



NEW HORIZON
COLLEGE OF ENGINEERING
New Horizon Knowledge Park, Ring Road, Marathalli
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade, Accredited by NBA

DEPARTMENT OF ELECTRONICS AND COMMUNICATION
REPORT ON GUEST LECTURE
TOPIC: FPGA TECHNOLOGY

The department of Electronics and Communication of New Horizon College of Engineering had organized a guest lecture on 3 February 2020 for the fourth semester students.

The lecture on the topic "FPGA TECHNOLOGY" was provided by Mr. Prafulla Galphade, senior principal program manager, Cadence Design Systems (private) Ltd. The resource person gave a two hour presentation on various FPGA technologies, their significance, working and industrial applications.

The session started with him giving an introduction on Programmable Logic Devices, their types and a briefing about the need for them; and also about look up tables and their implementation.



This was followed by an introduction to what an FPGA is, the FPGA design flow (basic architecture), its evolution and the testing process. Mr. Galphade further went on to elaborate on the topic by discussing the

process of FPGA synthesis considering the basic examples like logic synthesis, behavioral synthesis, etc and the synthesis tools.

The next subtopic covered by the speaker was the 'Circuit Compilation Of FPGA' which included explanations on:

1) Circuit Netlist and Mapping

2) The Placement Metrics

3) The Routing Process

This was followed by a discussion on the application of the available FPGA technologies in various industrial aspects which mainly covered points on the appropriate technologies adapted by the industry along with a briefing about the advantages and disadvantages of each of them.

All of these above mentioned topics were clearly explained to the students with the help of presentations. The session was an interactive one wherein the students were asked questions by Mr. Galphade relevant to various topics that he covered. He also spoke about the industry expectations of upcoming engineers.



After his presentation concluded, the students were given the chance to voice out their questions on the topics that was covered and also regarding the upcoming developments and requirements in modern technology.

The session was indeed a beneficial one which helped the students understand the perspectives of the subject.



The session concluded with a vote of thanks and presentation of a memento to Mr.Galphade for taking his time out to enlighten the students.