



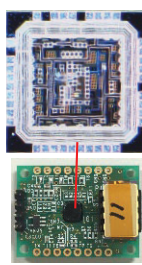
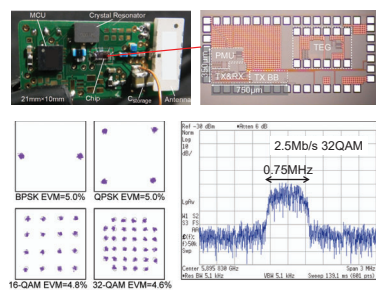
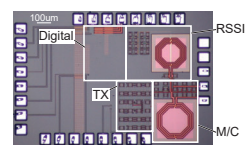
RF/Analog Circuits and Integrated MEMS for IoT

Nano Sensing Unit, FIRST
Applied Electronics Research Core

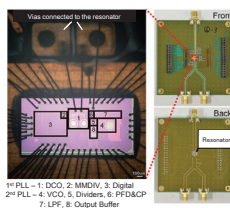
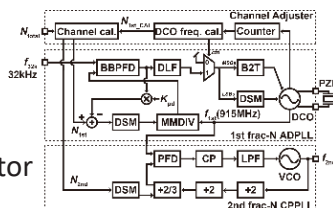
<http://masu-www.pi.titech.ac.jp>

- Ultra Low Power ($<1\mu\text{W}$) RF/Analog Circuits
- High Sensitivity ($< \mu\text{G}$) MEMS Accelerometer
- Low Power ($<1 \mu\text{W}$) AI Chips for Time Series Data Processing
- Low Noise Synthesizer, Small Atomic Clock
- Cow Monitoring System

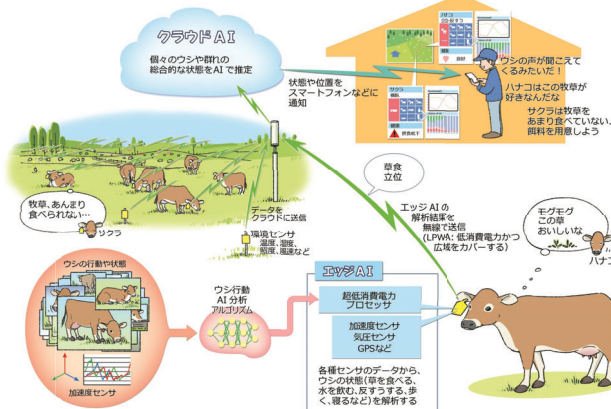
Integrated Circuit & RF Technology



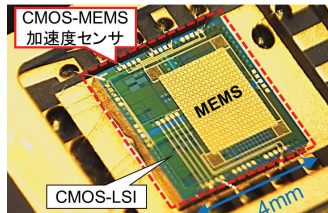
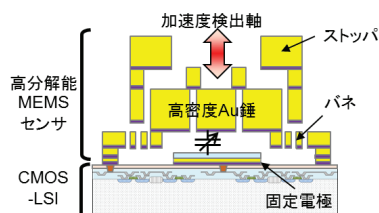
Low Noise Synthesizer Exploiting Piezo Resonator



Agriculture & Husbandry



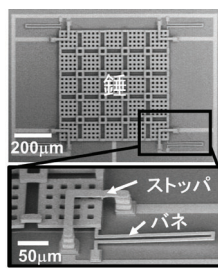
MEMS Accelerometer With micro-G Resolution



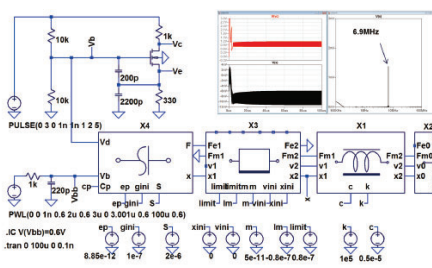
Integrated CMOS-MEMS

Energy Harvesting Device

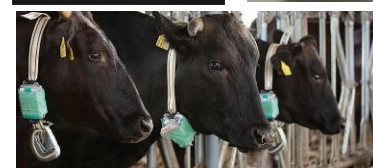
Heterogeneous Integration (CMOS-MEMS)



MEMS Accelerometer



CMOS-MEMS Co-Design



Medical & Health Care