

8051 MCUs get In-System Programming Benefits Through CAST and SMH Technologies Partnership

FlashRunner™ In-System Programmer (ISP) line from SMH Technologies supports 8051s from CAST; Live 8051 programming demo running in CAST's DAC booth

Woodcliff Lake, NJ, USA and Villotta di Chions, Italy — June 9, 2015 — Semiconductor intellectual property company CAST Inc. and silicon device programming leader SMH Technologies today have partnered to deliver the best-available flash programming experience to users of CAST's 8051 microcontroller IP cores.

CAST is the most experienced 8051 IP core provider, offering reusable, register-transfer level (RTL) soft cores for ASICs or optimized netlist firm cores for FPGAs. A comprehensive 8051 development and debug ecosystem is already available, via products from CAST and partnerships with other leading tool and infrastructure providers. Now the manufacturing end of the 8051-based product cycle is facilitated through universal, high-performance, stand-alone in-system programmers from SMH Technologies. These quickly and reliably load program code into manufactured 8051 chips already mounted in their final circuit board systems.

"SMH Technology's drive to combine innovative thinking and significant technical expertise into products that make customers more successful is quite similar to the 20-year focus of CAST towards more effective reuse of semiconductor IP," said Nikos Zervas, chief operating officer for CAST. "We're excited to support SMH Technologies' efforts to make in-system programming of systems using our class-leading 8051 IP cores not just feasible, but easy and extremely cost-effective."

"Tests show that the CAST R8051XC2 microcontroller can perform 10 times better than the original processor, and that the FlashRunner series of Universal Device Programmers are much faster than others. Users who want to work with the two technologies will find great benefits in employing the fastest and most reliable products on the market today," said Claudio Stefani, president of SMH Technologies.

SMH Technologies' FlashRunner is a line of efficient in-system programmers designed specifically for flash-based microcontrollers and serial memories.

The culmination of years of microcontroller development experience, FlashRunner systems work on a manufacturing line and are able to program chips soldered into their boards—versus traditional programmers that work on the individual chip which then must be inserted to the board—and they incorporate advanced features like support for the latest host system interconnection technology, PXI.

FlashRunner packages integrate with existing programming systems or automated test equipment (ATE), and can either work in full stand-alone mode or be controlled by a host system. In medium to large programming volume scenarios, in-system programming allows a significant reduction of the programming cost-per-part when compared with conventional socket programmers. Its advantages further include the elimination of manual device handling for better manufacturing quality, a shorter time to market because software development can overlap manufacturing startup, and greater manufacturing flexibility with more frequent firmware updates.

The CAST and SMH Technologies partnership has already yielded successful programming of a mutual customer's shipping system, which uses the R8051XC2 MCU IP core. FlashRunner support for other 8051's CAST offers is available upon request. A live FlashRunner demo is running in CAST's booth (#1026) at the Design Automation Conference (San Francisco, June 8–10, 2015).

About SMH Technologies

SMH Technologies is an independent, global, company that develops, markets, and supports microcontroller and memory programming systems used by manufacturers of electronic products. The company's team of advanced software, hardware and manufacturing engineers are based in Italy, and the company works with technical sales and support partners around the world. Learn more at www.smh-tech.com.

About CAST, Inc.

CAST is a twenty-year-old developer, integrator, and aggregator of IP cores for ASICs and FPGAs. The company has the most 8051 IP experience in the industry, with hundreds of customers and shipping millions of product units. The 8051 line includes the mature, highly-configurable R8051XC2 plus 8- and 16-bit 8051-compatible CPU/peripheral microcontroller variations offering some of the fastest performance, smallest area, or best legacy-processor support available. The company also offers some of the best available choices for other low-power, high-value IP, including BA2x 32-bit Processors; video, image, and data compression; security, interfaces and other functions needed for complete system on chip designs. Visit www.cast-inc.com, or follow [@castcores](https://twitter.com/castcores) on Twitter. # # #

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Media Contacts: Sergio Gugel, SMH Technologies, marketing@smh-tech.com, +39 0434 421 111
Nikos Zervas, CAST, Inc., +1 201.894.5511, n.zervas@cast-inc.com
Paul Lindemann, Montage Marketing, +1 603.490.4985, paul@montmark.com, [@plindemann](https://twitter.com/plindemann)