(venv) [msaha4@sg012:~/Downloads/lab3/scale-sim-v2]\$ python3 scalesim/scale.py -c configs/my_config_m1.cfg -t /home/msaha4/Downloads/lab3/dnn_layers.csv

Array Size: 16x16

SRAM IFMAP (kB): 64
SRAM Filter (kB): 64
SRAM OFMAP (kB): 64
Dataflow: Output Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn_layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%|

448020/448020 [00:44<00:00, 9961.04it/s]

Compute cycles: 448019

Stall cycles: 0

Overall utilization: 91.91% Mapping efficiency: 99.51%

Average IFMAP DRAM BW: 2.376 words/cycle Average Filter DRAM BW: 0.102 words/cycle Average OFMAP DRAM BW: 0.728 words/cycle

Running Layer 1

100%

446208/446208 [00:53<00:00, 8352.92it/s]

Compute cycles: 446207

Stall cycles: 0

Overall utilization: 93.72% Mapping efficiency: 94.53%

(venv) [msaha4@sg012:~/Downloads/lab3/scale-sim-v2]\$ python3 scalesim/scale.py -c

configs/my config m3.cfg -t /home/msaha4/Downloads/lab3/dnn layers.csv

******* SCALE SIM *************

Array Size: 32x32

SRAM IFMAP (kB): 64
SRAM Filter (kB): 64
SRAM OFMAP (kB): 64
Dataflow: Output Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn_layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

121125/121125 [00:17<00:00, 6990.08it/s]

Compute cycles: 121124

Stall cycles: 0

Overall utilization: 84.99% Mapping efficiency: 99.51%

Average IFMAP DRAM BW: 4.439 words/cycle Average Filter DRAM BW: 0.526 words/cycle Average OFMAP DRAM BW: 2.688 words/cycle

Running Layer 1

100%

112576/112576 [00:21<00:00, 5338.45it/s]

Compute cycles: 112575

Stall cycles: 0

Overall utilization: 92.87% Mapping efficiency: 94.53%

(venv) [msaha4@sg012:~/Downloads/lab3/scale-sim-v2]\$ python3 scalesim/scale.py -c

configs/my config m3.cfg -t /home/msaha4/Downloads/lab3/dnn layers.csv

Array Size: 16x16

SRAM IFMAP (kB): 128
SRAM Filter (kB): 128
SRAM OFMAP (kB): 128
Dataflow: Output Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

448020/448020 [00:40<00:00, 11009.65it/s]

Compute cycles: 448019

Stall cycles: 0

Overall utilization: 91.91% Mapping efficiency: 99.51%

Average IFMAP DRAM BW: 2.234 words/cycle Average Filter DRAM BW: 9.852 words/cycle Average OFMAP DRAM BW: 0.833 words/cycle

Running Layer 1

100%|

446208/446208 [00:46<00:00, 9602.09it/s]

Compute cycles: 446207

Stall cycles: 0

Overall utilization: 93.72% Mapping efficiency: 94.53%

(venv) [msaha4@sg012:~/Downloads/lab3/scale-sim-v2]\$ cd ..

(venv) [msaha4@sg012:~/Downloads/lab3]\$./run.sh

Running SCALE-Sim with Config:

/home/msaha4/Downloads/lab3/scale-sim-v2/configs/my_config_1.cfg
Output Directory: /home/msaha4/Downloads/lab3/output/run_DC_1

Array Size: 16x16

SRAM IFMAP (kB): 64
SRAM Filter (kB): 64
SRAM OFMAP (kB): 64
Dataflow: Weight Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn_layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

423798/423798 [00:50<00:00, 8340.54it/s]

Compute cycles: 423797

Stall cycles: 0

Overall utilization: 97.16% Mapping efficiency: 98.64%

Average IFMAP DRAM BW: 13.135 words/cycle Average Filter DRAM BW: 0.087 words/cycle Average OFMAP DRAM BW: 15.775 words/cycle

Running Layer 1

100%

577152/577152 [01:00<00:00, 9555.10it/s]

Compute cycles: 577151

Stall cycles: 0

Overall utilization: 72.46% Mapping efficiency: 100.00%

Completed SCALE-Sim run 1
Running SCALE-Sim with Config:

Array Size: 16x16

SRAM IFMAP (kB): 128
SRAM Filter (kB): 128
SRAM OFMAP (kB): 128
Dataflow: Weight Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

423798/423798 [00:46<00:00, 9081.38it/s]

Compute cycles: 423797

Stall cycles: 0

Overall utilization: 97.16% Mapping efficiency: 98.64%

Average IFMAP DRAM BW: 10.047 words/cycle Average Filter DRAM BW: 9.852 words/cycle Average OFMAP DRAM BW: 15.776 words/cycle

Running Layer 1

100%|

577152/577152 [00:53<00:00, 10815.71it/s]

Compute cycles: 577151

Stall cycles: 0

Overall utilization: 72.46% Mapping efficiency: 100.00%

Completed SCALE-Sim run 2 Running SCALE-Sim with Config:

***************** SCALE SIM ****************

Array Size: 16x16

SRAM IFMAP (kB): 64
SRAM Filter (kB): 128
SRAM OFMAP (kB): 64
Dataflow: Weight Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

423798/423798 [00:47<00:00, 8853.46it/s]

Compute cycles: 423797

Stall cycles: 0

Overall utilization: 97.16% Mapping efficiency: 98.64%

Average IFMAP DRAM BW: 13.135 words/cycle

Average Filter DRAM BW: 9.852 words/cycle Average OFMAP DRAM BW: 15.775 words/cycle

Running Layer 1

100%

577152/577152 [00:59<00:00, 9695.44it/s]

Compute cycles: 577151

Stall cycles: 0

Overall utilization: 72.46% Mapping efficiency: 100.00%

Completed SCALE-Sim run 3 Running SCALE-Sim with Config:

Array Size: 16x16

SRAM IFMAP (kB): 256 SRAM Filter (kB): 128 SRAM OFMAP (kB): 256 Dataflow: Weight Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

423798/423798 [00:47<00:00, 8982.05it/s]

Compute cycles: 423797

Stall cycles: 0

Overall utilization: 97.16% Mapping efficiency: 98.64%

Average IFMAP DRAM BW: 5.753 words/cycle Average Filter DRAM BW: 9.852 words/cycle Average OFMAP DRAM BW: 15.778 words/cycle

Running Layer 1

100%

577152/577152 [00:49<00:00, 11641.47it/s]

Compute cycles: 577151

Stall cycles: 0

Overall utilization: 72.46% Mapping efficiency: 100.00%

Completed SCALE-Sim run 4
Running SCALE-Sim with Config:

Array Size: 16x16

SRAM IFMAP (kB): 64
SRAM Filter (kB): 512
SRAM OFMAP (kB): 256
Dataflow: Weight Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

423798/423798 [00:48<00:00, 8808.95it/s]

Compute cycles: 423797

Stall cycles: 0

Overall utilization: 97.16% Mapping efficiency: 98.64%

Average IFMAP DRAM BW: 13.135 words/cycle Average Filter DRAM BW: 9.495 words/cycle Average OFMAP DRAM BW: 15.778 words/cycle

Running Layer 1

100%

577152/577152 [01:00<00:00, 9489.66it/s]

Compute cycles: 577151

Stall cycles: 0

Overall utilization: 72.46% Mapping efficiency: 100.00%

Completed SCALE-Sim run 5 Running SCALE-Sim with Config:

/home/msaha4/Downloads/lab3/scale-sim-v2/configs/my config m1.cfg

Output Directory: /home/msaha4/Downloads/lab3/output/run_M_1

************ SCALE SIM *************

Array Size: 16x16

SRAM IFMAP (kB): 64
SRAM Filter (kB): 64
SRAM OFMAP (kB): 64
Dataflow: Output Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

448020/448020 [00:44<00:00, 10045.11it/s]

Compute cycles: 448019

Stall cycles: 0

Overall utilization: 91.91% Mapping efficiency: 99.51%

Average IFMAP DRAM BW: 2.376 words/cycle Average Filter DRAM BW: 0.102 words/cycle Average OFMAP DRAM BW: 0.728 words/cycle

Running Layer 1

100%

446208/446208 [00:53<00:00, 8362.87it/s]

Compute cycles: 446207

Stall cycles: 0

Overall utilization: 93.72% Mapping efficiency: 94.53%

Average IFMAP DRAM BW: 2.979 words/cycle

Average Filter DRAM BW: 15.756 words/cycle
Average OFMAP DRAM BW: 16.000 words/cycle

****** SCALE SIM Run Complete **********

Completed SCALE-Sim run 1
Running SCALE-Sim with Config:

/home/msaha4/Downloads/lab3/scale-sim-v2/configs/my_config_m2.cfg

Output Directory: /home/msaha4/Downloads/lab3/output/run_M_2

Array Size: 16x16

SRAM IFMAP (kB): 32
SRAM Filter (kB): 32
SRAM OFMAP (kB): 32
Dataflow: Output Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn_layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

448020/448020 [00:42<00:00, 10528.57it/s]

Compute cycles: 448019

Stall cycles: 0

Overall utilization: 91.91% Mapping efficiency: 99.51%

Average IFMAP DRAM BW: 2.789 words/cycle Average Filter DRAM BW: 0.147 words/cycle Average OFMAP DRAM BW: 0.686 words/cycle

Running Layer 1

100%

446208/446208 [00:54<00:00, 8224.21it/s]

Compute cycles: 446207

Stall cycles: 0

Overall utilization: 93.72% Mapping efficiency: 94.53%

Completed SCALE-Sim run 2

Running SCALE-Sim with Config:

/home/msaha4/Downloads/lab3/scale-sim-v2/configs/my_config_m3.cfg

Output Directory: /home/msaha4/Downloads/lab3/output/run_M_3

******** SCALE SIM ****************

Array Size: 16x16

SRAM IFMAP (kB): 128
SRAM Filter (kB): 128
SRAM OFMAP (kB): 128
Dataflow: Output Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

448020/448020 [00:41<00:00, 10815.91it/s]

Compute cycles: 448019

Stall cycles: 0

Overall utilization: 91.91% Mapping efficiency: 99.51%

Average IFMAP DRAM BW: 2.234 words/cycle Average Filter DRAM BW: 9.852 words/cycle Average OFMAP DRAM BW: 0.833 words/cycle

Running Layer 1

100%

446208/446208 [00:46<00:00, 9527.49it/s]

Compute cycles: 446207

Stall cycles: 0

Overall utilization: 93.72% Mapping efficiency: 94.53%

Completed SCALE-Sim run 3
Running SCALE-Sim with Config:

/home/msaha4/Downloads/lab3/scale-sim-v2/configs/my_config_m4.cfg

Output Directory: /home/msaha4/Downloads/lab3/output/run_M_4

Array Size: 16x16

SRAM IFMAP (kB): 16
SRAM Filter (kB): 16
SRAM OFMAP (kB): 16
Dataflow: Output Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn_layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%

448020/448020 [00:44<00:00, 9985.55it/s]

Compute cycles: 448019

Stall cycles: 0

Overall utilization: 91.91% Mapping efficiency: 99.51%

Average IFMAP DRAM BW: 4.109 words/cycle Average Filter DRAM BW: 0.124 words/cycle Average OFMAP DRAM BW: 0.667 words/cycle

Running Layer 1

100%

446208/446208 [01:04<00:00, 6950.00it/s]

Compute cycles: 446207

Stall cycles: 0

Overall utilization: 93.72% Mapping efficiency: 94.53%

Completed SCALE-Sim run 4
Running SCALE-Sim with Config:

/home/msaha4/Downloads/lab3/scale-sim-v2/configs/my config m5.cfg

Output Directory: /home/msaha4/Downloads/lab3/output/run_M_5

******* SCALE SIM ***********

Array Size: 16x16

SRAM IFMAP (kB): 128

SRAM Filter (kB): 64

SRAM OFMAP (kB): 256 Dataflow: Output Stationary

CSV file path: /home/msaha4/Downloads/lab3/dnn_layers.csv

Working in ESTIMATE BANDWIDTH mode.

Running Layer 0

100%|

448020/448020 [00:43<00:00, 10312.91it/s]

Compute cycles: 448019

Stall cycles: 0

Overall utilization: 91.91% Mapping efficiency: 99.51%

Average IFMAP DRAM BW: 2.234 words/cycle Average Filter DRAM BW: 0.102 words/cycle Average OFMAP DRAM BW: 1.172 words/cycle

Running Layer 1

100%|

446208/446208 [00:52<00:00, 8578.86it/s]

Compute cycles: 446207

Stall cycles: 0

Overall utilization: 93.72% Mapping efficiency: 94.53%

Completed SCALE-Sim run 5

All SCALE-Sim runs completed successfully!