XCODEPRO 100 PRODUCT BRIEF

- **Addresses a wide range of applications using Cable / Satellite / IPTV Encoders; Switched Digital Systems; Multi-Screen (TV, PC, Mobile) Transcoders; Ingest Systems; On-Demand Video Delivery Systems; Video Conferencing; Surveillance and many more**
- **Highest Video Quality achieving unprecedented density and lowest power consumption per channel**
- **Sets a new benchmark in compression efficiency**
- **Follow-on to XC3290 and XC4125 currently in use by leading broadcast & professional OEMs**
- **Xtensiv™ Broadcast Stack enables faster time to market for OEMs**

FEATURE SUMMARY

Multi-Stream, Encoder / Transcoder

- Multi-Stream Encoding and Transcoding
  - Full Decode / Re-encode Mode Implementation
  - Smart XCode mode Implementation
- Multi-format Video Encode or Transcode (H.264, MPEG2)
- High Quality 1080p60 HD Encode
- Sub-frame Low-Latency Support
- AVC HD High Profile up to Level 4.1
  - Full Interlace Support – MBAFF
  - Entropy Coding – CABAC/CAVLC
- MPEG2 Encode up to HD (MP@HL)
- 4:2:2 to 4:2:0 Conversion
- Support of Wide Range of Bit Rates: 0.5 Mbps to 100Mbps
- Flexibility in Rate Control Implementation: CBR, VBR and capped VBR
- Scene Change Detection, Fade Detection
- Programmable GOP Structure
- Dynamic Parameter Changes

Advanced Video Processing

- Motion Adaptive De-interlacing
- Edge Directed Scaling
- Edge Sharpening
- Adaptive Contrast
- Several Modes of Noise Reduction

Programmable Audio Processing

- MPEG2 LI, LII
- MPEG2 AAC-LC-Stereo
- Dolby AC-3 True HD, 7.1, 5.1,Stereo

Video Inputs

- CCIR 656
- SMPTE 274/296
- TS
- Ethernet; USB; PCIe

Video Output

- MPTS over Serial TS
- Ethernet; USB; PCIe

Closed Captioning Support

- Close Caption Standards; flexible architecture to support proprietary data

Audio / Video Containers

- Multiple Audio/Video Containers supported

xcodepro 100 PRODUCT BRIEF

INTERFACES

- Transport Stream Inputs (up to 5 serial/ 1 parallel)
- Cablecard Interface
- Transport Stream Outputs (2 serial / 1 Parallel)
- 2 x CCIR 656 input or 1 x SMPTE 274/296 input
- 2x I2S Input; SPIF Input
- 2x CCIR 656 Output or 1x SMPTE 274/296 Output
- 2 x I^2C – master and master/slave
- 2x I2S Output
- 2x 10/100/1000 Ethernet MAC
- 2x USB2.0 Host
- PCIe Root Complex / End Point
- Integrated NAND FLASH interface
- DDR3 SDRAM memory controller
- 4x UART; GPIO

HIGH PERFORMANCE CPU & NETWORKING

- 3000+ DMIPS Host Processing Capability to run custom applications
- Distributed Processing architecture enables sustained networked data throughput of 400Mbps

TECHNOLOGY

- Efficient Low Power Design
- 65 nm CMOS design
- 35mm x 35mm BGA package

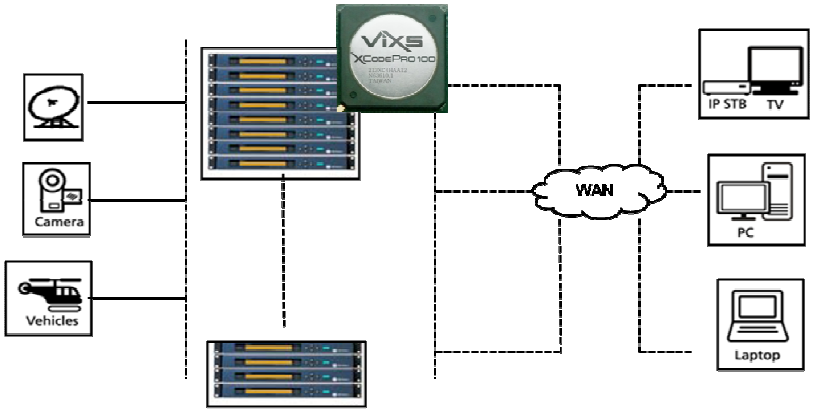
TYPICAL APPLICATIONS

- Broadcast Encoders / Transcoders
  - Cable / Satellite / IPTV systems
  - On-Demand Video; Multi-Screen Transcoder
- Professional Applications
  - Video Conferencing
  - Surveillance

CORE TECHNOLOGIES

- MPEGPerfection™ technology redefines low-bitrate compression
- TurboMPEG™ technology allows conversion of formats, resolution, and frame rates of pre-compressed video faster than real-time

BROADCAST ENCODER / TRANSCODER APPLICATION



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