Evaluated Artifacts

Here we collect papers with artifacts that have been evaluated and awarded badges at our community conferences and journal. We link the papers, the artifacts, and related repository links for your convenience.

2024

FCCM

LightningSimV2: Faster and Scalable Simulation for High-Level Synthesis via Graph Compilation and Optimization
Rishov Sarkar, Rachel Paul and Cong Callie Hao
[[Artifact]] [Repository]

A Data-Driven, Congestion-Aware and Open-Source Timing-Driven FPGA Placer Accelerated by GPUs
Zhili Xiong, Rachel Selina Rajarathnam and David Z. Pan
[[Artifact]] [Repository]

A Routability-Driven Ultrascale FPGA Macro Placer with Complex Design Constraints
Qin Luo, Xinshi Zang, Qijing Wang, Fangzhou Wang, Evangeline F.Y. Young and Martin D.F. Wong
[[Artifact]] [Repository]

HardCilk: Cilk-like Task Parallelism for FPGAs
Mohamed Shahawy, Canberk Sönmez, Cemalettin Belentepe and Paolo Ienne
[[Artifact]] [Repository]

FPGA

CompressedLUT: An Open Source Tool for Lossless Compression of Lookup Tables for Function Evaluation and Beyond
Alireza Khataei and Kia Bazargan
[Repository]

Hardcaml MSM: A High-Performance Split CPU-FPGA Multi-Scalar Multiplication Engine
Andy Ray, Benjamin Devlin, Fu Yong Quah and Rahul Yesantharao

[[Repository](#)]

[Survival of the Fastest: Enabling More Out-of-Order Execution in Dataflow Circuits](#)

Ayatallah Elakhras, Andrea Guerrieri, Lana Josipovic and Paolo Ienne

[[Repository](#)]

[LevelST: Stream-based Accelerator for Sparse Triangular Solver](#)

Zifan He, Linghao Song, Robert F. Lucas and Jason Cong

[[Repository](#)]

[Formal Verification of Source-to-Source Transformations for HLS](#)

Louis-Noël Pouchet, Emily Tucker, Niansong Zhang, Hongzheng Chen, Debjit Pal, Gabriel Rodríguez and Zhiru Zhang

[[Repository](#)]