

ISA Gap at ACL-BASE-TTL = 16 (All Three Seeds)

Each point = one 30-rep campaign cell. amd64: +0.08% (all three seeds identical).
aarch64/riscv64: +61.8%...68.1% ... caused by cold-word heat deficit under TCG emulation.
Gap factor: ~800... Theoretical prediction: $12/(16+12)$... 43% per cold word.

Overhead vs. no-ACL baseline (%)

80%

60%

40%

20%

0%

amd64
(x86-64)

aarch64
(ARMv8-A)

riscv64
(RV64GC)

Seed

- seed 12345
- seed 67890
- seed 13579

ISA

- amd64
- aarch64
- riscv64

0.1% 0.1% 0.1%

61.8%

65.6%

65.5%

65.9%

67.0%

68.1%

