

Experiment Report

Start of automated test report 2023-03-07 07:51:37

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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 : 4.7894 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

training_td3_cpu_622:1678118952_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/01_training_td3_cpu/work/eval_testing_set/1678118952_0

| pcb name | trial | 0% overlap | 10% overlap | 20% overlap |
|-------------------------|---------|------------|-------------|-------------|
| voltage_datalogger_adc0 | trial_0 | 32.6 | 32.6 | 32.6 |
| voltage_datalogger_adc0 | trial_1 | 28.69 | 28.69 | 28.69 |
| voltage_datalogger_adc2 | trial_0 | 14.87 | 11.67 | 11.67 |
| voltage_datalogger_adc2 | trial_1 | 16.22 | 15.5 | 14.64 |

Mean over all trials in run //home/luke/work/rl_pcb/tests/01_training_td3_cpu/work/eval_testing_set/1678118952_0

| pcb name | run | 0% overlap (#) ¹ | 10% overlap (#) ¹ | 20% overlap (#) ¹ |
|-------------------------|--------------|-----------------------------|------------------------------|------------------------------|
| voltage_datalogger_adc0 | 1678118952_0 | 30.65 ± 1.96 (2) | 30.65 ± 1.96 (2) | 30.65 ± 1.96 (2) |
| voltage_datalogger_adc2 | 1678118952_0 | 15.54 ± 0.67 (2) | 13.58 ± 1.92 (2) | 13.16 ± 1.49 (2) |

¹ # indicates the number of layouts over which the mean ± std was computed

Routed Wirelength

Raw trial data for run //home/luke/work/rl_pcb/tests/01_training_td3_cpu/work/eval_testing_set/1678118952_0

| pcb name | trial | 0% overlap | 10% overlap | 20% overlap |
|-------------------------|---------|------------|-------------|-------------|
| voltage_datalogger_adc0 | trial_0 | 34.45 | 34.45 | 34.45 |
| voltage_datalogger_adc0 | trial_1 | 40.74 | 40.74 | 40.74 |
| voltage_datalogger_adc2 | trial_0 | 12.07 | 10.31 | 10.31 |
| voltage_datalogger_adc2 | trial_1 | 16.89 | 17.65 | 16.59 |

Mean over all trials in run //home/luke/work/rl_pcb/tests/01_training_td3_cpu/work/eval_testing_set/1678118952_0

| pcb name | run | 0% overlap (#) ¹ | 10% overlap (#) ¹ | 20% overlap (#) ¹ |
|-------------------------|--------------|-----------------------------|------------------------------|------------------------------|
| voltage_datalogger_adc0 | 1678118952_0 | 37.6 ± 3.14 (2) | 37.6 ± 3.14 (2) | 37.6 ± 3.14 (2) |
| voltage_datalogger_adc2 | 1678118952_0 | 14.48 ± 2.41 (2) | 13.98 ± 3.67 (2) | 13.45 ± 3.14 (2) |

¹ # indicates the number of layouts over which the mean ± std was computed

training_td3_cpu_622:1678118952_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/01_training_td3_cpu/work/eval_testing_set/1678118952_1

| pcb name | trial | 0% overlap | 10% overlap | 20% overlap |
|-------------------------|---------|------------|-------------|-------------|
| voltage_datalogger_adc0 | trial_0 | - | - | 27.0 |
| voltage_datalogger_adc2 | trial_0 | 29.81 | 14.32 | 12.58 |
| voltage_datalogger_adc2 | trial_1 | - | 14.07 | 14.07 |

Mean over all trials in run //home/luke/work/rl_pcb/tests/01_training_td3_cpu/work/eval_testing_set/1678118952_1

| pcb name | run | 0% overlap (#) ¹ | 10% overlap (#) ¹ | 20% overlap (#) ¹ |
|-------------------------|--------------|-----------------------------|------------------------------|------------------------------|
| voltage_datalogger_adc0 | 1678118952_1 | nan ± nan (0) | nan ± nan (0) | 27.0 ± 0.0 (1) |
| voltage_datalogger_adc2 | 1678118952_1 | 29.81 ± 0.0 (1) | 14.2 ± 0.12 (2) | 13.32 ± 0.75 (2) |

¹ # indicates the number of layouts over which the mean ± std was computed

Routed Wirelength

Raw trial data for run //home/luke/work/rl_pcb/tests/01_training_td3_cpu/work/eval_testing_set/1678118952_1

| pcb name | trial | 0% overlap | 10% overlap | 20% overlap |
|-------------------------|---------|------------|-------------|-------------|
| voltage_datalogger_adc0 | trial_0 | - | - | 26.35 |
| voltage_datalogger_adc2 | trial_0 | 22.59 | 11.36 | 10.19 |
| voltage_datalogger_adc2 | trial_1 | - | 18.03 | 18.03 |

Mean over all trials in run //home/luke/work/rl_pcb/tests/01_training_td3_cpu/work/eval_testing_set/1678118952_1

| pcb name | run | 0% overlap (#) ¹ | 10% overlap (#) ¹ | 20% overlap (#) ¹ |
|-------------------------|--------------|-----------------------------|------------------------------|------------------------------|
| voltage_datalogger_adc0 | 1678118952_1 | nan ± nan (0) | nan ± nan (0) | 26.35 ± 0.0 (1) |

| | | | | |
|-------------------------|--------------|-----------------|-----------------|------------------|
| voltage_datalogger_adc2 | 1678118952_1 | 22.59 ± 0.0 (1) | 14.7 ± 3.34 (2) | 14.11 ± 3.92 (2) |
|-------------------------|--------------|-----------------|-----------------|------------------|

¹ # indicates the number of layouts over which the mean ± std was computed