Graph Acceleration

Design

Coding Algorithm

Compile/ **Synthesize** Configure/ Load

Programmable

C++ Openmp/Cuda



~hours-days

~hours-days

~seconds-minutes

~micro-seconds



C++ pragma **HLS/ Separate Bitstreams**



~days-months ~weeks-month

~hours-day /Bitstream

∻seconds-minute/ **Bitstream**



HDL / Separate Bitstreams



Overlay

HLS

~days-months ~weeks-months

~hours-day /Bitstream

~hours-day

(once)

~seconds-minute/ **Bitstream**



C++ pragma **HLS/ Single Bitstream**

OverLay Verilog/HDL ~months-year

~months-year/

most flexible

~hours-days

~hours-days

~hours-day (once)

~nano-micro seconds



~nano-micro seconds



HDL / Single **Bitstream**