

**MICRON**

**MIMORY**

**AWARDS**

**Si + Idea**

**Micron Mimory Awards**

**Information Pack**

## **Event Mission**

**Promotion of innovation in the semiconductor industry to bring about technological progress and industry upgrade**

Through the Mimory Awards, we hope to encourage university students to explore new concepts, technologies, and solutions in the field of semiconductors. Such exploration will not only contribute to advances in semiconductor technology but also stimulate the development and upgrading of the industry as a whole. We believe that the competition will give competitors the opportunity to demonstrate their creativity and professional knowledge. They will also connect and cooperate with talented people from different backgrounds which will in turn inspire even more outstanding ideas and innovations. We hope this competition will become a platform for innovation in the semiconductor sector, and lead to technological breakthroughs that bring more value and have a greater influence on society.

## **Competition Theme**

**Enriching the lives of all humanity  
through changes in how information is  
used**

## **Competition Rules**

### **Eligibility**

1. Registration is open to all current full-time students in the senior (4th) year or above (including graduate and post-graduate students, but excluding in-service students and teachers) at universities and colleges in Taiwan, regardless of their nationality.
2. Each team may have up to four members. Teams with diverse backgrounds made up of people from different disciplines/ nationalities/ genders/ years/ faculties/ universities are encouraged.

3. Each team must have a current member of a university faculty member as their supervisor. There is no limit on the number of teams that each supervisor can advise.

### **Registration Category**

1. Advanced Process Technology Development Category (includes but is not limited to the following topics: Development of Next-Generation Memory Processes, Development of Logic Processes, Development of Third-generation Semiconductor Processes, Advanced Packaging Process Technology, Development of 3D IC Process Technology, High-Bandwidth Semiconductor Process Technology)
2. Next-Generation Semiconductor Applied Materials Category (includes but is not limited to the following materials: Gallium Arsenide (GaAs), Gallium Nitride (GaN) and Silicon Carbide (SiC) based Next-generation Semiconductor Materials, Advanced Yellow Light Resist Materials, Advanced Packaging Application Materials, Process Chemicals, Special Process chemicals)
3. Component Design and Development Category (includes but is not limited to the following topics: Memory Component Circuit Design, Simulation Technology Development)
4. Semiconductor Production and Manufacturing Category (includes but is not limited to the following topics: Advanced Measurement Technology, Development of Real-Time Process Monitoring Technology, Smart Manufacturing, Development of Automation Technology, ESG Sustainability)

### **Industry Advisor**

1. Industry advisors will be provided during the semi-finals. Student teams are the focus of the competition so industry advisors will only advise rather than direct. All teams that progress to the semi-finals may choose whether they wish to consult with the industry advisor or not.
2. Consultations with the industry advisor will be conducted online via ZOOM video conferences. Teams can arrange for a consultation with the industry advisor if necessary.
3. In the interest of fairness, the contact details will be provided separately

to teams in the semi-finals that are interested in a consultation. Industry advisors will only offer advice and will not be appointed as judges for scoring.

### **Event Timetable**

The timetable will be as announced by the Organizer. The Organizer reserves the right to make adjustments to the dates. Experts from the industry and academia will be invited to serve on the judging committee for the preliminaries and as online judges (except those serving as team supervisors)

Competition Stages	Time	Description
Online Registration (Review of Eligibility)	From now to January 13, 2025 (Mon)	<ol style="list-style-type: none"> <li>1) Registrations are to be conducted online. Please follow the online registration form and provide all necessary information including the competition category, team name (do not include school name, faculty and personal information), team members (team captain and team members), contact details (contact address, contact number, mobile number, contact person), entry name in Chinese and English, supervisor, the name of the school and faculty in Chinese and English (please use the formal name for the school). Teams can log into the competition website and update their details before January 13, 2025 (Mon). <b>Revisions may only be made once.</b></li> <li>2) Please also fill out the <b><u>Letter of Confirmation on Registration Eligibility</u></b> (see Attachment 1) during registration. Supporting documentation is to be scanned and uploaded by the team captain on behalf of the team.</li> <li>3) If registration was successful, a Team ID will be generated for each team. Please use the Team ID for logging in and filling out information in the future.</li> <li>4) Eligibility for the preliminary round will be reviewed</li> </ol>

		by the Micron project team on a <b>rolling basis</b> . Teams may submit their preliminary proposal once they receive notice that they passed the review.
Preliminary Proposal Submission	Submission window is from passing of eligibility review to <b>23:59</b> on February 23, 2025 (Sun)	<ol style="list-style-type: none"> <li>1) Submissions and updates: Please refer to the Proposal Submission Guidelines for the proposal format. Submissions can be uploaded and revised by logging into the competition website before 23:59 on February 23, 2025 (Sun). <b>Each team may revise the contents of their proposal once.</b></li> <li>2) Preliminary Proposal Naming Format: Team ID - Team Name (e.g. A01 - Micron Star)</li> </ol>
Announcement of Semi-Finalists	Announcement on March 10, 2025 (Mon)	Entries in each category will be scored online by each judge separately. The Preliminary Judging Committee will then discuss the list of candidates. A total of 16 teams with 4 teams from each category will be chosen for the semi-finals.
Semi-Finals	March 26, 2025 (Wed)	Semi-Finals Format: An online ZOOM video-conference will be held for each team to conduct a presentation as well as show or demonstrate their project. <b>The Oral Examination may be conducted in Mandarin.</b> 30 minutes is allotted to each team including 20 minutes for the presentation, and 10 minutes for questions and suggestions from the judges.
Announcement of Finalists	Announcement on April 7, 2025	The judges will score each team on the overall performance of their written preliminary proposal and their performance during the semi-finals. The judges will then confer to nominate 3 teams from each category for a total of 12 teams to proceed to the Finals.
Final / Award Ceremony	April 30, 2025 (Wed)	<ol style="list-style-type: none"> <li>1) The Final and Award Ceremony will be held on the same day. The winners list and rankings will also be announced.</li> <li>2) Final Format The Final will be conducted through presentations and oral examinations. <b>The Oral Examination may</b></li> </ol>

		<p><b>be conducted in Mandarin.</b> 30 minutes is allotted to each team including 20 minutes for the presentation, and 10 minutes for questions from judges.</p> <p>3) Judging Method: Judging is to be conducted in-person. The venue is expected to be at Tsing Hua University (to be announced). The Final scores will be sealed after the competition with the rankings announced at the Award Ceremony on the day.</p>
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### **Judging Criteria**

Preliminary Round (each item scored from 1 ~ 10). “Diversity” is a bonus item to encourage greater diversity and collaboration in teams.

<b>Item</b>	<b>Definition</b>	<b>%</b>
<b>Completion and quality</b>	Completeness of proposal and quality of presentation The problem and target are clearly defined	<b>15%</b>
<b>Data analysis</b>	Thoroughness of supporting evidence and data collection Effective use of tools for data analysis Usability	<b>25%</b>
<b>Innovation</b>	The logic and correctness behind the formulation and selection of proposal Creativity Actual benefits and influence	<b>35%</b>
<b>Feasibility &amp; Difficulty</b>	Construction of feasibility model, verification of root cause, and analysis of variance	<b>25%</b>

<b>Diversity</b>	The criteria for the awarding of bonus points will be as defined by the judging committee to encourage cooperation between students from diverse backgrounds including different disciplines/ nationalities/ genders/ years/ faculties/ schools.	<b>5% (Bonus item)</b>
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Semi-final accounts for 30% of total score; final accounts for 70% of total score (each item is scored from 1 ~ 10)

<b>Item</b>	<b>Definition</b>	<b>Weighting</b>	
		<b>Semi-Finals</b>	<b>Final</b>
<b>Completion and quality</b>	Completeness of proposal and quality of presentation The problem and target are clearly defined	<b>10%</b>	<b>50%</b>
<b>Data analysis</b>	Thoroughness of supporting evidence and data collection Effective use of tools for data analysis Usability	<b>15%</b>	
<b>Innovation</b>	The logic and correctness behind the formulation and selection of proposal Creativity Actual benefits and influence	<b>15%</b>	
<b>Feasibility &amp; Difficulty</b>	Construction of feasibility model, verification of root cause, and analysis of variance	<b>10%</b>	
<b>Demonstration &amp; Presentation</b>	Demonstration Presentation	<b>50%</b>	<b>50%</b>

## **Competition Rules**

1. By registering for the competition, you consent to provide your competition entry and personal contact details to the Organizer and Co-Organizers for the purpose of reviewing the entered project, and making of arrangements for the event.
2. The project proposal may be a dissertation, research report, or class project report. Projects that have already finished in the top three of other international and national competitions before the registration deadline for this year's competition, as the 1st Micron Mimory Awards, are not eligible.
3. The principle of anonymous entries is to be followed. The contents and file names of all written information (including the Final presentation), photos, images, and audio-visual materials may not contain the school logo, or mention the name of the school, faculty, or supervisor. Points will be deducted for any violations. Disqualification may be recommended by the judges for serious breaches.
4. In the event of any plagiarism, competitor ineligibility, violation of the competition rules, or violation of the rights (including intellectual property rights) of the Mimory Award's Organizer, Implementer, or other parties, the offending team may be disqualified at any time. If the team has already won an award, they will be required to return all prize money and trophies that they have collected.
5. Patent rights belong to the competitor. The Organizer has the right of first refusal.
6. **The names and resumes of competitors will be recorded in the Micron Taiwan talent database. Award winners will receive preferential treatment in future interviews and recruitment.**
7. Teams agree to authorize the Organizer to take photos or video recordings during the event, or to ask teams to provide related photos or videos for the recording, promoting, and marketing of this event or related activities. The aforementioned photos or videos may also be published in any form.



# Submission Format and Content

Please adhere to the following format while preparing the Proposal and Presentation. All of the contents must be in English.

## **Preliminary Proposal**

Must include one cover page (contents as described above) and the project contents. The “recommended” Chinese font is Microsoft JhengHei. The “recommended” English font is Arial. File size must not exceed 30MB. Please convert to PDF then submit by uploading the file to the competition website.

**Proposal Coverage Page:** The coverage page must include the competition topic, competition category, Team ID (to be notified after eligibility review), as well as the names of the supervisor, team captain, and team members.

**Project Content:** There is no page limit for project content but it must contain, at a minimum, the following items:

1. Project Title
2. Research background & motivation or benefits
3. Introduction
4. Experimental design
5. Experimental results
6. Project summary & Future work
7. Reference

## **Semi-Finals / Final Presentation File**

Once students receive confirmation that they have proceeded to the next round, they may adjust the presentation’s structure, page count, and format without any restrictions.

## Awards and Prize Money

Award Name	Advanced Process Technology Development Category	Next-Generation Semiconductor Applied Materials Category	Component Design and Development Category	Semiconductor Production and Manufacturing Category
Gold Award	<b>800,000</b> (200,000 per category)			
Silver Award	<b>400,000</b> (100,000 per category)			
Excellence Award	<b>160,000</b> (40,000 per category)			
In addition to the above prize money, finalists will also be invited to visit Micron and offered an interview for a full-time position/internship				

\*Unit: New Taiwan Dollar

**Competition website**

**[www.micron-mimoryawards.org.tw](http://www.micron-mimoryawards.org.tw)**



# Attachment 1

## The 2<sup>nd</sup> Micron Mimory Awards Letter of Confirmation on Registration Eligibility

### Student Documentation

Please provide the front and reverse of student ID cards with registration mark for the First Semester of 2024, or certificate of enrollment issued by the school

Team Captain	Student ID (front)	Student ID (reverse) or certificate of enrollment
Team Member 1	Student ID (front)	Student ID (reverse) or certificate of enrollment
Team Member 2	Student ID (front)	Student ID (reverse) or certificate of enrollment

Team Member 3	Student ID (front)	Student ID (reverse) or certificate of enrollment
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