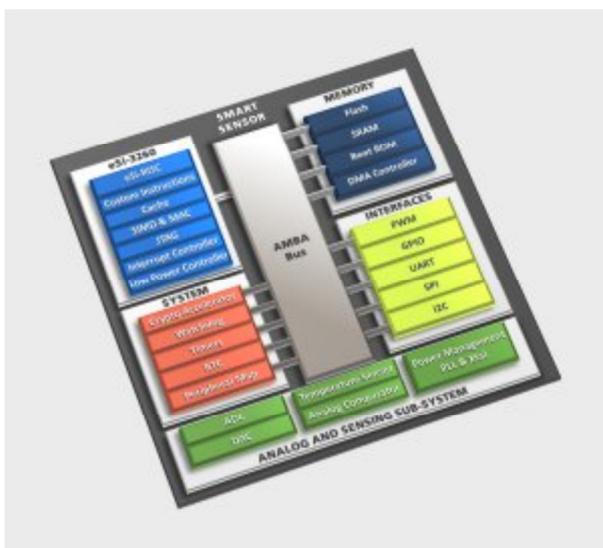


PRESS RELEASE

Pressemitteilung • Communiqué de Presse • Comunicato Stampa

EnSilica launches eSi-3260 processor core with comprehensive SIMD DSP extensions targeting IoT sensing nodes and always-on applications

Combines advanced DSP features with eSi-RISC's characteristic low power and small silicon footprint



Photocaption: Launch of DSP-enabled eSi-3260 processor core targets IoT sensing nodes and always-on applications

Wokingham, UK – 14th April 2015. EnSilica, a leading independent provider of semiconductor IP and services, has added to its family of eSi-RISC processor cores with the launch of the eSi-3260 targeted at IoT sensing nodes and always-on applications. The eSi-3260 combines advanced DSP functionality with the characteristic eSi-RISC small footprint and extremely low power consumption.

The inclusion of a 64-bit precision, fully-pipelined MAC unit makes the eSi-3260 ideal for audio, high-accuracy sensor hub, motion control and touch screen applications. In addition to 32-bit data, the MAC unit supports dual 16-bit SIMD (single instruction multiple data) multiply and MAC operations. Uniquely, full complex multiplication is also supported, performing four multiplies and two additions per cycle. The inclusion of saturating and rounding arithmetic, along with instructions to support bit-reversed addressing, provides excellent FFT acceleration and accuracy.

The eSi-3260 employs a 5-stage pipeline which has been optimized to deliver market-leading performance in mainstream process nodes with frequencies of over 1GHz obtainable in a 28nm process with dynamic power as low as 14µW/MHz. This can be reduced to 3µW/MHz when optimizing the processor for power, rather than frequency. A flexible memory architecture, with either native, AXI or AHB interfaces, allows the inclusion of instruction and data caches as well as tightly coupled memories for running code that is timing critical. The addition of a cache facilitates high-performance operations even when they are run from embedded Flash.

The radix-8 fast divide and square root options enable 32-bit integer division and square root operations to be reduced to six cycles, greatly decreasing the cycle count in sensing operations where these operations are key to the code operation. An optional, fully pipelined single precision floating point capability helps accelerate high dynamic range calculations for applications such as gesture recognition and fingerprint detection. Custom instruction support allows a further level of application acceleration such as IIR and

ENS023 / EnSilica launches eSi-3260 processor core with comprehensive SIMD DSP extensions targeting IoT sensing nodes and always-on applications

logarithmic DSP operations or cryptographic operations for standards including ECC, RSA, AES and SHA.

“The balance of processing performance, silicon area, low power and DSP functionality provided by the eSi-3260 delivers a distinct technology edge for customers looking to develop complex IoT sensing nodes and devices in what is a highly competitive market,” said Ian Lankshear, CEO of EnSilica.

Adopting the eSi-RISC series of processors for its touch screen controllers, Ken Tsui, Vice President, Design Engineering of Solomon Systech Limited said: “The solution developed by EnSilica, with its excellent features, has enhanced greatly the functionality of our product. We look forward to joining hands again with the team to develop more high-performance IC solutions.”

#

About EnSilica

EnSilica was founded in 2001 and has a strong track record of success in delivering semiconductor IP and providing ASIC/FPGA design services to semiconductor companies and OEMs worldwide. The company is headquartered in the UK and has offices in India and the USA. The company is a specialist in low-power ASIC design and complex FPGA-based embedded systems including hardware and embedded software development. In addition to providing IP and turnkey ASIC/FPGA development, EnSilica also provides point services to companies with in-house ASIC design teams. These services include system engineering, analog and mixed signal design, and advanced verification using UVM, DFT and physical implementation. For further information about EnSilica, visit <http://www.ensilica.com>.

About Solomon Systech

Founded in 1999, Solomon Systech Limited is a leading semiconductor company providing display IC products and system solutions on an international basis under its own global brand. Adopting a “fabless” business model, the Group specializes in the design, development and sales of proprietary IC products and system solutions that enable a wide range of display applications for smartphones, smart TVs and other smart devices including consumer electronics products, portable devices, industrial appliances and green energy applications. Solomon Systech (International) Limited’s shares have been listed on the main board of the Stock Exchange of Hong Kong Limited since April 8th, 2004 (stock code: 2878). More information about the Group, its products and services may be obtained at <http://www.solomon-systech.com>.

All trademarks are recognised and are the property of their respective companies.

This press release and any associated images (in high-resolution compressed jpeg format) can be downloaded from www.humbugpr.com.

Avant Technology Inc.

Sales Contact (Taiwan, Malaysia, Singapore)
Jill Chen
+886-3-668-6603 x16
sales@avant-tek.com

Sales Contact (China, Vietnam)
Norman Huang
+86-187-0130-2010
sales@avant-tek.com

This email was forwarded to you by Avant Technology (www.avant-tek.com, the distributor of Ensilica).

If you do not want emails like this anymore, please send an empty email to unsubscribe@avant-tek.com