



October 03, 2005 08:00 AM US Eastern Timezone

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_view&newsId=20051003005049&newsLang=en

AMI Semiconductor Integrates Flash Memory with SmartPower Technology to Deliver True SoC Designs; Integrated HiMOS(TM) NVM Flash Gives Cost and Space Savings in a Wide Range of Applications

POCATELLO, Idaho--(BUSINESS WIRE)--Oct. 3, 2005--AMI Semiconductor (Nasdaq:AMIS), a designer and manufacturer of state-of-the-art integrated mixed-signal and structured digital products for the automotive, medical and industrial markets, today announced that it is now able to offer Flash memory embedded in its high-voltage CMOS based system-on-chip designs. The integration of HiMOS non-volatile memory (NVM) with the company's established I3T80 SmartPower technology allows designers to develop fully integrated solutions that achieve important cost and space savings plus performance benefits for their applications.

The inclusion of Flash memory requires only three additional mask layers to the I3T80 base technology mask set. The small number of extra layers that are needed helps ensure designs are as cost effective as possible.

Available Flash memory sizes range up to 64kBytes with 100 erase cycles for code storage, and up to 512 bytes and 10,000 erase cycles for data storage.

With an operating temperature range of -40(degree)C to +125(degree)C, I3T80 SoC designs with embedded Flash are well suited to applications in the most demanding environments. Further key features of NVM Flash include a sector and multiple sector erase time of 0.5s and page program in 20(mu)s (32 pages per sector). Random access read time is 100ns for either 8- or 16-bit words. The memory can retain data for up to 10 years and has automotive qualification to AEC-Q100.

AMI Semiconductor's Flash memory has been developed in conjunction with IMEC, Europe's leading independent research centre in nanoelectronics and nanotechnology, and uses IMEC's High Injection MOS (HiMOS) split gate technology.

I3T80 enables the delivery of 0.35(mu)m CMOS-based SmartPower SoC solutions for voltages up to 80V. The technology allows the integration of complex digital circuitry, embedded microprocessors and high voltage functionality on a single IC and is suitable for automotive, medical, industrial, and other high-voltage designs.

AMIS supports the supply of its SoCs with integrated NVM Flash for the lifetime of a project; in automotive and industrial applications this can be 10 years or more. This protects against the risk of needing to periodically re-qualify a design due to the phasing out of current technology in favor of newer approaches, a problem that often occurs when using stand-alone NVM.

"The industry continues to see increasing demand for more extensive on-chip memory, especially in automotive and industrial applications and white goods," said Rich Wawrzyniak, senior analyst covering ASIC and SoC technology for Semico Research. "The new high voltage flash process from AMI Semiconductor seems to mark a new breakthrough in integration for mixed signal circuits for these kinds of harsh environments."

About AMI Semiconductor

AMI Semiconductor (AMIS) is a leader in the design and manufacture of silicon solutions for the real world. As a widely recognized innovator in state-of-the-art integrated mixed-signal and structured digital products, AMIS is committed to providing customers with the optimal value, quickest time-to-market semiconductor solutions. Offering unparalleled manufacturing flexibility and dedication to customer service, AMI Semiconductor operates globally with headquarters in Pocatello, Idaho, European corporate offices in Oudenaarde, Belgium, and a network of sales and design centers located in the key markets of North America, Europe and the Asia Pacific region. For more information please visit the AMIS Web site at www.amis.com.

About IMEC

HiMOS is a registered trademark of IMEC. IMEC is a world-leading independent research center in nanoelectronics and nanotechnology. Its research focuses on the next generations of chips and systems, and on the enabling technologies for ambient intelligence. IMEC's research bridges the gap between fundamental research at universities and technology development in industry. Its unique balance of processing and system know-how, intellectual property portfolio, state-of-the-art infrastructure and its strong network of companies, universities and research institutes worldwide, position IMEC as a key partner with which to develop and improve technologies for future systems. IMEC is headquartered in Leuven, Belgium and has representatives in the US, China and Japan. Its staff of more than 1300 people includes over 400 industrial residents and guest researchers. In 2004, its revenues were EUR 159 million. Further information on IMEC can be found at www.imec.be.

Contacts

AMI Semiconductor, Pocatello

U.S. Editorial Contacts:

Tamera Drake, 208-234-6890

tamera_drake@amis.com

or

Shelton

Helen Garrett, 972-239-5119 x201

hgarrett@sheltongroup.com

or

Jason Caldwell, 972-239-5119 x119

jcaldwell@sheltongroup.com

or

Pinnacle Marketing

AMIS European Editorial Contact:

Simon Flatt, +44.20.8869.9229

simon@pinnaclemarcom.com

Terms of Use | © Business Wire 2005
