



Research Corporation

Semico is pleased to announce our latest report on the configurability market! The use of Configurable 32-bit CPU cores is going to be the next major driver in several of the sub-families in the ASIC market.

--Jim Feldhan  
President, Semico

Configurability Extends 32-bit CPU Core Influence: Defining Markets

## About Semico's Research Report!

In its most recent report, "Configurability Extends 32-bit CPU Core Influence: Defining Markets", Semico Research examines the end use markets for embedded cores and those applications that are most likely to implement configurability. Many new opportunities are emerging in communications and consumer electronics. These have new standards for which algorithms are still being developed. It is in such applications where designers can add their own "special sauce" with configurability to achieve differentiation.

**In 2005, unit shipments for devices with configurable CPU cores were 0.134B units, a growth of 46.1% over 2004. Unit shipments for 2006 are forecast to be 0.195B, a growth of 45.7%.**

### Executive Overview

The market for 32-bit CPU cores implemented as Semiconductor Intellectual Property (SIP) blocks is comprised of two components: Configurable cores and Non-configurable cores. This report contains primary and secondary research aimed at defining the entire market for 32-bit CPU cores and then separating the overall market into its respective components.

The overall market for silicon containing both configurable and non-configurable 32-bit CPU cores showed positive growth in 2005.

Market revenues increased to \$15.9B from \$13.0B in 2004, a 22.4% growth rate. 2006 is forecast to increase to \$22.3B, growth of 40.0%. This market is in growth mode over the long term and will increase over the forecast period to \$32.0B by 2009, a 19.1% CAGR.

Unit shipments for silicon containing both configurable and non-configurable 32-bit CPU cores also experienced good growth in 2005 and is forecasted to see exceptional unit demand.

**On a Regional Basis:** The report details regional growth segmenting the Americas, Europe, Japan, Asia Pacific and China.

**On an Application Basis:** The report details market growth segments including computing, consumer, communication, transportation and industrial. The largest market in 2005 was Communications followed by consumers and then computing. By 2009 Consumer will become the largest segment.

### Configurable vs. Non-Configurable 32-bit CPU Cores Newsworthy Items:

In general, configurable 32-bit CPU cores are expected to grow at a CAGR of 45.9% over the forecast period.

Non-configurable 32-bit CPU cores are expected to grow at a CAGR of 8.8% over the forecast period.

The current trend in the ASIC market is for the number of SIP blocks per part to increase.

Currently, the number of SIP blocks used on the different types of ASIC is increasing quickly as designers turn more and more to the use of 3rd Party SIP to accomplish their designs. The aggregate average of the number of 32-bit CPU cores used on ASICs in 2005 is estimated to be 5.6 per part, virtually doubling from 2.9 in 2004. By 2009, the average is will grow at a CAGR of 39.6%.

This study is available for immediate delivery for \$5,000. To purchase, please contact Mike Caldwell at 602-997-0337 or MikeC@semico.com, and reference ML101-06, Configurability Extends 32-bit CPU Core Influence: Defining Markets.

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### Interested in Semico's IPI or Market Research Products?

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If you would like to review the list of tables and figures that compliment this report, please contact Mike Caldwell, VP of Business Development, at 602-997-0337 x.111 or [mikec@semico.com](mailto:mikec@semico.com)

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