Microprocessors and DSPs

Freescale will license ColdFire microprocessor core

by **Nick Flaherty**
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Freescale has finally decided what to do with its ColdFire range of 32-bit microcontrollers and licensed the technology to chip intellectual property (IP) specialist, IPextreme to sell to other system-on-chip makers.

The move will reassure the market, which will benefit from future development in the family. “The ability to license ColdFire cores, available now for the first time in the 27-year history of the architecture, will give embedded designers greater choice and flexibility in their Asic designs,” said Tony Massimini, chief of technology at Semico Research.

“The licensing programme will also help expand the market for ColdFire architecture within the embedded control community, and help broaden the availability of third-party ecosystem support for the architecture,” said Massimini.

IPextreme will license and support the V2 ColdFire core to Asic designers to integrate the core and peripherals into a single chip, to be followed by additional ColdFire cores in 2007 and beyond. Freescale parts are based on the V3 architecture, while the V4 architecture has been specified but not implemented.

“ColdFire has a rich heritage in the embedded market, and we are pleased to bring the architecture to a broader audience through our IP commercialization program,” said Warren Savage, CEO of IPextreme.

Freescale ran a marketing campaign earlier this year to revitalise the ColdFire line. “The ColdFire licensing program is a key milestone in our Controller Continuum roadmap, broadening and deepening our market penetration within the 32bit control industry,” said Mike McCourt, v-p and general manager of Freescale’s Microcontroller Division. “The licensing programme gives customers the design freedom and flexibility to develop application-specific solutions that provide control, connectivity and security for a wide array of consumer and industrial products.”

Asic designs based on the V2 core will be software-compatible with all ColdFire standard products and cycle accurate with V2-based devices. In a 130nm process, the core runs at 166MHz and is supported by the CodeWarrior tools and those from third-party partners, such as Green Hills Software, Mentor Graphics and Wind River Systems.