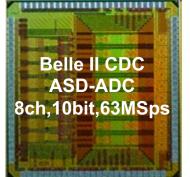
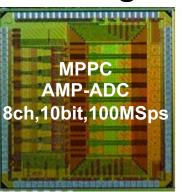
Masaya Miyahara

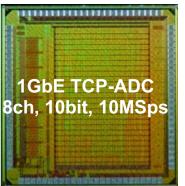
2017~ Associate Professor in IPNS, KEK

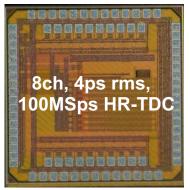
Research area: Analog Mixed signal LSI and its applications







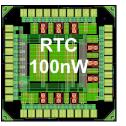




Masaya Miyahara

Collaboration with Industry



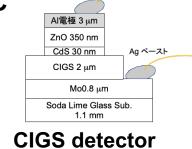




Activity 1. Read-out ASIC (collaborate with PIs) Authorized PIs)

Ex. Rad-hard detector read-out ASIC





Am-241, α particle

Activity 2. Design automation for Analog LSI

ASIC development issue

- Long TAT
- Difficult to fix the bug
- Engineer Education(Analog 10 years)

Concepts

- Performance scalable
- Process scalable
- Effective use of past works (know-how)

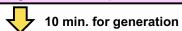
Design Spec.
Resolution N
Conv. Rate F_S
Ref. voltage V_{FS}
:

Process Data
Foundry X corp.
Technology Y nm
Metal layer Z
:



nthesis platform

Analog circuit synthesis platform



Schematic, Symbol, Layout, Testbench



1 week for verification

Submit the GDS data to the foundry