SoftMC

A Flexible and Practical Open-Source Infrastructure for Enabling Experimental DRAM Studies

Hasan Hassan,

Nandita Vijaykumar, Samira Khan,

Saugata Ghose, Kevin Chang,

Gennady Pekhimenko, Donghyuk Lee,

Oguz Ergin, Onur Mutlu

SAFARI

ETH *zürich*

Carnegie Mellon

TOBB
UNIVERSITY OF
ECONOMICS AND TECHNOLOGY

Systems@**ETH** zürich

DRAM

Reliability   **Performance**

Characterize, *analyze*, and *understand* DRAM behavior

SoftMC

- **Flexible**
- **Easy to Use (C++ API)**
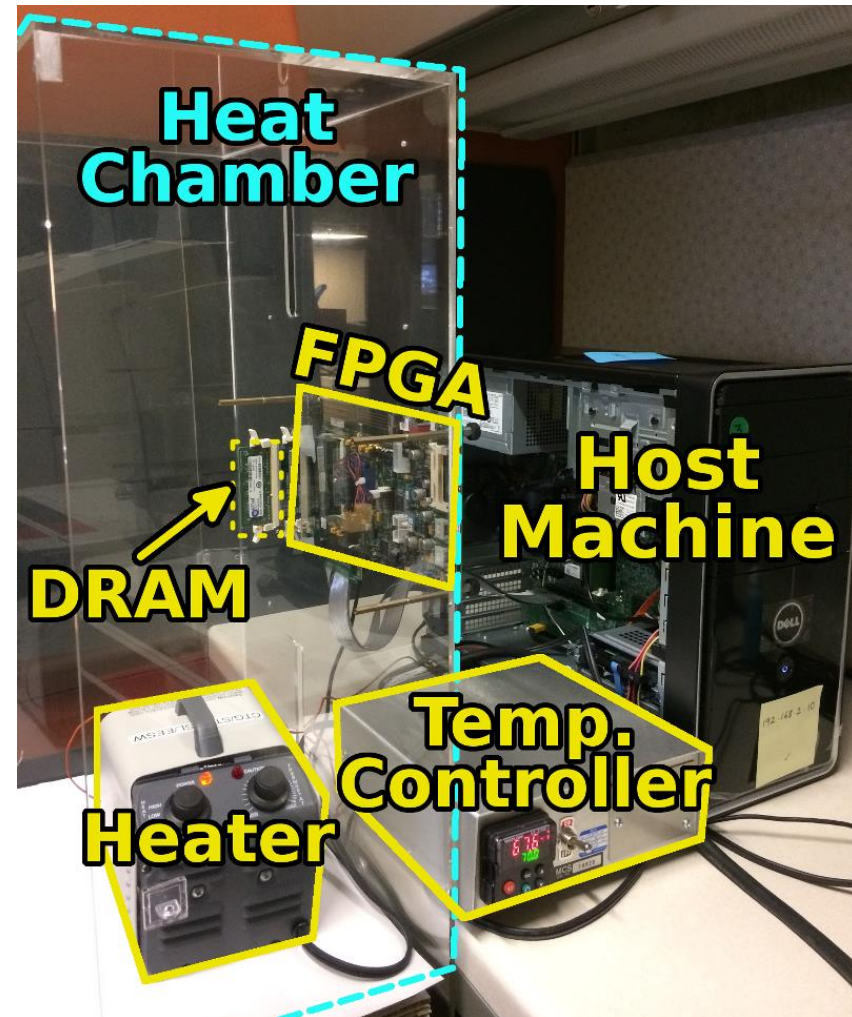- **Open-source**

Example Use Cases

1 Retention Time Distribution Study

2 Evaluating Two Recently-Proposed Latency Reduction Mechanisms

github.com/CMU-SAFARI/SoftMC