

The Standard-Performance Nuclear Event Detectors (NED) features a 2X increase in radiation dose rate sensitivity, and faster response times at 5X lower overdrive levels relative to legacy devices. With integrated differential drivers providing SWaP reduction, improved noise immunity and reduced delay times.



KEY FEATURES

- Gamma Dose Rate Sensitivity Threshold Range Adjustable from 1×10^5 to 2×10^7 rads (Si) / sec.
- 44 Pin Non-Hermetic J-Lead SMT Package (.650in x .650in x .113in)
- Integrated Differential Line Drivers and Receivers
- Radiation Specifications
 - Total Dose (Device Survivability): 1×10^6 rads (Si)
 - Dose Rate (Operate Through): 1×10^{12} rads (Si) / sec.
 - Neutron Fluence (Operate Through): 5×10^{13} neutrons / cm²
- 3.3V Power Requirement
- -55°C to +125°C Extended Full MIL-Temperature Range (XT)
- Integrated Differential Line Drivers and Receivers All Operate Through Prompt Dose Without Extra Shielding

BENEFITS

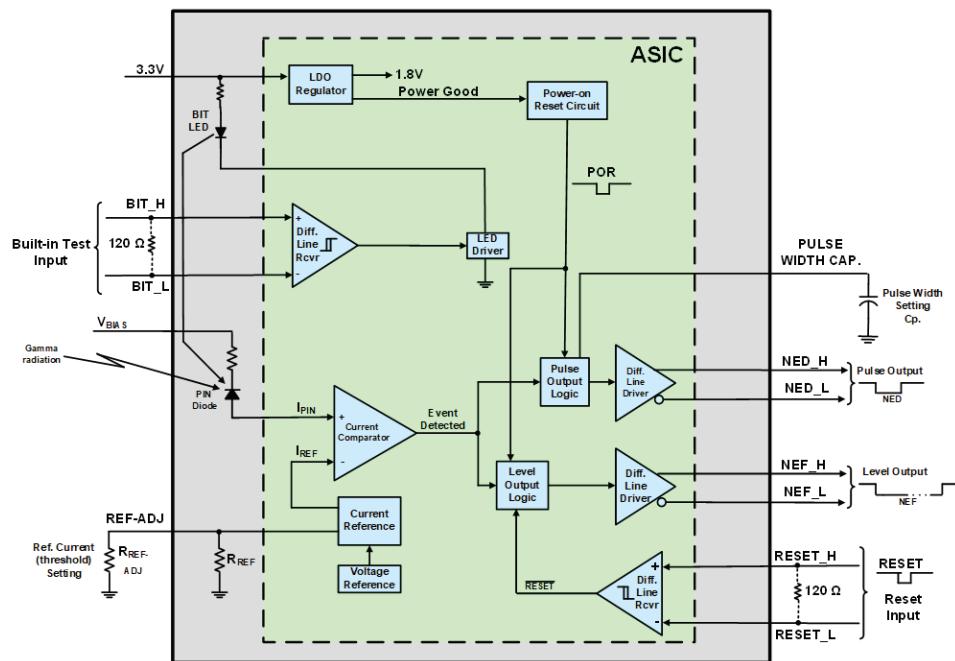
- 2X Lower Minimum Dose Rate Sensitivity
- Fast Delay Time to Enable Rapid Shutdown and Minimize Damage to Other Electronics
- Rad-Hard for Strategic Environments
- Small Compact Package Facilitates Use on Densely Populated Circuit Cards and Boards
- Built-In Differential Drivers and Receivers Provide SWaP (Space, Weight, & Power) Savings, Improved Noise Immunity, and Reduced Delay Times
- Use Output Signal to Shut Down Power Supplies, Take Processors Offline and Block Memory Write Operations

APPLICATIONS

- Aircrafts and Drones
- Defense Weapon Systems
- Satellites
- Military Ground Vehicles
- Nuclear Material Storage

Standard-Performance NED

INTEGRATED LINE DRIVERS & RECEIVERS



ORDERING INFORMATION

MYX RH NED S CJ / H

Screening Flow

EM Engineering Model, Non-Hermetic, Designed for -55°C to 125°C, but tested at only 25°C

XT Extended Temperature Range, -55°C to +125°C, Internal and External Visual Inspections, Fine & Gross Leak Testing

H MIL-PRF-38534 Class H Screened and Qualified

Package

CJ Ceramic J-Lead

Configuration

S Standard Performance NED

Product

NED Nuclear Event Detector

Radiation Rating

RH Rad-Hard

Micross

Disclaimer

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