Spotlight Feature

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CSR's Revolutionary MusiCore1 Processor Features mQSynth™



CSR's revolutionary MusiCore1 processor is the world's first fully featured single-chip stereo audio processor with integrated Bluetooth capability for mobile phones that allows handset manufacturers to eliminate the cost and space required for a separate audio CPU subsystem. MusiCore1 now includes mQSynth™, a powerful wavetable MIDI synthesizer from QSound Labs, providing a complete spectrum of audio features from polyphonic ringtones to user interface sounds to multi-track game audio. This single-chip audio solution

provides up to 100 hours of music playback, extended battery life and a significant overall cost savings.

With the addition of mQSynth, MusiCore1 eliminates the need for a dedicated hardware MIDI solution from the BOM while still providing comparable features. By combining QSound's mQFX stereo audio processing functions and mQSynth with fully featured Bluetooth on a single chip that is smaller than most dedicated Bluetooth chips, CSR's MusiCore1 technology offers handset manufacturers the most efficient audio processor architecture available for mobile phone designs. With MusiCore1, OEMs can differentiate their products through QSound's advanced audio features without compromising on cost or size, in fact, saving 75 percent of the cost and more than 36 mm2 of PCB space that would otherwise be required for a separate audio processor.

QSound's mQSynth engine provides a capability that is directly in line with CSR's product strategy of delivering the most powerful and complete audio solution for mobile handsets. mQSynth is QSound's wavetable MIDI synthesizer that supports polyphonic ringtone files,



game music and interactive real-time sound events using digital wavetable instruments. mQSynth renders polyphonic sequenced content including SMF, SP-MIDI, SMAF, mXMF and JSR135, delivering an optimal solution with architectural efficiencies and performance levels which greatly surpass today's benchmarks.

CSR's selection of mQSynth as the embedded MIDI synthesizer for MusiCore highlights the best-in-class performance and efficiency of QSound's technology. The additional availability of QSound's mQFX 3D stereo enhancement solution for multimedia on the MusiCore1 platform provides an attractive, compelling technology and licensing proposition for all leading mobile OEMs. Enabling mQFX features provides a more natural, less fatiguing music listening experience, allowing customers to personalize their audio settings and fully enjoy the 100 hours of continuous music available to them.

With MusiCore1, CSR and QSound deliver a truly innovative single-chip solution for creating advanced music phones. Sample packages are available from CSR now, with volume production of MusiCore1 scheduled to start in September 2008. For more information, please visit the CSR MusiCore1 website or contact QSound Labs.

QSound Labs, Inc.