

Synopsys' DesignWare® ARC® HS38 processor, the latest addition to the ARC HS family of high-speed 32-bit processors based on the ARCV2 architecture, is optimized for power efficiency (DMIPS/mW) and area efficiency (DMIPS/mm<sup>2</sup>) and supports embedded Linux and other high-end operating systems. A single HS38 processor delivers up to 4200 DMIPS at speeds up to 2.2 GHz in typical 28-nanometer (nm) silicon, more than 2X the performance of previous generation ARC 770D cores supporting Linux. The performance and low power consumption of the ARC HS38 make it ideally suited to address the increasing performance demands of devices such as home routers and gateways, data centers, digital TV, networked appliances and automotive infotainment.

Delivers more than 4200 DMIPS in typical 28-nm processes while consuming less than 90 milliwatts of power and only 0.21 mm<sup>2</sup> of silicon area

**Highlights**  
Fully optimized GNU Tool Chain and Linux Kernel for home networking, automotive and digital home applications running embedded Linux

Single-, dual- and quad-core configurations with support for cache coherency and symmetric multiprocessing (SMP) offer scalable performance

of software development tools, hardware and middleware accelerate design of HS38-based systems