

## **For Immediate Release**

### **NEWS**

#### **ESS Samples MPEG-2/AC-3\* Decoder and DVD Reference Design**

**FREMONT, Calif., July 28, 1997** -- ESS Technology today introduced the ES3308, a dual engine Programmable Multimedia Processor that drives down the cost of manufacturing consumer DVD players and set-top boxes. The ES3308 integrates both a CPU and DSP, while providing greatly expanded programmable features. ESS also announced the availability of a complete DVD player reference design consisting of all of the elements required to create a drive system.

The ESS DVD chipset consists of the ES3308, the ES3301 transport/decryption chip, and ES3207 DAC and multi-standard television encoder that supports either NTSC or PAL formats. The ESS solution constitutes the most highly integrated DVD chipset available, comparing favorably with the four to five chips employed by competitors to produce solutions with less advanced functionality. The ESS Programmable Multimedia Processor has also been architected to allow for expansion of capabilities through software code enhancements. Future development plans focus on increasing the level of silicon integration while expanding the range of functions addressed.

"In pursuing this new market, we're applying knowledge gained from our very successful experience in the Video CD market," said Bo Ericsson, vice president of marketing for ESS Technology. "Using our programmable architecture, the DVD OEM customer can differentiate products or develop hybrid solutions on the same basic platform through software changes."

The ES3308 Programmable Multimedia Processor consists of an integrated 32-bit RISC core control engine and a 64-bit DSP video processor running in lock step on a single chip. The 32-bit RISC core performs management functions, while the 64-bit DSP video processor is dedicated to processing video image streams.

The RISC core is programmable, allowing DVD player manufacturers to differentiate their products by adding special features, such as Picture-In-Picture while a user is traversing a menu. The core also controls management functions, such as fast forwarding or any operation that moves data from one place to another.

Support for an on-screen display and blending is controlled in software, so vendors can readily differentiate their products through the user interface and navigation features they wish to incorporate into their DVD player. Sub-picture decoding is also supported to enable the display of sub-titles.

The programmable DSP core is dedicated to processing video streams and can scale output to any video size desired. Functions such as video pan and scan, letter box mode, and support for both television and movie aspect ratios are provided by the DSP engine.

## **AC-3 and MPEG Support**

An MPEG-2 video decoder and Dolby\* Digital (AC-3\*)/MPEG audio decoder are integrated into the ES3308. Dolby support includes both 5.1 channel decoding and a 2 channel downmix mode.

ESS' MPEG-2 implementation is backward compatible with VideoCD 2.0 and MPEG-1, an important consideration for Asian markets.

## **Pricing and Availability**

The ES3308/ES3301 DVD Programmable Multimedia Processor chipset is sampling now and will be priced at \$35.00 in production quantities. A complete DVD player reference design is also now available from ESS Technology.

## **ESS Technology**

ESS Technology, Inc. is a leading supplier of PC audio and digital video semiconductor solutions for the PC and consumer markets. ESS designs, develops, and markets highly integrated mixed signal semiconductor and software solutions for multimedia applications. ESS, headquartered in Fremont, California, has sales and technical support offices in Austin and Houston, Texas; Irvine, California; Beijing and Shenzhen, China; Tokyo, Japan; Taipei, Taiwan; and Hong Kong. ESS Technology is listed on the Nasdaq Market System under the symbol ESST. World Wide Web site: <http://www.esstech.com>.

NOTE TO EDITORS: [Block Diagram of DVD solution using the ESS Technology products described in this release is attached](#)

\* AC-3 and Dolby are trademarks of Dolby Laboratories

*The matters discussed in this news release include certain forward looking statements that involve risks and uncertainties, including the timely availability and acceptance of new products, the impact of competitive products and pricing, the dependence on continued growth in demand for PC and consumer multimedia products, the management of growth of the company, and the other risk detailed from time to time in the SEC reports of ESS, including the report on Form 10-K for the year ended December 31, 1996, and Form 10-Q for the quarter ended March 31, 1997. Actual results could differ materially from those projected in the forward looking statements.*