

NEWS

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Pioneer chooses ESS's ES9016 SABRE³² Ultra DAC For Its Award Winning SC-LX57 series of A/V Receivers

FREMONT, Calif., September 16, 2013— ESS Technology, a leading provider of high performance audio/video solutions, today announces that the ES9016 SABRE³² Ultra DAC is shipping in volume in Pioneer's latest SC-LX57 9.2 channel A/V receiver, a Gold Award winner of Japan's prestigious 2013 Summer Visual Grand Prix (VGP) in the A/V Amp category. Additionally, Pioneer is incorporating the ES9016 SABRE³² Ultra DAC in multiple 2013 A/V receiver models including the SC-LX87 and SC-LX77, as well as the Elite series SC-79, SC-77 and SC-75.

The ES9016 SABRE³² Ultra DACs add stunning sound stage, unmatched audio performance and jitter-free clarity to Pioneer's Direct Energy HD amplifiers built on Class D technology, delivering ultimate sound quality that will satisfy even the most demanding audio enthusiasts.

Unlike conventional sigma-delta ($\Sigma\Delta$) DACs, the ES9016 SABRE³² Ultra DAC incorporates ESS's innovative patented HyperStreamTM circuits to deliver spectacular music with up to 128dB dynamic range and 0.0003% (-110dB) total harmonic distortion, free from clock jitter common in digital

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audio systems. The 32-bit HyperStreamTM modulator is capable of 100% modulation and unconditional stability; the RevolverTM Dynamic Element Matching ensures performance over a wide dynamic range, while a Time Domain Jitter Eliminator removes the digital jitter that causes distortion.

The ES9016 SABRE³² Ultra Audio DAC supports 8-channel or stereo conversion from digital audio input in PCM, DSD or SPDIF formats, features click-free soft mute, volume control, de-emphasis, programmable zero detect, per-channel customizable roll-off filter characteristics and consumes less than 100mW.

Robert Wong, vice-president of marketing and worldwide sales for ESS Technology, said, "We are excited that Pioneer has upgraded the D/A converters in its latest A/V receiver models to the ES9016 SABRE³² Ultra DAC enabling audio enthusiasts to enjoy ESS's famous SABRESOUNDTM. With digital input sources such as HDMI becoming more widespread, audio enthusiasts have been patiently waiting for A/V receivers to adopt SABRESOUNDTM quality D/A converters to enhance their listening experience. These ES9016-equipped Pioneer A/V receivers will finally enable audio enthusiasts to enjoy unrivaled, jitter-free SABRESOUNDTM from whichever input source they select."

The ES9016 SABRE³² Ultra DAC is available now in 48-LQFP package. Sample chips, reference design and volume price information are available from your local ESS Sales Representative.

About Pioneer

Pioneer Corporation is a preeminent manufacturer of high-performance audio, video and computer equipment for the home, car and business markets and is celebrating 75 years of innovation in the consumer electronics industry. Please refer to the site of Pioneer Electronics (USA) for the product information in the U.S.: http://www.pioneerelectronics.com/PUSA/

About ESS Technology

ESS Technology, Inc. designs and markets high-performance audio and video products for the consumer entertainment, home, automotive and professional market.

ESS's products include the SABRE/SABRE³² series of Hyperstream™ audio DACs and ADCs, the Phoenix-III series of HD-Enhanced DVD Home Theater SoC, Crescendo series of Sound Bar SoC, Radix CMOS TV tuners, 1080p Video Up-converter, and the DMPX Media Processor.

ESS's $SABRE^{32}$ audio DAC series is the world's highest performance 32-bit audio D/A converter

Page 3 of 3 solution, built upon the original SABRE audio DAC series first introduced in 2008. The SABRE³² and SABRE audio DACs have been designed into the world's most prestigious consumer, audiophile and professional equipments, including Blu-ray players, CD/SACD players, A/V preamps and digital audio workstations.

ESS is headquartered in Fremont, California, and has R&D, sales, and technical support offices worldwide. ESS Technology's web site address is: http://www.esstech.com.