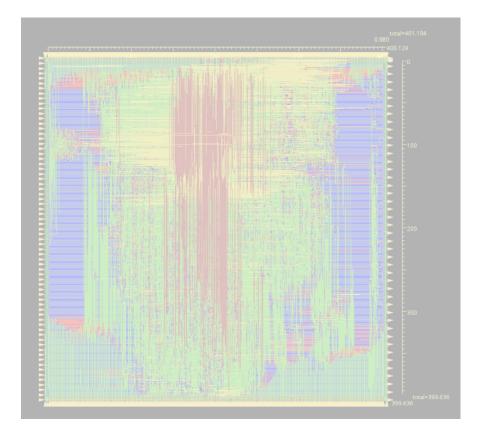
Total area of Blockac

Total area of Pad cel

Total area of Core: 1

Total area of Chip: 1
```

Snippet from log



Design x and y dimensions screenshot

### > Innovus density:

Before filler cell insertion: XXX

```
Density:

(
Routing Overflow:

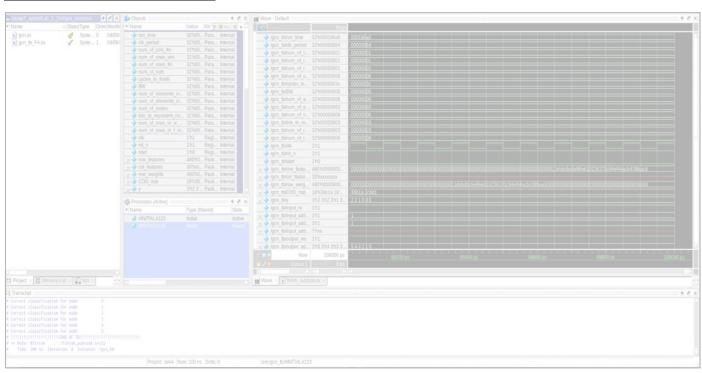
**optDesign ...

*** Finished optDesign ***
```

## **➤ Number of gates:**

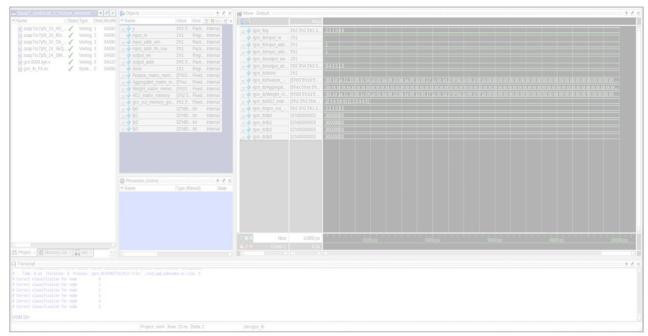
- Gates = xxx
- Cells = xxx

### **Behavioral Verilog - Simulation:**



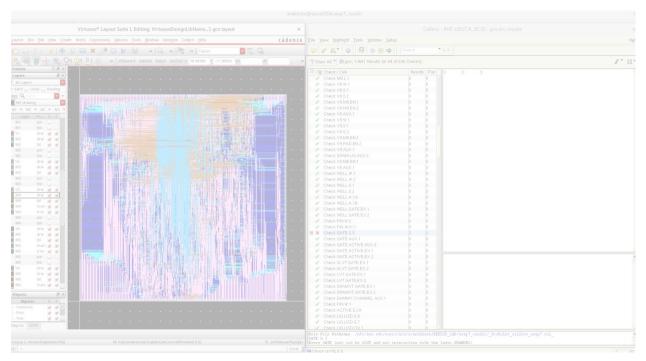
Correctness of the module with behavioral Verilog

#### <u>Post Synthesis – Simulation:</u>

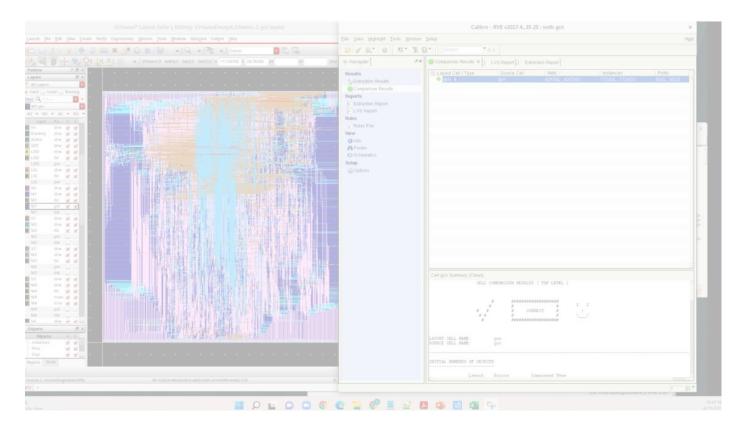


Correctness of the module with post-synthesis Verilog netlist

### Post APR - DRC Check:



### Post APR – LVS Check:



#### Note:

If you have any additional comments, you can briefly document them here.