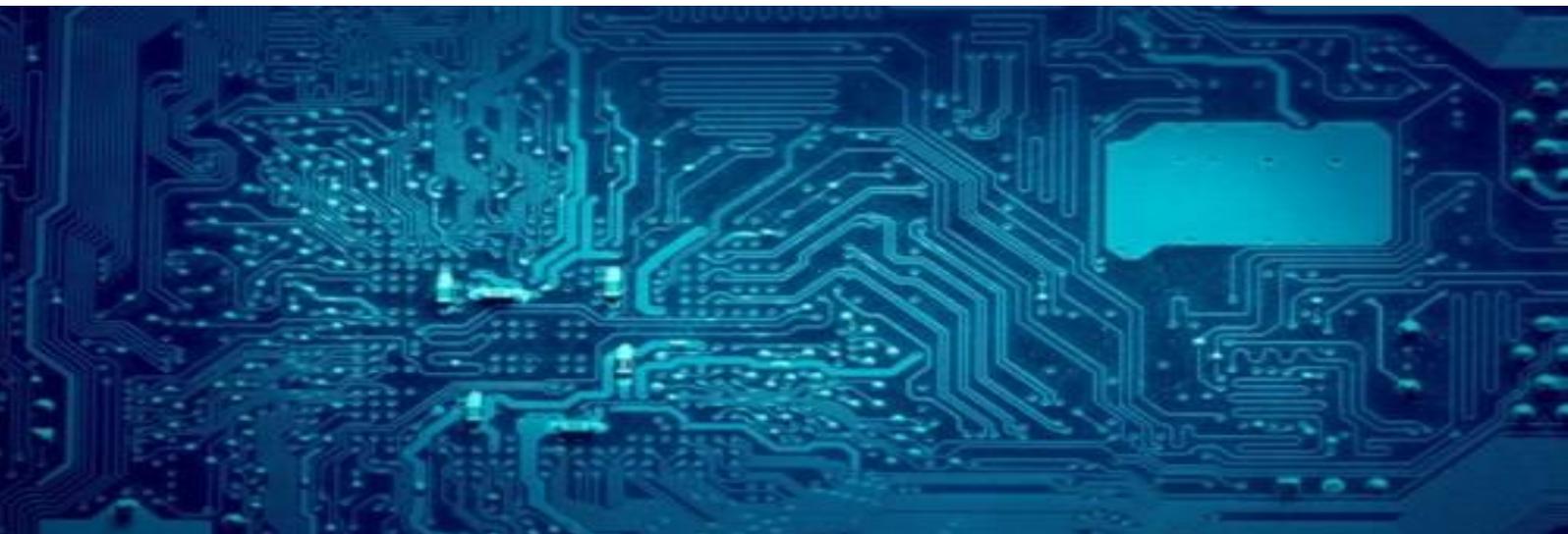




# ANNUAL REPORT 2016-17

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**Table of Contents**

MESSAGE FROM THE CHAIRMAN ..... 3

IESA EXECUTIVE COUNCIL 2016-17 ..... 3

MEMBERSHIP ..... 4

EVENTS..... 4-7

    VISION SUMMIT 2017 .....4

    IoT NEXT 2016.....5

    DEFTRONICS 2016.....6

    THOUGHT LEADERSHIP FORUMS.....6

INITIATIVES ..... 7-9

    IESA LAUNCHES HYDERABAD CHAPTER.....7

    IESA LAUNCHES CHENNAI CHAPTER.....8

    IESA LAUNCHES PUNE CHAPTER.....8

    ENGAGEMENT WITH MINISTRY OF DEFENCE, GOI .....8

    WORKING WITH MINISTRY OF ELECTRONICS AND IT (MeitY) .....9

    WORKING WITH DEPARTMENT OF SPACE.....9

    ELECTOPRENEUR PARK.....9

IESA CORE INITIATIVE GROUP ..... 10-11

    NETRA-TALENT CIG GROUP .....10

    AEROSPACE & DEFENCE CIG .....10

    IoT CIG .....11

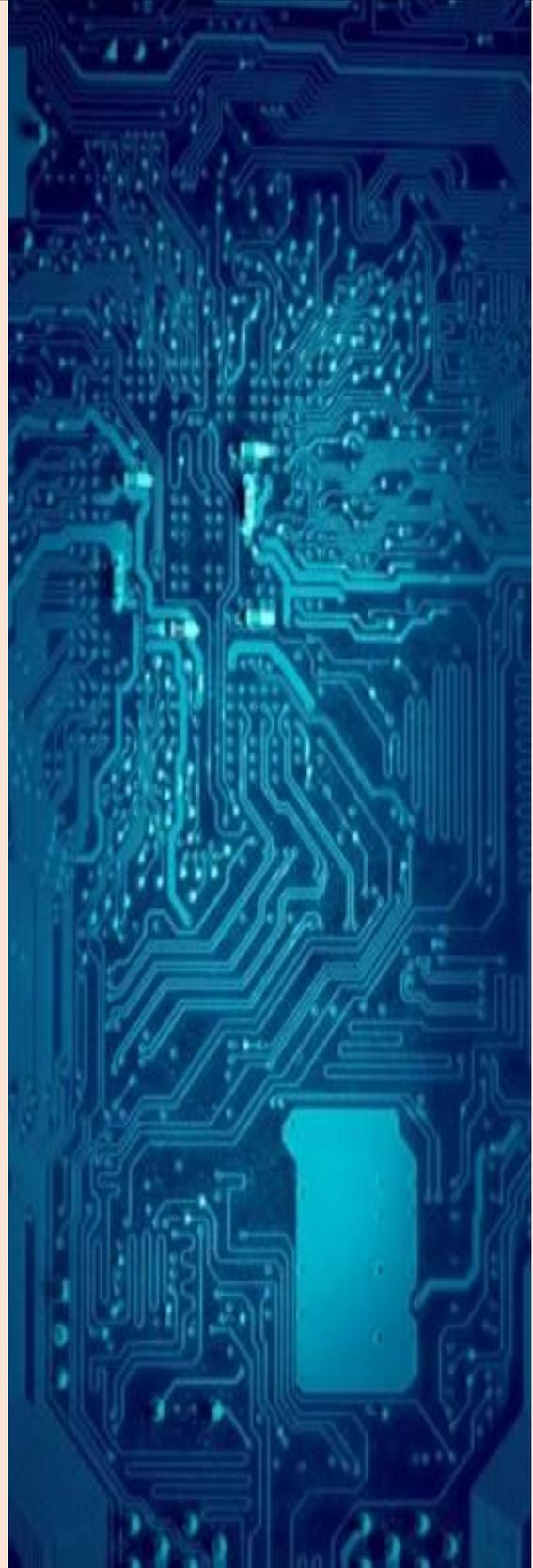
    AUTOMOTIVE CIG.....11

    START – UP CIG .....11

    BROADCASTING CIG .....11

    MANUFACTURING CIG .....11

ESDM MAP OF INDIA 2017 ..... 12



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## Message from Chairman

IESA Executive council over the last year had its laser sharp focus in fostering the Indian ESDM sector to further deliver value to our members, enthuse the ESDM start-up's by helping to remove its disabilities, assist market and business access to the MSME's in high value MoD and Space verticals, in developing skills in ESDM sector and also creating new segment focused activities in IoT and manufacturing. The Core Initiative Groups (CIG's) were very active in driving all these with active engagement with the respective stake holders and governments at the centre and states. We expanded our member connect and outreach to major technology hubs in the country namely Pune, Hyderabad and Chennai by opening our chapters in these cities. I am very happy to announce that IESA is now going International. We have the required approvals and financial support with the issuance of the Government Order (GO) on from the state of Andhra Pradesh as the 'lead state' for opening our first IESA international office in Taiwan in the next few weeks. Similar commitments from the 2 'partner states' are also expected this week. The target is to get an investment of US\$500Mn in the first 3 years in ESDM related products and systems design and manufacturing.

Our efforts to open offices in Stockholm, Europe is also in final stages of planning and I hope we can start that too in Q2 along with Taiwan office. Our office in Bay Area in USA are also expected to fructify within the next 3 months. Both the offices at Stockholm and Bay Area are being hosted and supported by our members. Please join me in thanking and congratulating the Secretariat in Delhi and Bangalore and EC members in assiduously following up on these and making it happen.

As I am signing off after being the Chairman for the past year during which I had the active support and encouragement of all of you members and I am happy to share a brief summary of the year that went by.

**K. Krishna Moorthy**

Chairman - IESA

VP & Managing Director, India Design Center

Rambus Chip Technologies India Pvt. Ltd.

## IESA Executive Council 2017-18

We are glad to announce the names of IESA Executive Council for the year 2017-18 with 3 new members coming on board as the EC member. I wish to extend my heartiest congratulations to Vivek Sharma, Managing Director, STMicroelectronics; Jitendra Chaddah, Director, Operations and Strategic Relations, Intel India; Rajeev Khushu, Director - Corporate Affairs, Texas Instruments who have been elected into the EC 2017-18.

I would like to thank the outgoing EC for their support and contribution in 2016-17.

## Membership

IESA has been committed to the development of a vibrant Indian Electronic Systems Design and Manufacturing (ESDM) ecosystem and evangelizing the dream of establishing "Brand India" that is recognized worldwide as a go-to destination for electronic products. As a trade body, we share with our members – domestic and multinational companies – a common goal of improving their global positioning and recognition and, in the process, creating more avenues for business expansion on a global scale.

IESA has a member base of 227 as of March 2017. We extend our heartiest congratulations to the new members and exhort all of you to be a part of the ecosystem and share your insights. Please write to [membership@iesasonline.org](mailto:membership@iesasonline.org). Please do talk to your connects in the ESDM space and bring them under the umbrella of IESA to enhance the Electronics & Semiconductor industry and benefit them as members of IESA.

Be part of the activities and events in the of IESA at Bangalore, Delhi as well as the various Chapters – Chennai, Hyderabad and Pune. We are spreading our wings even more and beyond our home base. We look forward to your contribution and help increase the numbers of IESA members.

## Events

### Vision Summit 2017

The Vision Summit was held on 21st & 22nd of February 2017 at Bangalore themed Design Led Manufacturing – Redefining the future of India's ESDM. The twelfth edition of this event saw an attendance of over 950 delegates and a speakers list that included 75+ international and national industry and academic veterans. This year's Vision Summit was distinct from the ones held earlier in that both the days saw workshops on various topics in addition to the panel sessions. And the fact that most of these sessions and workshops were completely filled with standing room only is a testament about the relevance of the topics and the theme. Day one was dedicated to design and the first keynote was delivered by Ray Bingham, Executive Chairman of the Board, Cypress Semiconductor who spoke about the three powerful technologies transforming businesses, i.e., Information, Mobility and Cloud and the next big thing, i.e., networked microcontrollers with embedded sensors and actuators. He was followed by Dr. Ron Black, President and CEO, Rambus Inc., who emphasized the need for a new model to bring design-led manufacturing to life since the semiconductor industry growth has stagnated. Raja Manickam, the Founder & CEO, Tessolve, delineated the semiconductor infrastructure opportunities in changing commodity models and the VP Engineering of Qualcomm, Ajay Bawale spoke about intelligent connected platforms transforming the world. Ganesh Guruswamy, Senior Vice President, Western Digital made an exciting point about how people who can extract relevant information from the data are going to rule the world. Day two was all about manufacturing and the speaker panel was an exciting lot including Prof. Rajeev Gowda, MP, Govt. of India, who spoke about finding models that work for India rather than trying to replicate China's model and Bruce A. Anderson, Global Managing Director, Electronics Industry, IBM, who spoke about the ways the electronics manufacturing industry is progressing towards a cognitive reality. The other keynotes included Dana Kammersgard, Executive Vice President, Cloud Systems, Seagate Technology who shed light on the advancement of storage system designs for digital India and Dr. Uming Ko, Corporate Vice President, MediaTek who spoke about an impending revolution in transportation. In addition to these lively panel sessions, there were workshops on both days encompassing varied topics. The workshop on day one was about designing with FD-SOI technology for IoT products and the other workshops were equally enthralling covering topics like creating ESDM product innovation hubs on campuses and a primer on India digital broadcast. The former saw Vivek Pawar of Talent CIG, IESA, explaining how unless there was a tight coupling between campuses and industry, the collaboration would not work. The second workshop on India digital broadcast had Sh. Rajiv Bansal, Joint Secy, MeitY, exhorting all the stakeholders in the digital broadcast ecosystem to work together toward finding solution and sharing of infrastructure in addition to other speakers like the Broadcast Core Group Convener, Ankan Biswas and Peter Siebert, Executive Director, DVB, speaking remotely who spoke warmly of India being a very special market due to its size and diversity.

The Vision Summit also saw the release of the IESA-E&Y report, 'The Indian ESDM Industry Update' which gives valuable guidelines to decision makers both from the government and industry. This study gives a current update on the ESDM market in India and throws a light on the estimated versus actual market size for key ESDM sub-segments such as electronic products & components, design services, EMS as well as reports on critical success factors and key recommendations. This year's Technovation Sarabhai Award, was awarded to Dr. Kiran Kumar, Chairman, Indian Space Research Organization (ISRO), for his outstanding contribution to India's space program

and the TechnoVisionary Award (Life Time Achievement Award) was awarded to Prof. Partha Pratim Chakrabarti, Director IIT Kharagpur.

The Leadership Summit showcased the signing of 3 Memorandum of Understanding (MoUs)

(i) MoU with US based Society for Information Display (SID) - IESA and SID signed an MoU to create an enabling agenda that can create a platform for the collaboration between industry and academia to nurture the building-block capabilities required for the development of a display systems industry ecosystem in India.

(ii) MoU with Infineon Technologies for Electropreneur Park – IESA and Infineon Technologies signed an MoU with the aim to support the incubator initiatives in Electropreneur Park in particular, for Infineon to share its experience, knowledge and network in the semiconductor industry with the start-up companies (“Incubatees”) and for IESA to introduce Infineon to the community of the Incubatees as well as to invite Infineon to events organised by IESA.

(iii) MoU with IIT-Kharagpur - The intent of the MoU is to create a comprehensive platform for pursuing advanced research works jointly by IESA, and IIT Kharagpur.



Technovation Sarabhai Award to Dr. Kiran Kumar, Chairman, ISRO

## IoTNext 2016

IoT Next 2016 was the second edition of a marquee event designed for IoT leaders, practitioners and ecosystem enablers organized by IoT and TiE Bangalore. The theme “Global IoT Summit on Realities and Road Ahead” emphasized on digital innovation as the main driver of economic growth around the world. The Summit was held on Nov 9 & 10, 2016 wherein over 50 IoT startups from India (there are close to 500 IoT startups now in India) were showcased with parallel ongoing developers workshop by IBM, Intel, Samsung, Intel, Microsoft and SDA. A panel discussion on how the startups should choose the right accelerator/incubator and a Mixer for the startups to socialize with the investors and the accelerator/incubators was also organised. Benjamin Joffe, General Partner of HAX, the most successful and largest hardware/IoT accelerator gave his insights.

The second edition of IoTNext brought in both International & Indian leaders who shared their knowledge in various domains. The focused sessions at the Summit were on Industrial IoT/ Industry 4.0; Smart Agriculture & Food; Safe Nation which also had parallel sessions. IoT awards – Innovations from India; Developers Lounge – Road ahead for Indian Healthcare Innovation added a feather to the cap at the The Summit had multiple Keynotes touching upon the current trends in India. To name a few: Marc Carrel-Billiard, MD of Global Technology R&D, Accenture spoke on Driving Business Value in IoT with Artificial Intelligence; Shalini Kapoor, Distinguished Engineer, CTO-IoT Ecosystem Solutions, IBM spoke on Internet of Things becomes the Internet that Thinks – IBM Watson IoT; Madhav Narayan, Senior Director, Business Strategy, Intel India spoke on IoT-A transformational & disruptive force in 21st century; Munish Makhija, MG, GE spoke on GE Predix Platform; Subrata Gupta, Chief GM, Dept of Financial Inclusion & Banking Technology & DIT, NABARD spoke on Doubling Farmer’s income – Role of Technology and many more.

At the IoTNext 2016, the first of its kind IoT Start-up directory was launched with over 500 start-up companies listed in the directory.

Deftronics Next Awards Jointly organised by IESA & TiE Bangalore, these awards aim is to promote and support start-ups and entrepreneurs in the fabless semiconductor and electronic products in the IoT or connected devices space and focus on the most innovative products developed in India. IESA & TiE Bangalore continue to work together on various workshops relating to IoT. Congratulations to the IoTNext award winners – Most Promising Start-up

Impacting Safe Nation/Smart City: Sensworx Systems; Most Promising Start-up Impacting Automotive: Ather Energy Pvt Ltd; Most Promising Start-up Impacting Agriculture: Pycno Agriculture Sensors; Most Promising Start-up Impacting Industrial IoT: KFX Circuits & Systems Pvt Ltd; Most Promising Start-up Impacting Medical: Spectral Insights.

## DEFTRONICS 2016



DEFTRONICS is one of IESA's flagship events that showcases the latest trends in strategic electronics in our country and brings together the entire ecosystem involved in the defense and aerospace sector. The Summit was held on Aug 4 & 5, 2016 at Bangalore. The theme of Deftronics 2016 was "Building India's Strategic Electronics Ecosystem for Greater Self-Reliance and Global Relevance – Defence, Aerospace and Internal Security". This edition had a record participation of both delegates and exhibitors, spanning the length and breadth of the aerospace and defense arena. We had the Consul General of Israel, H.E. Ms. Yael Hashavit, offering collaboration and support for Indian firms venturing into this sector;

ArunKakatkar, the Managing Director of TE Connectivity India expanding on TE's Connectivity's core as a solution for the defence industry's demand of harsh and robust connectivity solutions; Dr. V. K. Saraswat, Member NITI Aayog & Former Chief Scientific Advisor to the Indian Minister of Defence & Director General, DRDO sharing his insights on imports taking place in the area of Semiconductor, power devices, processors and large number of PCBs for which it is important that the Government sets its own foundry, VLSI design and manufacturing system; Rahul Gangal, Partner, Roland Berger delineating the policy recommendations along with many other prominent speakers. The much awaited "Defence Electronics and Systems Design Report – Policy recommendations" which defined the practical roadmaps for companies in the sector and discussed testing and certification infrastructure that needs to be created by the government in collaboration with the industry bodies was launched at the Summit. The DEFTRONICS awards were given away including the Dr. APJ Abdul Kalam Lifetime Achievement Award to Dr. V. K. Saraswat, Member NITI Aayog & Former Chief Scientific Advisor to the Indian Minister of Defence & Director General, DRDO while GE Aviation won the Best Product Design Company along with MosChip Semiconductor Technology Ltd and Best Electronics Manufacturing Company in A&D went to Centum Electronics Ltd. The event was attended by 600+ attendees; 40+ speakers; and 60+ media. The Deftronics Awards was crafted to honour India's best individual contributors & organisations that drive the industry forward.

Thought Leadership Forums



The TLF **with AMD** was organised by IESA on 22nd June 2016 at Bangalore. The TLF showcased insights from Mark Papermaster, CTO & Senior VP, AMD on “New Era in Immersive Computing”. Over 55 industry leaders were present at the event. In the immersive computing era, networked connections among people, processes and data will change how we interact with people and technology, and how we learn, work and play. Virtual Reality (VR) is a notable example.



IESA continued with Thought Leadership Forum for the month, and this time it was **with Advantest** on June 29<sup>th</sup> 2016 at Bangalore. Advantest had tied up with Cloud Testing Service (CTS), both being based out of Singapore. The Speakers of the Forum were Larry Liow, Sales & Mktg Director, Advantest; Manabu Kimara, President, CTS Inc.; Akira Hamajima, Sales & Mktg, CTS Inc.; Ryosuke Takeuchi, System Engg & Mktg, CTS Inc. The attendees show great interest in the topic “Making chip test available for everyone” wherein a demo was also showcased. Over 85 industry leaders and academia attended the forum.



The TLF continued with **Mouser Electronics** on 17th August 2016 at Bangalore, along with its office inauguration on the same day. The leaders from Mouser Electronics, Mark Burr-Lonnon, Senior VP, APAC & EMEA and Kevin Hess, Senior VP, Mktg gave an in-depth talk on the world of distribution, the impact of internet on electronics market, effects of counterfeiting and measures to stop it, and of course the importance of marketing in the world of distribution. Over 80 leaders from the industry participated in the forum and was a highly interactive discussion.



IESA also organized a **seminar for K&S Partners and Knobbe Martens**, US to discuss on the various “Patent strategies in modern economy” at Bangalore. Over 35 core ecosystem partners had participated in this seminar and discussed on “Global Software Patent portfolio management”; “Recent changes in Patent Law and Practice in India & US”; “Telecom litigation in India & US”.

## Initiatives

### IESA launches Hyderabad chapter



We have now expanded our presence across the major technology hubs of the nation and have even more strengthened support to bring India into the global radar for manufacturing innovation. IESA launched its Hyderabad Chapter on February 16, 2017 with about 55 industry leaders attending the launch. Several policy initiatives have been approved in last few months which include providing very attractive financial investment in electronics manufacturing and providing preference to domestically manufactured electronic goods in all

government procurement as well as all those electronic goods whose use has security implications for the country. This expansion has put us in the right path for the fulfilment of our objectives and aiding the government of India to digitally empower the nation. The IESA Hyderabad chapter is represented by K. Ramachandra Reddy, CEO/Chairman, MosChip Semiconductor Technology Limited with office address: Plot No. 83 & 84, 2<sup>nd</sup> Floor Punnaiah Plaza, Road no. 2, Banjara hills, Hyderabad 500 034.

### IESA launches Chennai chapter



IESA has embarked on a focused outreach activity in 2016-17 to expand our presence across India and Tamil Nadu comes right on top of that activity. We are happy to have formal presence in Chennai and are determined towards providing a collaborative platform to promote Made-in-India products in India and globally. With the commencement of our activities from Chennai, we will have greater opportunities to connect and collaborate with companies to help them create products and solutions to cater to the ever - increasing electronics systems demand in India. With an already strong base of electronics manufacturing in the state with suburbs of Chennai and Coimbatore as the 2 major cities of innovation and product realization, we hope to partner with the companies in

electronics design and manufacturing and services to put the Indian ESDM industry on the global radar. The Chennai chapter was launched on February 15, 2017 with about 45 attendees. The IESA Chennai chapter contact address is Plot B27, Phase II, Zone B, MEPZ-SEZ, Sanatorium, Tambaram, Chennai, Tamil Nadu 600045. Dr. Sreeram Srinivasan, CEO, Syrma Technologies would be the IESA representor of the Chennai Chapter.

### IESA launches Pune chapter



Post the successful launch of IESA chapters in Chennai and Hyderabad, IESA set to achieve another landmark by setting up the Pune chapter on March 17, 2017. A good participation of about 55 industry leaders were present at the launch of the Pune chapter. With the strong focus for Electronics R & D and Manufacturing in Maharashtra, it was apt to set up a chapter in Pune as well, a formidable contribution to the ESDM industry. The IESA Pune chapter would be represented by Sunil Desai and located at Maven Systems Private Limited (A MOSChip company), Galore Tech, 5th Floor S.No.22 BavdhanKhurd, Pashan Road, Behind Maratha Mandir, Pune - 411021.

## Engagements with Ministry of Defence, GoI

IESA and NASSCOM is working closely with Minister of Defence, Government of India to prepare the first Defence Electronics policy for the country. The country's first Defence Electronics Policy, which has been on the anvil since December 2014, is now a few steps away from being approved. The draft recommendations for the Policy, which were put together by the IESA along with Nasscom and submitted to the Secretary, Defence Production in 2015, went through several iterations over the last 18 months, both at the government and industry level IESA. IESA and NASSCOM submitted the final draft recommendations for the Policy on July 25, 2016 in a meeting chaired by the Defence Minister. The recommendations, which are based on current aerospace, defence, internal security trends and happenings, will provide guidance to the formulation of the Defence Electronics policy by the Union Ministry.

After the successful submission of the First report on Policy Recommendation on Aerospace & Defence to the Ministry of Defence, the MOD has willingly assigned IESA and NASSCOM to play a leading role to set up an electronics testing and certification facility and consultancy for the Aerospace and Defence industry in the country to benefit the MSME's and start Ups to become competent to access the high value Defence and Space business opportunities. Both IESA and NASSCOM along with the help of their research consultant Roland have prepared a Detailed Project Report (DPR) for this electronics testing and certification and consultancy facility we expect to be set up jointly with the participation by all stake holders including MoD. IESA expects that the Defence electronics policy which is now being in the final rounds approval by the Government will soon become a reality which will favourably address many of the concerns, operational issues and present disabilities of the industry to participate in the MoD business opportunities.

## Working with Ministry of Electronics and IT (MeitY)

IESA has been working in close quarters with Ministry of Electronics & Information Technology (MeitY), Government of India. In addition to giving periodic inputs on a number of policy related issues, IESA is also actively engaged in a dialogue with the senior officials in the Ministry. A number of projects like IOT COE's, A central Chip Design Centre with the required infrastructure which can be remotely accessed by fabless design houses and Start Up's from anywhere, Skill development initiatives in ESDM, setting up of both brown field and greenfield EMC's are in the final stages of approval thereby adding immense business value to the members in IESA. IESA has also released the IESA & E&Y ESDM report during the flagship summit – Vision Summit 2017.

## Working with Department of Space

IESA is also well connected with Department of space and thereby trying to leverage the SCL fab (which is under Dept. Of Space) for use by some of the fabless design houses to design test chips and early prototypes of concepts and ideas. The academia also now has access to the SCL fab to get trained in chip design methodologies and flows and enable student tape outs. ISRO and IESA are fostering a relationship to help IESA member industries to get a deeper understanding of the Space ESDM requirements ahead in time and be ready to become a certified and qualified supplier to DOS. A workshop was organised by ISRO & IESA for its members on February 7, 2017 at ISRO campus. The focused sessions were "Electronics for Space Applications – Opportunities for Indian Industry", "Infrastructure and Capabilities," Ground Systems for Indian Navigation System (NAVIC)" and the "Way forward". IESA and ISRO are working on into an MoU with the specific objective of furthering the interests of the two organizations in strengthening the supply chain and enhancing sourcing opportunities for ISRO. IESA is also exploring definite opportunities in making use of the semiconductor lab (SCL Chandigarh) currently under the charge of ISRO.

## Electropreneur Park



Funded by Ministry of Electronics & IT (MeitY), Government of India, the Electropreneur Park (EP) is the first of its kind Incubation Centre in India in the Electronic Systems Design & Manufacturing (ESDM) sector. It is managed by Software Technology Park of India (STPI). Other stakeholders include Delhi University as the Academic Partner and India Electronics & Semiconductor Association (IESA) and CyberMedia as the Execution Partner. The Electropreneur Park was officially launched on 27th August 2016 which was inaugurated by Sh. Ravi Shankar Prasad, Hon'ble Minister for Electronics & Information Technology at New Delhi. There are 8 companies incubated by EP as on Mar 2017. About 6

companies have been selected and it is a work in progress of incubating them. EP also organised few roadshows on

technical and business workshops for incubated companies. Industry Interaction for setting up a Common Facility Centre as Brownfield EMC (Electronic Manufacturing Cluster) was organised on 21st April at Gurgaon with a good number of member representation.

IESA has organised various events for the year such as "Aerospace Programmes and Opportunities for Electronics Industry"; "Thought Leadership Forums", "Patent Strategies in Modern Economy" and "Open house discussion on IoT Certification" at Bangalore; "Discussion on IoT Security" and "Delhi Chapter meeting" at New Delhi; "IP Workshop on importance of Innovation & Role of Patents in driving Innovation" at Pune.

IESA had associated with partners for events such as "Perspectives from Venture Capitalists"; "International Conference on Cloud Computing & IoT", "Global IoT Conclave", "DVCon India", "Intel-SINE-DST joint program for hardware startups", "India Gadget Expo", "Bangalore ITE.Biz with Govt. of Karnataka", "Talk by Dr. Quy Nguyen Huy with DERBI Foundation" at Bangalore; The Next Global Technology Hub with Govt. of Karnataka at Belagavi; and an International event "IoT Evolution" at Florida, USA.

## IESA Core Initiative Groups

IESA core groups work with specific objectives cutting across various market segments, focusing on various ESDM segments to propel the growth of the electronics in India. These CIGs consist of industry leaders and to interact with them. Below are the CIGs functioning at IESA:

### NETRA (National ESDM Technology Research Academy) – Talent CIG Group

A subset of IESA initiated by a group of dedicated experienced engineering professionals who felt an urgent need to transform our current education scene so as to produce industry-ready next generation engineers who will focus on adding value to the corporate world with skills acquired through learning process. NETRA was created by IESA and ESSCI as a think tank that aims to bring the three vectors of technology research, in-chip program and leveraging campus start-ups to create entrepreneurial talent and ESDM products on campus.

NETRA proposes the hubs (Parent Campus/Institution) and spokes (Supporting institutions) model under NETRA India. The number of Hubs and Spokes will be increased gradually over time. This incubation model has to be "Industry driven" and not only academia focused. High tech innovation will come out from the academic campuses only if the industry is actively involved in the entire process.

#### NETRA has following goals:

##### Immediate goal

**Incubation** – NETRA model in 3 campuses. 4+ ESDM start-ups in each campus

**Capability Building** – Industrial courses in 5 campuses

**Technology Research** – Start ESDM industry research programs in at least 1 campus

**InChip program** – Create and Test IOT Chip (Venus) with collaboration of 5 campuses and Industry

##### Short term goal

**Incubation** – NETRA model in at least 5 campuses & each having 10+ ESDM start-ups

**Capability Building** – Industrial courses in 25 campuses running successfully

**Technology Research** – Start ESDM industry research programs in at least 1 campus

**InChip program** – Create and Test IOT Chip (Venus) with collaboration of 5 campuses and Industry

##### Long term goal

**Incubation** – One world class product/design for the global market

**Capability Building** – Industry ready Students joining ESDM companies. Create more number of top students in ESDM jobs

**Technology Research** – Research programs running in ALL campuses. Each campus should file patents

**India Chip** – Create 100 Students / Faculty with Chip Development experience through InChip program

This will be driven & implemented by India Electronics & Semiconductor Association at an education campus.

## Aerospace & Defence CIG

Strategic electronics is one of the key focus areas for IESA. The Aerospace & Defence CIG's mission is to bring together all the stakeholders in the value chain, evolve common roadmaps, represent policy needs to the government, catalyse partnerships (academia-industry-start-ups) and provide a platform to focus attention. The CIG also focuses on the development of cyber and internal security.

## IoT CIG

IESA and TiE has entered into a Memorandum of Understanding with a vision to create first generation semiconductor and IoT start-ups in India. The objective is to create and foster an ecosystem that promotes start-ups who will develop fabless and semiconductor and electronic products, especially around connected devices or IoT. IoT Security Core Group has also been formed.

## Automotive CIG

This group consists of industry leaders from NXP, Bosch, LDRA, Bajaj, Texas Instruments, TCS, Tata Motors, Sandisk/Western Digital etc. The formal kick-off and team formation was completed in September 2015.

## Start-Up CIG

The focus of the Start-Up CIG is to become a key driving force to establish a strong ecosystem for fabless semiconductor start-ups (IP and design) in India thus making IP creation a key pillar of Digital India. This group is working hard to facilitate business opportunity creation for ESDM start-ups, eliminate entry barriers through funding support, incubation centre and government sponsored MPWs and to help formulate policies that will influence ESDM start-ups to thrive and prosper. NETRA's Mission is to create Engineering Campuses with: Incubation to create, Capability Building to Scale, Research and Development to Advance, InChip Program to Prove and Productization to Demonstrate. It is proposed that the ESDM NETRA COEs will be funded by MeitY, GoI and the State Government and also get investment in cash or kind from various investors or companies who are looking to partnering over the 1st 5 years.

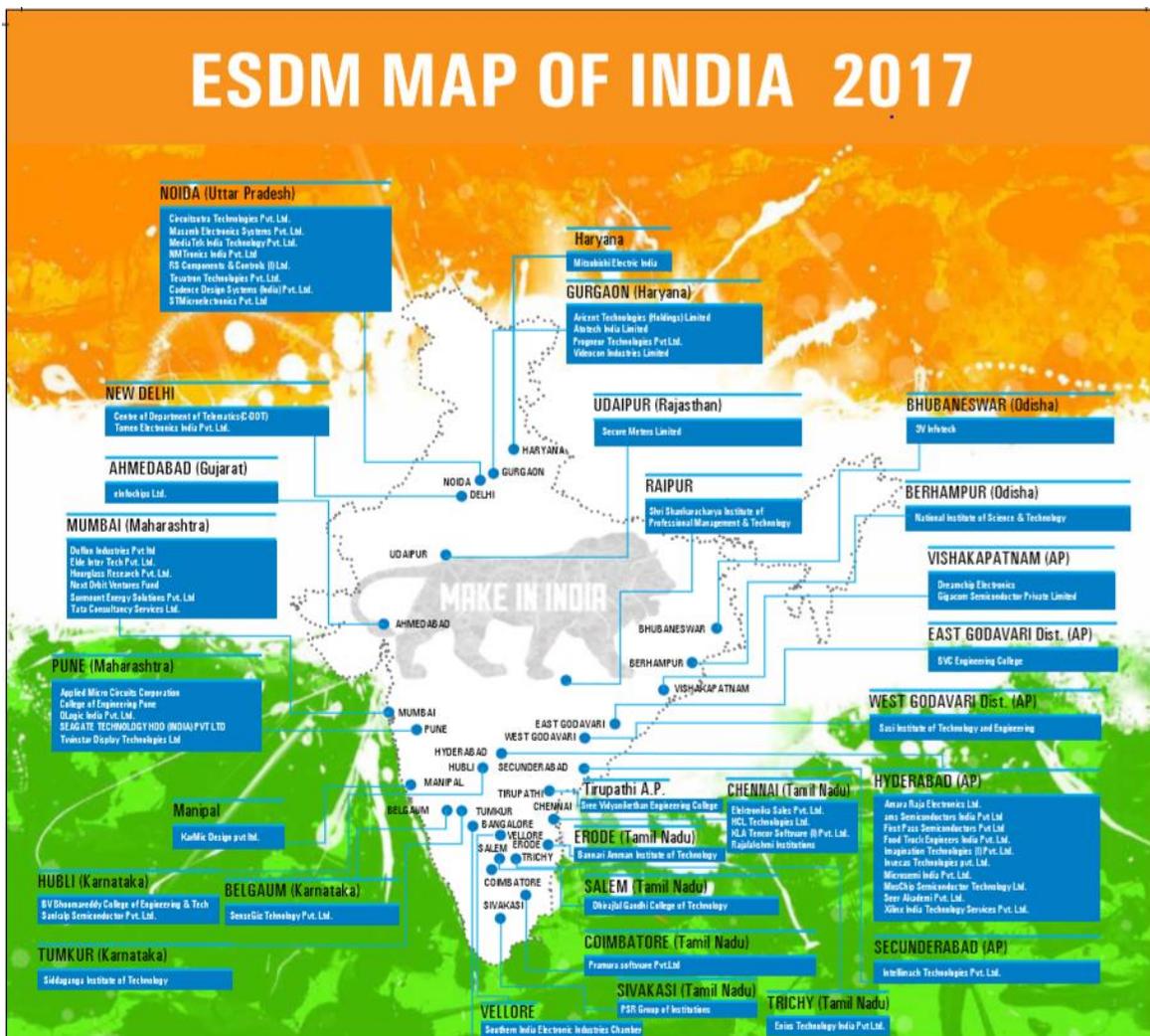
## Broadcasting CIG

The Indian Broadcasting core group is a non-profit Indian collaboration centre for innovation in digital media technology under aegis of IESA. The charter of the India Broadcasting CIG is to respond to calls from the industry, to help define and develop appropriate standards for Industry. It will also act as a bridge between Industry and Policy making and Standard mandating and regulating organisations. It plans to facilitate knowledge transfer and skill development among members thereby enabling skill development needed for the growth of the industry.

## Manufacturing CIG

The Manufacturing CIG is a work under progress. We shall keep you updated on the objectives of this CIG as we move ahead.

ESDM Map of India



Please write to [membership@iesasonline.org](mailto:membership@iesasonline.org) to get access to the ESDM Map of India

Please write to [events@iesasonline.org](mailto:events@iesasonline.org) for any queries on organizing events as well as delegations – inward and outward

Please write to [govtaffairs@iesasonline.org](mailto:govtaffairs@iesasonline.org) for any queries related to Government relations

Please visit <http://www.iesasonline.org/vision-summit-2018/> to get access to:

- ESDM policies of States and their contact details
- IESA Fabless start-up report – Executive Summary

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