A CPU Talks to an FPGA Using the Front-Side Bus

Accelerate application with FPGA

- > Orders of magnitude speed up
- Power efficient than general purpose CPU
- > Target for domain-specific applications in financial services, energy, manufacturing, etc

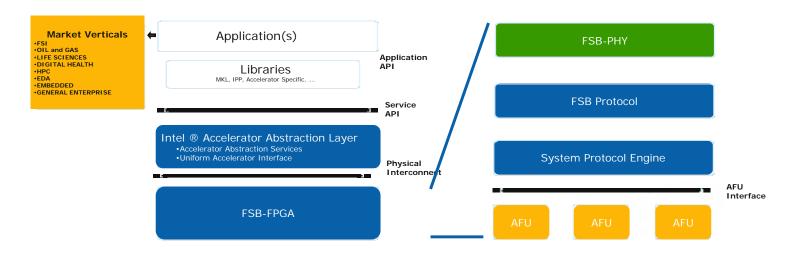
Front side bus as the attaching point

- ➤ High bandwidth (8.3GB/s for Caneland)
- > Low latency communication between CPU and FPGA
- > Cache coherency support

Caneland Platform Bensley/Stoakley Platform 7000 Sequence 5000 Sequence

FSB-FPGA as ingredient of Intel QuickAssist technology

- ➤ License validated FSB core to FPGA vendors
- Provide Accelerator Abstraction Layer (AAL) to unify the interface to FPGA accelerators



AAL eliminates the need for applications to be customized for installing and communicating with different accelerators.



