

The IbTIECar competition

Detailed submission guidelines (IC Design Track only)

Submission Format

Your final submission (PHASE 2) should meet the following requirements:

1. The submission will be in the format of a cover page + a six page paper outlining the project.
2. The cover page must include:
 1. Title of the design.
 2. Names and email IDs of authors.
 3. Mailing address and mobile number of the contact author.
 4. Area of the application and implementation method.
 5. Contribution of each group, if the prototype is jointly developed with non-academic parties.
 6. The camera ready submission must be written within six pages using the [IEEE 2-column format](#), including figures, tables, and references. Only Adobe PDF files will be accepted. Guidelines for the content of the submission is shown below in the "Submission Guidelines" section.
 7. It is strongly recommended that measured experimental results and a chip micrograph or a photograph of the hardware prototype be included.

Submission Guidelines

You may want to address some of the following questions and issues in your Project Report:

System Overview:

- Motivation for designing the chip or system.
- Is the implementation medium appropriate?
- Does this design satisfy the system requirements?
- What is unique about this project?
- What novel ideas or elegant solutions does the design include?
- Implementation and Engineering Considerations:
 - Specifications: functional, timing, electrical, and environmental (temperature).
 - Trade-offs: architectural and circuit trade-offs, I/O considerations, floorplanning and interconnect approaches. Emphasis should be placed on "why" part.
 - Timing and Critical Paths. What clocking scheme is used? Why?
 - Which paths are critical? Have you simulated or measured their delays?
 - Block Diagram, Logic / Circuit Diagrams, and Algorithms.
 - Photo or Final Layout Plot (annotate so various blocks can be identified).
 - Verification/Simulation (keep it brief): how did you assure that the chip would work as specified?

Testing:

- How did you, or will you, test this part?
- What test equipment did you use?
- Actual test results, if available, should be summarized.

Statistics:

- Die size.
- Total power.
- Number of transistors.
- Density of layout.
- Maximum clock speed.
- and/or other relevant parameters.