

ARM SVE

- ▶ The ARM Scalable Vector Extension (SVE) targets the HPC market [1]
- ▶ Key features of SVE hardware
 - ▷ Wide vector units, ranging from 128 bit to 2048 bit
 - ▷ Vectorized native 16 bit floating point operations, including arithmetics
 - ▷ Vectorized arithmetics of complex numbers
 - ▷ The silicon provider chooses the vector register length and defines the performance characteristics of the SVE hardware
 - ▷ The first SVE hardware officially announced is the Post-K, which comprises 512 bit wide vector units, 48 compute cores per node and high performance stacked memory [2]