

Rajiv C Mody



Rajiv C Mody

Chairman and Managing Director
Sasken

1. What is your perception of the Indian Electronic Systems Design & Manufacturing (ESDM) industry?

ESDM industry is primarily represented by embedded products for telecom equipment, consumer electronics, Industrial electronics, Automotive electronics, healthcare and other segments related to enterprise, Defence and payment industry needs. Indian ESDM industry is expected to grow at CAGR of 16+% including silicon design, embedded SW, product engineering and manufacturing. Currently Indian ESDM industry is adding value at discrete points in the whole eco system with stronger presence in silicon design services, embedded software and product engineering, whereas manufacturing remaining the weakest area with insignificant share of global market.

With Indian industry's having more than 2 decades experience of different market and HW and SW design services, there is going to be upsurge complete product engineering segment which can serve local market, and hence reducing total import. What is needed is, right policy support to enable manufacturing within country which will boost ESDM industry growth tremendously.

ESDM in India can enhance the level of support it currently extends by forging stronger connects between the manufacturing and design communities. It is very important to have manufacturing capability in the eco system in order to enable a constructive dialog.

2. What are the top 3 innovative trends Sasken Communication Technologies sees in ESDM technology?

Personal mobile devices (be it smartphones or Tablets) would continue to be the key driver for the overall semiconductor industry. On one hand there will be more complex SoCs and on the other hand there would be low cost derivatives that would hit the market. With the former, challenges would be in complex design and functional integration. With the latter challenge would be design re-targeting and re-use. Innovations in design and verification IP blocks & re-use – in methodologies & tools will continue.

The exciting space of "Internet of Things" or "everyday device connectivity" to each other and to the Internet is going to bring about innovation in embedded processing and communication protocols that would have to operate in extremely constrained and tight low power requirements. Internet connectivity phenomenon is going to influence electronics system design in all industry vertical ie, consumer electronics, home automation, automotive, healthcare & industrial segment. Might be a good idea to link this in some way to "SMAC".

Reliable Software will be pivotal for the success of a chip. Software – be it core communication and connectivity engines or operating systems, would be the key differentiator for silicon and test & validation is going to be growth area related to specification and regulatory compliance of products.

3. What part does India play in the overall technology and marketing strategy of Sasken?

India figures prominently for Sasken in the overall scheme. Since its inception, Sasken has been the Partner of Choice in Product Engineering Services for several semiconductor leaders. Our offerings in silicon design, embedded software, core communication and connectivity engines, multimedia and graphics engines, operating systems, systems integration and end application development has made us a one-stop shop for our customers and it will be our endeavour to continue to excel and deliver value to our customers.

While our core strength has been in the wireless communication space and we work very closely with the Indian Innovation Centres of leaders in this space at semiconductor, device and enterprise level, we have in the last few years expanded our canvas significantly. We have successfully leveraged our expertise in wireless communications and forayed into Automotive, Industrial Automation and Consumer Electronics.

4. How do you place the competency of Indian product and design companies as compared with MNCs?

Indian companies are in the unique position of being able to deliver all that is required from Design till Productization stage in key verticals – Handheld communication devices, Communication Infrastructure, Automotive, Industrial and Consumer Electronics.

Indian companies have also been very valuable as a “systems integrator” with a vast talent pool available who understand silicon design, tools, deep embedded software and application specific software – we bring in complementary skills and partner in product development.

We have seen the mightiest products crumble for lack of quick, reliable and efficient post-sale support and this is where Indian companies clearly differentiate and bring in value.

Enabling manufacturing within country is going to put Indian industry in an advantage position as compared to Chinese and Taiwan companies which have edge today.

The key weaknesses lie at either end of the development lifecycle. Product definition and management remains a challenge, as does manufacturing capability.

5. What would be the key market drivers in 2014?

The personal mobile device is a technological marvel and has revolutionised forever how mankind communicates, gathers and uses information. Mobile devices will continue to be the key driver; the next leg in this journey is capitalising on the mobile device and enabling use outside of communication alone. Healthcare, Retail, Point of Sale, Ticketing, Automation and Control will see new models and applications built around the mobile device and these verticals will see action in semiconductors and the entire value chain. With short range connectivity and internet based connectivity becoming core to all industrial vertical, we expect cloud and wireless device interaction centric embedded engineering to heavily proliferate in each industry vertical.

While healthcare segment will see more devices connecting to smartphone for health monitoring, home automation will bring enhance electronic components in accessories affecting daily life, industrial segment will see more of remote monitoring/sensing and automotive segment will see advancement in driver assistance & safety, car to car to connectivity and entertainment.

6. In your view, what should India's focus be for the next 2 years?

We should continue to play to our strengths and cement our position as the Strategic destination for Design and Development. At a macro-level, Higher Productivity and Value delivered will be differentiating parameters alongside Lower Cost. We should continue to build deep know-how and broad-base relevant skills with industry-academia affiliations. As added focus, we should enhance the focus on manufacturing esp with respect to products related to Indian local market needs and need country specific customization.

7. What would be your mission and vision statement for the growth of the Indian ESDM industry?

I have always been of the firm belief that we need to build a DNA that will eventually result in us ‘unleashing creativity’ to build products for global markets. In this endeavour, semiconductors for the fundamental building block and increasingly software is the critical differentiation and perhaps is at the core of any product. Indian companies need to forge strong alliances amongst themselves and globally leading semiconductor vendors including innovative start-ups and develop a product mind-set.

About the author

Rajiv C Mody

Chairman and Managing Director
Sasken

Rajiv Mody, the Chairman and Managing Director of Sasken Communication Technologies, founded the company in 1989, at San Jose along with two other co-founders. The company was set up in the classical tradition of Silicon Valley startups; in a garage in Fremont, California. This was before he returned to India to expand company operations in 1991.

Under his able leadership, over the last two decades, Sasken has grown into a major technology and solution provider to Tier 1 customers across the telecom value chain. Over the years, Sasken has steadily expanded its portfolio of solutions into development, life-cycle extension and sustenance of semi-conductors, platforms, network elements (voice and data) including terrestrial and satellite, customer owned equipment like handsets, set-top boxes and lifestyle / consumer products.

Rajiv, a seasoned technocrat and an industry veteran has worked with corporations like AMD, Seattle Tech Inc., and VLSI Technology Inc., prior to founding Sasken. His expertise lies in design, development and integration of physical design tools for Gate-Array and Standard Cell Design Styles. Besides, he has co-authored a patent in the area of physical design.

Rajiv was awarded the "Technovator of the Year 2007" by VOICE & DATA, a leading technology publication. He also served as an Executive Council Member of NASSCOM (2001 – 2008).

He obtained his Bachelor's degree in Electrical Engineering from M.S University, Baroda, India and Master's degree in Computer Science from Brooklyn Polytechnic, New York, USA. Rajiv is an avid reader of biographies and humanity and draws inspiration from the likes of Gandhi, Tolstoy, Mandela and others to build sustainable organizations that are ethical and value centric.