

VLSI design is a key component of the knowledge-based industry. Considering the availability of quality human resource as the key catalyst for this sector of industry and with a vision to make India a high-end VLSI design destination and to target VLSI design turnover of around US\$ 1 billion (Rs.5000 crore) by the year 2010, DIT has taken several initiatives. One such initiative in the area of human resource development is a project entitled Special Manpower Development Programme in the area of VLSI Design & related Software (SMDP-II). This programme was initiated in March 21 2005.

The programme has been evolved by a Working Group set up by DIT consisting of members from MHRD, UGC, AICTE, MAIT, NASSCOM, academic and R&D institutions. The Working Group has developed a model curriculum for M-Tech in VLSI Design/Microelectronics course for the Participating Institutions of this project. The Electronic Design Automation (EDA) tools and the hardware platform that are required for establishing VLSI design laboratory have also been suggested.

The major elements of the project are listed as below:

1. To conduct Instruction Enhancement Programme (IEP) for the faculty of PIs, by RCs.
2. To establish VLSI Design Laboratory equipped with contemporary Electronic Design Automation (EDA) Tools at all RCs and PIs.
3. To create VLSI Design Resource website and Mirror sites at RCs.
4. To launch India Chip Project for siliconization of designs done by students of RCs and PIs.

NIT Arunachal Pradesh has done MoU with DIT to become one of the PIs taking IIT Guwahati as its RC. We already have submitted a project proposal under SMDP-C2SD scheme on “Clock & Data Recovery Circuit Design for Serial Link based Communication”. This project will be under the following faculty members –

1. **Mr. Alak Majumder**, Assistant Professor, Department of ECE (Chief Investigator)
2. **Dr. S. K. Chakraborty**, Assistant Professor, Department of CSE (Co-Chief Investigator)