

Report On *A talk on* “Semiconductor Future and Opportunities”

For 4th Semester Students

Date: 10th June 2023



A T M E
College of Engineering



Department of
Electronics and Communication
Engineering
In association with ISF
is organizing a

**“Talk on
Semiconductor Future
& Opportunities”**

Date: 10th June 2023 Time: 11:15 am
Venue: Department Seminar Hall



Mr. Sunil Kumar
Founder, Vivarthan Technologies

Convenor
Dr. Basavaraj L
IQAC Director, Professor & Head,
Department of ECE, ATMECE, Mysuru

Coordinator
Mr. Guruprasad K N
Assistant Professor, Faculty Placement Coordinator
Dept of ECE, ATMECE, Mysuru

Target Audience: 4th semester students of Dept of ECE

Report on

A talk on

“Semiconductor Future and Opportunities”

India is aiming to become the global hub for semiconductor design, manufacturing and technology development. However, the shortage of semiconductor chips has exposed vulnerabilities in the semiconductor supply chain and highlighted the need for increasing domestic manufacturing capacity. Semiconductors are essential to almost all sectors of the economy including aerospace, automobiles, communications, clean energy, information technology and medical devices etc.

Semiconductor chips are the lifeblood of the modern information age. They enable electronic products to compute and control actions that simplify our lives. These semiconductor chips are the drivers for ICT (Information and Communication Technologies) development and one of the key reasons for the current flattening of the world. They are used in critical infrastructures such as communication, power transmission, etc., that have implications for national security.

Development of the semiconductor and display ecosystem will have a multiplier effect across different sectors of the economy with deeper integration to the global value chain.

In connection with this, to create awareness among students regarding Semiconductor Industry, Department of Electronics & Communication Engineering, ATME College of Engineering, organized a talk on ***“Semiconductor Future and Opportunities”*** for **4th Semester** students on **10th June 2023**.

Title of the Talk :	Semiconductor Future and Opportunities
Resource Person :	Mr. Sunil Kumar, Founder, Vivarthan Technologies
Targeted Audience :	4 th Semester ECE Students
Venue :	Department Seminar Hall
Date :	10 th June 2023
Timings :	11.15 to 1.15 PM

To begin the session, Dr. L Basavaraj, IQAC Director, Professor and Head, Dept. of ECE addressed the 4th semester students regarding importance of VLSI domain and opting VLSI as a career option. He also explained various opportunities available in the semiconductor industries.

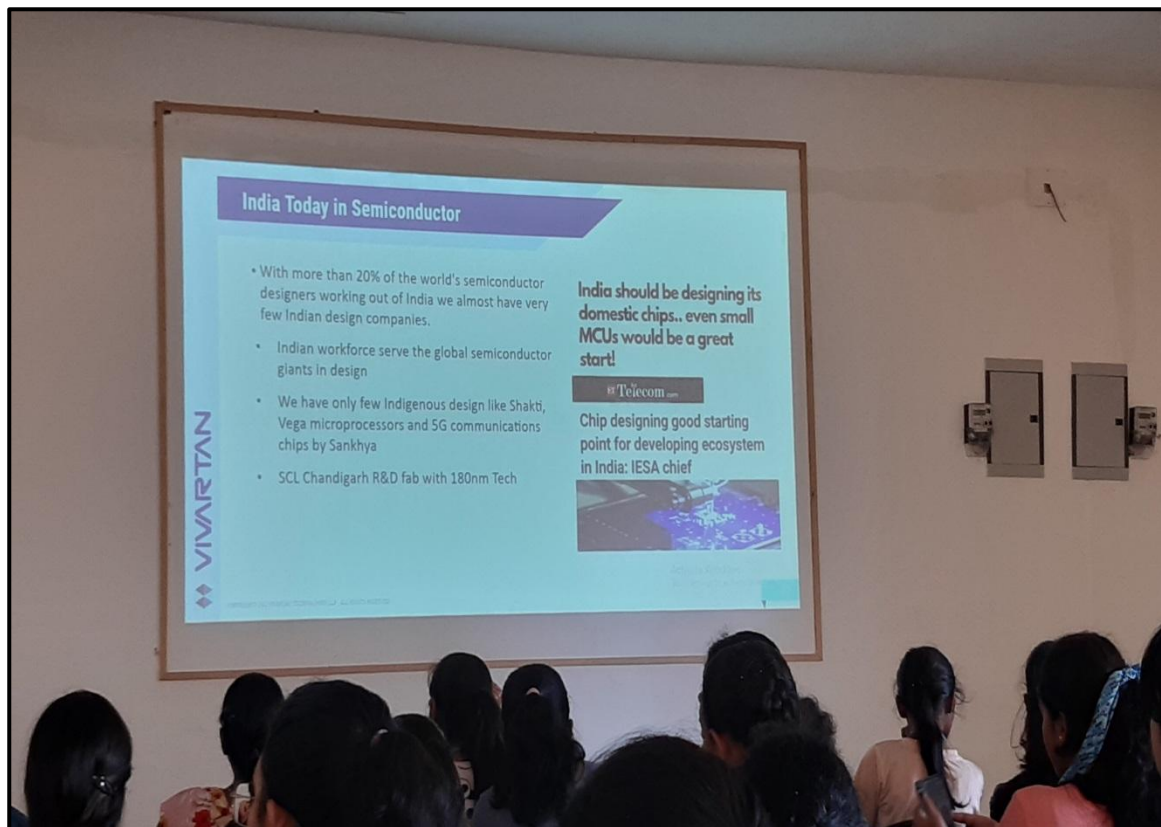


Mr. Sunil Kumar, Founder of Vivarthan Technologies addressed the students regarding 'Semiconductor Future and Opportunities'. He iterated how semiconductor technology used in critical infrastructures such as communication, power transmission, etc., that have implications for national security.

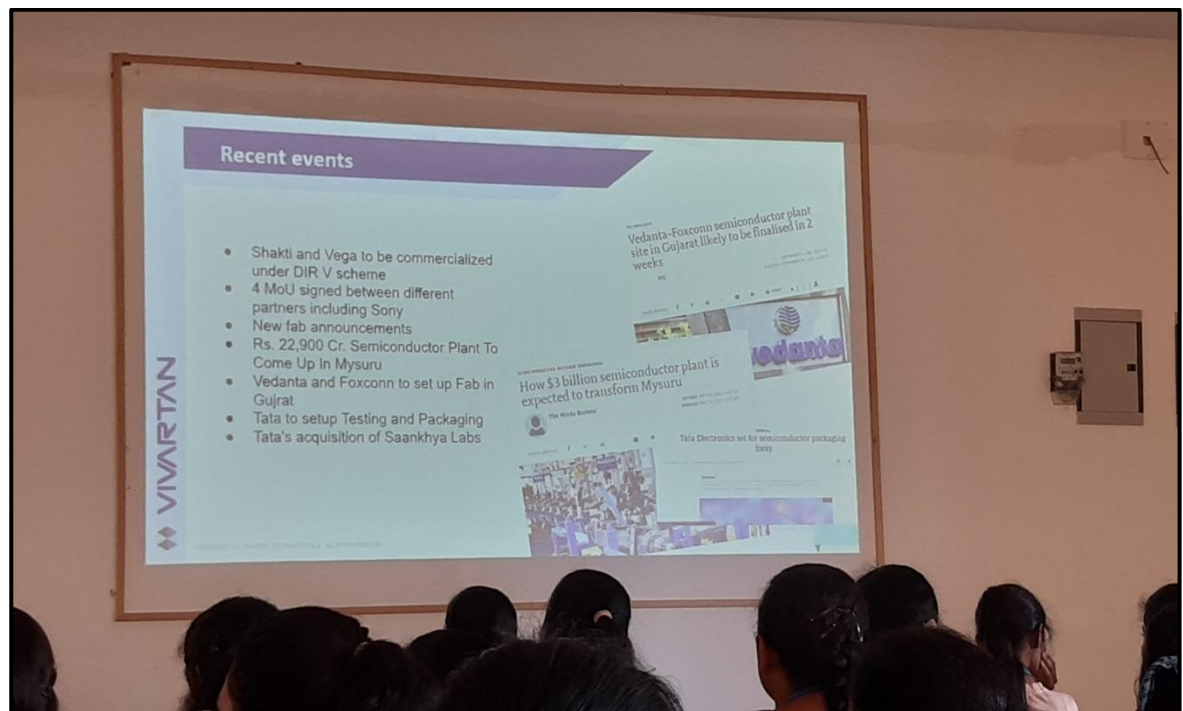
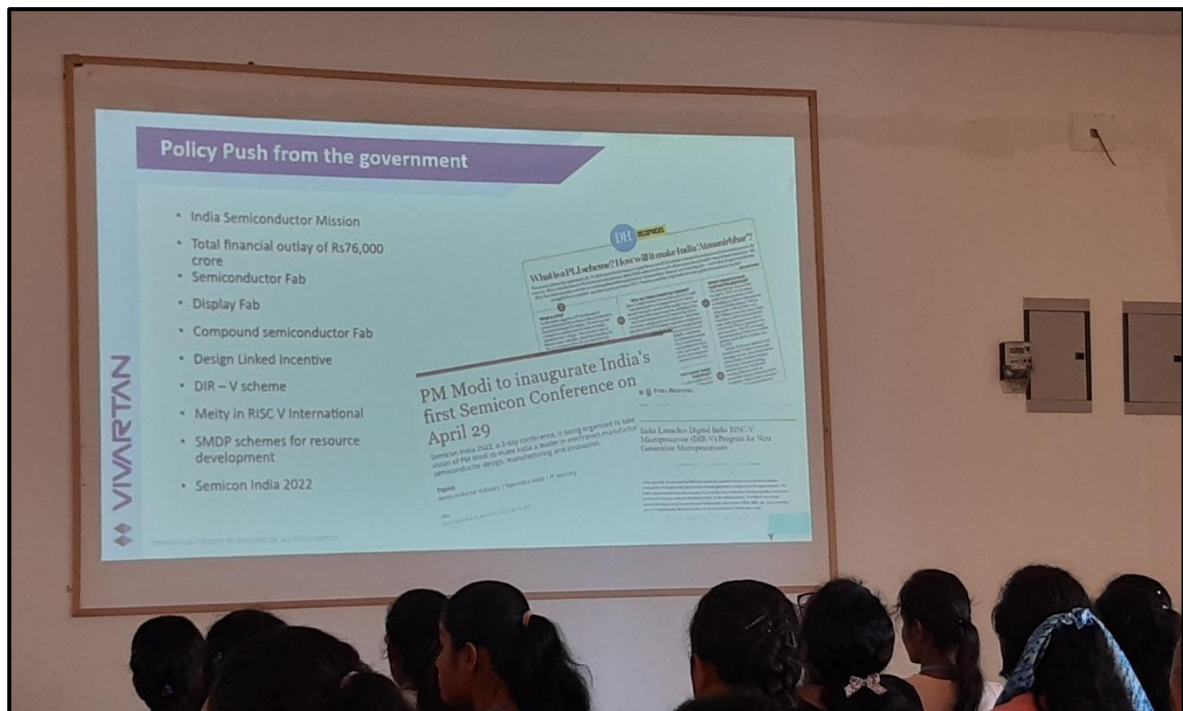


Following points were covered in the talk.

- Types of companies in the market
 - a) Product (OEM) based companies: Apple, Google, Samsung, IBM
 - b) Chip Design companies: TI, Intel, Qualcomm, Broadcom, NVIDIA, AMD
 - c) Fabrication Companies: TSMC, UMC, Intel, Global Foundries, Samsung
 - d) EDA Companies: Cadence, Synopsis, Mentor Graphics
 - e) IP and VIP Companies: ARM, Cadence, ANDES technology, Synopsis
- Chip Design Process
 - a) Chip Design Specification
 - b) Architectural Design
 - c) Behavioural & Functional Modelling
 - d) Logical Implementation
 - e) Synthesis & Testing
 - f) PNR
 - g) Design Layout
- India Today in Semiconductor



- Policy Push from the government and Recent events



- The Semiconductor decade
- Market share by applications

The talk was concluded at 1.15 PM.
