On the Use of APU Architectures in MUMPS / XKBlas

Thierry GAUTIER and Pierre-Etienne POLET

Inria, France

Abstract

Recent GPU-based architectures, such as the AMD MI300 APU and NVIDIA Grace Hopper, enable efficient unified-memory access to data from both the CPU and GPU. This talk introduces the basics of XKBlas, details the modifications made to MUMPS and XKBlas to leverage these architectures, and presents our preliminary results.