



Touchscreen Software Added to Altair Partner Alliance

February 15, 2017

SENSE is now available for use by HyperWorks® customers

TROY, Mich. – Feb. 15, 2017 – The Altair Partner Alliance (APA) is pleased to announce the addition of Fieldscale's SENSE to its software offering. Sense is an intuitive and highly advanced touchscreen design and simulation tool. The cutting-edge algorithms provide accurate results up to ten times faster than any other simulation software. As a result, engineers save effort and time and products are launched sooner and with increased profit margins.

"Altair is committed to continually providing cutting-edge and comprehensive solutions to assist electronics companies in creating innovative products to stay ahead of competition," said Moly Heskit, Senior Director of Business Development. "Expanding our partnership with Fieldscale, we are excited to introduce Sense software in our offering, which will further empower electronics product designers to create robust solutions and shorten development cycles."

Sense was developed after months of research on touchscreen industry needs and the product design process. The greatest challenges of effectively using simulation in touchscreen design were all identified and tackled one by one. In Sense, it takes a matter of seconds to set up the design by choosing the analysis type, the controller, the pattern and the stack-up. The parametric analysis capability saves engineers valuable time, enabling the simultaneous testing of hundreds of finger positions in all three dimensions. Algorithms that run in the background are optimized to deliver results with maximum accuracy in a minimal amount of time. Results are presented in heat maps and interactive plots and can be easily filtered and exported. Sense is the new essential tool for touchscreen design.

"Sense is the first of a long line of new generation simulation tools. Simplifying the simulation by hiding all expertise behind a simple intelligent app environment will enable more engineers to use simulation in their design processes," said Yorgos Boritzos, CEO at Fieldscale. "We are thrilled that Altair is our ally and together we head to the new era of simulations."

The touchscreen industry is emerging with all of the new applications and technology developed today. Flexible and curved touch displays, wearables and several applications in this era of the automotive industry are just a few industries that Sense will impact. Design engineers can test new materials, new pattern designs and new technologies, all within Sense's plug-and-play environment.

An [industry webinar](http://industry.webinar) for Fieldscale will be held on March 2 at 10 a.m. ET. For more information about the software, please visit the product page for [Sense](http://sense).

The screenshot displays the Fieldscale Sense software interface. On the left, there are several configuration panels:

- Analysis:** Mutual-capacitive (checked), Earthed Model, Self-capacitive, Floating Model.
- Controller:** Fieldscale, FcT3202. Parameters: Cmin: 1 pF, Transmitters: 20, Cmax: 2.5 pF, Receivers: 12, Sensitivity: 0.0851 pF.
- Pattern:** Diamond Double Layer. Material Type: Solid (i.e. ITO). Sensor Dimensions: Ratio: 4.3, S: 4 inch, S-r: 1 mm, S-k: 1 mm, WTx: 3.964 mm, WRx: 4.91333 mm, side: 2.85839 mm. Pattern Parameters: g: 0.3 mm, Wrx: 0.5 mm, Wdx: 0.5 mm.
- Stack up:** Layers 1-4. Transmitter Position and Receiver Position settings.
- Resistance Computation:** T_s: 50 Ohms/sq, R_s: 50 Ohms/sq.
- Pointer:** Simulation Node: Central. Geometry: Cylinder length: 10 mm, Cylinder diameter: 8 mm, Hemispherical Tip: checked. Position: Start: 0 mm, End: 2 mm, Step: 0.2 mm.

 On the right, there are control buttons (Solve, Solve on Cloud, Edit Input, Export Results) and a results summary:

- Capacitance:** Sensitivity = 0.0851 pF, Cmin = 0.5769 pF.
- Cell Resistance:** RTx = 251.709 Ohms, RRx = 196.523 Ohms.
- Selected Value:** Cm = 0.0882 pF.

 Below the summary is a 2D heatmap showing capacitance distribution across a diamond-patterned grid. A color scale on the right ranges from 0.0348 (blue) to 0.0882 (red). To the right of the heatmap is a 'Maps' section with 'Filtering' and 'Distance (mm)' controls.

 At the bottom right, there is a 'Plots' section with a graph titled 'Cm (pF) over Distance'. The graph shows three data series: Cm (pF) (red line), Cmin (cyan line), and Cmax (magenta line) plotted against Distance (mm) from 0 to 1. The Cm (pF) line is constant at approximately 0.5769 pF. The Cmin (cyan) line is constant at approximately 0.0348 pF. The Cmax (magenta) line is constant at approximately 0.0882 pF. To the right of the graph is a 'Plots' section with 'Point Position' controls for X (mm) and Y (mm), both set to 2.

About the Altair Partner Alliance

Altair's HyperWorks platform applies a revolutionary subscription-based licensing model in which customers use floating licenses to access a broad suite of Altair-developed, as well as third-party, software applications on demand. The Altair Partner Alliance effectively extends the HyperWorks Platform from more than 20 internally developed solutions to upwards of 60 applications with the addition of new partner applications. Customers can invoke these third-party applications at no incremental cost using their existing HyperWorks licenses. Customers benefit from unmatched flexibility and access, resulting in maximum software utilization, productivity and ROI. For more information about the Altair Partner Alliance, visit <http://www.altairpartnerworks.com/apa>.

About Fieldscale

Fieldscale is a simulation software provider that utilizes parallelized algorithms integrated within a simple, intuitive user environment to support the effortless design of great products. Founded in 2015 and based in Thessaloniki, Greece, Fieldscale offers state-of-the-art simulation software for electric design and analysis. Fieldscale's solvers cover the constantly growing demands of engineers for accuracy and efficiency in the design phase of any hardware product. Find out more at www.fieldscale.com.

About Altair

Founded in 1985, Altair is focused on the development and application of simulation technology to synthesize and optimize designs, processes and decisions for improved business performance. Privately held with more than 2,600 employees, Altair is headquartered in Troy, Michigan, USA with more than 45 offices throughout 20 countries, and serves more than 5,000 corporate clients across broad industry segments. To learn more, please visit www.altair.com.

Media Contacts:

Altair Corporate/North America
Biba A. Bedi
+1 734 224-0548 x 406
biba@altair.com

Altair Europe, the Middle East and Africa
Evelyn Gebhardt
+49 6421 0894351
gebhardt@bluewin.ch

Fieldscale
Vassio Kalatzidou
+30 6941 869-6566
vassio@fieldscale.com