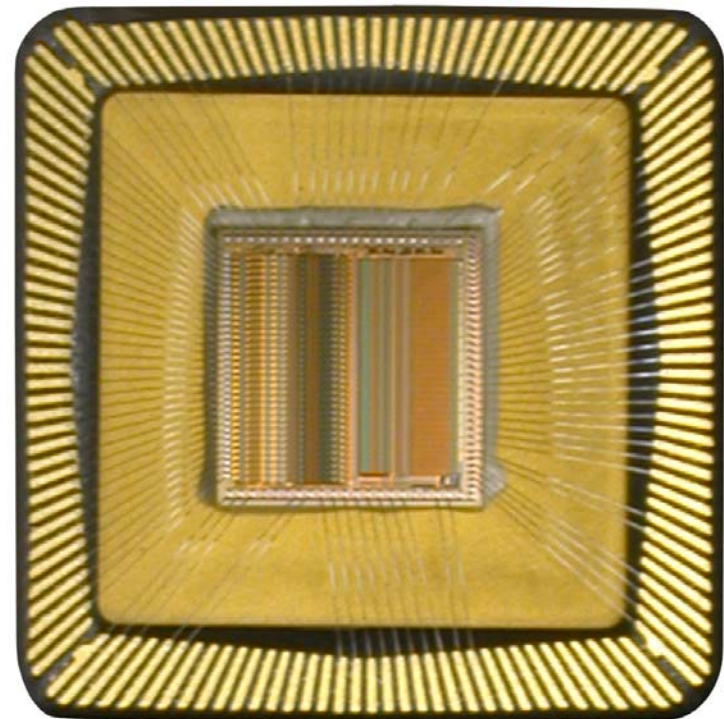




## XENA™ Amplifier/Shaper ASIC chip



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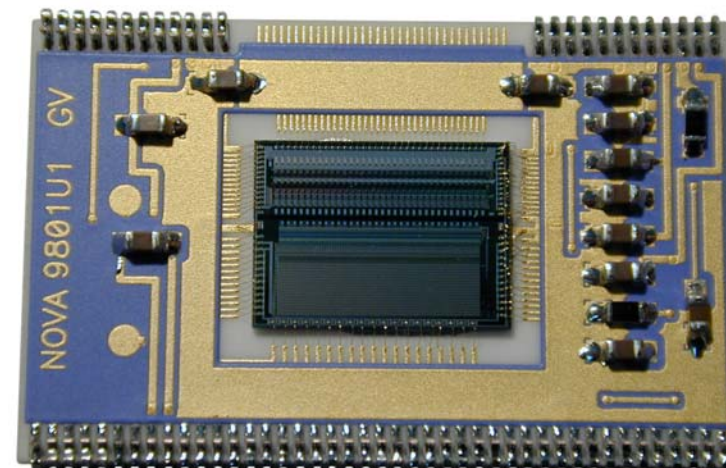
# XENA™

## Linear array multi-spectral detection and imaging

XENA™ (X-ray ENergy-binning Applications) is an integrated circuit for the fast readout of solid-state x-ray and gamma ray detectors with multi-energy capability, designed for the high-throughput N-Energy X-ray Image Scanning (NEXIS) system and similar x-ray imaging technologies. XENA has 32 signal channels plus two analog-only test channels for use in linear array imaging applications.

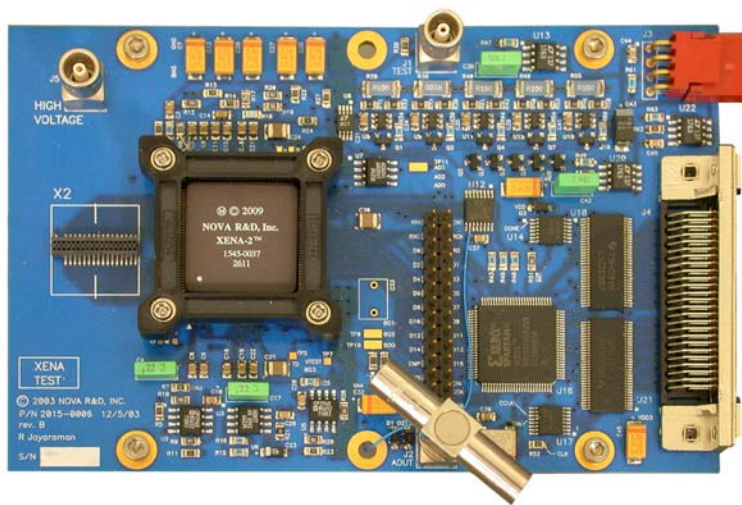
### XENA Development Kit

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



#### Features:

- 2 × 10<sup>6</sup> counts/second per channel count rate capability
- Self-resetting charge sensitive amplifiers with fast pulse shaping
- Five fast comparators per channel with associated 16-bit counters
- 160 counters read out sequentially over a 16-bit parallel data bus requires approximately 20 μs
- Five comparator threshold voltages, common to all channels, applied externally
- Digitally adjustable comparator thresholds, gains and offsets
- Pulse decay time externally adjustable
- Input signals of either polarity
- 500 mW nominal power consumption



NOVA R & D Inc.

XENA Evaluation Board