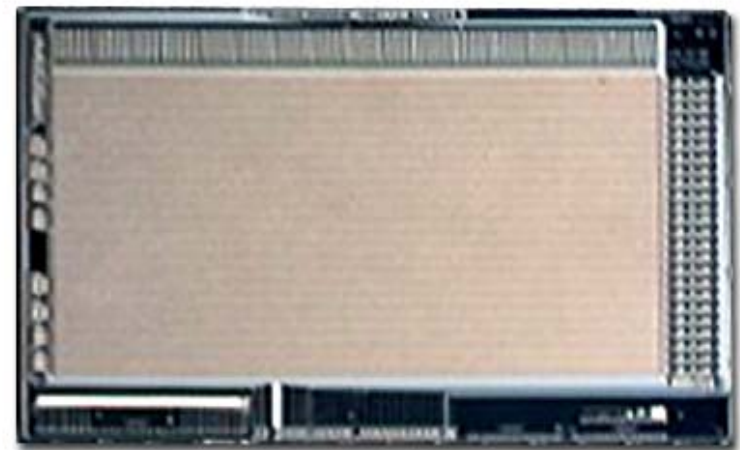




MARY™ X-ray Pixel Detector ASIC chip



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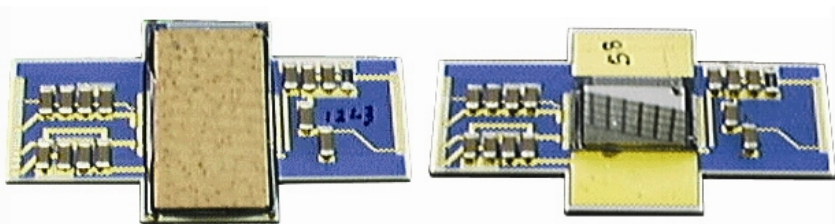
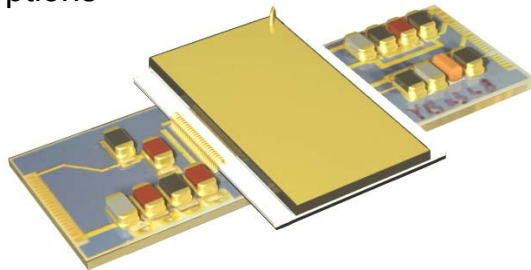
MARY™

X-ray Pixel Detector

MARY is a solid state pixel detector readout ASIC with 192 x 384 array of 50 x 50 μm pixels for high resolution, high dynamic range industrial or medical x-ray imaging. A version with a 64 x 192 array of 100 x 100 μm pixels is also available.

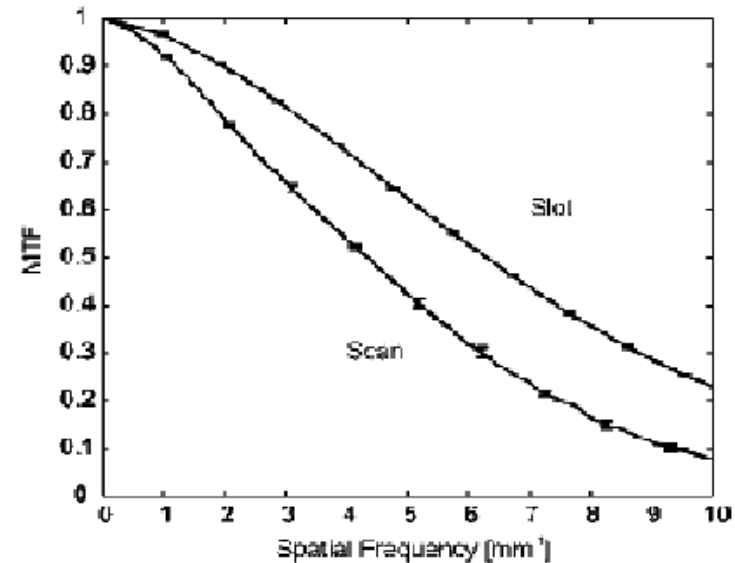
Mary Development Kit

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



A large MARY™ chip (left), hybridized with a 2mm thick CdZnTe detector. Small Mary chip (right), hybridized with a 1 mm thick silicon detector, mounted on ceramic chip carriers.

NOVA R & D Inc.



Graph showing measured MTF derived from slanted edge image using the oversampling technique.

Features:

- 256 channels, 16x16 matrix, 500 μm pitch
- 50 x 50 μm pixel size
- TDI CCD or staring mode readout
- 384 TDI columns
- High dynamic range (16 bits)
- Low noise
- Scan speed up to 5 cm/sec
- User-selectable staring mode readout
- Fat zero test input
- Overflow control
- 24 Independent readout taps
- Internal and external clock drivers