



technology

TECHNOLOGY BRIEF

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Medipix2

The Medipix2 ASIC is a high spatial, high contrast resolving CMOS pixel read-out chip working in single photon counting mode. It can be combined with different semiconductor sensors which convert the X-rays directly into detectable electric signals. This represents a new solution for various X-ray and gamma-ray imaging applications.

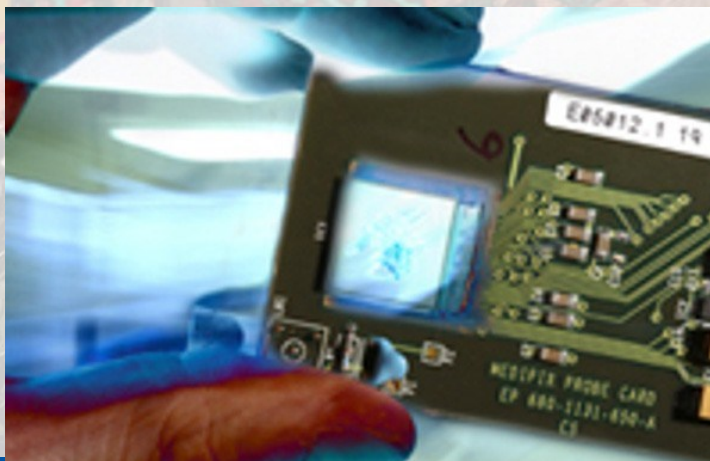
The core concept of the Medipix2 chip was originally invented for pattern recognition in tracing of particles in the LHC. Since then the technological platform has evolved and is being developed in different application specific directions.

Applications

- Life Sciences
- Digital Autoradiography
- Astrophysics
- Various X-ray and gamma-ray imaging applications
- Neutron imaging
- Diffraction analysis

Features

- The chip is designed to accept either positive or negative charge input
- A window of energy can be selected through the pixelwise adjustment of upper and lower threshold
- Pixel size reduced to 55 microns



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