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Experiment Report

Start of automated test report 2023-03-12 07:37:30 Author=luke@workstation obo Luke Vassallo

Machine Information

sysname=Linux nodename=workstation release=5.4.0-144-generic version=#161~18.04.1-Ubuntu SMP Fri Feb 10 15:55:22 UTC 2023 machine=x86_64

CPU arch: X86_64

CPU bits: 64

CPU brand: Intel(R) Core(TM) i7-10700K CPU @ 3.80GHz

CPU cores: 16

CPU base clock: 3.8000 GHz CPU boost clock: 4.9928 GHz System Memory: 62.64GB

Nvidia driver version: 470.161.03 Device 0: NVIDIA GeForce GTX 1080

Device 0: 7.93GB

Library Information

python: 3.8.13

torch: 1.11.0+cu102

optuna: 3.1.0 numpy: 1.23.3 pandas: 1.5.3 matplotlib: 3.7.0 seaborn: 0.12.2

pcb library: generation of .pcb files.

Library version: 0.0.12 Library built with: C++14

Library built on: Mar 3 2023 23:10:31

netlist_graph: Graph pre-processing library for PCB component placement.

Library version: 0.1.16 Library built with: C++14

Library built on: Mar 3 2023 23:10:32

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training_sac_cuda_622:1678569499_0

Steps per trial = 200 Euclidean wirelength (w) = 6 Half perimeter wirelength (hpwl) = 2.0 Overlap (o) = 2.0

Estimated Wirelength (HPWL)

Raw trial data for run //home/luke/work/rl_pcb/tests/04_training_sac_cuda/w ork/eval testing set/1678569499 0

pcb name	trial	0% overlap	10% overlap	20% overlap
voltage_datalogger_adc0	trial_0	-	32.18	32.18
voltage_datalogger_adc2	trial_0	19.3	12.17	11.78
voltage_datalogger_adc2	trial_1	-	15.86	14.49
voltage_datalogger_afe	trial_0	-	-	41.56
voltage_datalogger_afe	trial_1	-	-	60.46

Mean over all trials in run //home/luke/work/rl_pcb/tests/04_training_sac_cu da/work/eval_testing_set/1678569499_0

pcb name	run	0% overlap (#)¹	10% overlap (#) ¹	20% overlap (#) ¹
voltage_datalogger_adc0	1678569499_0	nan ± nan (0)	32.18 ± 0.0 (1)	32.18 ± 0.0 (1)
voltage_datalogger_adc2	1678569499_0	19.3 ± 0.0 (1)	14.02 ± 1.84 (2)	13.14 ± 1.36 (2)
voltage_datalogger_afe	1678569499_0	nan ± nan (0)	nan ± nan (0)	51.01 ± 9.45 (2)

 $^{^{\}mbox{\scriptsize 1}}$ # indicates the number of layouts over which the mean \pm std was computed

Routed Wirelength

Raw trial data for run //home/luke/work/rl_pcb/tests/04_training_sac_cuda/work/eval_testing_set/1678569499_0

pcb name	trial	0% overlap	10% overlap	20% overlap
voltage_datalogger_adc0	trial_0	-	33.34	33.34
voltage_datalogger_adc2	trial_0	15.5	13.73	13.77
voltage_datalogger_adc2	trial_1	-	21.53	13.82
voltage_datalogger_afe	trial_0	-	-	43.84

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voltage_datalogger_afe	trial_1	-	-	79.75
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Mean over all trials in run //home/luke/work/rl_pcb/tests/04_training_sac_cu da/work/eval_testing_set/1678569499_0

pcb name	run	0% overlap (#)1	10% overlap (#) ¹	20% overlap (#) ¹
voltage_datalogger_adc0	1678569499_0	nan ± nan (0)	33.34 ± 0.0 (1)	33.34 ± 0.0 (1)
voltage_datalogger_adc2	1678569499_0	15.5 ± 0.0 (1)	17.63 ± 3.9 (2)	13.8 ± 0.03 (2)
voltage_datalogger_afe	1678569499_0	nan ± nan (0)	nan ± nan (0)	61.8 ± 17.95 (2)

 $^{^{\}mathrm{1}}$ # indicates the number of layouts over which the mean \pm std was computed

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training_sac_cuda_622:1678569499_1

Steps per trial = 200 Euclidean wirelength (w) = 6 Half perimeter wirelength (hpwl) = 2.0 Overlap (o) = 2.0

Estimated Wirelength (HPWL)

Raw trial data for run //home/luke/work/rl_pcb/tests/04_training_sac_cuda/w ork/eval testing set/1678569499 1

pcb name	trial	0% overlap	10% overlap	20% overlap
voltage_datalogger_adc0	trial_0	-	30.97	30.97
voltage_datalogger_adc2	trial_0	23.03	14.8	14.19
voltage_datalogger_adc2	trial_1	14.43	12.87	11.89
voltage_datalogger_afe	trial_0	-	46.76	46.76

Mean over all trials in run //home/luke/work/rl_pcb/tests/04_training_sac_cu da/work/eval_testing_set/1678569499_1

pcb name	run	0% overlap (#)¹	10% overlap (#) ¹	20% overlap (#) ¹
voltage_datalogger_adc0	1678569499_1	nan ± nan (0)	30.97 ± 0.0 (1)	30.97 ± 0.0 (1)
voltage_datalogger_adc2	1678569499_1	18.73 ± 4.3 (2)	13.84 ± 0.97 (2)	13.04 ± 1.15 (2)
voltage_datalogger_afe	1678569499_1	nan ± nan (0)	46.76 ± 0.0 (1)	46.76 ± 0.0 (1)

 $^{^{1}}$ # indicates the number of layouts over which the mean \pm std was computed

Routed Wirelength

Raw trial data for run //home/luke/work/rl_pcb/tests/04_training_sac_cuda/work/eval_testing_set/1678569499_1

pcb name	trial	0% overlap	10% overlap	20% overlap
voltage_datalogger_adc0	trial_0	-	36.04	36.04
voltage_datalogger_adc2	trial_0	18.41	12.69	12.39
voltage_datalogger_adc2	trial_1	13.32	12.35	10.63
voltage_datalogger_afe	trial_0	-	51.93	51.93

Mean over all trials in run //home/luke/work/rl_pcb/tests/04_training_sac_cu

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da/work/eval_testing_set/1678569499_1

pcb name	run	0% overlap (#) ¹	10% overlap (#) ¹	20% overlap (#)1
voltage_datalogger_adc0	1678569499_1	nan ± nan (0)	36.04 ± 0.0 (1)	36.04 ± 0.0 (1)
voltage_datalogger_adc2	1678569499_1	15.86 ± 2.54 (2)	12.52 ± 0.17 (2)	11.51 ± 0.88 (2)
voltage_datalogger_afe	1678569499_1	nan ± nan (0)	51.93 ± 0.0 (1)	51.93 ± 0.0 (1)

 $^{^{1}}$ # indicates the number of layouts over which the mean \pm std was computed