

VSI/Pro®-GPU: Commercial VSIPL Support for GP-GPU-Based Accelerated Signal and Image Processing

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## **CUDA/NVIDIA Strategy**

- VSI/Pro® Commercial VSIPL for x86, PPC, and other processor platforms
- Commercializing GA Tech GPU-VSIPL
  - Integration of technologies to form a unique product
  - Combination is a commercial product that supports nVIDIA/CUDA platforms
- All VSI/Pro "Core Full" functionality provided from outset (baseline is SIMD accelerated)
- Increasing percentage of functions have GPU acceleration over time
- Thread safe



## **OpenCL / AMD Strategy**

- "New development" for functionality
- First release to offer Core Lite Profile VSIPL Acceleration
- Still has entire VSI/Pro® function set for x86 from outset
- Target 5770, 5870, Fusion platforms



## What's in the poster

- Brief Background on VSI/Pro®
- Approach for CUDA/NVIDIA GPU-VSIPL
- Approach for OpenCL / AMD
- Platform Validation / Current Platforms
- Status, Roadmap, Schedule
- Plan for Thread-Safe Functionality
- Plan for Early Adopters and HPEC Platforms





