## sonix<sup>®</sup> INTRODUCING





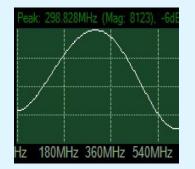
## **300 MHz Inspection**

THE CHALLENGE Detecting sub 10µm defects through different silicon layer thicknesses

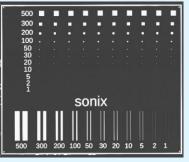
THE SOLUTION Exclusive **pulse2™**-300 pulser / receiver and **300 MHz** transducers from Sonix<sup>®</sup> for all Echo<sup>™</sup> and AutoWafer<sup>™</sup> systems

## THE 300 MHz PROOF

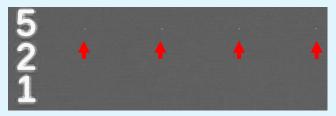
- True 300 MHz capability
- Clean signals with strong signal-to-noise ratios
- Generates clean, clear images through silicon layers
- Detection of spot defects down to 5um
- Detection of line defects down to 1um line width
- Multiple focal lengths available to penetrate different silicon layer thicknesses



Frequency Spectrum of a reflected signal in water showing a peak frequency of 298.8 MHz



SAM image of a defect pattern beneath 750µm of silicon



Zoomed in SAM image of the spot defect pattern showing detection of  $5\mu m$  spot defects



Zoomed in SAM image of the line defect pattern showing detection of  $1\mu m$  line width defects

## Sonix<sup>®</sup> YOUR PARTNER IN R&D AND PRODUCTIVITY

Every day you're **challenged** to execute the most accurate inspection of bonded wafers and packaged semiconductors. Your success – and your customers' success – depends on it.

Sonix has pioneered breakthrough solutions in image quality and process productivity, helping wafer and chip manufacturers literally transform the world. Our scanning acoustic microscopes perform nondestructive inspection of bonded wafers and packaged semiconductors from the development lab to the production floor The **proof** is in new products like the pulse2<sup>™</sup>-300 and our range of 300 MHz transducers. And in our full line of products that promise and deliver proven uptime, speed, and image quality. And in our collaborative problemsolving, proactive R&D and worldclass service and support. Sonix, the ultrasonics leader.