

The Microcross MYXRHNEHCJ series Nuclear Event Detectors (NED) are screened to class H & K, and feature integrated differential drivers – providing SWaP savings, improved overall noise immunity, 300% greater radiation dose sensitivity, and 25% faster response times compared with legacy devices.



## KEY FEATURES

- Gamma Dose Rate Sensitivity Threshold Range Adjustable from  $5 \times 10^4$  to  $2 \times 10^7$  rads (Si) / sec.
- 44 Pin J-Lead SMT Package (.650in x .650in x .113in)
- Integrated Differential Line Drivers and Receivers
  - Eliminates the Need for Shielding External Drivers and Receivers
- Radiation Specifications
  - Total Dose (Device Survivability):  $1 \times 10^6$  rads (Si)
  - Dose Rate (Operate Through):  $1 \times 10^{12}$  rads (Si) / sec.
  - Neutron Fluence (Operate Through):  $5 \times 10^{13}$  neutrons /  $\text{cm}^2$
- Delay from Radiation Detected to Output Signal Asserted: 15ns
- 3.3V Power Requirement
- -55 to +125°C Temperature Range
- Differential Line Drivers and Receivers All Operate Through Prompt Dose Without Extra Shielding

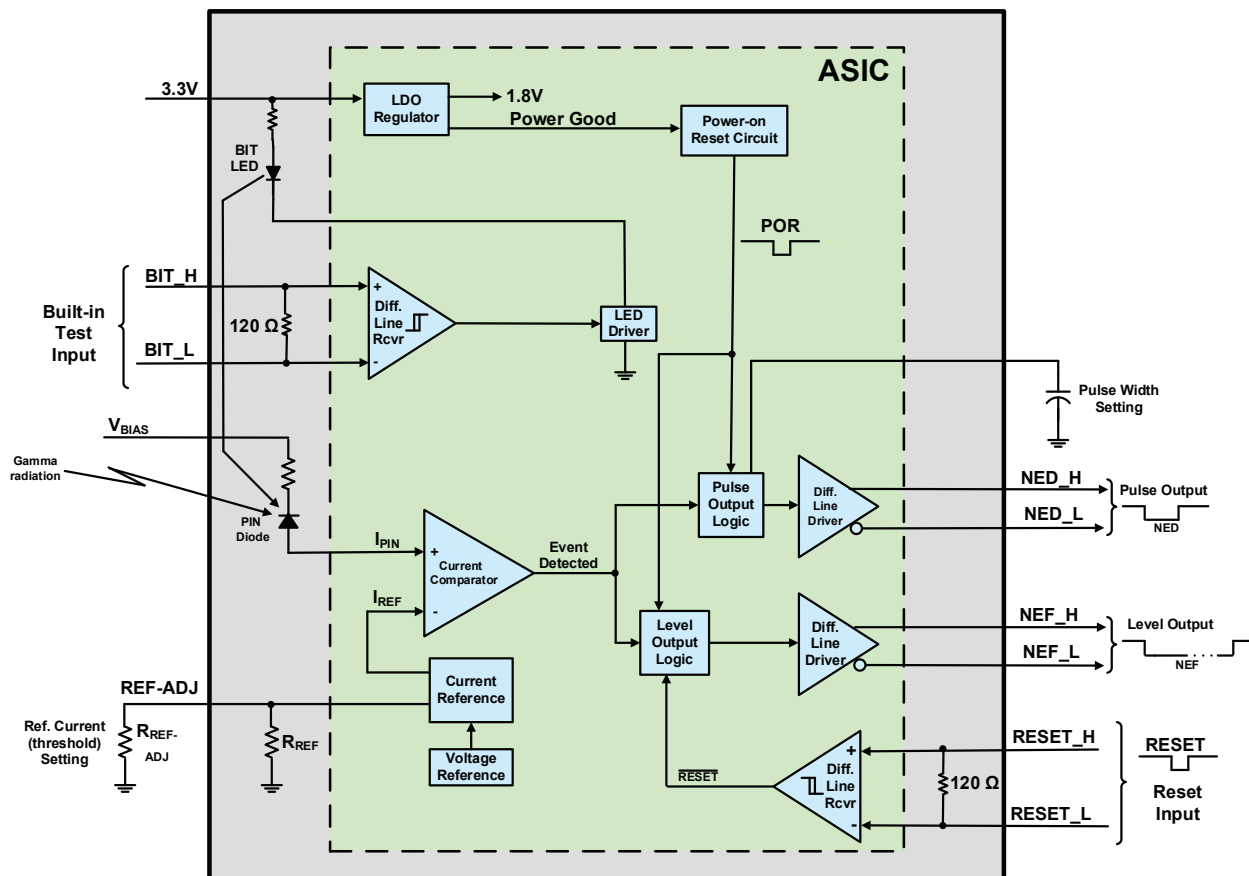
## BENEFITS

- 4X Lower Minimum Dose Rate Sensitivity
- 25% Faster Response Time – Enabling a More Rapid Shutdown of Critical Electronics
- Improved Noise Immunity
- Use Output Signal to Shut Down Power Supplies, Take Processors Offline and Block Memory Write Operations
- Manufactured on US soil in the Jazz Semiconductor Trusted Foundry
- Improvements in Obsolescence Mitigation with In-House Sourced PIN Diode and ASIC

## APPLICATIONS

- Aircrafts and Drones
- Missiles and Bombs
- Satellites
- Military Ground Vehicles
- Nuclear Material Storage

# NED with Integrated Line Drivers & Receivers



## MYX RH NED H CJ / X

- Screening Flow
  - K Space Flow
  - H Mil Flow
- Package
  - CJ Ceramic 44 Pin J-Lead
- Configuration
  - H High Performance Functional Replacement for DDC HSN-3000 with Differential Drivers and Receivers
- Product
  - NED Nuclear Event Detector
- Radiation Rating
  - RH Rad-Hard
- Micross

### Need Information?

- Quote Request: [micross.com/quotes](https://micross.com/quotes)
- General Requests: [micross.com/info](https://micross.com/info)
- Technical Support: [micross.com/tech-support](https://micross.com/tech-support)