



ESL – The Next Leadership Opportunity for India?
by
Alan Naumann, President and CEO, CoWare Inc.

Mr. Naumann will address the increasingly critical role played by electronic system level (ESL) design tools in the development of the complex system-on-chip (SoC) devices that are now the indispensable engines of advanced consumer and communications products. Drawing upon his experience in managing CoWare, which has world-class software development resources in India, Mr. Naumann will argue that ESL tools development expertise can be an effective differentiator for Indian software engineering.

Mr. Naumann will discuss the growing impact of SoC technology on the global electronics market, and the factors driving it. In particular, contrary to the conventional wisdom, the design cost per gate continues to *fall* – because rising mask costs are more than offset by the massive increase in the number of gates per chip. This increase in gate capacity presents SoC designers not only with a significant market opportunity, but also with a serious design challenge – how to integrate so much functionality into one chip without the multiple re-spins that destroy a product's time to market and bury its design budget.

Mr. Naumann will then discuss ESL design methodology, and argue that the adoption of such a methodology is a pre-requisite for meeting this SoC design challenge. He will then argue that Indian engineers – with their proven expertise in software modelling and development – can occupy a pole position in this new industrial revolution.

Alan Naumann brings 20 years of experience in the high-tech industry to CoWare, Inc. He joined the company in 2002 and has led the company to become the market leader in system-level electronic design automation (EDA) tools. His career includes CEO, Vice President, and General Management roles within leading EDA software, Internet and computer companies. Those companies include Cadence Design Systems, Calico Commerce, and Hewlett Packard. During his ten years at Cadence, he played key roles growing the company from a small, privately-held niche player into the leading provider in the industry with annual revenues in excess of a billion dollars. One of Mr. Naumann's roles at Cadence was as VP and GM of the Alta Group, which became the leader in next-generation systems design tools, and the fastest-growing business unit in the company. While Naumann was CEO of Calico Commerce, the company was recognized as the 14th fastest-growing company in Silicon Valley. And, under Naumann's leadership, Calico had the 6th best IPO in the history of the NASDAQ. Mr. Naumann is currently serving as a member of the EDA Consortium (EDAC) board of directors. He also serves on the Board of Siperian, a venture-backed Internet infrastructure company. He also serves on the Advisory Board of the Software Development Forum, a non-profit group dedicated to fostering the software industry, entrepreneurship, and new company formation in Silicon Valley.