NATIONAL CHENG KUNG UNIVERSITY

College of Electrical Engineering and Computer Science

DEPARTMENT OF ELECTRICAL ENGINEERING

Advanced VLSI System Design

Fall 2024 ver.2

Project Proposal Presentation Guidelines

Due Date: 3:00 pm 11/13 (Wed.)

*** Please refer to Project Guidelines for details on the project description.

A. The proposal presentation aims to cover the following items:

- Understanding of your Proposed Project: Provide insights into the proposed project, including motivation, application background, and a technical overview in a proper length.
- Specifications for the Target IC: Outline the essential requirements and justifications for significant features of your target integrated circuit, such as input/output data bit-width, neural network models, frames per second, operating speed, encryption key lengths if applicable, throughput, and security features.
- System Architecture: Introduce your system architecture, dedicating at least four minutes to this section. The appendix page provides a sample system architecture. Use this as a foundation, incorporating additional blocks and detailing the architecture and data flow relevant to application-specific modules. Feel free to include any information about the algorithms and concepts behind your design.
- Expected Results: Define the key results you anticipate, which will help measure the progress of your design based on your targets. Explain why these metrics are essential, referring to standard benchmarks or programs relevant to the application, such as achieving an EPU performance of 50 MHz
- Credibility Enhancements: Highlight elements that can bolster your credibility and demonstrate your efforts to industry professionals.
- **Teamwork.** It shows that your team members know how to contribute to the project. The team works to organize and present the technical content.
- B. Video making. To ensure effective presentation timing and quality, each team must submit a 15-minute presentation media by the due date. There are 27 teams this semester, and each presentation lasts 13 minutes and is followed by a 10-minute Q&A. Consequently, we will accommodate a maximum of 5~6 teams per 3-hour class.
- C. PPT making. Your presentation slides should at least include the following elements:
 - Photos and names of your team members on the cover page. Everyone shall have a significant place in the presentation.
 - Explanation of the critical issues outlined in the Project Guidelines with explicit technical content.
 - Major specifications of the proposed EPU. Unless you have anything special to say, the Requirement BASE shall be completed within two slides.
 - Task assignments for all team members.
 - A Gantt chart outlining your schedule from now to the project demo.

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- All team members must be present during the proposal presentation to answer questions. Failure to do so will result in deductions from individual grades.
- D. Grading. Your grades for this part will be based on your team presentation (the submitted media) and the questions you answer during the on-site Q&A. All team members will fill out a separate contribution form after the submission. Note that individual grades will be lost if anyone does not participate with due effort.
- E. **Deliverables**. Please upload your PowerPoint file, presentation media, related documents, and the order preference form to the designated submission area for the proposal presentation.

APPENDIX

