Insik Lee

・M.S. course
・Mechanical Engineering
・Korea Advanced Institute of Science and Technology (KAIST)
・Office: Mechanical Engineering Building (N7-4) Room #3101
・Email: tomykevin@kaist.ac.kr

・Research interest:
1. 2.5D/3D semiconductor thermal management
2. Machine learning based optimization
3. Multi-phase jet-impingement cooling

Academic Experiences

Korea Advanced Institute of Science and Technology (KAIST) M.S. (2024.02 – Present)

Korea Advanced Institute of Science and Technology (KAIST) B.S. (2020.02 – 2024.02)

Journal Publications:

Conference Presentations:

1) Hyunho Cho, **Insik Lee**, Seungwoo Kim, Soosik Bang, Jaechoon Kim and Youngsuk Nam, "Multi-objective design optimization of direct liquid cooling system for multi-chip semiconductor package using active learning", *KSME Spring Conference*, Korea, Apr 19-22, 2023.

2) Hyunho Cho, **Insik Lee**, Seungwoo Kim, Soosik Bang, Jaechoon Kim and Youngsuk Nam, "An active learning approach to performance optimization of jet impingement – based cooling module for chiplet semiconductor package", *KSFM Summer Conference*, Korea, July 5-7, 2023.

3) Hyunho Cho, **Insik Lee**, Seungwoo Kim, Soosik Bang, Jaechoon Kim and Youngsuk Nam, Optimization of thermal management performance of direct liquid cooling module for chiplet packages using active learning and hierarchical exploration, *KSFM Winter Conference*, Korea, Nov 29 - Dec 1, 2023

Award:

Patent:

Research Topics:

1) 2.5D and 3D Semiconductor Thermal Management System Design

2) Thermal Optimization with Neural Network based Machine Learning Techniques

3) Multi-phase Jet-Impingement Cooling for Semiconductor Devices