

2025/07/01

NSTC-BMFTR Joint Research Program on Advanced Chip Designs and Microelectronics

APPLICATION FORM

1. Cover Sheet with General Information

1.1 Project titles and duration:

Title in English (Acronym):	
Title in Chinese:	
Title in German:	
Duration:	from DD/MM/YY to DD/MM/YY

1.2 Project PIs:

Taiwanese Principal Investigator

Name (Chinese):	Name (English):
Institution:	Department:
Position:	Tel: Email:
Signature:	

German Principal Investigator

Last Name:	Given Name:
Institution:	Department:
Position:	Tel: Email:
Signature:	

1.3 Project costs and grant:

Principal Investigator:	Total Costs:	Planned Grant:
Taiwan (Costs in NTD):		
Germany (Costs in EUR):		

1.4 Category:

- ☐ EDA tools for Chip Designs, Heterointegration and Advanced Packaging
- ☐ Chips for Edge-AI, Automotive Driving and Emerging Applications
- ☐ Novel Interconnects for High-Throughput and High-Bandwidth Applications, such as Silicon Photonics, 3D Stacking, Chiplets

1.5 Key words:

2. Abstract of Research Project

Please describe briefly the proposed research project first, including the aims, executive plan, expected results, potential benefits and impacts to both sides from this collaboration and utilization of the results within one page.

3. Budget requested for entire term of project and financial plan:

3.1 Budget requested

Taiwanese side:

Categories	Principal Investigator	First year from / / to / / (M M / Y Y)	Second year from / / to / / (M M / Y Y)	Third year from / / to / / (M M / Y Y)	Budget Requested (NT\$)
project					
Total					

German side:

Categories	Principal Investigator	First year from / / to / / (M M / Y Y)	Second year from / / to / / (M M / Y Y)	Third year from / / to / / (M M / Y Y)	Budget Requested (EUR)
Project					
Total					

3.2 Partner-specific detailed financial plan (personnel, materials, equipment, travel and stays, etc.)

4. Research Proposal

4.1 Aims and targets

- Motivation, scientific and technical objective of the project
- Industrial and social relevance of the subject
- Presentation of the project partners including key competencies, capabilities, infrastructure

4.2 Current state of the art and innovations

- Problem description and initial situation (comparison with the international state of the art, patent situation)
- Solution approach and its advantages beyond the current state of the art
- Innovations and indication of innovation level
- Qualification and previous work of the involved partners

4.3 Methodology / Executive

- Description of the work packages and the solution approach
- Partner-detailed work plan including indication of personnel resources (i.e. person-month) per work package and partner, timeline
- Milestones and abort criteria (i.e. after 12, 18 and 24 months)
- Cooperation between the project partners (i.e. individual contributions and activities to the project) and added value by the international cooperation if necessary cooperation with third parties

4.4 Expected results

- Description of expected scientific results, scientific and economic prospects of success
- Application and utilization potential of results in science and/or industry

4.5 Potential benefits and impacts

- Planned measures for transfer of results to industry (with timescale), planned cooperation in follow-up projects (compatibility)
- Scientific and, if possible, economic exploitation of the results created within the project
- Benefits of solution approach for Taiwanese and German semiconductor ecosystem, i.e. technological sovereignty, skilled workers and talents
- Leverage and widespread impact of target solution

4.6 Student exchange

- Detailed plan of on-site research and student exchange including description of student contribution to project and estimated costs for accommodation, travel, personnel (usually 1 stay per student and project for a period of 6 months)

- Significance and perspectives for talents and skilled workers

4.7 Necessity of funding

- Identification of specific scientific, technical and economic risks with justification for the need for state funding
- Search results for equivalent funding opportunities in the international and European environment

5. Outputs of collaborations

Please explain the proposed output of the research, and the plans for publication or other dissemination. Please also state that there is a general agreement about a policy between the two groups concerning publication of results and the attribution and exercise of Intellectual Property Rights (IPR).

6. Annex

6.1 Curriculum Vitae of all participants (main investigators) of the project (German and Taiwanese side)

6.2 List of the most important publications of the working group

(Taiwan PIs should include the Annex in their application form submitted on-line to NSTC.)