

## President's Message



Dear Leader,

This quarter ends on a positive note with the release of the draft National Policy on Electronics (NPE 2011) by the Department of Information Technology.

The NPE proposes several initiatives to reach an industry turnover of USD 400 billion and create job opportunities for 28 million people by the year 2020.

This is one of the most significant steps for the electronics industry, and specifically ESDM industry, in India in the past many years.

The policy suggests that India should aim for global leadership in VLSI, chip design and other frontier technical areas. Innovation is the key to achieving these goals and becoming a global leader to reckon with.

Innovation is also what ISA seeks to recognize through the Technovation Awards. Slated to be held on 16th December 2011, the Technovation awards will honour excellence in the Indian Electronic Systems Design and Manufacturing (ESDM) ecosystem. These awards celebrate the intellectual property created in India and honor individual contributors and organizations that strengthen the ESDM ecosystem in the country.

ISA continues to conduct several member connect events across the country and we hope to organize many more in cities where we have significant membership clusters. ISA Interactive (i2) is reintroduced with the open house model for unstructured discussions among members.

I look forward to meeting you at the Technovation Awards ceremony and encouraging the people who are driving our industry forward with zeal.

Best wishes,

**PVG Menon**  
President - ISA

## Chairman's Message



Dear Member,

It's my pleasure again to inform you about the developments at ISA from June to November 2011. The draft National Policy on Electronics was unveiled by Kapil Sibal, the Honorable Union Minister of Communications and Information Technology. The proposed policy envisions creating a globally competitive ESDM industry including nano-electronics to meet the country's needs and serve the international market. We welcome the draft policy and extend our support to achieve the targeted turnover of USD 400 billion employment generation of 28 million by 2020.

The Government is very upbeat about the prospects of our ESDM industry. Your invaluable

help and immense sense of togetherness has brought us where we are today and we will do our best to provide the momentum required for the accelerated growth of semicon and ESDM activities in India.

ISA, as always, had another eventful quarter marked by several member meets and conclaves. One of our key events, Technovation 2011 is scheduled to be held on December 16. I look forward to your participation as we get together to recognize, applaud and derive inspiration from the leaders in our industry.

This quarter, we also welcome our new President, PVG Menon, a trusted industry veteran who has been associated with ISA for many years. Please join me in wishing him the best as he assumes this important mantle.

Thank you all and look forward to your continued support.

Best wishes,

**Dr. Pradip K Dutta**  
Chairman - ISA



## ISAVISION SUMMIT®

February 6 & 7 2012  
Hotel Taj West End, Bangalore

### Growth drivers for emerging markets: semiconductors & electronic systems

ISA Vision Summit is our annual flagship event conducted in Bangalore. This would be our seventh consecutive edition. ISA Vision Summit is a global leadership conclave for the semiconductor and electronics industry.

For registration & sponsorship opportunity, please contact  
Gaurav K Punjabi [gaurav@isaonline.org](mailto:gaurav@isaonline.org) | +919900919234



# The Innovation Environment in India

- *How does India fare with regard to innovation in the semiconductor domain?*

The semiconductor industry in India has come a long way. In the last decade, we have seen several global semiconductor companies set shop in India. Not only has this led to remarkable growth in the industry, but has also led to significant increase in product and design innovation in the domestic market. Rapid changes in technology, increasing complexity of equipment and falling prices have made innovation vital to reduce cost of production and increase ROI.

In India, most of the R&D labs working in the semiconductor domain are located in premier technical institutes such as the IITs, IISc and BITS Pilani. These institutes, with access to funding, quality infrastructure and a large talent pool, account for 70–75% of semiconductor research activities in the country. Of all the research undertaken here, almost 43% of the activities are in the area of chip design. India also ranks favorably in terms of the number of IEEE papers filed in fields related to semiconductor design.

In the recently conducted study, India, with a global rank of 30, ranks seventh in the sample set of countries in terms of quality of scientific research institutes. Although quite encouraging, there is definitely scope for improvement here.

- *What role is the industry playing in promoting innovation?*

The innovation environment in India is evolving rapidly and we are recognized as one of the prime destinations for companies seeking to establish R&D centers outside their home country. Availability of skilled talent and high-quality scientific research institutes are primary drivers for the establishment of such R&D centers. A number of Indian captives of global semiconductor companies file patents every year. This is a good indicator of the amount of IP being created in the country.

However, in a study on company spend on R&D, India, with a global rank of 37, ranks last among the sample set of countries. This definitely calls for intervention from our policy makers. The announcement of the NPE draft policy is a step in the right direction to encourage innovation in the ESDM industry.

## iQ Corner



**Ganapathy Subramaniam**

Member

ISA Executive Council

CEO

Cosmic Circuits Pvt. Ltd.

The announcement of the NPE draft policy is a step in the right direction to encourage innovation in the ESDM industry.

- *What are the ISA Technovation Awards 2011 December? How do you see this initiative promoting innovation in the semicon and electronics industry?*

As we all in the industry have come to realize, innovation is the key driver for success in the years to come. Specifically in the Indian context where we are aiming to reach a target industry turnover of USD 400 billion by 2020, innovation must happen, and fast. Technovation aims to proliferate innovation by recognizing the people and organizations that are leading us from the forefront.

Technovation 2011 carries awards in three categories - intellectual property created in India, the best individual contributor in the semiconductor domain and the ecosystem award for companies that are promoting innovation in India. We also

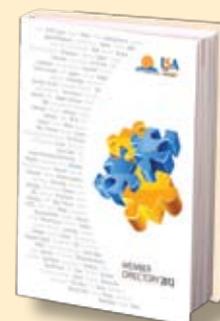
have a category called the TechnoVisionary award, a lifetime achievement award to be given away to an individual for their seminal contributions to the Indian electronics and semiconductor industry.

Awardees will have a chance to showcase their achievements and product successes during the upcoming ISA Vision Summit scheduled to be held in February 2012. The aim is to not only recognize the work of these leaders but also to encourage more members of our fraternity to go ahead, take the risk and innovate for the betterment of the entire Indian semiconductor industry.

- *As the founder of an Indian IP company, Cosmic Circuits, how has innovation impacted the company and your customers?*

Innovation is extremely important to us as a company. In fact innovation is one of our strongest differentiators. For example, Cosmic was the first IP company to prove on silicon, several data-converter and power-management cores in the 40nm process node. We partner with all the leading foundries worldwide to offer the broadest analog IP portfolio in the world outside the interface space. We were awarded our first patent way back in 2009; today, with an IP portfolio of 300 crores across 7 technology families, we hold several patents and have many more in the pipeline. As a company that values innovation, we are very happy with ISA's effort to promote innovation through the Technovation Awards. ●

## ISA Member Directory 2012



Book your ad space now!  
To know more about membership,  
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**Chandrika Anil** at:  
[membership@isaonline.org](mailto:membership@isaonline.org)



## TECHNOVATION

AN ISA INITIATIVE  
*Celebrating Excellence in Electronics...*

# AWARDS 2011

December 16 2011 | The Leela Palace, Bangalore

The Technovation December 2011 awards ceremony is fast approaching! Join us for the annual celebrations at The Leela Palace, as we honour companies and researchers. The award ceremony is scheduled to be held on December 16 2011 between 06.30 pm to 09.00 pm at The Leela Palace, Bangalore. We invite you to join in celebrating it.

Kindly confirm your availability to Dr. Vidya Mulky email id [technovation2011@isaonline.org](mailto:technovation2011@isaonline.org) latest by December 12 2011.

### Intellectual Property (IP) Awards

This award is designed to identify the Intellectual Property created in India and the companies behind them.

#### Indian Startup Awards

less than three years of existence

#### Indian Enterprise Awards

more than 3 years of existence

#### Multinational Enterprise Awards

more than 6 months of existence

- Semiconductor company
- OEM Consumer
- OEM Enterprise
- Embedded design company

### Eco-system Awards

This award is designed to recognize the companies which have taken the business risk to build Eco-system infrastructure in India.

#### Indian Startup Awards

less than three years of existence

#### Indian Enterprise Awards

more than 3 years of existence

#### Multinational Enterprise Awards

more than 6 months of existence

- Semiconductor eco-system company
- EMS company

### Individual Awards

Awards to individuals associated with semiconductors and electronics with impact in India.

#### TechnoMentor

- Electronics

This recognizes the academician/researcher/industry professional for his outstanding contribution in the field of electronics through mentoring others in technical/technology domains.

- Semiconductors

This recognizes the academician/researcher/industry professional for his outstanding contribution in the field of semiconductors through mentoring others in technical/technology domains.

#### TechnoVisionary

This award is for lifetime achievement by a global citizen of any nationality for his seminal contributions in electronics and semiconductors and having an impact on India.

#### Sarabhai Award

This award is for an individual for his or her leadership skills in the area of semiconductors or electronics, also for a person who has stayed in India and recognized for his continued efforts in India in the above area.

### AWARD JURY

#### Semiconductors Awards

**Mahesh Mehendale**  
TI Fellow, Texas Instruments (India)

**Shantanu Jha**  
Vice President, Ittiam Systems

**Dr. Shanthi Pavan**  
Professor, IIT-Madras

#### Electronics Awards

**Chetan Maini**  
Founder and the Chief of Strategy and Technology, Mahindra REVA Electric Vehicles

**Arnob Roy**  
President Engineering, Tejas Networks

**K Subramanya**  
CEO, Tata BP Solar

#### Individual Awards

**Dr. H Harish Hande**  
Managing Director, SELCO-India

**Prof. Sadagopan**  
Director, IIT-Bangalore

**Mohan Yegnashankaran**  
Senior Fellow, National Semiconductor



## Events

### PVG Menon takes over as the President of ISA



On August 16, ISA welcomed its new president, PVG Menon, an industry veteran with over 24 years of experience. Prior to taking up this role, PVG Menon was the President and CEO, VANN Consulting Pvt. Ltd. and has worked with technology majors such as Philips, Analog Devices, Siemens and CMC Ltd. An active volunteer at several ISA initiatives in the past, he has also served on the Executive Council of the Advanced Computing and Communications Society of India (ACCS).

Commenting on his new role, Mr. PVG Menon said that he hopes to work towards strengthening ISA's role and contributions in various key segments and leveraging the strong linkages that ISA has established. The ISA family joins in to wish him the best.

### ISA Interactive at Hyderabad



ISA Interactive (i2) member meeting on June 9 at Hyderabad was hosted by MosChip Semiconductor. The meeting began with a welcome address by Ramachandra Reddy, Chairman & CEO, MosChip Semiconductor, followed by presentation of the ISA Vision for the year 2011-12 by ISA Chairman, Dr. Pradip Dutta.

Dr. Kiranmai Pendyala, Head- Human Resources, AMD India, provided an update on the activities and initiatives of the ISA Women forum. Gulshan Dua, Convener ISA Regulatory Core Initiative Group (CIG) and Country Finance Controller, Freescale Semiconductor, spoke on the key objectives of the group and invited participation from the Hyderabad region to collectively address issues faced by Finance heads.

The interactive session concluded with a thank you note from Poornima Shenoy, (former) President ISA, who also presented a memento to Ram Reddy for hosting the meeting at Hyderabad. The interactive session closed with networking lunch.

### Thought Leadership Forum at Bangalore with Warren East



ISA conducted the Thought Leadership Forum on the topic, "Mobile as the Nexus", on 14 June in Bangalore. Warren East, CEO, ARM, discussed the growing importance of mobile phones in everyday life. His presentation focused on market trends driving the mobile and tablet computing market and the innovative technology developed by ARM and its partners around the world.

### ISA Interactive at Pune



The i2 member meeting on June 28 at Pune was hosted by Qlogic India. The meeting began with networking breakfast followed by the welcome address by Parag Mehta, EC & Managing Director, Qlogic India, who also announced the launch of the ISA Pune Chapter headed by him.

ISA Chairman, Dr. Pradip Dutta released "Industry Perspective", an ESDM report contributed by all the segment conveners. The report is now available online on the ISA website. An update on the ISA Automotive segment was presented by Dinesh Shyamsundar, Member, ISA Automotive Segment and Head R&D, Varroc Engineering, Pune. Gulshan Dua, Convener ISA Regulatory CIG, addressed the gathering on the objectives of the group and invited participation from the Pune region.

The interactive session concluded with a thank you note by Chandrika Anil from the ISA secretariat. A memento was presented to Parag Mehta by the ISA Chairman for hosting the meeting at Pune.

### Regulatory and Legal Forum Meeting



The Regulatory & Legal forum meeting was held on August 4 at LSI, Bangalore. The forum is driven by Gulshan Dua, Country Finance Controller, Freescale Semiconductors. The session began with a closed door discussion of the core group followed by a member meeting which began with a presentation on the ISA Vision by ISA Chairman, Dr. Pradip Dutta.

Gulshan Dua then presented the objectives of the forum. The session also had a presentation by KPMG on GST, XBRL and Schedule VI. This was followed by a highly interactive Q&A session with the KPMG team. The meeting ended with working lunch where various action plans for the forum were mooted.



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## ISA Interactive (i2) at Bangalore



A member meeting was organised on August 18 2011 at IIIT Bangalore. The welcome address was given by Prof S Rajagopal, Director Incubation Centre, IIITB followed by a panel discussion on "Start-ups in India: Challenges, Eco Systems and Govt Policies" moderated by Ganapathy Subramaniam, CEO of Cosmic Circuits. The panelists were S Jamkhandi, Director, MSME Development Institute, Gol; Prof. S Rajagopal, IIIT-B; Rajendra Kumar Khare, Surewaves; Mohammed Saliya, iWave Systems; Ravindranath, TIE Bangalore. The session concluded with a thank you from PVG Menon President ISA followed by networking lunch.

## State CMs Meet in Delhi

A meeting of all state CMs, the Minister of State, Sachin Pilot, the Secretary, DIT and other officials from DIT was held on August 29 at New Delhi to promote ESDM policy initiatives in the respective states. Dr. Pradip Dutta represented ISA in the event.

## ISA Country Focus: Japan

As part of our country focus initiatives, ISA invited a delegation from Japan for an interactive session on August 31 with ISA members. The team, including academicians, members of the semiconductor industry and representatives of the Japanese Government, explored means of business collaboration between companies of the two countries.

## DIT Workshop - Estimation and analysis of India semiconductor market

A half-day brainstorming session at the office of DIT, New Delhi was held on September 9. The session had in-depth discussions with the key stakeholders on salient points like market trends, pricing, government procurement and technology landscape. As per the DIT Task Force Report, the ESDM industry in India is a potential high growth industry with the market opportunity projected at USD 400 billion by the year 2020. Semiconductors form the pervasive component of every electronic product and with their increasing content are expected to present domestic market of about USD 50 billion by the year 2020. As the domestic market itself presents a large opportunity, a study was proposed to analyze the potential product mix for the India Fab.

## ISA Interactive (i2) at Bangalore



The i2 member meeting on September 10 was hosted at RV VLSI. The session began with breakfast followed by welcome address by Venkatesh Prasad, CEO, RV VLSI, Bangalore. ISA Vision was shared by Dr. Pradip Dutta, Chairman ISA, followed by briefing on ISA events and Core Groups by PVG Menon, President ISA.

A discussion on "Building Talent for the ESDM Industry" followed by an Open House forum moderated by Raju Pudota, Director, Cadence, on the growth potential of the electronics market in India and how ISA is closely working as the knowledge partner to Department of IT, Govt of India.

## CXO Conclave at Bangalore on Nano-Electronic Solutions



ISA organized a CXO Conclave on "Nano-Electronic Solutions for Emerging Market Services", in Bangalore on September 5. The speakers included Dr. S Aravind, CEO, Aravind Eye Hospital; Luc Van Den Hove, President and CEO, IMEC Belgium; Rudi Cartuyvels, VP, IMEC Belgium; Aneesh Agrawal, SVP, Qualcomm; Dr. Anurag Srivastava, CTO, Wipro Technologies; Pari Natarajan, Co-Founder and CEO, Zinnov LLC and Rajesh Ram Mishra, VP, Wipro Technologies.

This event discussed how concurrent innovations in sensors, nano-technology and ICT can transform services in India and also introduced ARISE (Applied Research in Intelligent Systems Engineering) - an IMEC Wipro initiative, as a collaborative R&D platform that can help create innovative systems and services.

## CXO Conclave at Hyderabad with Russ Garcia



On September 20, ISA held a CXO Conclave in Hyderabad on the theme, "Maximizing Opportunities in High-Value Semiconductor Markets with Steep Barriers to Entry". The key speaker, Russ Garcia, EVP Worldwide Corporate Marketing, Microsemi Corporation, shared his perspective on key high-value, high-entry-barrier market segments such as aerospace, defense, alternate energy and medicine. He provided an overview of key trends driving these segments and the critical need for superior performance and reliability. He also spoke about how India is well positioned to leapfrog other destinations to deliver key infrastructure-based solutions to these segments.



## IT Secretaries Meet

Joint Secretary, Dr. Ajay Kumar chaired a meeting with State IT Secretaries at DIT on September 26. ISA President, PVG Menon, attended the meeting which discussed how policies and programs to foster ESDM could be rolled out in the respective states.

## Meeting on Semicon Design Report

A meeting to discuss the study report on "Semiconductor Design, Embedded Software and Services Industry" submitted by ISA was held on September 27. As per the discussions, a Task Force will be constituted with DG-STPI, President ISA and experts from DIT to identify and implement strategies for setup of VLSI-specific incubation centers in India.

## ISA CXO Closed-Door Round Table with Jeff Kodosky



A closed-door meet with Jeff Kodosky, co-founder and NI Business & Technology Fellow, was held at Hotel Leela Palace, Bangalore on October 11. Jeff spoke about how graphical system design redefines the approach to system design and helps engineers and scientists to address several engineering challenges in design and test integration.

## DIT Workshop on ESDM during BangaloreIT.Biz



As part of BangaloreIT.Biz, a workshop on ESDM was held on October 19 driven by Dr. Ajay Kumar IAS, Joint Secretary, Department of Electronics & IT, Govt of India to discuss the immense opportunities available to India to become an ESDM hub catering to the domestic as well as the global requirements.

The session began with a welcome note by ISA Chairman, Dr. Pradip Dutta followed by talks by industry leaders like Sanjeev Keskar, PMC Sierra; Sanjay Nayak, Tejas Networks; Paresh Vasani, Circuit System; A. Gururaj Vittal, Innovation City; Dr. Satya Gupta, Vice Chairman ISA; B. Venkat Ramana, VMC Systems; Amitava Nath, Tata Elxsi and Muralidhar P R, IBM. The workshop concluded with a thank you note from S. Parthasarthy, Director, STPI Bangalore & Chennai.

## Visit to Analog Devices, USA

ISA President PVG Menon accompanied Sachin Pilot, Minister of State, Govt of India, on a visit to Analog Devices Inc., fabrication unit at Wilmington, MA on October 20. The visit also included discussions with senior corporate officers of the company. PVG Menon took this opportunity to discuss India's growing strengths in the ESDM domain and invited members of the US industry to participate in Vision Summit 2012.

## ISA Interactive at Bangalore



The i2 meeting was held at Intel, Bangalore on October 21. The topic for the day was on Regulatory & legal issues faced by the industry. The welcome note by Kamal Chopra, Head Tax and Trade, Intel India was followed by a presentation by Gulshan Dua, Country Finance Controller, Freescale Semiconductors. Members of PwC then gave a presentation on major challenges faced by the ESDM industry with regard to direct and indirect taxes.

## ISA Thought Leadership Series at BIC Bangalore



ISA conducted a Thought Leadership Series (TLS) on November 3 at BIC Bangalore, featuring Prof Vijay K Bhargava, University of British Columbia, Vancouver, Canada, President-Elect, IEEE Communications Society. Prof. Bhargava shared his perspective on "Future Trends in Wireless Communication" which concluded with an interactive Q&A session.

## CXO Conclave at Bangalore with Vijay Ullal



ISA conducted a CXO Conclave on November 14 at Bangalore featuring Vijay Ullal, Group President, Consumer and Automotive Solutions, Maxim. Mr. Ullal spoke about the increasing demand for analog integration. He shared his perspective on how innovation and collaboration are key to addressing these emerging challenges.



## ISA delegation to UK



ISA in collaboration with UK Trade & Investment, (UKTI - a UK Government organization) had taken a delegation to the UK between November 16 - 18 2011, with the twin objectives of creating a larger visibility for Indian industry and showcasing areas of collaboration & partnership.

The visit was planned during the international event TechWorld 2011 on Nov 16 & 17 in London, which included meeting with Hon. Rt. Patricia Hewitt, Chair, UKIBC and Dr Derek Boyd, CEO, NMI. An exclusive one day industry visit in Cambridge was arranged on Nov 18, which included lunch meeting at ARM with Jim Nicolas & Haydn Povey, networking meeting at Hauser forum with Neville Reyner, Chair, Grater Cambridge Grater Peterborough Enterprise Partnership (GCGPEP) with industry representatives and visit to Cavendish laboratory hosted by Sir Richard Friend.

The ISA delegation consisted of Anurag Goel IAS, Secretary IT, Govt. of Assam Mahendra Kumar Yadava, Managing Director and Shyamal Kumar Bhuyan, Deputy Manager, AMTRON. From the industry we had Ranjan Kumar Das, Director, Elite Computers & Communications; Sudesh Rao, MD, Leo Integrated Technologies; Doug Balfour, Director & Tony Budd, Manager - Business Development, Embitel Technologies; Bhaskar Putreau, VP - Northern Europe & Sriram Bellamkonda, Sales & Marketing Manager, Infotech Enterprises and Shyam Pawar, Sr. Business Development Manager, HCL Technologies.

The upcoming ISA Vision Summit generated interest among several UK companies who have expressed their interest in participation. UKTI is planning a delegation to India during VS 2012.

## Forthcoming Events

### Women in Technology

ISA partners with Anita Borg Institute (ABI) for a session on Women in Technology on December 15 at KTPO, Bangalore. The session would have a keynote speaker talk on 'My success story' and a panel discussion on Opportunity and Growth in the semiconductor industry. For registration, write to suriya@isaonline.org

### Technovation December 2011

Technovation 2011 is just round the corner. The award ceremony is scheduled to be held on December 16 between 6.30 pm – 9.30 pm at the Leela Palace, Bangalore. To confirm your availability, please write to technovation2011@isaonline.org

### Vision Summit 2012

ISA Vision Summit is our annual flagship event conducted on Feb 6 & 7 in Bangalore, this would be our seventh consecutive edition. ISA Vision Summit is global leadership conclave for the semiconductor and electronics industry. For registration & sponsorship opportunity, please write to gaurav@isaonline.org

## CXO Conclave at Bangalore on Continuing Education



ISA conducted a CXO conclave with a difference on November 29 in Bangalore. ISA invited speakers from Seer Akademi, UC Berkeley Extension, Stanford's Shorenstein Asia Pacific Research Center (APARC) and GTU to speak on "Continuous Education – India's Biggest Ecosystem Challenge?"

Dr. Frank Yeary, Vice Chancellor, UC Berkeley, in his keynote address, discussed the applicability of the Silicon Valley experience in the Indian education scenario and called for further research into educational methodologies and organizational development. Other speakers at the meet included Dr. Diana Wu, Dean of Continuing and Distance Education, UC Berkeley Extension, Prof. Akshai Aggarwal, Vice Chancellor, Gujarat Technological University, Dr. Raffiq Dossani, Stanford's Asia Pacific Research Center and Prof. Srikanth Jadcherla, Chairman and CEO, Seer Akademi.

GTU and Seer Akademi proposed an open discussion on the continuing education framework at the end of the meeting to obtain important feedback from participants from the industry.

## ISA Interactive at Bangalore, Hyderabad, Noida

The meetings were post the release of the draft National Policy for Electronics by the Dept of IT, Gol, aiming to reach an industry turnover of USD 400 billion by 2020. These meetings post the presentations by Dr Satya Gupta, ISA Vice Chairman and PVG Menon, ISA President were interactive and received inputs from members to plan the way forward.

i2 in Bangalore hosted by Sasken Communciation



i2 in Hyderabad hosted by AMD India



i2 in Noida hosted by Cadence Design Systems





## Draft National Policy for Electronics

### NPE 2011: Putting the ESDM Industry into High Gear

Aims to put India on the global radar by 2020

The Government of India unveiled the draft of the National Policy on Electronics (NPE) 2011 on 3 October 2011. The draft is a significant move from the Government and is a strong signal of growth for the ESDM industry in the years to come. The draft envisions an overall turnover of USD 400 billion by the year 2020. Currently, electronics production in the domestic market is pegged at USD 20 billion and, at the current levels of growth, is expected to reach USD 100 billion by 2020. The NPE's ambitious vision of USD 400 billion is, therefore, a clear signal of putting the ESDM industry into a high-growth mode.

#### The Aim

- Develop a globally competitive ESDM industry, including nano-electronics, to meet the country's needs and serve the international market
- Achieve an industry turnover of USD 400 billion by 2020
- Be a global leadership in VLSI, chip design and other frontier technical areas and achieve USD 80 billion in exports in this sector
- Create job opportunities to around 28 million by 2020
- Achieve a turnover of USD 55 billion in the chip design and embedded software industry
- Create a National Electronics Mission, in participation with the industry, to implement the various programmes as per the policy

The draft policy takes a holistic view of growth and proposes a mix of financial impetus, industry-specific incentives, innovation and academic excellence programmes to achieve this target.

#### Financial Impetus

- Bring in USD 100 billion of investment by 2020 to spur domestic growth
- Offer a 10-year stable tax regime for manufacturers in order to attract global investment
- Provide fiscal incentives through the Modified Special Incentive Package (M-SIPS)
- Consider domestic sale of zero duty electronic products as physical exports and extend all the benefits of export schemes including rebating of import duty
- Provide preferential market access - 30% of all government procurement of electronics - for domestically designed / manufactured products
- Declare several electronic products as goods of special importance under the Central Sales Tax Act
- Include loans for computers and peripherals under priority sector lending

#### Industry Incentives

- Rename the Department of Information Technology as the Department of Electronics and Information Technology (DeitY) to provide renewed emphasis on the ESDM industry
- Set up over 200 electronic manufacturing clusters (EMCs) with high quality infrastructure and logistics

- Offer the benefits of National Manufacturing Policy and National Investment and Manufacturing Zones to these EMCs
- Set up semiconductor wafer fabrication facilities and its eco-system for design and fabrication of chips and chip components
- Provide assistance for setting up Greenfield clusters and upgradation of Brownfield clusters.
- Create linkages for long term partnership between the domestic ESDM industry and strategic sectors like Defence, Space & Atomic Energy, etc.
- Offer incentives for relocating hardware manufacturing units to India
- Develop a national policy framework for enforcement and use of standard quality management processes

#### Innovation

- Create an Electronic Development Fund to the tune of (a proposed) ₹ 5000 crores for promoting innovation, R&D and commercialization in ESDM, nano-electronics and IT sectors
- Support seed capital and venture capital funding of ESDM companies
- Set up VLSI-specific incubation centers for chip design
- Promote domestic IP development with special thrust on innovation on Green technologies
- Develop an India microprocessor to address diverse strategic needs

#### Academic Excellence

- Upscale high-end human resources for the ESDM industry with the production of 2500 PhDs annually by 2020
- Set up a specialized institute for semiconductor chip design
- Leverage the National Knowledge Network to include students into the Special Manpower Development Programme for VLSI chip design
- Improve the output of graduates and post graduates by increasing capacities in colleges and Polytechnics
- Set up Centers of Excellence in areas of automotive electronics, avionics and industrial electronics
- Encourage development of skill-oriented and hands-on courses to enable graduates from other disciplines to migrate to ESDM-related subjects.

This draft proposal is likely to be finalized by December 2011. Going by the tone set by the draft policy, it is clear that the coming years hold a lot of promise for our industry. ISA, as a knowledge partner to the Government, has played a vital role in drafting the NPE proposal document and we will continue to play an equally vital role in promoting innovation, creating a vibrant ESDM ecosystem in the domestic market and eventually realizing these ambitious goals in the years to come.

## New Members

The following companies have joined ISA between June 2011 – November 2011

Accord Software & Systems Pvt. Ltd.
Audiocodes India Pvt. Ltd.
CardPro Solutions Pvt. Ltd.
Embitel Technologies (India) Pvt. Ltd.
IMEC India
Intel Mobile Communications (I) Pvt. Ltd.
LDRA Technology Pvt. Ltd.
Mistral Solutions Pvt. Ltd.
Sankhya Technologies Pvt. Ltd.
Satyam Computers Services Ltd.
SoCtronics Technologies Pvt. Ltd.
Sri City Pvt. Ltd.
Sterlite Technologies Ltd.
Synapse Techno Design Innovations Pvt. Ltd.
Teradyne (India) Engineering Pvt. Ltd.
VMC Systems Ltd.
Wafer Space Semiconductor Technologies Pvt. Ltd.

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