

**GTU & C-DAC One Day Workshop
for
Research Students and Professor
on
Embedded System: SoC based approach - Application and Case
Studies**

Gujarat Technological University (GTU) and C-DAC has a good innovative idea to conducting the M.E. programs with the industry collaboration and the learning process will be in the practical and research orientation.

Gujarat Technological University (GTU) & C-DAC jointly organized a one-day workshop on Embedded System: SoC based approach - Application and Case Studies, at GTU Chandkheda Campus on 25th January, 2014 in which participants were apprised of the basic for designing the System.

Total 43 students and faculties participated in the workshop.

Ms. Usha Banker welcomed dignitaries to inaugurate the workshop by lighting lamp.



A delightful beginning was made by **Dr. G P Vadodariya** with his motivational speech for students and faculties. He made focus on current technology available for creating programmable system on chip and also encourage the students for carrying out research work on programmable system on Chip.



A motivational speech for participants was given by **Mr. T P Singh**, Director of Bhaskaracharya Institute for Space Applications and Geo-informatics, to utilize the resources provided by each college and governments. He explain the participant's importance of hardworking for developing the nation.

Honorable Vice Chancellor of GTU **Dr. Akshai Aggarwal** addressed the participants to develop a



spirit of collaboration, compete with the world to develop new products and do a research work. He explain the participants about having discipline in our daily work and encourage them to work for country.

First technical session was started by **Ms. Khushali A. Shah** on basics of programmable system on chip. Participants were introduced with SoC(System on Chip).After that she introduced them with PsoC(Programmable System on Chip) and its advantages over FPGAs, CPLDs etc. They explained about various commercially available version like PsoC1, PsoC3, PsoC5,and also explain about newly launched version PsoC4.after wards we were given demo ,how to configure PsoC1 in there IDE PsoC Designer made by cypress.



Second technical session was introduced by **Ms. Mikita Gandhi** about brief information about PsoC creator for PsoC3 & PSoC5. She differentiate between Cypress Designer and Creator Software to Program PSoC1 using Cypress Designer and also program PSoC3/PSoC5 using Cypress Creator depending on the application. She explain the participants about the reason as to why we need to use PSoC (i.e; to reduce the overall design cycle, hence it saves a lot of time to meet the market demand).

Practical exercise took place later in the afternoon by **Christopher Parmar** and **Vivek Pandit** on how to program a chip depending on the application. The practical done was on blinking LED and Capsense (touch screen) application. In programming PSoC, we use cypress Designer for PSoC while in PSoC3/PSoC5 we use cypress Creator.



The last session was carried out by **Dr. Mihir Shah** about current research going on various Electronics and Communication Engineering and Computer Engineering. He gave the various ideas on which the participants can do the research work. He suggested them to read research papers and how systematically do the research work.

Conclusively, the whole workshop was very interactive, educative and beneficial for participant's Professional career though it was only for a day. I wish such workshop can be organised frequently so as to expose them in this changing technological world.



Report presented by:

Asst. Prof. Sunny Mujpara, & Asst. Prof. Harsh Gurjar and CDAC-GTU Team

**GTU PG School,
Ahme da bad**