A Artifact Appendix

A.1 Abstract

In this artifact we compare three performance degradation strategies on Intel CPUs. In particular we measure the performance impact of performing a cache-flush based performance degradation in Intel microarchitectures with HyperThreading support. This artifact can be used to reproduce Tables 8-9 in the paper *"HyperDegrade: From GHz to MHz Effective CPU Frequencies"*. It can be also employed to extend the comparison to other microarchitectures.

A.2 Artifact check-list (meta-information)

- **Benchmark:** BEEBS
- **Compilation:** GNU toolchain
- **Hardware:** Intel with HyperThreading
- **Metrics:** clock cycles
- **How much time is needed to prepare workflow (approximately)?:** 30 minutes
- **How much time is needed to complete experiments (approximately)?:** 2–50 hours
- **Publicly available?:** yes
- **Code licenses (if publicly available)?:** MIT
- **Archived (provide DOI)?:** 10.5281/zenodo.5549559

A.3 Description

A.3.1 How to access

We provide full documentation in `README.md` available at the following URL. https://doi.org/10.5281/zenodo.5549559

A.3.2 Hardware dependencies

1. Intel CPU
2. HyperThreading
3. Recommended: Skylake, Kaby Lake, Coffee Lake, or Whiskey Lake

A.3.3 Software dependencies

1. Linux (root)
2. GNU toolchain
3. git
4. perf
5. python3

A.4 Installation

See `README.md` at https://doi.org/10.5281/zenodo.5549559.

A.5 Evaluation and expected results

1. This artifact reproduces the results in Section 4 of the paper.
2. In particular, Tables 8-9 in the paper.