

Competition Submission Requirements

The participating teams will design the entries based on the optional proposition and realize the projects that conform to the design plan at the time prescribed for submission of the works. The works to be submitted to the review committee include technical documents, demo video, photos, software and hardware design files, etc. The technical document is in the form of the presentation slides, and the suggested contents include but are not limited to (1) scheme demonstration, (2) difficulty and originality of works, (3) system structure and hardware implementation, (4) software design and implementation, (5) system testing and analysis, (6) summary and outlook. For specific format requirements of the technical document, please refer to the template (PPT) which can be downloaded from the Contest.

Submitted materials at all stages of the competition

- **Documentary Review** – Submit the project concept in PPT (4/6/2020):
Categorized in three parts: technical scheme demonstration, difficulty and originality of works, and system structure and hardware implementation.
- **Preliminary Submission** – Submit the preliminary project in PPT (5/24/2020):
The preliminary work should further elaborate on: technical scheme demonstration, difficulty and originality of works, and system structure and hardware implementation. Also, please explain the progress of the work, if applicable, please provide necessary documents (e.g., photos, videos, or source codes).
- **Final Selection**– Submit final project (7/10/2020):
Submission should be consistent with the requirements of the preliminary submission, with improvement of previous work, complete display of PPT, photos, videos, GIT readme.md, and source codes. Refer to the Annex for the complete submission list.
- **Final Contest & Award Ceremony (7/30/2020):**
Bring your work to the final contest and demo to the Review Committee.

Please note: all the above-mentioned documentations should be submitted to the Contest website.

Annex - Description of submission format:

1. Competition works should also be submitted to github:

- a) The participating team should register a GitHub account and uses git to submit the work.
- b) Reference templates for submission:
 - i. lbaby :
[HTTPS://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications/tree/master/lbaby_smarthome_multinode](https://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications/tree/master/lbaby_smarthome_multinode)
 - ii. lilight :
[HTTPS://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications/tree/master/lilight_smartdevice](https://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications/tree/master/lilight_smartdevice)
 - iii. Previous Winners :
[HTTPS://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications/tree/master/arc_design_contest](https://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications/tree/master/arc_design_contest)

Each participating team can submit works in accordance with the above templates, and there must be a readme.md in markdown file format to introduce the works; the contents include three parts, name, Introduction, HW / SW Setup, and User Manual.

2. Competition Submission Process

- a) First, the participating team should clone or download the benchmark code for this competition at GitHub:

https://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications

The embARC applications have already included huge amount of reference for application for the participating teams. The use of embARC application is based on embARC OSP, and the readme.md file of EMBARC applications can be reviewed for reference.

- b) Then, the files should be developed under this category:
[embarc_applications/arc_design_contest/2020](https://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications/tree/master/arc_design_contest/2020)
- c) During the development process, it is recommended not to upload directly to github, because the projects created free of charge in GitHub are open in public, this is to avoid premature disclosure of related work and to ensure the originality of the works.
- d) The participating teams should submit their works in the format of repo to GitHub at the time prescribed, and fill in the repo's hyperlinks in the Project URL column at the proposal submission website.
- e) The committee reviews the submitted works through their links and provide feedback through various channels, including GitHub.

3. List of Competition Final Submission

- a) Display PPT (use the template slide provided on the Contest Website).
- b) Display video, and upload it to the registration website. Video resolution should not be less than 640X480, total time should not exceed 10 minutes, and file size should be less than 100MB. The contents should include three parts: work principle and originality, software and hardware structure introduction, function demonstration, etc. Video can be explained for the works in subtitled Chinese.
- c) A full view picture of the entries, 5 close-up photos. A full view picture of the entries with 5 close-up photos, and the file size of the picture should not exceed 2M.
- d) GIT readme.md description files in markdown format to introduce the works; access the Internet for markdown tutorials.
- e) Software source code and scripts, C language code style with programming specification for Linux. It is recommended to check code style using checkpatch.pl script in Linux kernel before submitting; do not include a generated file by a compiler, such as debugging files, etc.
- f) Hardware schematics PDF files (if any), add watermark of the participating team.

4. Notes

- a) For the competition, the github and git is the core of the competition, and it is recommended that all participating teams learn the relevant foundation. Please refer to "GitHub Entry Practice" (search the Internet to download the file).
- b) GIT readme.md file can be in English or Chinese, preferably in English.
- c) Make sure the submitted work can be compiled; the committee will download the source code for compilation when they are reviewed.
- d) All winning entries will contribute to embARC application. If the participating team does not accept it, the committee will consider the submitted work invalid.
- e) All finalists should resubmit their works after the modification in accordance with the jury's opinions.
- f) All winning entries will eventually be incorporated into embarc applications in the form of pull request for promotion.
- g) For detailed development and method of submission, please refer to: https://github.com/foss-for-synopsys-dwc-arc-processors/embarc_applications/blob/master/github/CONTRIBUTING_APPLICATIONS.md