

Spotlight Feature

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Sound Terminal[™] Single-Chip Audio Solutions from STMicroelectronics Incorporate QSound QHD[®] Technology



QSound's QHD® high definition audio engine has been incorporated into the new Sound Terminal[™] STA333BWQS, STA335BWQS and STA559BWQS single-chip audio solutions from STMicroelectronics, one of the world's largest semiconductor manufacturers. With the inclusion of QHD, the highly integrated STAxxxBWQS Sound Terminal product range offers leading consumer electronics and audio product manufacturers the oppportunity to differentiate their products with QSound's unique sound-field enhancements and to deliver

to consumers an impressively expanded stereo image for a more natural, immersive audio experience.

Designed for use across the full range of consumer audio products, from portable and wireless devices to home theater and audio systems, the Sound Terminal family of consumer electronics ICs from ST brings high audio quality, lower power dissipation, and reduced manufacturing costs to OEMs of fast-growing applications such as flat-panel TV sets, PC soundbars and portable player docking stations. The high level of integration of Sound Terminal single-package solutions, combined with their fully digital stream from sound source to loudspeaker, makes possible the design of cost-effective, high-efficiency, small form-factor audio systems.

QSound QHD and its industry recognized QXpander® technology is a field-proven audio enhancement technology that provides a broader stereo width with greater separation and depth for stereo signals, synthesizing a three-dimensional stereo sound field. QHD is especially effective when processing decompressed audio since it improves the dynamics, bass and treble performance over both speakers and headphones. Normally, due to the digital compression of music and video sound combined with various audio processing techniques used in broadcast transmission, reduced audio clarity is experienced in most home entertainment situations, but QSound QHD technologies restore stereo width and the dynamics of audio content for a rich listening experience.

Sound Terminal STAxxxBWQS products integrate digital audio processing, digital amplifier control, DDX® power-output stage and QSound QHD® technology to create a high-power, single-chip DDX solution with high-quality, high-efficiency and all digital amplification. Benefits include:

- * No analog to digital converter needed due to full digital streaming
- * Embedded digital processing capability for sound enrichment and application features' customization
- * Easy integration with wireless audio interfaces

ST's new product line of Sound Terminal ICs is currently available worldwide in production quantities.

QSound Labs, Inc.

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