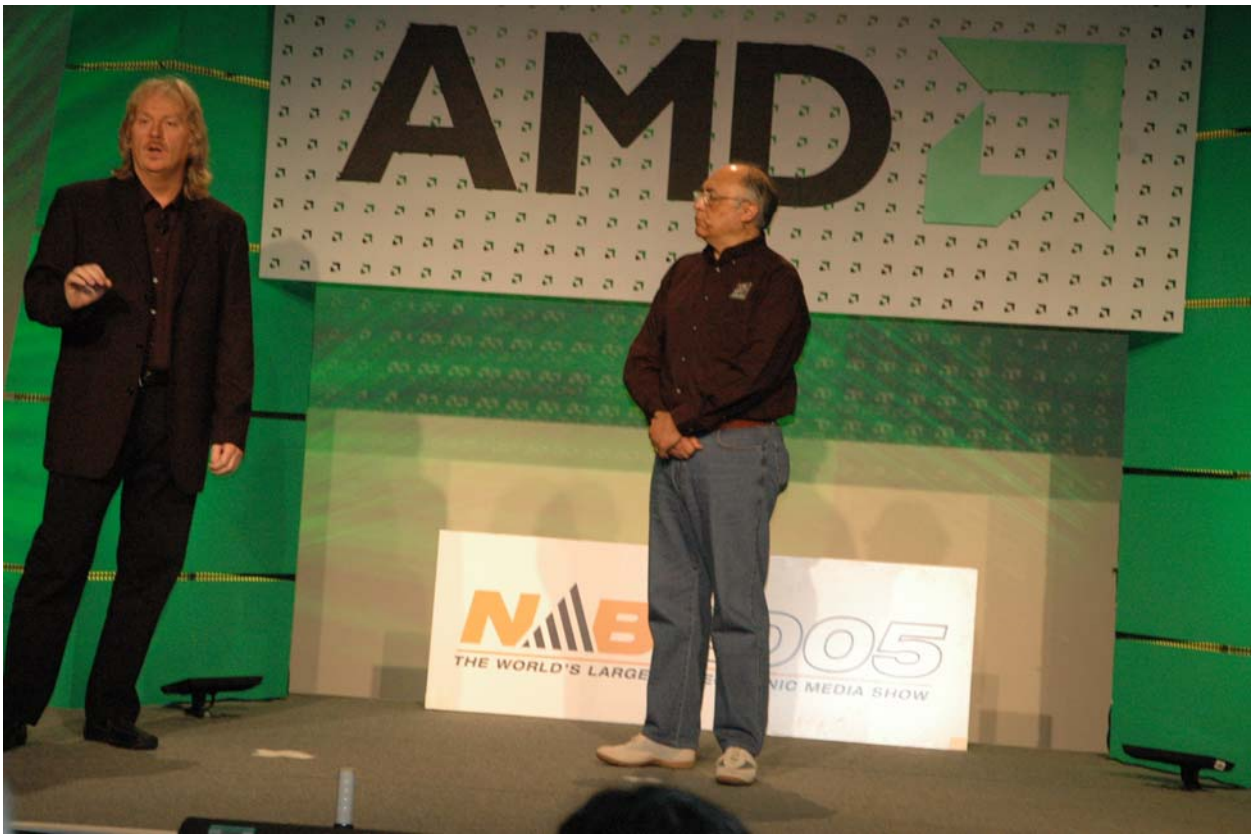
Charles R. Boswell Jr.

Director, Digital Media & Entertainment
Advanced Micro Devices



From L-R: Charles Boswell, Director of Digital Media and Entertainment
& Hector Ruiz CEO AMD
NAB 2005 Keynote

Charlie Boswell has been with AMD for nine years, holds 8 software patents in signal processing and one in fault tolerant computing, and has recently been promoted to Director of Digital Media and Entertainment. Charlie is an accomplished musician, composer / director and was featured on Good Morning America in the spring of 2000 for his musical score on an independent film. Charlie as Director of Digital Media & Entertainment for Advanced Micro Devices works directly with leading entertainment industry innovators and content creators including George Lucas/JAK Film (Star Wars), Robert Rodriguez (Sin CIty), as well as musical artists Eric Clapton, Peter Frampton and Mark Knopfler, and music producers Phil Ramone (Elton John, Barbra Streisand), and Elliot Scheiner (The Eagles, Fleetwood Mac), among others. Charlie is currently working with the family of the late great composer and rock icon Francis Vincent Zappa – Frank Zappa - to re-master the entire Zappa catalog using AMD 64-bit workstations. Charlie is also driving AMD's Digital Cinema initiative. Charlie holds a Bachelors degree in Electrical Engineering from the University of Missouri.

For online information….Google "Charlie Boswell AMD" or "Charles Boswell AMD"

Charles R. Boswell Jr grew up in the Midwest in the serene and almost surreal boyhood home of Walt Disney, Marceline Missouri. A film maker and musician since early youth, Boswell graduated from the University of Missouri with a BSEE . His change of focus from creative pursuits to engineering has taken him on a rather circuitous route to his current position with Advanced Micro Devices….that of Director of Digital Media and Entertainment. Charlie has worked for both the private sector and government on technologies that span medical electronics to software for the Space Shuttle and holds 9 US patents.

Advanced Micro Devices – AMD has annual revenues of 3.5 Billion and has just released their industry leading 64-bit technology that Charlie is helping evangelize to Hollywood and the music industry. Charlie began with AMD as a software engineer in 1996 where his focus was on host-based signal processing on the Windows OS. He led an industry special interest group as was promoted to Senior Member of Technical Staff. He caught the attention of then new CEO Dr. Hector Ruiz in the spring of 2000 after a film he wrote the score for entered theaters across Texas. Even though the film was mercilessly panned by critics, this eventually led Charlie to an appearance on Good Morning America. Dr. Ruiz soon asked Charlie to utilize his passion and skills for music and filmmaking to focus the new AMD technology into Hollywood and the music industry. Charlie is currently working with everyone from Eric Clapton and Warner Music to Robert Rodriguez "Spy Kids" to George Lucas on Star Wars prequels. Charlie is also working with the families of two of people who were his biggest influences in music.i.e. Spike Jones and Frank Zappa. Charlie works with Spike's daughter Leslie Ann Jones at Skywalker Sound at the Lucas Ranch and Frank's son Dweezil in Los Angeles. Charlie is also working with Willie Nelson and his band to record their live shows. Charlie will appear on FoxTV this fall in a piece on music and technology and will be interviewed on "Electric Playground" with Tommy Tallarico and Dweezil Zappa. Charlie recently worked with Tommy Lee former drummer of 80's band Motley Crew on the set of the NBC reality show "Tommy Lee Goes To College" shot on the campus of the University of Nebraska at Lincoln…will air in 2005.

Wall Street Journal November 4th 2004 – Technology Journal

Surprise Stand-In

Charlie Boswell has one of the dream jobs in the semiconductor industry. As director of Advanced Micro Devices Inc.'s digital media and entertainment group, he meets famous recording artists and film makers and tries to convince them to use computers powered by AMD chips. But a trip to Oregon in September had an extra fringe benefit.

A Portland TV station was going to shoot footage of guitarist Peter Frampton, an AMD user, but also wanted to show how the technology could benefit home users. That spurred the idea of doing a live garage recording with the Kingsmen, the venerable Portland-area group whose 1963 recording of "Louie, Louie" is a fixture of garage-band mythology. There was only one problem -- two members of the band couldn't make the gig.

So Mr. Boswell was drafted to play keyboards; Scott Carroll, an AMD public-relations man, strapped on the bass guitar. "Scott and I found ourselves performing with the Kingsmen in a garage, playing at nosebleed volume, as the TV guys filmed it," Mr. Boswell recalls. "It was a surreal experience." Keeping up with the three chords of "Louie, Louie" wasn't a problem, but the two men didn't get any closer to unraveling the song's mysterious words. "The lyrics are still indecipherable," Mr. Carroll says.

USA Today – April 19th 2005

AMD basks in Hollywood's glow

By Byron Acohido, USA TODAY

SEATTLE — Technology is at it again, expanding Hollywood's creative horizons.

Effects in *Sin City* were created with AMD microprocessors.

AP/Miramax

But this time, the tech supplier isn't named after a fruit.

Apple (AAPL) Mac computers, long the tool of choice for Hollywood's elite artists, were conspicuously absent during key parts of creating the special effects blockbuster *Sin City* and two cutting-edge films arriving later this year, *Star Wars: Episode III* and *Stealth*.

For a number of crucial creative tasks, A-list directors Robert Rodriguez, George Lucas and Rob Cohen relied on Windows computers running microprocessors from Advanced Micro Devices (AMD). And DreamWorks Animation (DWA) on Monday announced it had signed a three-year deal to use AMD computers to do films like *Madagascar,* coming out next month

Cohen's *Stealth*, a $130 million air-battle epic coming this summer, is a case in point. Buzz has spread about composer Brian Transeau's use of six Windows AMD computers to run music software giving him real-time control of a 110-piece digital orchestra to score the movie.

A year ago no bank of computers, Windows or Mac, could do the job without repeatedly crashing, Transeau says. "AMD is untouchable," he says. "Applications run flawlessly and don't crash."

AMD's secret: its Opteron chip, designed to process data in chunks of 64 bits or 32 bits very efficiently. Since rolling out the Opteron in 2003, AMD has come on strong against

longtime rival Intel (INTC) by making it possible to do high-performance computing easily and cheaply.

AP file

Ruiz

Intel's annual sales of $34 billion dwarf AMD's $5 billion. But that juxtaposition only fuels the ambition of AMD's guitar-strumming CEO Hector Ruiz. Monday, Ruiz unveiled his latest strategy for gaining more ground on Intel at the huge National Association of Broadcasters convention in Las Vegas.

In a USA TODAY interview before giving his convention speech, Ruiz described how AMD aims to leverage testimonials from top Hollywood directors and music producers to boost consumer sales of Windows AMD computers. A special target: consumers looking for the best gear to produce home videos and home-brewed digital music.

"We intend to be the artist's best friend from the technology point of view," he says.

Getting 64-bit servers going

But Ruiz's vision goes further. He wants AMD at the forefront of delivering the next generation of 64-bit computer servers, office desktops and home-entertainment PCs, a market expected to blossom in coming years. Most corporate desktop and consumer PCs are still based on 32-bit processing.

A hot topic in the tech industry is the debate over how quickly tech suppliers and media firms will embrace 64-bit computing for the next generation of computer servers, workplace tools and digital entertainment services to the home.

The 64-bit market is where Ruiz, 58, intends to plant AMD's flag. "I believe that market is a huge potential for us," says Ruiz, who relaxes at home by strumming Merle Haggard tunes on his vintage Martin acoustic guitar.

Knowing where Ruiz is steering AMD helps explain the chipmaker's calculated encroachment on Apple's Hollywood turf.

Shortly after taking over as CEO in 2002, Ruiz assigned senior engineer Charlie Boswell to begin preaching Opteron's performance benefits to elite creative artists. Boswell, who scores music for indie films in his spare time, won over Lucas and Rodriguez on the film side, and Peter Frampton and Dweezil Zappa in the music industry. One key convert was Elliot Scheiner, a sought-after music producer who does sound for Eric Clapton and Steely Dan.

Scheiner, a die-hard user of expensive tape-based analog recording systems, feared computer crashes. But Boswell coaxed him into trying a Windows AMD-based digital system.

Last June, Scheiner used the system to record and mix sound for Clapton's three-day Crossroads Guitar Festival at Dallas' Cotton Bowl stadium. The concert, featuring a

who's who of guitar virtuosos, became a popular PBS television special and widely released DVD.

"I felt so confident with this technology and the speed everything was getting transferred, that there was no reason not to use it," Scheiner says.

Winning such accolades fulfills the first part of Boswell's assignment from Ruiz to capture "the passion of Apple users and the (sales) volume of Intel," Boswell says.

More Hollywood converts seem likely, especially with the success of projects like Rodriguez's *Sin City*, which opened earlier this month at No. 1. Ticket sales so far have surpassed $60 million.

Rodriguez used high-definition video cameras, instead of film. He then used Windows AMD computers to storyboard scenes, edit, add visual effects and produce a high-definition digital master copy.

"The fact that you have Hollywood using this to do movies gives AMD cachet to talk about being ahead of the curve," says Rob Enderle, principle analyst at the Enderle Group.

Keeping consumers in mind

Still, nailing the second part of Ruiz's mandate — closing the gap on Intel — isn't assured.

"AMD's primary obstacle is they face a very credible competitor in the form of Intel," says Dean McCarron, principal analyst at Mercury Research.

Intel has history on its side. It has bested AMD at many turns over the past two decades. Plus, Intel's incoming CEO, Paul Otellini, takes over next month with engineering and business units freshly realigned. Moreover, Intel has more than $8 billion in cash to fend off the latest threat from its much smaller chief competitor.

With Intel on the move, AMD must overcome the big hurdle of transferring its success with elite artists to the burgeoning market of consumer hobbyists. They're now buying mostly cool, simple-to-use Apple products to create home videos and do home music recordings. Comparable consumer-level editing software for Windows can take hours of frustrating tinkering to get up and running.

"If AMD is really serious about getting into the consumer market, it's going to come down to whether they can push for simple applications that run well in Windows," says movie composer Transeau, a loyal Mac user for 14 years. "I think they can do it, because they have a superior system."

Ruiz says he realizes as much.

"This community of users, who are incredibly tough drivers of technology, is helping us fine tune and optimize the technology," he says. "And all of that sooner, rather than later, is going to trickle down to the consumers."

Tom' Hardware Guide – August 2004

AMD Takes The Leading Role in Digital Content Creation
Apple, the favored computer of many movie artists and companies, may be losing ground to AMD

AMD's Charlie Boswell, "All those explosions, laser beams and lightsabers in modern movies are created by computers, lots of them. Traditionally the computer of choice has been Apple, but this reign may soon be over as AMD looks to supplant the Apple G4s/G5s with their Opteron 64-bit processors."

THG interviewed Charlie Boswell, Director of AMD's Digital Media & Entertainment Division, and Dan Gregoire, Pre-Visualization Supervisor at JAK Films. Mr. Gregoire is currently supervising the special effects pre-visualization shots for Star Wars Episode Three: Revenge of the Sith. His company also did the shots for Episode Two. JAK Films is responsible for pre-visualization, or "pre-viz" in movie lingo, for the Star Wars movies. Movies are so complex now that computers are used to find out if a particular special effects shot is even possible. Think of these as test runs of the final shot. Mr. Gregoire said that Star Wars Episode Three, to be released May 2005, will have thousands of shots. This results in an insane production schedule that has no room for error. According to Mr. Gregoire, George Lucas now has the same power in pre-viz as he has in an actual director's chair. Many elements of a shot can be changed in real-time. The power of the AMD processor is nicely summed up by Mr. Gregoire, "My artists can go home on time and much happier now. Without the Opterons, it would have been much more painful."

This is where the competition can't keep up. Mr. Boswell says, "Apple doesn't have any solution past two processors. The Apple architecture just ran out of gas." Almost every film made today has dozens, maybe even hundreds of special effects shots. Rendering all of these shots in a timely manner requires render farms consisting of hundreds of processors. This is where the Opteron excels. Mr. Boswell says that AMD wants to reach out to Apple users. He says that they are passionate, want to succeed and continually push the limits of hardware. Companies that are hesitant of throwing away the Macs on the desktops can gracefully grow into the AMD architecture by migrating their render farms to AMD Opterons. This migration would be transparent to the end user, as many Mac fans would rather face a fiery death than to have their Macs taken away.

Will the Opteron boot Apple from the top of the movie industry computer heap? Only time will tell, but with its use in completed projects such as Star Wars Episode Two and the upcoming Episode Three, there is little doubt that AMD intends to make a good run at toppling Apple. ***(Tom's Hardware Guide, Humphrey Cheung, August 11, 2004)***

NAB 2004

AMD Launches the AMD64 Masters Group

Grammy Award-Winning and Nominated Audio Pros and Film Pre-Visualization Expert Finding exceptional Artistic Freedom and Control With AMD Opteron™ Processor-Based Creative Tools

AMD announced the formation of the AMD64 Masters Group comprised of digital production masters from the entertainment industry. Members include Grammy Award-winning and nominated audio professionals Phil Ramone, Elliott Scheiner, Frank Filipetti, George Massenburg, Rory Kaplan, Chuck Ainlay, Fred Maher, and Robert Hill and Dan Gregoire of JAK Films, pre-visualization supervisor for Star Wars: Episode III. The AMD64 Masters Group members are realizing significant performance benefits and exceptional creative freedom using dual AMD Opteron(tm) processor-based digital audio workstations, non-linear video editing, special-effects compositing and 3-D rendering systems.

"Our AMD Opteron processor-based systems provide incredible speed in a professional environment," said Phil Ramone, 9-time Grammy Award winning producer whose credits include Frank Sinatra, Barbara Streisand, Elton John, Paul Simon and Billy Joel. "Dependability is always the hope of uninterrupted work. The AMD Opteron processor has met the new standards we dream of." "I've found my AMD Opteron processor-based DAW to be extremely reliable and quick, and the most versatile box I've ever worked with," said Elliot Scheiner, a 5-time Grammy Award-winning engineer whose credits include Steely Dan, The Eagles, Fleetwood Mac, and Beck.

"AMD64 technology and customer-centric leadership is enabling a revolution in content creation simply because it removes limitations, providing the artist with extraordinary power to create," said Charlie Boswell, director of AMD's Digital Media & Entertainment group. "What was once only accessible to the largest studios with the largest budgets is now available to everyone. AMD64 technology-based platforms offer talented up-and-comers in the entertainment industry and average consumers access to the same technology used by the best of the industry icons. Dads who want to record Junior's garage band, or want to edit and add music and effects to the family highlight video, can purchase an AMD64-based desktop PC running the same type of software." "With ubiquitous 64-bit computing around the corner and the weight of the open PC architecture and investment R&D dollars rolling behind it, the fun is only beginning."

AMD Premier Artists Group

ROBERT RODRIGUEZ – TROUBLEMAKER STUDIO

He could be referred to as the King of the ultra-low budget film. Whatever you call him, he is truly a God among Directors. From his award winning short film Bedhead to the $7,000 feature film, El Mariachi, to the $6 million Desperado, Robert Rodriguez has brought his amazing talents to Hollywood. This 25-year-old filmmaker is one of the brightest stars in the film industry. He works cheap, fast, and makes amazing films. He's an editor, a director, a writer, a D.P, a cameraman, and a steadicam operator. Recent feature projects include From Dusk Till Dawn, Once Upon a Time in Mexico, Spy Kids 3-D: Game Over, Spy Kids: Island of Lost Dreams, and Spy Kids. “At Troublemaker, we require processors that can keep up with the speed of thought. AMD Opteron™ processors—in both our artist workstations and our render farm—allow us to be limited only by our own imaginations.” Robert Rodriguez

DWEEZIL ZAPPA – UTILITY MUFFIN RESEARCH KITCHEN (UMRK)

AMD today announced support for Zappa.com and forthcoming support for the Zappa studio with AMD Opteron processor-based digital audio workstations and servers. Also known as the Utility Muffin Research Kitchen (UMRK), this studio is being equipped with AMD64 technology for 32- and 64-bit processing that enables Dweezil Zappa to compose music and move his father's master analog tapes into the new surround digital formats. "The AMD Opteron processor-based workstations will provide Dweezil powerful 64-bit capability for new music creation as well as digital asset management and archival of the massive Zappa catalog," said Charles Boswell, Director of Digital Media & Entertainment, AMD's Computation Products Group. Frank Zappa is the author of hits like, "Don't Eat The Yellow Snow," "Joe's Garage," and the hit radio single, "Valley Girl." Dweezil Zappa has embarked on projects that involve new virtual instruments and sample libraries not practical with existing 32-bit technology. "Technology is finally catching up to some of the incredible music that has been created in this studio," said Dweezil Zappa. "AMD is providing the 64-bit technology backbone required to help us complete the previously impossible projects in our vault. We are now only limited by our imagination." ***(WorkstationPlanet.com 10/03)***

BT (BRIAN TRANSEAU)

“BT mounts mesmerizing journeys with his compositions. He is not only a virtuoso programmer, but an extremely gifted musician..." Peter Gabriel speaking to the LA Times. Initially known as the pioneer of trance music, BT has arrived as one of the most cutting- edge artists and producers for a multitude of musical styles. Whether he's crafting perfect pop hooks with *NSYNC, composing intricate scores with eighty-piece orchestras for films like The Fast and the Furious, collaborating with Sting on a track from his forthcoming album, or remixing emotional and languid epics for Sarah McLachlan, Tori Amos, Madonna or Seal, BT consistently balances creative and memorable songwriting, sonic innovation, and the latest technology for a cutting-edge, yet organic sound. BT scored the amazingly powerful new film, "Monster," starring Charlize Theron and Christina Ricci. Additional BT film score credits include: The Fast and the Furious, More Fast and Furious, Zoolander, Driven, and 3000 Miles to Graceland. Charlie Boswell and the AMD Digital Media & Entertainment team are currently deploying AMD-64 technology at BT’s studios. Charlie is working with BT and Tommy Lee on the new reality TV show for NBC – “Tommy Lee Goes To College”

Charlie recorded BT and Tommy Lee on AMD’s 64-bit processor Thursday November 11th in Lincoln Nebraska on a remake of the Beastie Boys hit “Fight for the Right” which included a performance by the Cornhusker marching band. The show will air in early 2005.

Tommy Lee with the Nebraska Cornhusker Marching Band

TOMMY TALLARICO

Tommy Tallarico is the most successful and accomplished video game composer in history. He has helped revolutionized the video game industry and has shown time and again his ability to create unique soundtracks that truly enhance the overall gaming experience. His music has been heard by hundreds of millions of people all over the world on mediums such as video games, television, motion pictures, radio, and soundtracks. Some of Tallarico's top titles include Earthworm, Disney's Aladdin, Cool Spot, The Terminator, Madden Football, Prince of Persia the Test Drive series, MDK, Tomorrow Never Dies, Tony Hawk Skateboarding, Spider-Man, Unreal and Time Crisis series. Charlie Boswell and the AMD Digital Media & Entertainment team are currently deploying AMD-64 technology at Tommy Tallarico studios.

DAN GREGOIRE - JAK FILMS (DIVISION OF LUCASFILMS)

One of the film industry's most sophisticated and successful franchises, George Lucas' Star Wars saga, is scheduled to return to theaters in 2005 after a complex creative process that is being helped along by production tools that rely on AMD Opteron™ processors. "Just a year ago, we had to spend much more time optimizing our 3D projects so we could simply complete our work," says Daniel Gregoire, pre-visualization effects supervisor at JAK Films, the production company for Star Wars: Episode III. "In that not-so-distant past, the image-rendering process often meant a coffee break," Gregoire said, "and while the computer chugged along trying to assemble and display a new image, a production artist could lose a lot of valuable time. Today, these tasks move much more quickly." Gregoire adds, "Speed is just one of the benefits JAK Films has realized." Gregoire describes the process now underway at JAK as "storyboarding on steroids." Right now, he and his team are using computer software including Alias' Maya and Adobe's After Effects to build sets in 3D and match them to plates shot in Sydney. These pre-postproduction shots form the foundation of the finished film. "The plates for the film are mostly blue screen, which makes it difficult to see if scenes are working. We use AMD64 technology-based hardware to roughly place the appropriate digital sets in with the actors and of course we do this without spending an exorbitant amount of money," Gregoire says. "This is an incredibly powerful tool for George (Lucas) to have in his arsenal." "Thanks to the AMD Opteron processor and off the- shelf software (which JAK Films uses exclusively), we can deliver even more punch for every shot. Twelve guys working for a week can produce 180-plus prepostproduction shots on these machines—from the first 3D track to the last 2D composite and everything in between," says Gregoire. "The chips are awesome," he agrees. "We can upgrade to a 64-bit native chip, and it's totally legacy compatible. But there's also an incredibly well thought out internal architecture, HyperTransport™ technology, which helps realize the full benefit of faster than- ever chips."

George Lucas

Charlie began a relationship with Lucas film at the outset of Star Wars Episode-II "Attack of the Clones" with AMD 32-bit technology. Working directly with the George's pre-viz team at the Lucas Ranch. Charlie introduced AMD's 64-bit technology at the outset of Star Wars Episode-III and George quickly discovered he can direct animatics just like principle photography….in real-time. This helped him save 10Million in production costs for Ep-III.

George Lucas was drafted into the Hall of Fame at the 2004 Audio Engineer Society(AES) in San Francisco October 30th 2004. Charlie worked with the Lucas team o both Episode-II & Episode-III of Star Wars… Charlie was a guest at the Lucas table and attended the London Premier of Episode-III as a guest of the Lucas team….Charlie is also in the credits of Episode-III..

AMD64 Goes Down to Crossroads with Eric Clapton at Guitar Festival

AMD64 processor-based digital audio workstation to record benefit concert in DVD-A featuring Eric Clapton and other legendary guitar players

AMD today announced that AMD64 technology is the digital audio workstation (DAW) platform of choice to record Eric Clapton's Crossroads Guitar Festival concert at the Cotton Bowl in Dallas on Sunday, June 6, 2004. Tens of thousands of music fans are expected to attend the concert featuring a line-up of legendary guitar players. Scheduled to perform are Eric Clapton and Doyle Bramhall II, Carlos Santana, Jeff Beck, James Taylor, ZZ Top, Steve Vai, Robert Cray, Neal Schon, blues legend B.B. King, and many more artists. The deployment of an AMD64 processor-based DAW to record the Crossroads Guitar Festival underscores a growing trend of AMD64 technology adoption in the digital audio industry. AMD64 Masters Group members and multiple Grammy Award-winning audio engineers like Phil Ramone, Elliot Scheiner, George Massenberg, Frank Filipetti and others have made AMD64 their digital audio technology of choice in the professional studio. Elliot Scheiner, a five-time Grammy Award-winner was selected along with audio recording heavyweight Ed Cherney by Warner Music to capture the live magic of these artists for an upcoming DVD release. "When I got the call to record the Crossroads Guitar Festival, I knew immediately that I wanted my AMD64 processor-based system to do the 'heavy lifting.' I have complete confidence in the AMD64-based system," said Scheiner, a 5.1 surround sound pioneer who also re-masters classic albums on AMD64. "I'm now exclusively using my AMD64-based DAW64 from Verari Systems running Steinberg's Nuendo 2.0 in my studio. AMD64 has solved the performance, reliability and sonic integrity issues that audio engineers in the digital domain have had to live with up until now." “AMD64 technology was designed to meet the needs of the most discriminating professionals in extremely demanding environments like recording Eric Clapton's Crossroads Guitar Festival," said Charlie Boswell, marketing director for AMD's Digital Media & Entertainment group. "The Direct Connect Architecture of AMD64 enables an ideal balance between artistic performance and cutting-edge production power, which is already making an impact inside the professional recording studio and now in mission-critical live recording. AMD64 technology has been selected over 32-bit-only systems." (BUSINESS WIRE, June 2, 2004)

Staging a Guitar Fest

Clapton's Crossroads Festival was a sophisticated homage to the fabled instrument

Recording Live Guitars – For guitar fanatics, it was the event of a lifetime — the best guitarists in blues and rock in one place to raise money for Eric Clapton's Crossroads Centre in Antigua, which treats addictions to alcohol, drugs, and other disorders. The event featured a slew of artists, including Clapton, Styx, Robert Cray, Buddy Guy, and many more. To record audio on a live concert like the Crossroads Guitar Festival, producers at Warner Brothers called on Grammy Award-winning sound engineer Elliot Scheiner, a veteran of dozens of high-profile live events, including The Eagles' Hell Freezes Over reunion special, the Fleetwood Mac reunion, and work with John Fogerty, among others. To record the event, Scheiner and his team relied on an AMD64-based Verari DAW64 system that features 64-bit, 96K processing. “The package is incredibly reliable and very stable,” says Scheiner. “It never crashed and the quality is unbelievable — it's better than any system out there and actually sounds like analog.” A key part of the system was the digital backbone based on technology from AMD, Sunnyvale, Calif., one of the companies that sponsored the event. Dual AMD Opteron processors running Windows in 32-bit mode allowed the sound recording team to work at “crazy” speeds, according to Scheiner. “[The AMD processors] are so fast and so reliable, there's nothing you can really compare it to out there,” he says. “It has to be reliable. It's a live recording, and you only get one chance to do it.” In the end, Scheiner was prepared for almost anything. “We made sure that if we encountered any problems, that we would have an answer for everything,” he says. “We had backup systems, we backed up the computers with digital tape, and we were prepared for anything to happen,” he says. (Jul 1, 2004 by Sharon Stancavage)

Joe Walsh and Charlie Boswell backstage at Eric Clapton’s Crossroads Festival in June of 2004