

# Experiment Report

Start of automated test report 2023-03-07 07:58:35

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 : 4.2000 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\_sac\_cpu\_622:1678118995\_0

Steps per trial = 200

Euclidean wirelength (w) = 6

Half perimeter wirelength (hpwl) = 2.0

Overlap (o) = 2.0

### Estimated Wirelength (HPWL)

Mean over all trials in run //home/luke/work/rl\_pcb/tests/03\_training\_sac\_cpu/work/eval\_testing\_set/1678118995\_0

pcb name	run	0% overlap (#) <sup>1</sup>	10% overlap (#) <sup>1</sup>	20% overlap (#) <sup>1</sup>
voltage_datalogger_adc0	1678118995_0	nan ± nan (0)	nan ± nan (0)	33.18 ± 3.28 (2)
voltage_datalogger_adc2	1678118995_0	16.17 ± 0.0 (1)	14.34 ± 0.63 (2)	12.63 ± 1.11 (2)
voltage_datalogger_afe	1678118995_0	nan ± nan (0)	50.64 ± 0.0 (1)	47.76 ± 2.88 (2)

<sup>1</sup> # indicates the number of layouts over which the mean ± std was computed

### Routed Wirelength

Mean over all trials in run //home/luke/work/rl\_pcb/tests/03\_training\_sac\_cpu/work/eval\_testing\_set/1678118995\_0

pcb name	run	0% overlap (#) <sup>1</sup>	10% overlap (#) <sup>1</sup>	20% overlap (#) <sup>1</sup>
voltage_datalogger_adc0	1678118995_0	nan ± nan (0)	nan ± nan (0)	34.5 ± 1.75 (2)
voltage_datalogger_adc2	1678118995_0	17.0 ± 0.0 (1)	14.64 ± 1.19 (2)	12.08 ± 1.28 (2)
voltage_datalogger_afe	1678118995_0	nan ± nan (0)	53.27 ± 0.0 (1)	53.18 ± 0.09 (2)

<sup>1</sup> # indicates the number of layouts over which the mean ± std was computed

## training\_sac\_cpu\_622:1678118995\_1

Steps per trial = 200

Euclidean wirelength (w) = 6

Half perimeter wirelength (hpwl) = 2.0

Overlap (o) = 2.0

### Estimated Wirelength (HPWL)

Mean over all trials in run //home/luke/work/rl\_pcb/tests/03\_training\_sac\_cpu/work/eval\_testing\_set/1678118995\_1

pcb name	run	0% overlap (#) <sup>1</sup>	10% overlap (#) <sup>1</sup>	20% overlap (#) <sup>1</sup>
voltage_datalogger_adc0	1678118995_1	nan ± nan (0)	31.38 ± 0.6 (2)	28.44 ± 0.73 (2)
voltage_datalogger_adc2	1678118995_1	19.36 ± 2.11 (2)	14.02 ± 0.55 (2)	12.8 ± 1.43 (2)
voltage_datalogger_afe	1678118995_1	nan ± nan (0)	nan ± nan (0)	45.1 ± 0.0 (1)

<sup>1</sup> # indicates the number of layouts over which the mean ± std was computed

### Routed Wirelength

Mean over all trials in run //home/luke/work/rl\_pcb/tests/03\_training\_sac\_cpu/work/eval\_testing\_set/1678118995\_1

pcb name	run	0% overlap (#) <sup>1</sup>	10% overlap (#) <sup>1</sup>	20% overlap (#) <sup>1</sup>
voltage_datalogger_adc0	1678118995_1	nan ± nan (0)	31.96 ± 2.54 (2)	28.77 ± 1.81 (2)
voltage_datalogger_adc2	1678118995_1	17.77 ± 0.7 (2)	14.51 ± 1.4 (2)	11.7 ± 1.16 (2)
voltage_datalogger_afe	1678118995_1	nan ± nan (0)	nan ± nan (0)	56.25 ± 0.0 (1)

<sup>1</sup> # indicates the number of layouts over which the mean ± std was computed