

# Conference of IT Secretaries

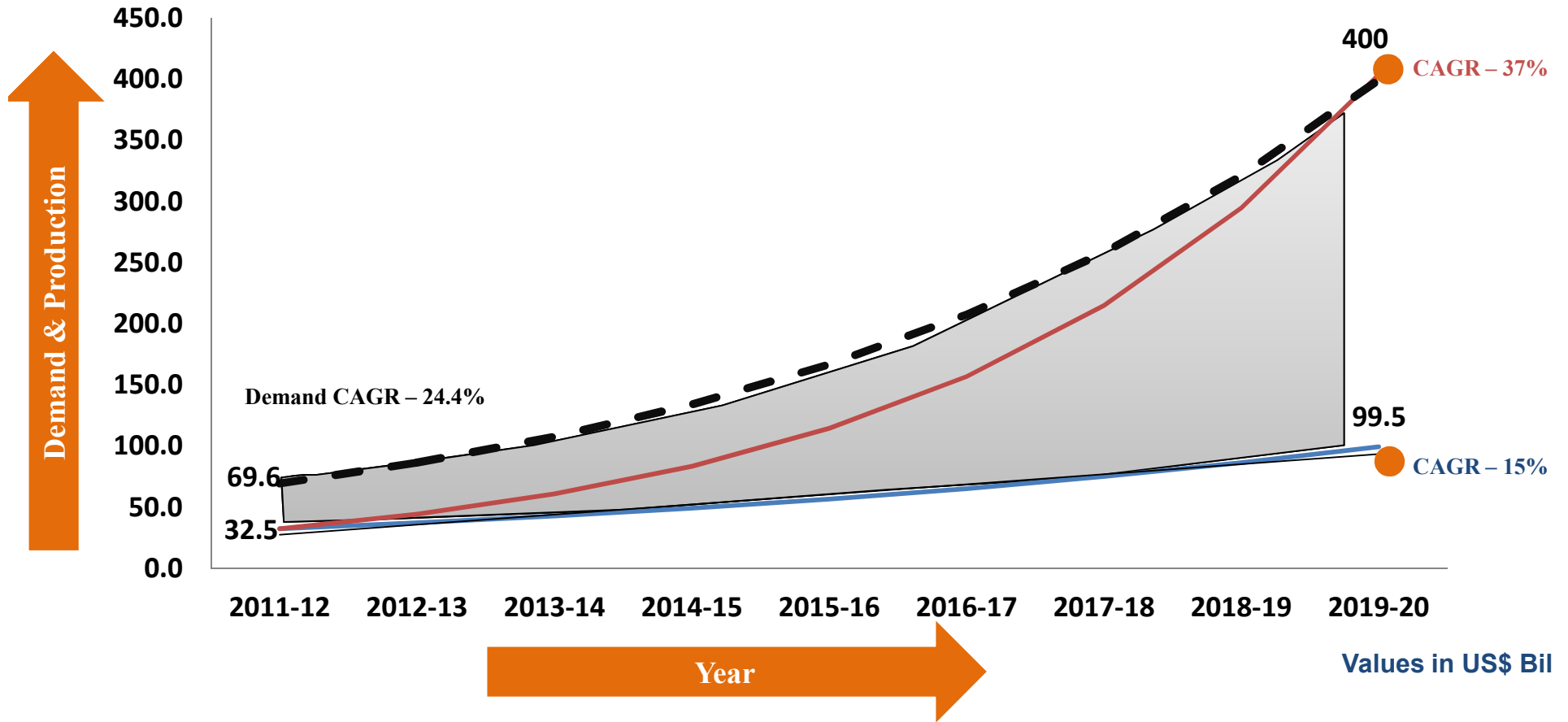
## National Policy on Electronics

DECEMBER 11, 2012



**Department of Electronics & Information Technology (DeitY)**  
**Ministry of Communications & Information Technology**  
**Government of India**

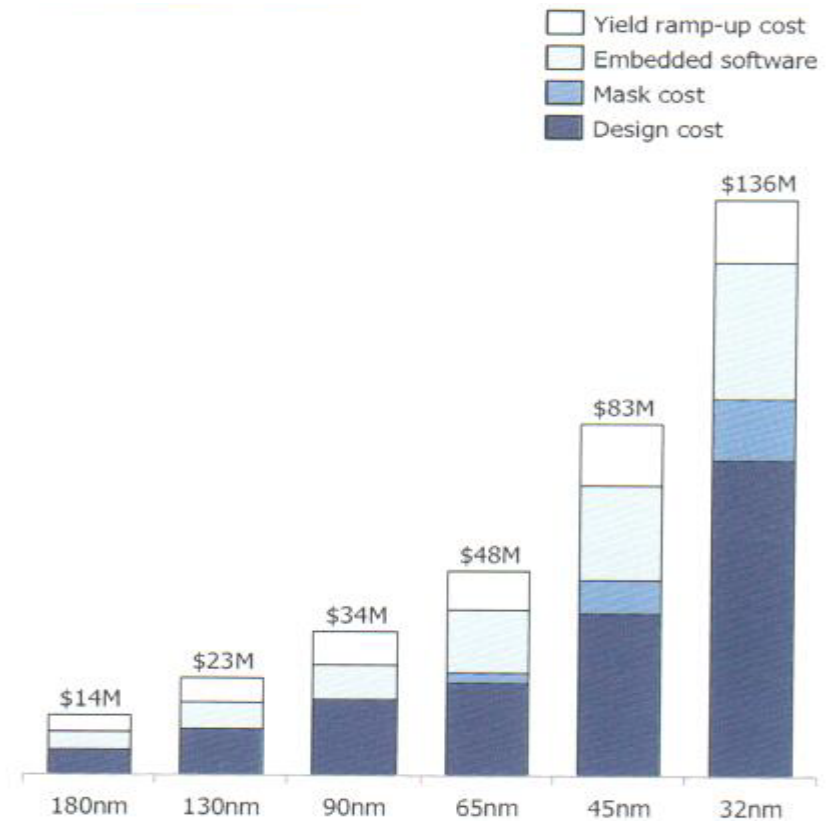
# | Electronics Demand and Production



Production is characterized by low value addition (5-10%)

**Projected semiconductor design market in 2020**

***US\$ 60-80 Bil***



**Cost of semiconductor design (US\$ Mil, 2010)**

# Telecom equipment



- Total telephone subscribers ~ 950 Mil, teledensity 77%

- **Broadband on Demand by 2015, 600 Mil connection by 2020 at min. 2 Mbps speed**
- **NOFN** : US\$ 4 Bil project to provide broadband connectivity to panchayats
- **NKN** : US\$ 1.2 Bil Infra project to connect educational and research institutes

Demand in 2010  
~ US\$ 11 Bil

Projected demand 2020  
~ US\$ 34 Bil

Projected Market for laptop,  
desktop by 2020

***US\$ 34 Bil***



- India PC shipments increase in 2012 ~ **17%**; world average ~ **4.4%**
- GoI aims to provide 1 tablet to every student under Aakash scheme
- State Government initiatives
  - Free laptop to students in Tamil Nadu and Uttar Pradesh
  - Other states coming up with similar schemes

Projected Market for Set Top Box in next 3-5 years

***200 Million units***

- Cabinet has approved providing Digital Addressable System (DAS) throughout country by December 2014
- Tamil Nadu state government owned Arasu Cable TV Corporation floated tender for 2 Mil STB



# | Medical Electronics

- Size of medical electronics equipment market by 2020 ~ **US\$ 6.5 Bil**
- GoI committed to development of affordable medical electronic device industry



## Example : Digital Hearing Aid

- Needed by 3-10% population in India
  - Current price: US\$ 300
  - Target price : US\$ 20-30
- Application Specific Integrated Circuit (ASIC) has been developed by CDAC Thiruvananthapuram
- Field trials currently going on



# | Automotive Electronics

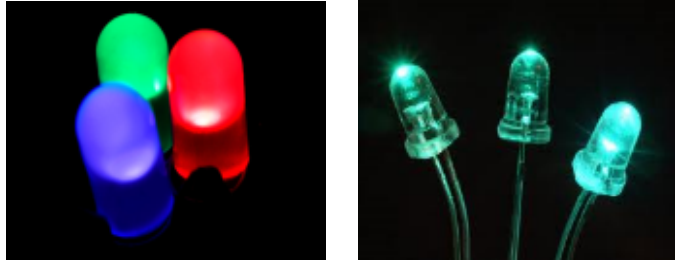
- Value of electronics in automobiles ~ 20%-40%, increasing rapidly
- Production of nearly 21 Mil Automotive vehicles in 2011-12



- Digitization of controls and expanding inclusion of safety and sophistication features.
- Evolving trend of localization in product procurement by Auto OEMs



# | LED Market



- Lower carbon emissions by 20-25% by 2020
- Distribution of free LED lights to all Below Poverty Line (BPL) families (**20 Mil** lights)
- Government initiatives :
  - Excise duty reduced to 6% on LED lamps and LEDs
  - SAD fully exempted on LEDs used for manufacture of LED Lamps

Demand in 2010  
< US\$ 1 Bil

Projected demand 2020  
~ US\$ 35 Bil

## National Policy on Electronics

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### **NPE Vision**

*“To create a globally competitive electronics design and manufacturing industry to meet the country's needs and serve the international market”*

### **NPE Goals for 2020**

1. Attract an **investment** of US\$ 100 bil
2. Reach a **turnover** of US\$ 400 bil
3. Create an **employment** of 28 mil
4. Enhance **exports** from US\$ 8 bil to US\$ 80 bil
5. Grow the **chip design/ embedded software industry** to US\$ 55 bil

## National Policy on Electronics | Major strategies

I

- Electronics Manufacturing Cluster Scheme (EMC)

II

- Modified Special Package Incentive Scheme (M-SIPS)

III

- Setting up of Semi-conductor Wafer Fab in India

IV

- Preferential Market Access

V

- Electronics Development Fund (EDF)

VI

- Mandating Safety Standards

VII

- Human Resource Development

VIII

- Communication & Brand building

Number of  
strategies  
identified  
under NPE  
**>50**

# Modified SIPS

CAPEX subsidy percentage

**20-25%**

- Reimbursement of CVD/excise for capital equipment in non-SEZ units
- Reimbursement of Central taxes and duties for 10 years in select high tech units like fabs and ATMPs
- Available for entire value chain of identified electronics products
- Available for three years from notification
- Incentives available for 10 years from the date of approval

# Electronics Manufacturing Clusters

- Financial assistance of 50% of infrastructure cost subject to ceiling of Rs. 50 crores per 100 acres of land
- Applicable to both Greenfield and Brownfield projects
- Assistance to Special Purpose Vehicle (SPV)
- Developer may initiate development of cluster infrastructure and undertake to bring units in certain time period



Andhra Pradesh  
Hyderabad  
Visakhapatnam

Punjab  
Near Chandigarh

Karnataka  
Near Bengaluru

# Preferential Market Access (PMA)

- Enabling framework
- WTO compatible
- No discrimination between foreign and Indian companies

- Preference to domestically manufactured electronic goods in
  - Government procurement
  - Electronic goods having security implications
- Extent of Government procurement from domestic manufacturers will not be less than 30 % of the total procurement.

# Govt. Procurement Projects

US\$ 4 Bil

## **National Optical Fiber Network**

Provide broadband connectivity to panchayats so that banking and health services can be accessed online

US\$ 1.2 Bil

## **National Knowledge Network**

Infrastructure project to connect educational and research institutes

US\$ 4 Bil

## **National e-Governance Plan**

Countrywide infrastructure reaching down to the remotest of villages; bringing public services closer to home

US\$ 0.2 Bil

## **LED products**

Distribution of free LED lights to all BPL families ;  
Excise duty reduction on LED lamps and LEDs

US\$ 1.2 Bil

## **Set Top Box**

Digital Addressable System (DAS) mandatory throughout country by December'14

# Semiconductor Fab



India : Latest destination for Chip manufacturing based on strength of Chip design

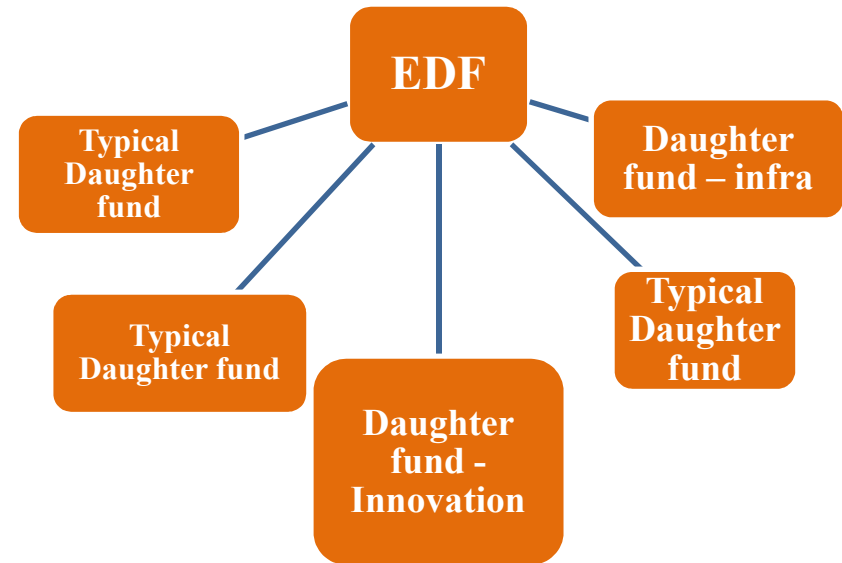
- Global responses sought in the form of EOI to setup Fabs
- Leading players have expressed interest
- Partners for Fab project to be finalized in 2012
- Fab likely to be operational by 2014



# Electronics Development Fund (Proposed)

Fund to promote Innovation and IP and R&D, product commercialization, etc in ESDM, nano-electronics & IT sectors

- Comprises of “**Daughter Funds**” of size US\$ 20 Mil -100 Mil
- Each fund to have Govt. share from 25% - 75%; remaining from private and financial institutions
- Policy to be announced shortly



- Proposed Size of fund : Rs. 10000 crore (US\$ 2 Bil )

# | HR Initiatives



- Electronics Sector Skill Council set up
- Telecom Sector Skill Council set up
- Fellowship support for 1500 PhD students in ESDM-scheme under approval
- ICT and Electronics Academies-Scheme under approval
- Skill Development for 1 mn persons under formulation

- New programs in in electronics design and production technology
- NIELIT L1-L4 certification in the area of electronics.
- Phase III of Special Manpower Development Programme for VLSI and chip design 10,000 students including 300 PhDs.

# | Mandating safety standards

- 15 electronics products notified under safety standards on October 3, 2012
- Electronic games (video), Laptop / Notebook / Tablets, Plasma / LCD / LED televisions (screen size  $\geq 32''$ ), Optical disc players (built-in amplifiers; i/p power  $\geq 200\text{w}$ ), Microwave ovens, VDU & monitors (screen size  $\geq 32''$ ), Printers & plotters, Scanners, Wireless keyboards, Telephone answering machines, Amplifiers (i/p power  $\geq 200\text{w}$ ), Electronic musical systems (i/p power  $\geq 200\text{w}$ ), Electronic clocks, Set top box, Automatic data processing machine
- Allows Self registration
- BIS accredited labs to test the goods
- Order comes into effect from April 3, 2013

## Actions Proposed

- Awareness seminars being conducted by STQC
- DGFT to notify eligibility
- STQC to notify labs to test electronic goods

# | **Role of State Governments** |

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- Formulate State Electronics Hardware policy
- Identify land for electronic manufacturing clusters
- Develop capacity in colleges and universities for ESDM related graduate/ post graduate courses
- Effective single- window clearances

**Thank You**

For more information, please visit

**[www.deity.gov.in](http://www.deity.gov.in)**