PRESS RELEASE

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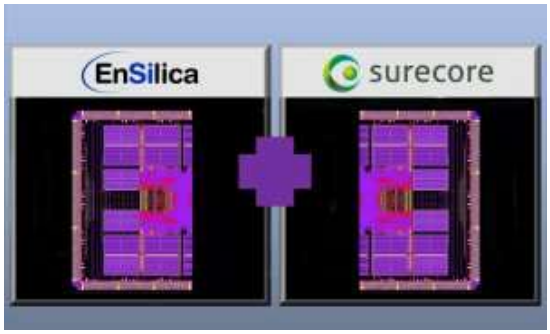
EnSilica develops sureCore's new, Ultra-Low Power IoT reference platform

- **Devices use the new TSMC's 40nm Ultra-Low Power (40ULP) process**
- **IoT platform targets wearable, consumer and medical applications**



Photocaption: EnSilica has developed sureCore's new, ultra-low power IoT reference platform

Wokingham, UK – 5th June 2017. EnSilica, a leading independent provider of semiconductor solutions and IP, and sureCore, the low power SRAM IP leader, have announced that EnSilica has developed sureCore's new, ultra-low power IoT reference platform targeted principally at the development of the next generation of wearable consumer and medical applications.

With proven expertise in low power SoC design for battery powered applications, EnSilica's experienced silicon team is able to deliver a complete, turn-key service covering complex digital and analog/RF technologies for both ASICs and SoCs down to 28nm. The service extends from system architecting and design specification through development and implementation to the supply of production silicon. EnSilica also offers point services within the whole systems design, development and IC supply cycle. Additionally, EnSilica maintains in-depth partnership with all the major silicon foundries.

The sureCore IoT reference platform has been taped out using TSMC's commercially available 40nm Ultra Low Power (40ULP) process technology. TSMC's 40nm process integrates 193nm immersion lithography technology and ultra-low-k connection material to increase chip performance, while simultaneously lowering power consumption. Specifically developed for IoT and wearable applications, TSMC's 40ULP process cuts leakage current by up to 70% and lowers power consumption by up to 30% compared to its Low Power (LP) process.

The sureCore IoT reference platform incorporates derivations of both its EverOn and PowerMiser SRAM IP product lines. By examining the fundamental limitations of conventional SRAM architecture to develop novel, patented circuit designs, architecture techniques, and assist circuits, coupled with foundry-supplied, high density SRAM bit cells, sureCore's SRAM IP is capable of operation at near-threshold bit cell retention voltages and delivering significant dynamic/static power savings. EverOn is capable of operation with supply voltages between 1.21V and 0.6V on commercially available 40ULP processes, across process corners, and across a -40°C to +125°C temperature range. The PowerMiser SRAM family delivers more than 50% dynamic power savings and approximately 20% static power savings compared to industry standard SRAMs available on commercially available 40ULP processes.

"With proven experience of delivering low power design services, EnSilica was a natural choice for the implementation of our new ultra-low power IoT reference platform," said Eric Gunn, COO of sureCore. "With a demonstrable understanding of how near threshold design can meet customer expectations for battery powered applications, we knew that EnSilica would be able to proceed quickly to successful tape-out.

EnSilica's technical appreciation of our technology, as well as deep understanding of TSMC's processes, has ensured a painless route to tape-out."

"We are pleased to be extending our relationship with sureCore on the implementation of its new ultra-low power IoT reference platform," said Ian Lankshear, CEO of EnSilica. "Its EverOn and PowerMiser SRAM IPs are proving a game-changer when it comes to providing SoC developers with ultra-low power, area-efficient memories and its new, ultra-low power IoT reference platform looks set to make the same impact on the next generation of wearable consumer and medical applications."

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About EnSilica

EnSilica was founded in 2001 and has a strong track record of success in delivering low power ASIC-based solutions with a focus on RF/Radio, Smart Sensing and/or Encryption/Security integration technology to OEM's and semiconductor companies worldwide. The company's headquarters are in the UK where it has three design offices as well as subsidiaries in Bangalore, India and Santa Clara, USA. In addition to providing turnkey ASIC development and supply chain services, EnSilica also provides point services to companies with in-house ASIC design teams covering system engineering, analog and RF design, and advanced verification using UVM, DFT and physical implementation. EnSilica also offers a highly successful portfolio of eSi-IP which comprises its eSi-RISC highly configurable and low power 16/32 bit embedded processors, eSi-Comms range of communications IP, eSi-ADAS automotive radar co-process IP, eSi-Connect range of processor peripherals and eSi-Crypto encryption IP. For further information about EnSilica, visit http://www.ensilica.com.

About sureCore

sureCore Limited is an ultra-low power SRAM IP company based in Sheffield, UK, that enables a new generation of IC designs. Its industry-leading, low power SRAM technology is process independent and variability tolerant making it especially suitable for leading edge silicon process nodes from 40nm down to 7nm. sureCore Ultra-Low Power SRAM IP empowers SoC developers to meet both challenging power budgets and manufacturability constraints posed by today's visionary IoT, wearable and medical products. For further information about sureCore, visit http://www.sure-core.com.

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