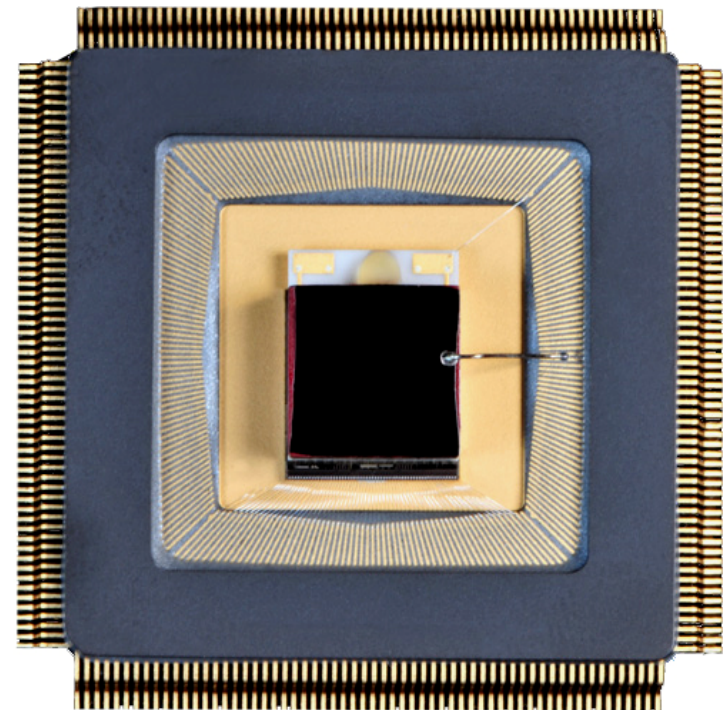




IMELDA™ PIXEL DETECTORS



Nova R & D Inc. 833 Marlborough Avenue, Suite 200
Riverside, CA 92507-2133, USA
Phone: (951) 781-7332 Fax: (951) 781-4858
Email: sales@novarad.com Web: www.novarad.com



IMELDA™

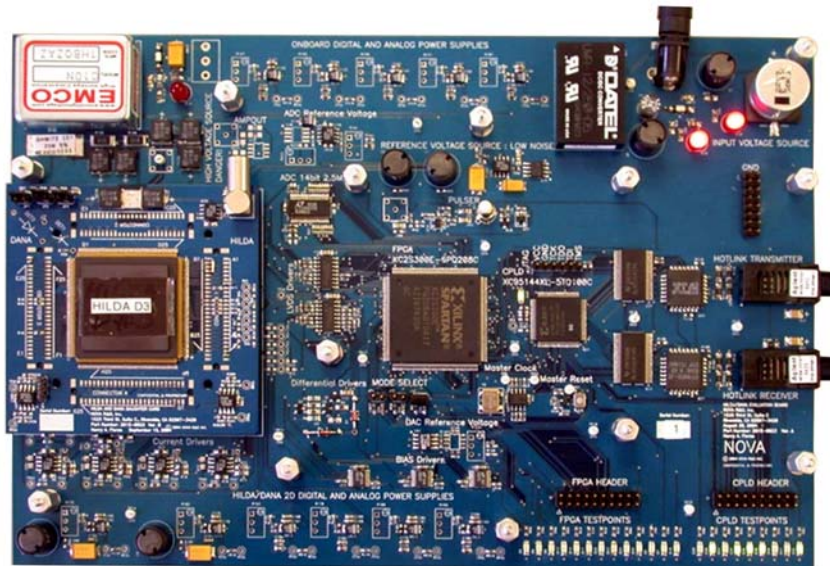
2D array digital and multispectral imaging

IMELDA is a solid state pixel readout ASIC with a 16 x 16 array of 500 μm x 500 μm pixels with 8 energy bins per channel.

IMELDA is suitable for high resolution, high dynamic range industrial or medical x-ray imaging. High contrast can be achieved through photon counting materials information can be extracted through the use of multiple energy bins.

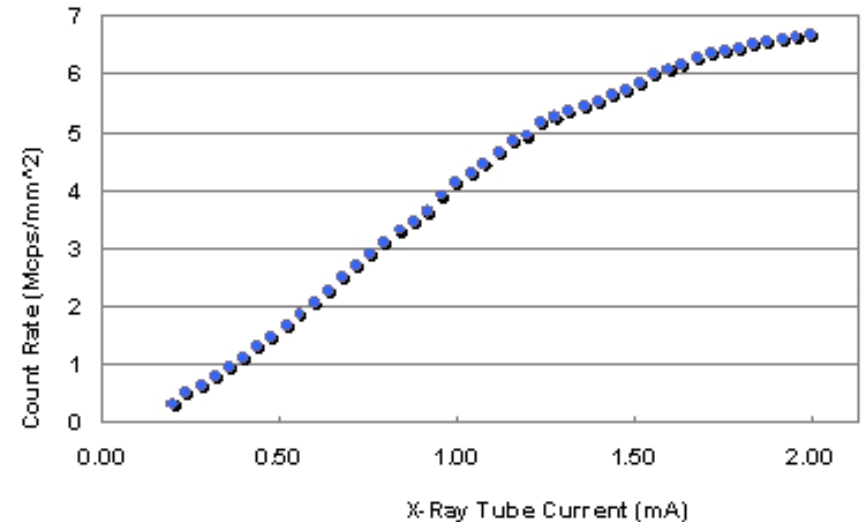
IMELDA Development Kit

Includes mother board, daughter board, ASIC and high-speed I/O interface, firmware and software. Other options available. Call for quote.



NOVA R & D Inc.

IMELDA Evaluation System



Features:

- 2×10^6 counts/second per channel count rate capability
- 200 keV input energy range
- 16 bit counter dynamic range
- Comparator thresholds, gains and offsets are digitally adjustable
- Externally adjustable, 100 ns to 2 μs pulse decay time
- User-controlled test signal input and analog monitor output for testing purposes
- Input loading capacitance optimized for 0.5 pF
- Frame readout (all counters stop, longer dead time)
- Raster readout (only the counters in the channel being read stop, shorter dead time)
- Readout can be limited to fewer than eight counters per channel and to any (contiguous) range of channels, to reduce dead time
- All I/O pads located on one side to simplify tiling
- 1 W nominal power consumption