ENDEAVOR INTERTECH CORPORATION

Digital Signal Processing & Multimedia

Custom Software Development

- *We Develop Complete Turn-Key Multimedia Software or Hardware & Software Products*
- *We Develop Standards Based Multimedia Software Libraries and Components*
- *We Optimize & Port Multimedia Code for High Performance on Pentium II MMX, DSP, and Special Purpose Processors*
- *We Work With Hardware Designers to Develop Custom ASICs for Audio & Video Codec Systems*

There's Work Behind All That Glitter

Nobody has to tell *you* that. You already have a concept of the end result, and it looks and sounds great! But now you're faced with the huge task of making a binary, number-crunching digital processor take your files and produce a visual kaleidoscope and a sonic masterpiece!

That's when we roll up our sleeves and work with you to provide the graphics, audio, and video algorithms which make up the underlying technology. We're the software equivalent of concert roadies—working in the background to assure that the talent and vision of the final product shines through, just as it did in your concept.

We can provide the complete package—analyzing hardware suitability and selection, algorithm and standards selection and development, and concept development.

We Have the Experience to Take Techno-speak Standards and Make Them Dance

Or sing. Or interact. Or communicate.

Our expertise is borne out of years of effort, understanding a wide variety of multimedia standards and then implementing or using them with performance and efficiency. Digital standards like:

Video

- MPEG 1 (video codec)
- MPEG 2 (HDTV standard)
- JPEG (photo codec)
- H.26x (realtime video codecs)

Audio

- G.723 (PSTN bandwidth audio)
- G.728 (ISDN bandwidth audio)
- G.711 (high quality audio)
- AC-3 (Dolby HDTV codec)
- CELP (digital cell phone codec)

Graphics and more

- DirectDraw
- ActiveX
- Video for Windows
- Color space conversion
- Analog/digital camera filtering
- Lossless temporal/spatial codecs

for desktops, laptops, set tops, and embedded systems.

We Work Hard to Create Multimedia That Screams!

Let's face it. Sight, sound, and communication requires speed. And speed takes more work. It's often not a matter of finding *an* algorithm that works, but finding *the right one* for your needs. We have thrown out 8 discrete cosine transforms (the basis of many video compression algorithms) just to find the 9th which was best tuned to the strengths of the target architecture.

Once the algorithms and details of the system are established, we are experienced in optimizing multimedia applications and

libraries for the fastest possible execution. Whether by carefully developing high performance high-level language modules, or assembly/microcoding multimedia cores, we provide world-class results.

Our staff has proven ability optimizing multimedia software for general purpose processors (Pentium, Pentium II MMX), DSP (TI, Analog Devices, Lucent, Motorola), and even VLIW, ASIC, and superscalar architectures.

It's this kind of commitment to performance that we bring to every project we do.

We Possess the Power to Communicate Your Image

Sometimes it's enough to store your images with formats like JPEG, GIF, AVI, and custom formats. However, many multimedia applications are integrated with communications. We can help you send your multimedia over the phone lines, using protocol standards like V.80 and V.34. Our staff has developed protocol and system layers for MPEG 1, and H.221, H.223, and H.245—which are used in real-time video communications software.

Moreover, Endeavor Intertech's staff are pioneers in multimedia communication over the internet.
Whether real-time audio/video transmissions or stored multimedia clips are being communicated, we can take advantage of our detailed understanding of TCP/IP and UDP. Using source quenching, regulation techniques, forward error correcting techniques, and more we can insure that your image does not get accidently routed to Timbuktu (or look like it had)!

From Architectures to Optimization, We Are Established Experts

Whether we are working with hardware designers to develop custom ASICs that implement all or part of a multimedia system, or we are developing a small suite of multimedia library routines, we can provide the experience and attention to detail that your project needs to be successful. Successful in performance, successful in budget, and successful in hitting your market window.

Call us to see how Endeavor Intertech's staff can work for you.

Proven Digital Signal Processing for Sophisticated Applications

But there is more to DSP than just exciting the senses. We have experience developing serious DSP applications and software library modules. We have developed applications ranging from

- Sonar
- Radar
- CT, MRI, Sonogram Medical Imaging
- OCR
- Image processing
- Seismic processing

and more. We have developed high performance algorithms such as FFTs, DCTs, filters, vector and matrix operations, to name a few, for fixed point and floating point processors.

For More Information…

Endeavor Intertech multimedia design engineers are available immediately to discuss the salient points of your new project.

Please contact the sales office listed below for more information on availability.

Sales Information

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The Company

Endeavor Intertech's staff has been creating scientific and engineering software solutions for decades. The staff has authored numerous multimedia and video conferencing applications being sold today on the shelves of your favorite computer software store. Founded by specialists in high performance processor software, Endeavor Intertech provides software services for computers from embedded processors to supercomputers.

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