



CiMLoop: A Flexible, Accurate, and Fast Compute-In-Memory Modeling Tool

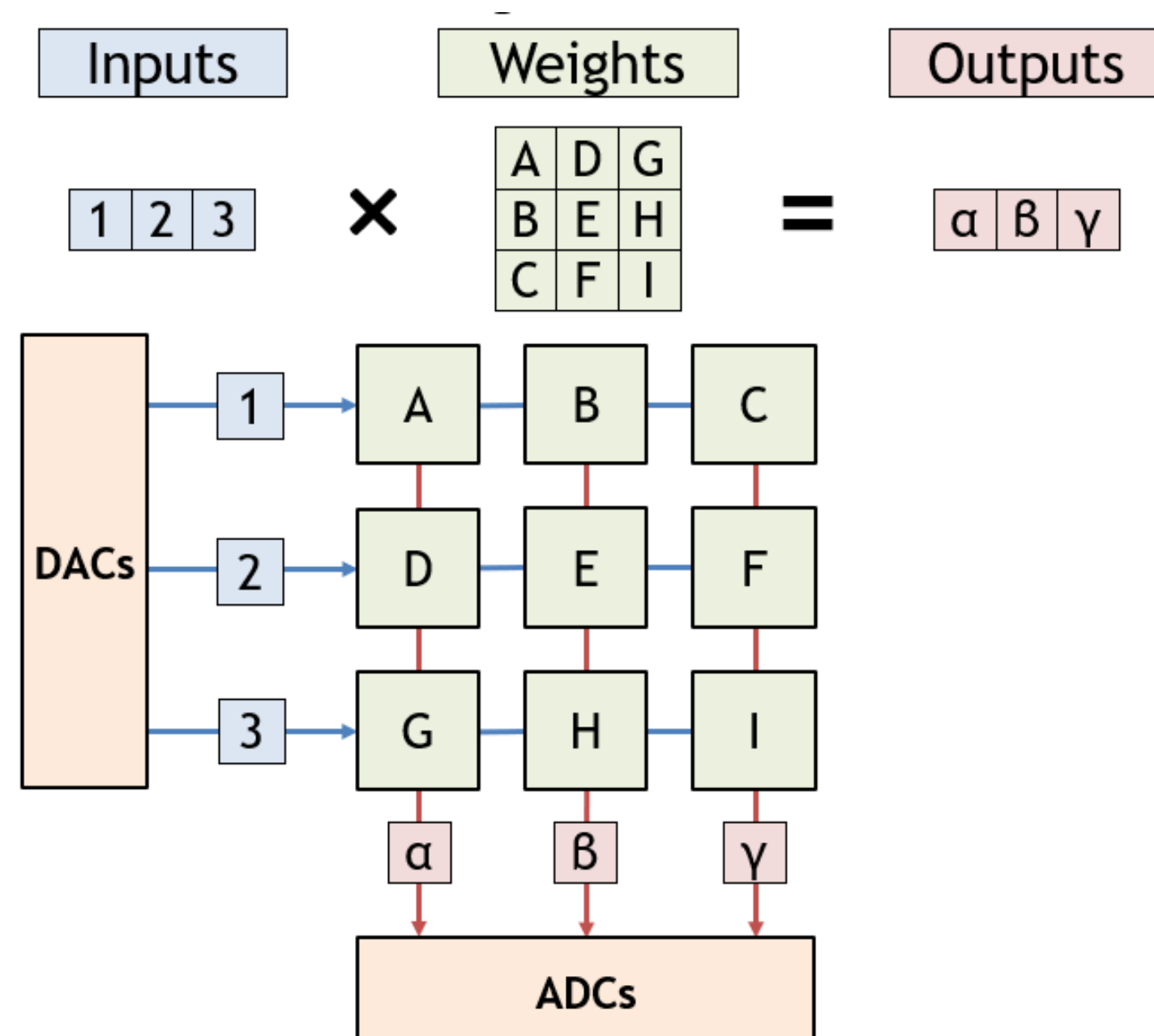
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Tutorials and examples

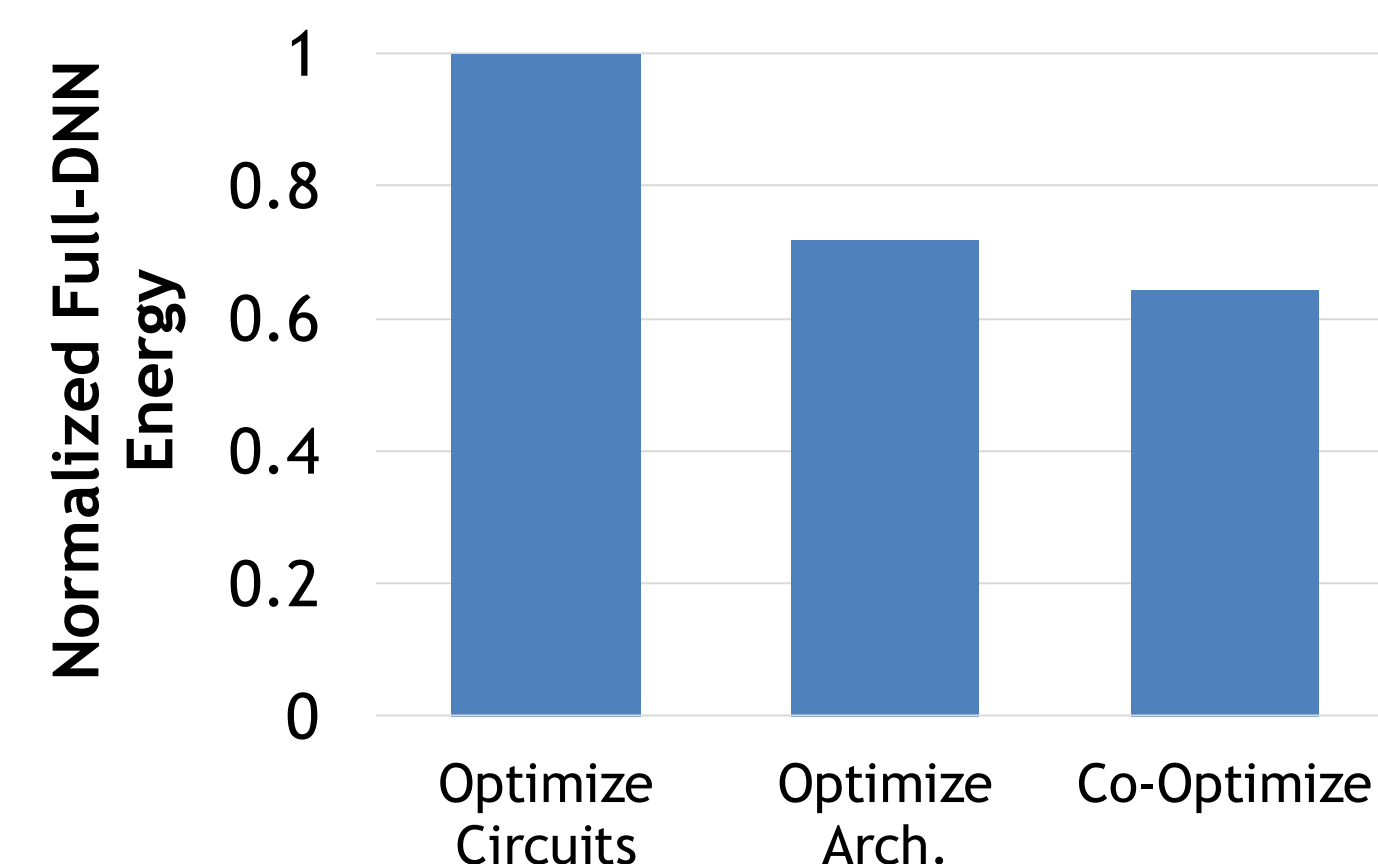


<https://github.com/mit-emze/cimloop>

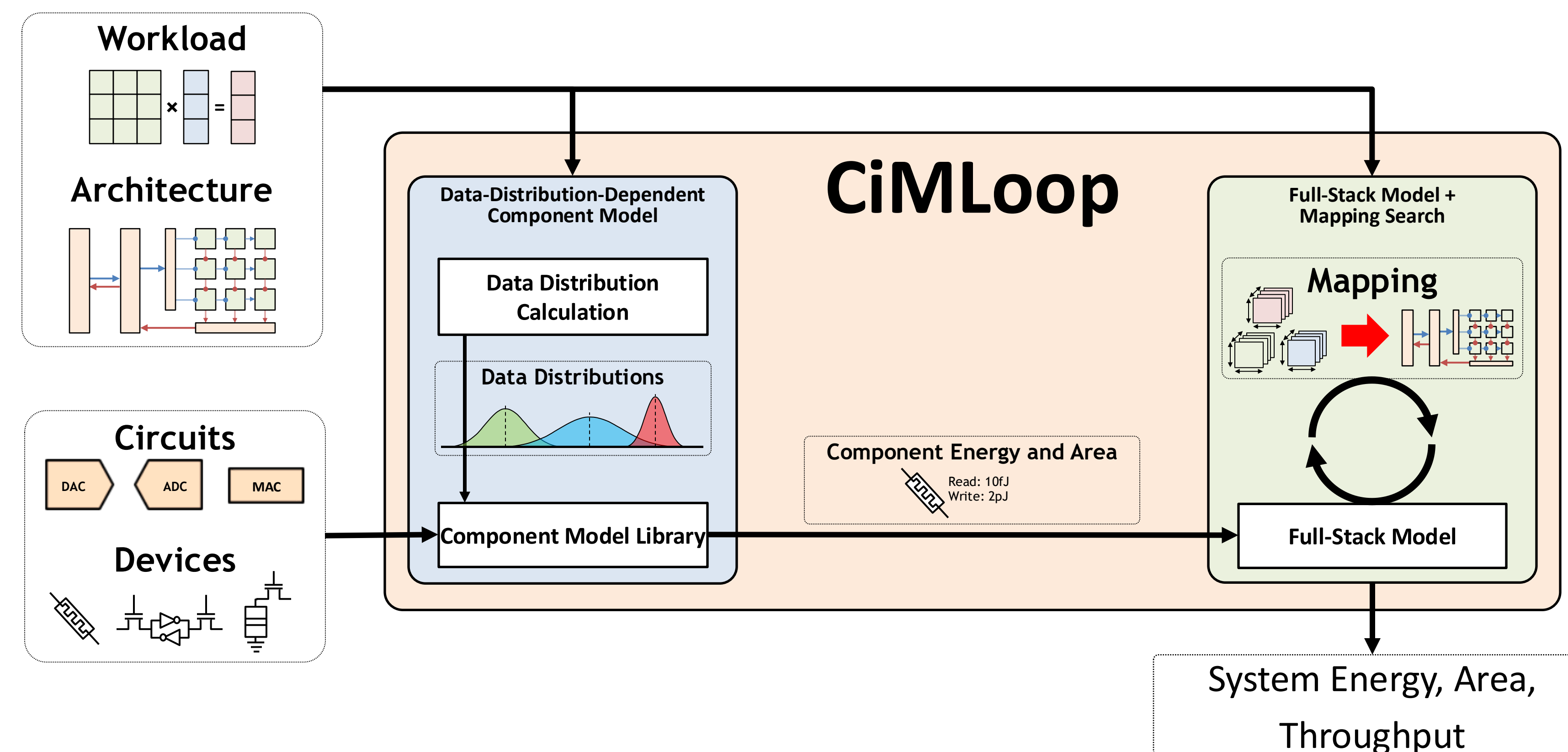
Compute-In-Memory (CiM) Deep Neural Network (DNN) Accelerators



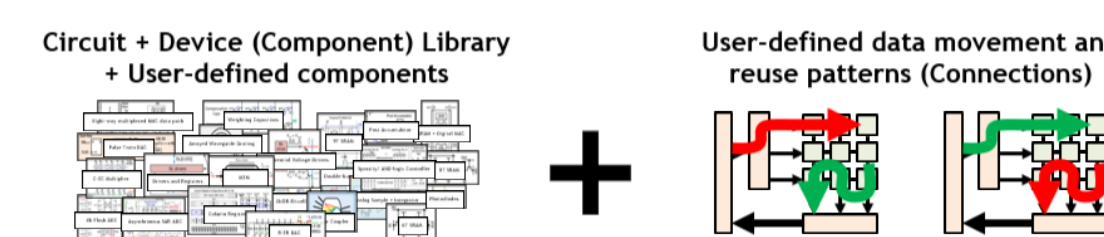
- ✓ No energy spent moving DNN weights
- ✓ Memory arrays can run many operations in parallel



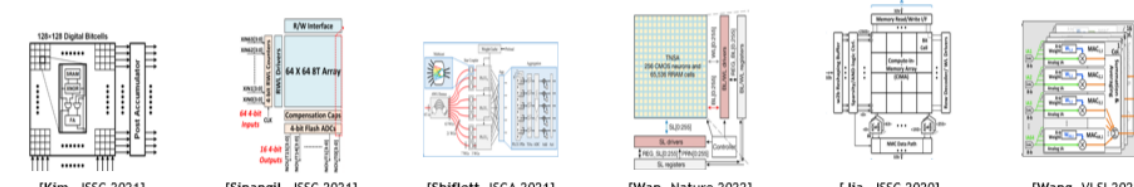
The CiMLoop Infrastructure



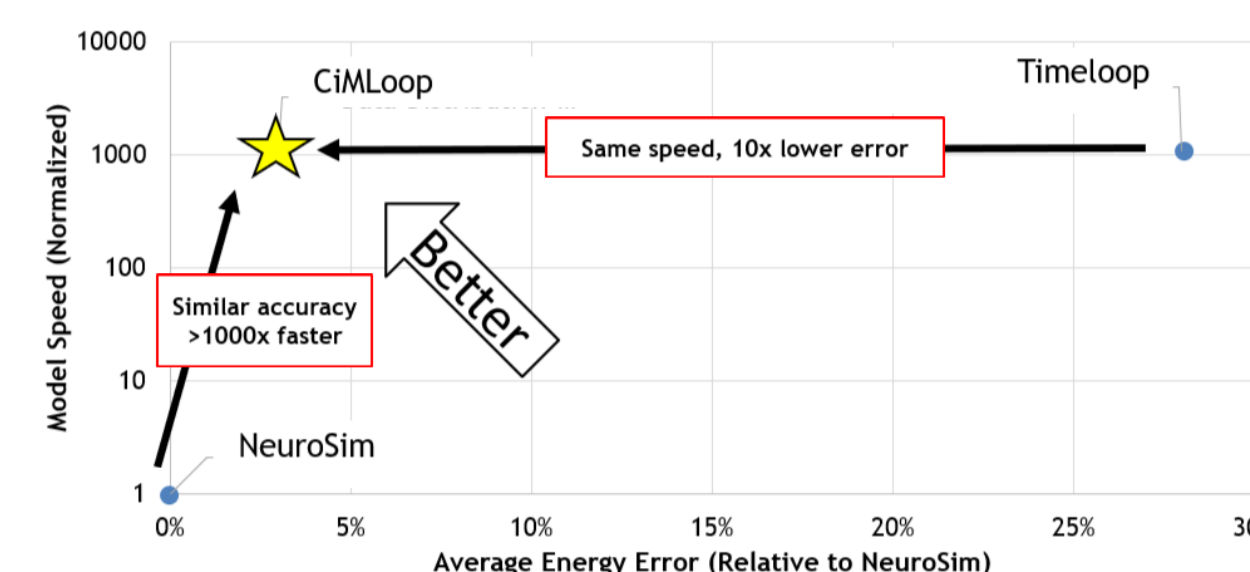
Support for diverse components and architectures



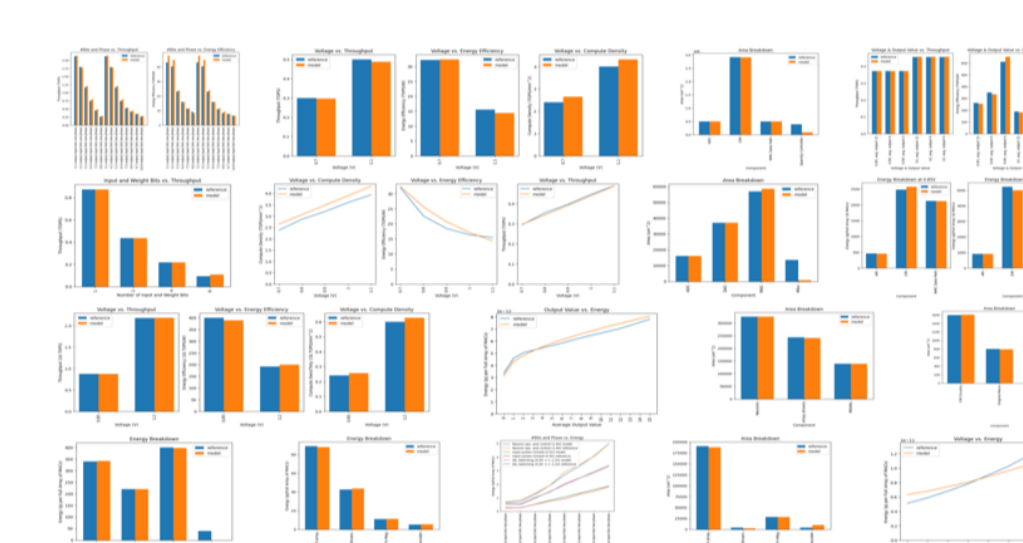
Provided models of published CiM, traditional, and optical DNN accelerators



10x more accurate than other fast models
>10,000x faster than other accurate models

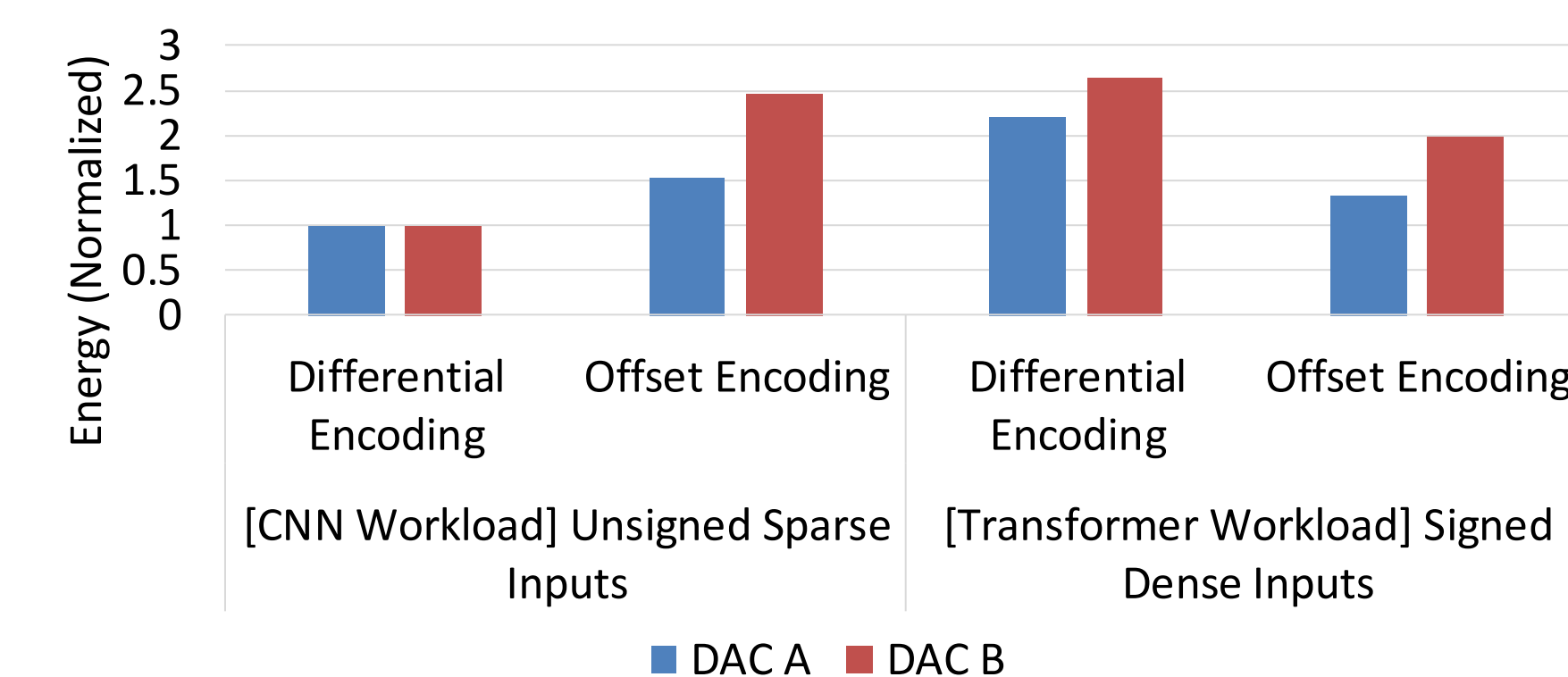
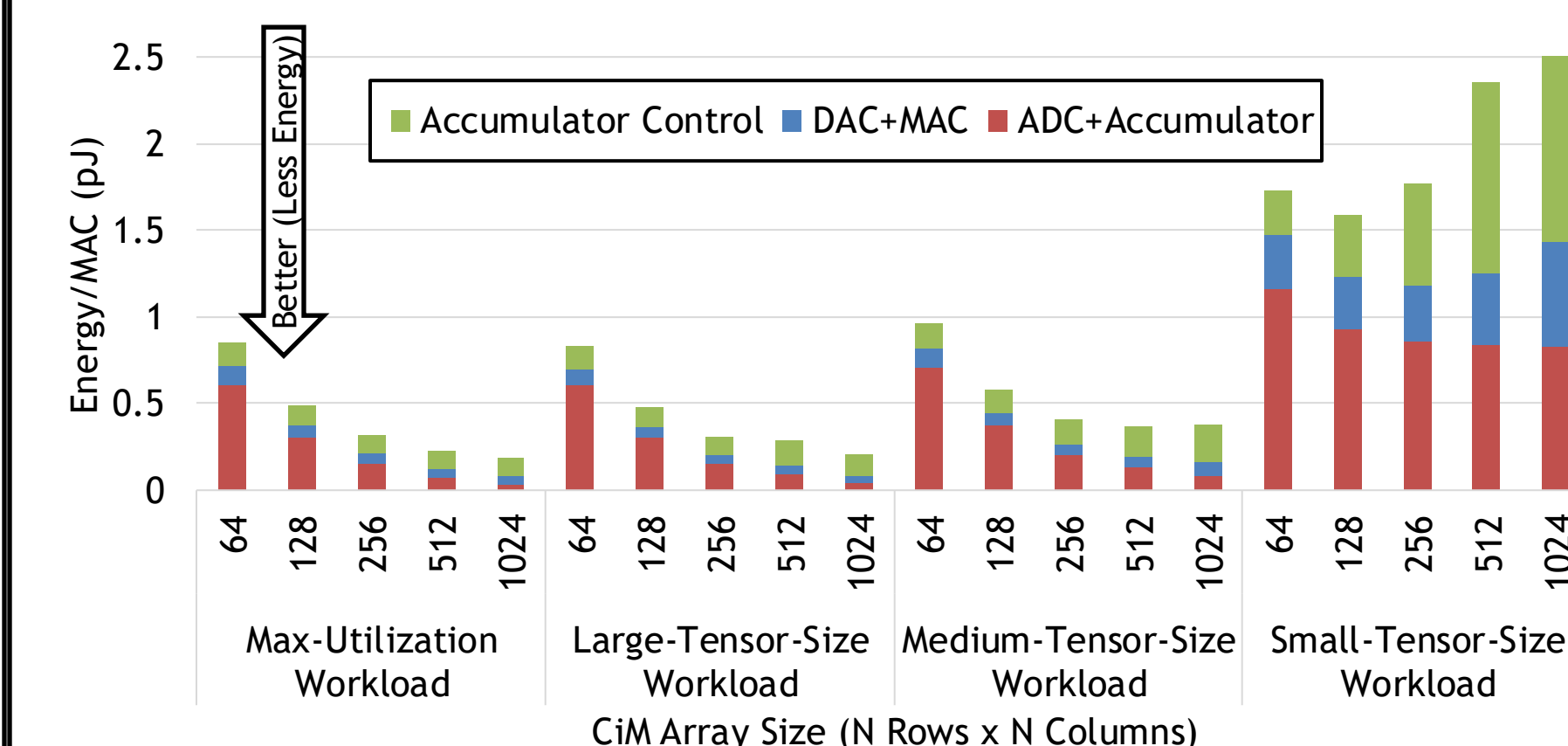


30+ provided experiments with silicon-verified results

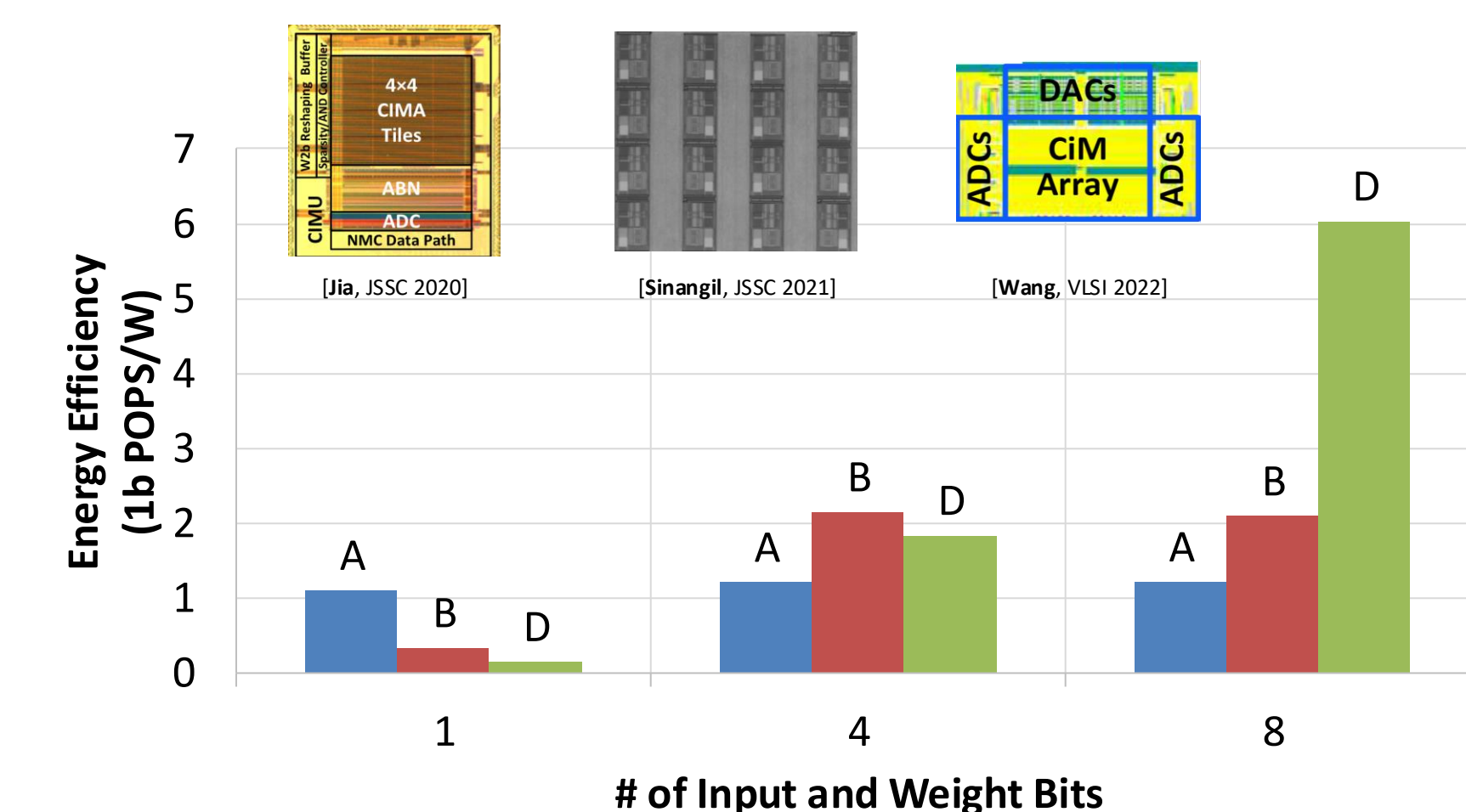


Using CiMloop

Co-explore all levels of the stack



Fairly compare published works



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