Low Power Subthreshold LSI, MOSFET based Sensor, and IoT/ICT System Assistant Professor Tomochika Harada



Content:

LSIs (Large Scale IC) are necessary for our life because these devices are built in any electronics systems, such as mobile phone, personal computer, car, and etc. However, power consumption of LSI systems is very important. If a power consumption realizes very low, they can achieve long term and no heating operation (more than 1 year and no heat sink) using battery or limited-power supply unit. Thus, I'm now studying three research topics.

 (1)Ultra-Low Voltage Analog/Digital Integrated Circuits using Subthreshold Region (nano-order ampere region)
(2) MOSFET based Semiconductor Sensor and Circuit Device as the Common LSI and Sensor Platform Design
(3) IoT/ICT based Low-Power Signal Processing System and Data Analysis

Appealing point:

It is the only my lab where you can acquire a wide range of knowledge, from sensor devices to electronic circuits, to the construction and operation of systems and networks that make full use of IoT / ICT! Please contact me, and let's study together!

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