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ESPN Emerging Technology

GTC Session S3487

ESPN Emerging Technology's use of NVIDIA'S GPU Solutions for High Resolution Imagery

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Overview

- Who we are / What we do
- Software Architecture built around NVIDIA GPUs
- ESPN Uses of this SW Architecture
- Q & A

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Who we are / What we do

ESPN Emerging Technology (ET)

ET develops the ideas and applications that bring the fan closer to the game with new, innovative production enhancements.

- Huck-O-Meter, HRD Ball Track, Snap Zoom, Ref Mics, Sky Cam, Ultra-Mo, Player Tracking, the 1st & Ten Line, K-Zone, the Emmy-winning EA Virtual Playbook and much, much more.

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Who we are / What we do

ESPN Wide World of Sports Innovation Lab in Orlando

- Designated testing ground for new innovations
- Over 300 sporting events occur at this facility each year

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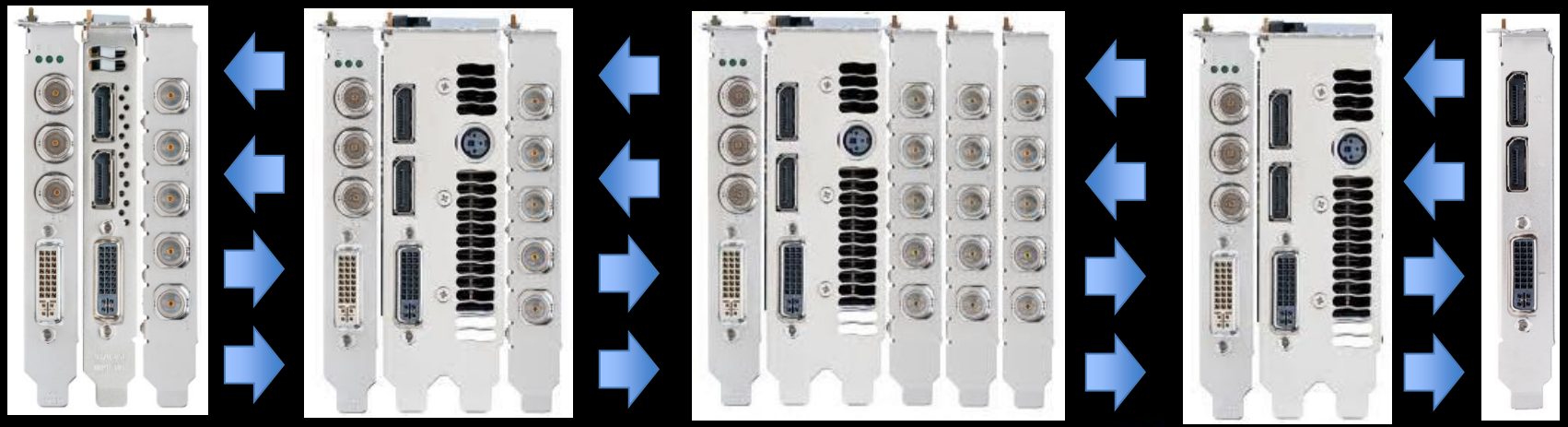
Software Architecture built around NVIDIA GPUs

- Each GPU in the system is classified as either an Input, Output, Input / Output, or a Compute Engine
- All GPUs have peer-to-peer access via CUDA
- Multiple input cards and output cards may be assigned to a GPU



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Software Architecture built around NVIDIA GPUs

- Hardware abstraction layer allows video I/O hardware from several manufacturers via gpuDirect

- Supports Quadro and Tesla GPUs (Fermi and Kepler)

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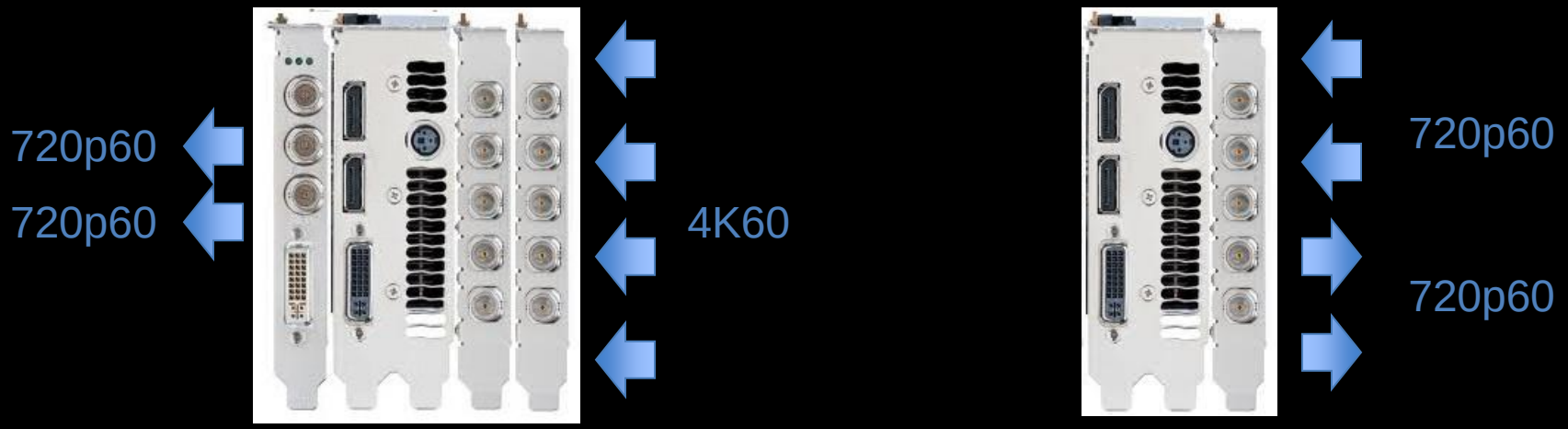
Software Architecture built around NVIDIA GPUs

- Supports use of Cubix GPU Xpander
- Each GPU pipeline can handle unique video formats for input vs. output



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Video Capture for Advanced Technologies

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Low Cost Video Effects

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4k to 720p workflows

4K Input

Zoomed 720p

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4k to 720p workflows

4K Input

Virtual Cameras

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Questions?