STMicroelectronics and Fieldscale Bring Intuitive Touch Controls to STM32-Based Smart Devices

- ❖ *Fieldscale SENSE is the first end-to-end development platform for touch-sensor design and high-accuracy simulation*
- ❖ *ST customers can now use SENSE to simulate touch-sensor solutions together with STM32 microcontrollers*
- ❖ *Fieldscale SENSE cloud-based platform accelerates time to market and saves development/prototype costs*

Geneva, Switzerland and Thessaloniki, Greece, 27 January 2020 - STMicroelectronics (NYSE: STM), a global semiconductor leader serving customers across the spectrum of electronics applications, and Fieldscale, an ST Authorized Partner and provider of simulation software, have joined forces to simplify development of touch-enabled user interfaces for smart devices containing ST's STM32 microcontrollers (MCUs).

Touch-sensitive controls are convenient and attractive for end users, and can enhance product reliability, ingress protection, and cost-effectiveness. On the other hand, development can be challenging. Using a conventional iterative design approach, optimizing to eliminate unwanted effects and ensure consistent responses for touch sensing in all operating conditions can involve building multiple prototypes.

ST and Fieldscale now enable STM32 customers to take a faster and more efficient route to market by introducing support for ST's Arm® Cortex®-based 32-bit MCUs to Fieldscale's SENSE development platform.

Fieldscale SENSE is an end-to-end solution for the design, schematic capture, and system-level simulation of capacitive touch sensors. The latest version lets STM32 users quickly design the touch sensor and PCB layout for virtual system simulation purposes.

The cloud-based development platform implements sophisticated electromagnetic algorithms, which drives accurate prediction of the system performance. Users can optimize the design and quickly re-simulate to fine-tune the performance before committing to hardware. With greater assurance that first prototypes will deliver close

to the desired performance, users can lower development costs and accelerate time to market.

"*At Fieldscale, our goal is to offer to all capacitive-touch design engineers a complete software solution supporting them end-to-end, from the early design up to the tuning of the final system. Integrating STM32 support is a major achievement towards this goal and we couldn't be more satisfied*," said Yiorgos Bontzios, PhD, Fieldscale CEO and Co-Founder.

Patrice Hamard, Microcontroller Product Marketing Manager, STMicroelectronics, added, "*Customers using our STM32 microcontrollers can now take full advantage of Fieldscale SENSE to implement simple and intuitive touch-based controls for smart devices and give their products a competitive edge*."

Fieldscale SENSE is available now as an online service and comes with a flexible pricing model to meet your requirements/needs. Please contact Fieldscale for further information.

Further technical information:

As a cloud-based development platform accessed via an intuitive web interface, Fieldscale SENSE enables users to online evaluate their touch sensors using powerful proprietary field solvers and algorithms. Unlike conventional PC-based software, there are no installation challenges or system-performance limitations.

Fieldscale SENSE simulation results have been validated against measurements from actual touch-sensor manufacturers, confirming the results are accurate to within 2%.

Before committing to building physical prototypes, with Fieldscale SENSE users can:

- Design or import capacitive touch sensor layout as a standard DXF or Gerber file(s).
- Easily create the complete 3D model of the sensor by simply clicking their way through material and connections assignment. Fieldscale SENSE applies the appropriate boundary conditions automatically.
- Simulate the touch-sensor performance including the effects of using a stylus or wearing gloves.
- Add RF conducted noise into the system, to simulate the testing procedure as specified in the IEC61000-4-6 standard, to evaluate the noise immunity of your system
- Understand effects such as coupling between traces and electrodes that can interfere with the touch-sensor performance, to identify required modifications.

The use case for STM32 users is available to download now here

You can also read our blogpost at https://blog.st.com/sense-stm32-fieldscale/

About Fieldscale

Fieldscale provides simulation software that helps IC makers and touch sensor manufacturers scale capacity, reduce product development cycles and go-to-market 10X faster. Using Fieldscale SENSE any engineer can make informed design decisions, starting from day one. For more information, go to www.fieldscale.com.

About STMicroelectronics

ST is a global semiconductor leader delivering intelligent and energy-efficient products and solutions that power the electronics at the heart of everyday life. ST's products are found everywhere today, and together with our customers, we are enabling smarter driving and smarter factories, cities and homes, along with the next generation of mobile and Internet of Things devices.

By getting more from technology to get more from life, ST stands for life.augmented.

In 2019, the Company's net revenues were $9.56 billion, serving more than 100,000 customers worldwide. Further information can be found at www.st.com.

Media Contacts:

Paschalis Arampatzis
Marketing Manager
Fieldscale
paschalis@fieldscale.com
+30 2310947484

Michael Markowitz
Director Technical Media Relations
STMicroelectronics
michael.markowitz@st.com
+1 7815910354