The New Sunrise

Opportunities in the growing Electronic System Design and Manufacturing sector
Demand & Production Trends for 2020

Values in US$ Bil

Year

Demand CAGR – 24.4%

CAGR – 15%

CAGR – 37%

Demand & Production
Top 20 Priority Electronic Product Markets (2013)

<table>
<thead>
<tr>
<th>Product</th>
<th>Revenue % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Phones</td>
<td>38.85%</td>
</tr>
<tr>
<td>FPD TV</td>
<td>7.91%</td>
</tr>
<tr>
<td>Notebooks</td>
<td>5.54%</td>
</tr>
<tr>
<td>Desktops</td>
<td>4.39%</td>
</tr>
<tr>
<td>Digital Camera</td>
<td>2.73%</td>
</tr>
<tr>
<td>Inverters and UPS</td>
<td>2.65%</td>
</tr>
<tr>
<td>Memory cards and USB drives</td>
<td>2.46%</td>
</tr>
<tr>
<td>4W EMS</td>
<td>2.33%</td>
</tr>
<tr>
<td>LCD Monitors</td>
<td>2.02%</td>
</tr>
<tr>
<td>Servers</td>
<td>1.72%</td>
</tr>
<tr>
<td>Total of Top 10 Products</td>
<td>70.60%</td>
</tr>
</tbody>
</table>

Source: ISA and Frost & Sullivan

2013 Electronics Product TM = $50.61 B

<table>
<thead>
<tr>
<th>Product</th>
<th>Revenue % of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Stations</td>
<td>1.61%</td>
</tr>
<tr>
<td>Power Supplies</td>
<td>1.28%</td>
</tr>
<tr>
<td>Set Top Box</td>
<td>1.13%</td>
</tr>
<tr>
<td>Printers and FPDs</td>
<td>1.06%</td>
</tr>
<tr>
<td>Routers/Switches</td>
<td>1.05%</td>
</tr>
<tr>
<td>Car Radio</td>
<td>1.02%</td>
</tr>
<tr>
<td>CFL</td>
<td>1.00%</td>
</tr>
<tr>
<td>Energy Meters</td>
<td>0.66%</td>
</tr>
<tr>
<td>Digital Instrument Clusters</td>
<td>0.58%</td>
</tr>
<tr>
<td>Smart Cards</td>
<td>0.52%</td>
</tr>
<tr>
<td>Total of Top 20 Products</td>
<td>80.52%</td>
</tr>
</tbody>
</table>
Create an ecosystem for auto subsystems which includes:
- 2W Ignition (Capacity Discharge Ignition)
- Digital Instrument Clusters (Stepper Motor, PCB, MCU, LCD)
- 4W EMS (Mechanicals - Pumps and Injectors, Analogs & Sensors, MCU)
- Electronic Control Unit
- Car Radio
- Automotive Safety Systems
- Electric Vehicles
Creating an Ecosystem for R&D and Manufacturing for:

- Flat Panel Display TVs – LCD / LED
- LCD Displays
  - Laptops/Desktops,
    - Recommend LCD generation 5 and above fab relocation in Brownfield clusters
  - LCD Display in Digital Instrument clusters, Energy Meters, etc.
- LED lighting usage in Street lighting, railways, etc. by Government
- LED Fabs

Opportunities in Flat Panel Displays, LCD and LED

- FPD TVs,
- LCD Monitors
- LED lighting
Smart Cities in India

PPP Model for development

100 Smart Cities

• Industrial Corridor ongoing development for Smart cities:
  ✓ Delhi –Mumbai corridor for 7 Smart cities
  ✓ Amritsar –Kolkata corridor for Smart Cities in 7 states in India
  ✓ 3 New Smart Cities for Chennai-Bengaluru region, vix. Ponneri in Tamilnadu, Krishnapatnam in AP, and Tumkur in Karnataka to be completed
  ✓ Provision of 20 Industrial Clusters for Bengaluru-Mumbai and Vizag-Chennai corridor

• GIFT city in Gujarat and Smart City Kochi under construction

• Rs. 7060 cr. allocated by GoI for current fiscal year for “100 Smart cities”
Opportunities in Railways

Metro Railways

50 cities in India

- High speed railways and railway lines
- FDI raised for infrastructure for both passenger trains and Metro Railways
- Bullet Trains
**Digital India Programme**

*“NET ZERO IMPORT by 2020”*

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment</td>
<td>US$ 100 Bil</td>
</tr>
<tr>
<td>Production</td>
<td>US$ 400 Bil</td>
</tr>
<tr>
<td>Employment</td>
<td>28 Mil</td>
</tr>
</tbody>
</table>
Substantial CAPEX subsidy

Subsidy of 20-25%

- Reimbursement of CVD/excise for capital equipment in non-SEZ units
- Available for EMS companies also.
- MSIPs are applicable for R&D expenditure and the valued supply chain for manufacturing specific electronic products
- Incentives available for 10 years from the date of approval
Benefit available for 3 years i.e. for investments made upto 31.3.2017

• Over and above MSIPS

Investment > Rs 25 crores  
~ (US $ 4 million)

Allowance of 15%
Electronics Manufacturing Clusters

Infrastructure Development
- Roads
- Power
- Water
- ETP’s
- Testing facilities
- Social Infrastructure

Subsidy of **50-75%**

- Subsidy up to ~USD 10 mil per 100 acres of land
- Single window clearance from State Governments
- Private/Public entity can set up clusters
FABs Coming Up in India

Greater Noida, near New Delhi

Prantij, near Gandhi Nagar, Gujarat

- 90/65/45/28/22/20 nm
- 40,000 WSPM
Preference to domestically manufactured electronic goods in Government procurement

Extent of procurement from domestic manufacturers indicated in notifications. Mostly 50%

List of notified items:
- Desktop PCs
- Tablet PCs
- Laptops
- Dot Matrix Printer
- LED Products
- Smart Cards
- 23 Telecom Products
- Biometric Access Control/Authentication Devices
- Biometric Access Control/Authentication Devices
- Biometric Finger Print Sensors
Export Incentives on FOB Value

- Set top Boxes 5%
- Mobile Phones 2%

2-5%
Skill Development

Training Cost

75 to 100%

- Financial Assistance for 90,000 persons.
- Courses specific to industry needs supported.
3000 PhDs

By 2020

- Support for scholarship of students and infrastructure for institutions.
- PhD candidates in areas of research identified by industry
What India Offers

1. Ready Land in Clusters and Single Window Clearance
2. Very Attractive Financial Incentives
3. Huge talent pool and support for skilled manpower
4. Support for Innovation and R&D
5. World’s fastest growing market
Electronics?

Think India!

www.deity.gov.in/esdm