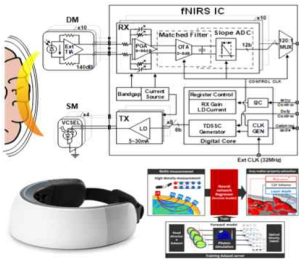
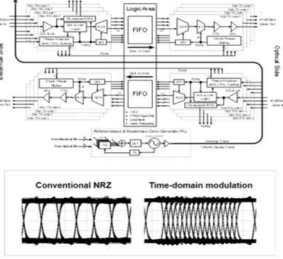
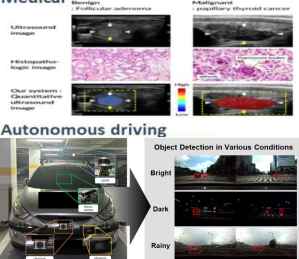


<div><div><div>NAIS</div><div>Nanoscale Advanced Integrated Systems LAB</div></div></div>		<div><div>■ Contact information</div><div>Professor : hmbae@kaist.ac.kr TEL : 042-350-3489</div><div>Lab. : baelab@kaist.ac.kr TEL : 042-350-3489</div><div>Website : http://nais.kaist.ac.kr</div></div>
<div><div>■ Current state of the Lab. (in 2025 Spring Semester)</div><div>Postdoctoral Fellows : 0 PhD Students: 9 Master's Student: 8</div></div>		
<div><div><div><div>fNIRS System</div><div></div><div>■ Research Areas</div></div><div><div>High-Speed Circuit</div><div></div></div><div><div>Ultrasound System</div><div></div></div></div></div>		
<div><div>■ Recommended courses & Career after graduation</div><div>One of the most important virtue at NAIS lab is 'craftsmanship'. For this, NAIS lab focuses on research and development involving communication circuits, and it is recommended that students take courses in circuit, digital, and communication-related subjects. Graduates of NAIS lab pursue careers both in industry and academia. They seek to enhance the degree of completion of their own research at NAIS lab.</div></div>		
<div><div><div>■ Introduction to the Lab</div><div>NAIS lab was established in 2009. It is constantly challenging and pursuing progress in many areas of research. The doctorate and the masters degree students are working in a friendly atmosphere. Students enjoy athletic activities and other hobbies. The lively atmosphere of the lab makes it possible for the students to devote themselves to research and to enjoy school life.</div></div></div>		
<div><div><div>■ Introduction to other activities besides research</div><div>We like to explore famous restaurants around Daejeon. Lab members are also active in physical activities.</div></div></div>		
<div><div><div>■ Recent research achievements ('22~'25)</div><div><div>[1] WooHyun Kwon, Hyosup Won, Taeho Kim, Sejun Jeon, Soon-Won Kwon, Hail Song, Hanho Choi, Bong-Jin Kim, Huxian Jin, Jun-Gi Jo, Woosang Han, Gain Kim, Jinho Park, Hyeon-Min Bae, "A 26-Gb/s Framed-Pulsewidth Modulation Transceiver for Extended Reach Optical Links", IEEE Journal of Solid-State Circuits (JSSC), Feb. 2024.</div><div>[2] Youngmin Kim, Myeong-Gee Kim, Seok-Hwan Oh, Guil Jung, Hyeon-Jik Lee, Sang-Yun Kim, Hyuk-Sool Kwon, Sang-Il Choi, Hyeon-Min Bae, "Quantitative Assessment of Thyroid Nodules through Ultrasound Imaging Analysis", International Conference on Medical Image Computing & Computer Assisted Intervention (MICCAI), Oct. 2024. - (early accept, top 11%)</div><div>[3] Bumjun Koh, Sangseong Kim, Byungju Park, SeongKwon Yu, Liang Yuqing, Jimin Lee, Hyeon-Min Bae, "Classifying the Prefrontal Cortex Reasoning Process Using CLEVR Cognitive Tasks", fNIRS 2024, Oct. 2024.</div><div>[4] Gyeongrok Lim, Jeong-ui Hong, Hyeon-Min Bae, "Bat-VUFN: Bat-Inspired Visual-And-Ultrasound Fusion Network for Robust Perception in Adverse Conditions", IEEE International Conference on Robotics and Automation (ICRA), May 2025. - Best Conference Paper Award Finalist</div></div></div></div>		