

# Broadcasters Show Daily

AN INDEPENDENT PUBLICATION NOT AFFILIATED WITH NAB

April 2008

User Communications Group

Las Vegas

## NEW FROM SORENSON MEDIA—HD VIDEO COMPRESSION ACCELERATOR FOR BLU-RAY, FLASH H.264 & MPEG-2

Sorenson Media, the worldwide leader for video compression and decoding solutions, is demonstrating an exciting new product for the first time at NAB: the Squeeze<sup>®</sup> 5 Pro Juiced™ Accelerator card. The Juiced Accelerator card is powered by Ambric's teraOPS-class Am2045™ massively parallel processor array (MPPA) chip which is seamlessly integrated with the Squeeze 5 Pro award-winning video encoding software.

### Adobe<sup>®</sup> Integration, Squeeze 5, H.264, Blu-ray—A Winning Combination

The product provides transparent integration and GUI plug-ins for accelerating Adobe CS3 video software. A top Hollywood compressionist and expert user of Adobe software says, "Ambric's parallel-processing technology makes the encoding experience so much better. Encoding a documentary for Blu-ray took me 37 hours with software-only

compression on a quad-core, but with Juiced, just nine hours."

The Squeeze 5 Pro Juiced Accelerator card opens up hardware-accelerated professional-level video processing to thousands of pro and prosumer video users on PCs and Macs by meeting the processing-power challenges of high-quality, high-definition video transcoding and encoding. Even on multi-GHz quad-core processors, computing bottlenecks occur during high-end HD video processing. But the Juiced Accelerator card, powered by Ambric, can encode DVD-quality HD MPEG-2 files in real time and compresses Blu-ray quality HD H.264 at two to five times faster than software alone on quad-core PCs.

### Based on Ambric's TeraOPS-class Programmable Video Processing Semiconductor Technology

Howard Bubb, Ambric Chairman and

CEO, is delighted that Ambric was chosen to supply its 1.2 TeraOPS processing technology to Sorenson Media. "Squeeze 5 software offers powerful job automation and flexibility while the integration delivers huge throughput gains," says Bubb.

The Juiced product leverages the Ambric Am2045 Massively Parallel Processing Array. Because Juiced is based on Ambric's purely software-programmable chip, Sorenson's card is future-proofed. Future video filters or encoders can simply be downloaded from Sorenson as they become available.

Ambric's chip is not just for PC acceleration. Embedded video equipment developers are thrilled with the time-to-market advantages and ease of programming, especially compared with complex FPGA designs or multi-DSP programming nightmares. Along with providing 1.2 TeraOPS of computation, the power used and heat produced is only 1/10 that of a GPU or CPU.

The initial accelerated encoding formats on the Juiced Accelerator card include MPEG-2 and H.264 output for Blu-ray, plus the latest H.264-based Adobe Flash video standard. The card

offers a compelling price-performance value for professionals and high-end prosumer video producers.

### Juiced Pricing and Availability

The Juiced Accelerator card with Sorenson Squeeze 5 Pro included is priced at \$3,995. For owners of Squeeze 5, the Juiced Accelerator card is priced at \$3,495 and is available now.

The card is available initially for Windows<sup>®</sup> XP. In early summer, support for the Apple<sup>®</sup> Mac OS<sup>®</sup> X Leopard (on Intel<sup>®</sup>) will be available.

For additional information or to locate a reseller, please call 888-767-3676 or visit [www.sorensonmedia.com](http://www.sorensonmedia.com).

### Learn More About Ambric's Video Processing Technology

Does your company develop complex video processing equipment? Tired of the complexity and time-to-market delays with FPGAs and multiple-DSP processing platforms? Please visit the Ambric booth, call sales at 503-601-6500 or visit [www.ambric.com](http://www.ambric.com).

At NAB, visit Ambric in booth SU13213 and Sorenson Media in booth SL6526.

## PYRO AV DEBUTS KOMPRESSOR HD FOR SUPER-CHARGED, HIGH-QUALITY HD VIDEO COMPRESSION

For the first time at NAB, Pyro AV<sup>®</sup>, a leading-edge video conversion and encoding solution provider, will showcase its Pyro Kompressor HD™ product, which can save hours—even days—per encoding project.

A PCI Express-based accelerator solution, Pyro Kompressor HD accelerates HD MPEG-2 and HD H.264/AVC encoding, performing up to eight times faster than software-only compression tools. Pyro Kompressor HD is ideal for time- and cost-conscious video pros who want a much speedier compression workflow.

Pyro Kompressor HD's high-quality MPEG-2 and H.264/AVC codecs enable compression for DVD and Blu-ray Disk, plus Web streaming media, Flash, archival storage, IPTV and VOD.

### Pyro Kompressor HD is Integrated with Adobe Products and Runs on the Windows and Mac Platforms

The product is transparently integrated with Adobe<sup>®</sup> Premiere<sup>®</sup> Pro CS3 and Adobe After Effects<sup>®</sup> CS3 software. The Adobe software integration offers a familiar workflow and quick turn-around. Use it for encoding whole video projects or for fast, iterative test-compressions while editing, compositing or creating special effects.

The half-height/half-length PYRO Kompressor HD board is powered by Ambric's Am2045, a massively-parallel processor array (MPPA) with 336 RISC processors. The Am2045 delivers 1.2 TeraOPS of video horsepower, with only 1/10 the heat of GPUs and CPUs. The form factor and low-power provides for use in energy- and space-conscious environments. Based on Ambric's 100 percent software-programmable silicon technology, the accelerator card is 'future-proofed' and can be updated in the field.

### Product Demonstration at NAB

Mike McCoy, President and CEO of Pyro AV, invites NAB attendees to see the new Pyro Kompressor HD product announced at Macworld. "It's an affordable, high-quality H.264 and MPEG compression solution for video editors, effects artists and compressionists who need super-charged encoding speed and processing power," says McCoy.

The included Pyro Kompressor™ transcoding software application simplifies production. Compelling features include watch-folders for job automation and extensive Blu-ray encoding settings created by a top Hollywood compressionist. Video import for a wide range of transcoding and encoding options, including: DV, MPEG-2, H.264, AVCHD, AVC-Intra, VC-1, DVCPRO 25/50, DVCPRO-HD, JPEG2000, RGB and YUV files, plus DirectShow and QuickTime import.

### Pricing and Availability

Pyro Kompressor HD for Windows XP is available now through Pyro AV dealers, with an MSRP of \$3,495. Mac support will be available this spring at the



*Pyro Kompressor HD features high-quality MPEG-2 and H.264 Encoding for DVD, Blu-ray Disc and the Web. It is integrated with Adobe products and features the award-winning Ambric Am2045 TeraOPS-class Massively Parallel Processing Array (MPPA).*

same price. For more information, visit [www.pyroav.com](http://www.pyroav.com).

See Pyro Kompressor HD in the B&H PhotoVideo booth, SU2905, or in the Ambric booth, SU13213.

### Want to Know More About Ambric's Powerful, Programmable Video Processing IC Technology?

If your company develops challenging video-processing equipment, or if you're tired of the complexity and time-to-market delays inherent in FPGA and multi-DSP video processing platforms, you'll want to check out Ambric's breakthrough silicon, embedded development systems and OEM offerings.

For more information, visit the Ambric booth, SU13213, call Ambric Sales at 503-601-6500 or visit [www.ambric.com](http://www.ambric.com).

# Broadcasters Show Daily

AN INDEPENDENT PUBLICATION NOT AFFILIATED WITH NAB

April 2008

User Communications Group

Las Vegas

## AMBRIC MAKES FIRST NAB APPEARANCE WITH MASSIVELY PARALLEL PROCESSING ARRAY

*An interview with Ambric CEO Howard Bubb, as he introduces the company and their new products.*

**BSD:** Hello, Howard. We welcome you and Ambric to your first exhibition at NAB. Please tell us about your company and its products.

**HB:** Ambric is a fabless semi-conductor company headquartered in the Silicon Forest near Portland.

We've developed a new kind of software-programmable device—the award-winning Am2045™ Massively Parallel Processing Array [MPPA]—which features more than 300 RISC/DSP processors and delivers over 1 TeraOPS of processing power with only 1/10 the power and heat of CPUs and GPUs.

Ambric also developed the first practical software development methodology and tools for massively parallel programming. These tools were designed to be powerful yet easy to use—with a hierarchical model, like object programming, complex embedded systems applications can be designed and tested far faster than multi-threaded programs or gate level logic—and the result is far

more robust. Our customers say that programming is fun again!

The Ambric Am2045 and aDesigner™ software tool suite combine to form the new-generation solution for the design of complex embedded systems, with outstanding flexibility for advanced media processing.

**BSD:** Is Ambric targeting any vertical markets at this time?

**HB:** Our first vertical is the market for high-quality video encoding for DVD, Blu-ray, Flash, the Internet, VoD and other uses. Even on multi-GHz quad-core processors, computing bottlenecks still occur during high-end HD video processing. Our customers saw a clear market opportunity there with more than 1,000,000 professional and high-end 'prosumer' digital video producers worldwide.

Ambric provides Ambric Am2045 MPPA silicon, developer boards, reference designs and the aDesigner software tool suite to OEMs for developing their video processing systems.

Our first OEM agreement for this market



is with PYRO AV, a leading-edge video conversion, capture and encoding solution provider. PYRO AV recently introduced its first Ambric-based product—Pyro Kompressor™ HD, a PCI Express-based accelerator card solution that speeds HD MPEG-2 and HD H.264/AVC encoding up to eight times faster than software-only compression. This translates into a much faster video authoring workflow, cutting substantial time and cost out of the production process.

Sorenson Media, a worldwide leader in video compression and decoding solutions, just announced its Ambric-based Squeeze 5 Pro Juiced™ Accelerator card. The Am2045 MPPA chip on the card is seamlessly integrated with Squeeze 5 Pro's award-winning video encoding software. Juiced also includes plug-ins to provide transparent integration for accelerating Adobe® Premiere® Pro CS3 and Adobe After Effects® CS3.

**BSD:** How does using the Am2045 and aDesigner software compare with developing embedded systems the traditional way—by using FPGAs or DSPs?

**HB:** Compared with using FPGAs, our customers report that performance-density of the Am2045 is two to four times better for complex video algorithms. And, they

spent a fraction of the time developing the code for the Am2045 as they did for the FPGA-based systems.

Relative to DSPs, the Am2045 delivers throughput that ranges from 10-25X higher than a 1 GHz 32 bit DSP without the tough problems of synchronizing multiple DSPs for real-time programming. Also, the Am2045 required less than half the code than the comparable DSP application. These two factors alone show the tremendous advantage of moving from FPGA- and multi-DSP-based design and moving up to Ambric for designing embedded media systems. And, when you add in the other benefits of using our MPPA and software, such as how much less power an Ambric-based embedded system uses, it's easy to see the value in Ambric's solution.

**BSD:** What's next for Ambric?

**HB:** With success building in media processing equipment, we're looking at other markets where the processing power, easy-to-use development tools, power, cost and time-saving benefits of Ambric-based products would be highly valued such as medical imaging. I look forward to updating you on all of this at next year's NAB.

**BSD:** Where can people find Ambric at NAB?

**HB:** Ambric is in booth SU13213.

# See the **Pyro Kompressor™ HD** from **Pyro|AV®**

at **NAB 2008**

With our technology and your talent,  
there are no boundaries in the field or in the studio

See us at the following Booths:  
**SU2905 & SU13213**



**Super-charged,  
hardware-accelerated HD MPEG-2  
and HD H.264 video encoding**

Accelerate HD video authoring for Blu-ray DVD production or the web  
Adobe CS3 plug-in preserves your workflow and speeds compression  
Pyro Kompressor™ transcoder application offers watch-folder automation and custom settings



**Plug-and-play integration in  
Adobe® Premiere® Pro CS3  
and Adobe® After Effects® CS3**

**Pyro|AV** by ADS Tech

[www.pyroav.com](http://www.pyroav.com) **800.888.5244**



Visit Ambric at **Booth SU13213** to learn more  
about Ambric's TeraOPS-class, massively  
parallel processor array IC technology.

## Available at: Dealers



[www.bhphotovideo.com](http://www.bhphotovideo.com)



[www.melrosemac.com](http://www.melrosemac.com)



[www.keycodemedia.com](http://www.keycodemedia.com)



[www.provideosales.com](http://www.provideosales.com)



[www.sharbor.com](http://www.sharbor.com)



[www.ramelectronics.net](http://www.ramelectronics.net)



[www.markertek.com](http://www.markertek.com)



[www.unitek.com](http://www.unitek.com)



[www.comprehensiveinc.com](http://www.comprehensiveinc.com)



[www.hvs.on.ca](http://www.hvs.on.ca)



[www.dvwarehouse.com](http://www.dvwarehouse.com)



[www.guygraphics.com](http://www.guygraphics.com)



[www.tekserve.com](http://www.tekserve.com)



[www.videoguys.com](http://www.videoguys.com)



[www.digitalsystemsmedia.com](http://www.digitalsystemsmedia.com)



[www.promax.com](http://www.promax.com)



[www.adorama.com](http://www.adorama.com)



[www.focal.co.jp](http://www.focal.co.jp)

## Distributors:

### 1 Source Video (USA)

[www.1sourcevideo.com](http://www.1sourcevideo.com)

1 Source Video

1-732-290-7501

### EMJ / SYNEX (Canada)

[www.synnex.com](http://www.synnex.com)



1-800-268-1220