

Contact: [www.sofics.com](http://www.sofics.com)

## **Sofics' clipping/scaling circuit enhances reliability of Near Field Communication (NFC) and other wireless interfaces**

Sofics granted a new European Patent for technology that protects antenna pads

Belgium, May 28, 2019 – Sofics bvba ([www.sofics.com](http://www.sofics.com)), a leading semiconductor integrated circuit IP provider announced that its technology to protect wireless antenna pads is now published as a patent by the European Patent Office. The clipping/scaling circuit is used to protect the Near Field Communication (NFC) antenna pads in an ultra-low power Bluetooth chip with 'Touch-to-pair' functionality. The first customer product, processed in TSMC 55nm technology, is running in mass production and is used for all kinds of home automation and IoT applications.

Sofics is a foundry independent semiconductor IP provider that has supported 60+ fabless companies worldwide with customized/specialty Analog I/Os and on-chip ESD protection. Recently, Sofics started with the development of circuit design solutions for increased robustness and reliability under the portfolio name PhyStar. The clipping circuit is the first such design that made it into a customer product. Other design circuits under development are automotive LIN and CAN transceivers and custom analog and digital I/Os.

Near Field Communication applications are ramping up because it can simplify aspects as diverse as communication, secure payments, user authentication, and retail loyalty programs for instance. Adding NFC functionality to an integrated circuit involves connecting the wireless interface pins to an antenna/coil. The voltage on those pads strongly depends on the distance between and alignment of transmit/read devices and the power of the transmitting device. Measures need to be taken to protect the wireless interface from excess voltages. The patented design from Sofics solves this issue by scaling the signal within the allowed normal operation and ESD design window.

“We are delighted that our patent application for our unique clipping technology was granted. This PhyStar circuit will reduce cost and risk for many IC companies working on NFC designs”, said Koen Verhaege, CEO of Sofics.

**About Sofics** – Sofics stands for “Solutions for ICs”. We are a foundry independent IP provider with a track record in on-chip robustness for ESD, EOS and EMC. Leveraging an extensive patent portfolio, more than 70 licensees, product proof in more than 50 processes, generates on average every day one new IC volume production release including Sofics IP.