

Intelligent systems for particle detectors in environmental applications and High-Energy Physics



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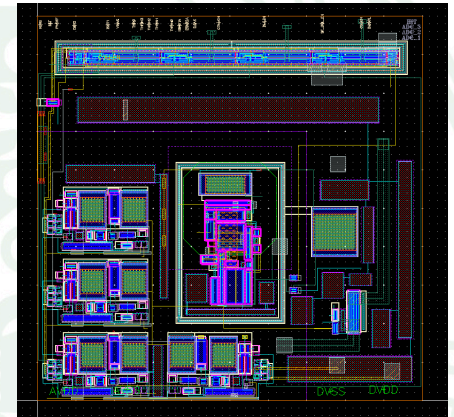
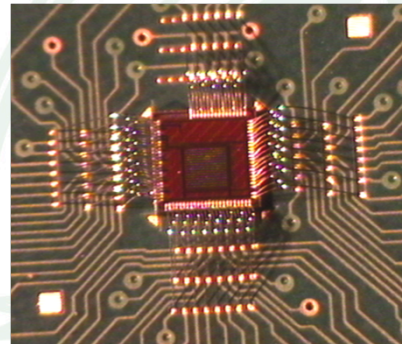
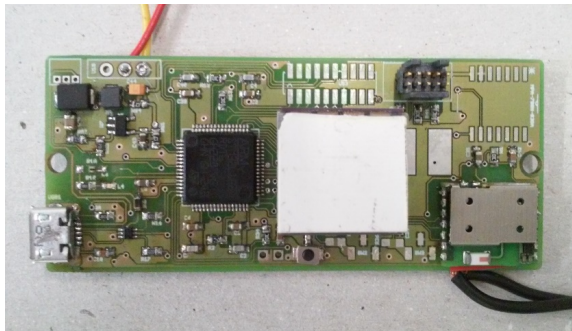


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Abstract

1. *Development of a portable radon detection system*

- Continuous and accurate indoor Radon concentration and environmental data monitoring;



2. *Intelligent signal processing ASIC design for next generation of pixel devices in large instrument **

- design of a synchronous analog processor in a 65 nm CMOS technology, conceived for pixel detector at the HL-LHC experiment upgrades and with applications to other pixel devices as for instance in Medical Physics.