

# Semiconductor Review

SEMICONDUCTOR TECH

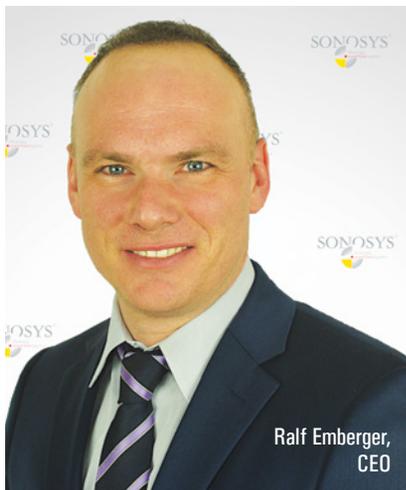
EDITION



# SONOSYS Ultrasonic Systems

## A Trailblazer in Ultrasonic and Megasonic Cleaning

The semiconductor industry is the fuel that runs the global economy. With over US\$300 billion in revenue, it's a US\$500 billion market that touches nearly every aspect of life, from space exploration to smartphones.



Ralf Emberger,  
CEO

That being said, the industry is also at a crossroads. The demand for the cleaning of micro- and nano-structures has grown manifold in the past few years. This means removing the tiniest particle residues from semiconductor devices like wafers or photomasks.

Innovative cleaning technology must work efficiently and for a longer duration for semiconductors. However, this is not the only requirement brewing in this space. There is also a growing need for a reliable partner that can promise excellence and constant support in this highly automated industry. Neuenbürg, Germany-based SONOSYS has been providing solutions to the semiconductor industry for over two decades with unparalleled ultrasonic

and Megasonic cleaning platforms used by some of the biggest names.

Founded in 1995, SONOSYS focuses on developing high-frequency Megasonic products within the 400 kHz and 5 MHz range. "After years of investment in innovation and research, the Megasonic solutions by SONOSYS can clean even the smallest of particles and contaminants down to the few nanometers range," says Ralf Emberger, CEO of SONOSYS.

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Used in the semiconductor industry, the main benefit of its products is better and increased product yield. This is due to less contamination of the wafers and photomasks when they are etched and cleaned, increasing the end quality of the products. For its spotless work, many players in the semiconductor industry trust SONOSYS' high-frequency ultrasonic cleaning method, available in various product models for single and batch substrate cleaning to be integrated in wet-cleaning tools. Besides this space, it also serves the optical, MEMS, and food industries.

Cleaning technology is a critical part of the chip production process. The machinery has to be reliable and flexible to meet the requirements of different

applications. The experts at SONOSYS know how delicate semiconductors can be. They have created their cleaning products on the pillars of reliability and durability, which keep pattern damage to a bare minimum, ensuring the semiconductors have a long life and are resistant to most chemicals used in the industry without introducing any form of contamination by the product itself.

Another key reason why SONOSYS is a partner to many organizations is its ability to develop customized solutions. Whether it's a different frequency, modulation, dimensions, or power level, SONOSYS can create the perfect solution for any environment. This can be attested by the fact that the company has already taken pre-orders until second half of next year.

Innovation is at the heart of SONOSYS, enabling it to stay ahead of any challenges or changes that might come in its path. For instance, SONOSYS has recently introduced low-power variations and high-frequency models up to 9MHz to reduce pattern damage and enhance particle removal efficiency (PRE) to the highest level. It has also developed dual and triple nozzle systems to clean particles of different size ranges. The solution gives the best cleaning result with minimal pattern damage, even at the smallest node sizes.

SONOSYS is driven by the different needs of the market. In the coming years, it will continue to improve its products and services while remaining true to its core values. SONOSYS is committed to collaborating with customers and tool-makers to achieve excellence in everything it does. 