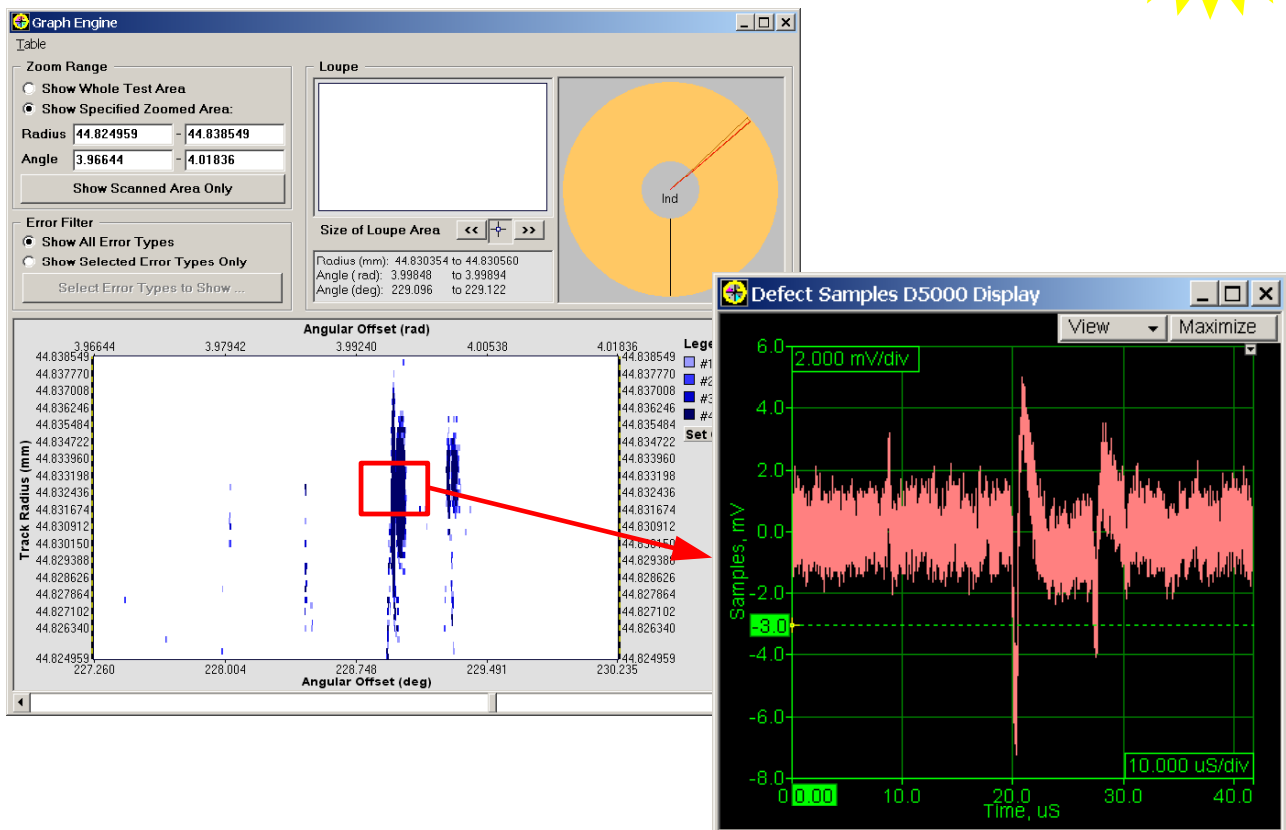# GUZIK PRODUCT BULLETIN

D5000 MSCAN ETA
Erased Track Thermal Asperity and Extra Pulse Scanner

New

- **Thermal Asperity** and **Extra Pulse** detection on erased track

- **Multi-threshold amplitude analysis** of positive and negative signal peaks

- **10 detectors** can run in parallel with different settings/thresholds

- **Digital low-pass filtering** with programmable cut-off frequency

- **High 15-bit resolution** of detection thresholds

Introduction

D5000 MSCAN ETA Erased Track Thermal Asperity and Extra Pulse Scanner software module is designed to operate with D5000 Digital Media Scanning package. The new scanning software module allows for detection of thermal asperity and extra pulse defects. The scanner can operate on erased tracks and can detect the read-back signal above specified amplitude thresholds. Up to ten defect detectors can run simultaneously, with different levels. The high 15-bit resolution of the defect detector thresholds and multi-threshold amplitude analysis allow the digital media scanner to generate three-dimensional map of the defects.

Scanning Algorithm

The scanning algorithm works on erased track. The read-back signal, digitized by D5000 Signal Analyzer with high oversampling, is filtered by low-pass digital filter with programmable cut-off frequency. The filtered signal is then supplied to ten identical threshold detectors. Each threshold detector compares the signal with the amplitude threshold, which is programmed individually for each detector. If the absolute value of the signal exceeds the threshold, the defect is registered and stored in the defect storage memory. You can configure the MSCAN test to ignore defects shorter than the specified size. You can also configure the MSCAN test to combine several consecutive defects into one large defect, if the distance between these defects is shorter than specified value.

D5000 MSCAN ETA Scanner Requirements

1. Guzik D5000 Signal Analyzer
2. Guzik RWA-2000 series
3. Guzik V2002 or Canon spinstand
4. WITE32 Revision 4.00 or later
5. D5000 MSCAN ETA Scanning module license. Please contact sales@guzik.com to obtain a quotation for the license. Please provide the RWA EEPROM Dump with your request.

2443 Wyandotte Street
Mountain View, CA 94043
Phone: (650) 625-8000
Fax: (650) 625-9325
E-mail: sales@guzik.com
http://www.guzik.com/