

Candera, next system and DATA MODUL to present innovative haptic User Interface at Embedded World 2021

Linz/Vienna - Austria, 26/02/2021 – Candera, a leading provider of HMI design tools, next system, a renowned expert of customized haptic hardware solutions and DATA MODUL, a leading partner for display technologies have been cooperating on the development of an innovative HMI solution, supporting intuitive touch feedback technology. Featuring different use cases in application fields like industry, nautics, medicine and many more, the solution also includes a haptic pin pad, that supports persons with visual impairment. This innovative haptic HMI will be presented at (digital) Embedded World, from 1-5 March, 2021.



Candera's, next system's and DATA MODUL's haptic Multi-Scene HMI solution supports intuitive touch gestures for multiple use cases

Following several studies about the hierarchy of human senses, touch is often named as one of the most important ones after visual and auditory impulses. Therefore, it is not surprising, that not only our physical but also the artificial world can be enriched from an enhanced input of touch stimuli. The incorporation of haptics and touch feedback technology into displays and touch screens is no future trend, it has already found its way into many application fields like automotive, industry or medicine. Adding these intuitive operating concepts to static devices transforms standard UI solutions into immersive and living HMI experiences.

Based on these insights, Candera GmbH, a leading HMI tool provider, next system, a renowned expert in haptics, displays, computers and motors together with DATA MODUL, a leading partner for display technologies have merged their expertise in order to create a modern Multi-Scene-HMI solution with intuitive and haptic touchscreen support. The result is a highly perceptive User Interface that combines the best out of 2 worlds: perfect HMI design and enhanced haptic technologies.

Intuitive touch feedback of displays and devices is no longer a privilege of the automotive industry. It has already found its way into multiple application fields like industry, medicine, entertainment and many more. This is why Candera, next system and DATA MODUL have highlighted several different use cases across various industries, among them a 2D/3D excavator UI, a nautic sea map, an ultrasonic control unit, a dynamic cashpoint pin pad and more. Indeed, this pin pad supports persons with visual impairment, who can successfully interact with the UI purely based on the haptic and auditory feedback they receive from the device.



Intuitive Cash Point Pin Pad with haptic and auditory feedback to support persons with visual impairment

All of these use cases have been created with Candera's HMI design tool CGI Studio, a highly intuitive and user friendly GUI design software. Thanks to Candera's powerful render engine, the scenes not only feature pin sharp graphics but also 3D elements and animations. CGI Studio's automated workflows, like the ready-to use controls, integrated state machines but especially the Smart Photoshop Importer have helped to rapidly turn the flood of images and animations linked to these multiple scenes into living HMIs – and this within only a few weeks instead of months.

next systems innovative hardware technologies were the perfect match to Candera's HMI solutions. As a pioneer in haptic touch solutions, next systems target was to create a state-of-the-art haptic touch demonstrator for several applications. The device includes two 10,1" touch screens with haptic feedback support based on electrostatic- and piezo-technology. Both screens include force-sense (Force measurement for targeted and safe triggering on the user interface) in order to ensure high quality user experience. The integrated haptic touch technology can be tailor-made applied to almost all touch sensitive applications.

"With Candera, as a specialist in HMI UI design, next system found the perfect partner to realize this very versatile project in a very short time frame," says Michael Nussbaumer, Product Manager for Display & Haptic Solutions at next system "The scenes, screens and functions were quickly created and integrated on the target hardware. The efficient cooperation enabled a quick and cost-efficient execution of the overall project."

DATA MODUL provided the custom refined cover glass including the latest version of their SITO projective capacitive touch unit. Additionally, the display expert was taking care of the fine tuning mostly for touch adjustments and TFT driving. This set-up of all included components ensured the perfect combination and integration of Candera's HMI and next system's haptic touch solution.

The new haptic HMI solution will be presented the first time at Embedded World 2021 at the virtual booth of Candera as well as during Candera's speaker presentation at the exhibitor forum on March 2, 2021 at 11.25 AM, in which David Aberl, Head of Product Management will talk about the Next Generation of HMI development tools.

About next system

next system is an Austrian owner-managed company and leading provider of solutions and products in the areas of Motors, Embedded Computers, Displays & Touch, Medical Solutions and Haptic Touch Solutions. Long-standing and selected partnerships with established manufacturers, deep technical know-how and a strong understanding of our customers are the foundations of our success.

About DATA MODUL

DATA MODUL AG is one of the world's leading specialist providers of display, touch, embedded, monitor and panel PC solutions. Since it was established in 1972, it has consistently pursued the objective of providing its customers with state-of-the-art, tailor-made and individually customized complete solutions for display technologies. The extensive distribution portfolio of displays, touchscreens and embedded solutions and the increasingly innovative in-house developments complete the unique modular product portfolio.

Based on our 21 years of experience in the embedded software development together with our broad customer base we have created a mature feature-rich and customizable product. In fact, CGI Studio today covers all aspects of automotive GUI development and beyond. Furthermore, we're closely working together with our customers and industry partners to provide solutions for present and future HMI needs.

Candera providing HMI solutions with 50 million units installed https://www.artspark.co.jp/en/candera_interview/

About Candera

Candera, is a leading HMI tool provider and development partner for worldwide automotive and industrial customers. Candera supports its customers with the CGI Studio tool environment as well as provision of software services mainly in the areas of HMI development and embedded software.

Candera GmbH in Linz/ Austria and Candera Japan Inc. in Shinjuku-ku, Tokyo / Japan are both part of the ArtSpark Group situated in Shinjuku-ku, Tokyo / Japan.

Corporate site : <https://cgistudio.at/>

Candera Japan site : <https://www.canderajp.co.jp/>

Facebook : <https://www.facebook.com/canderacgistudio/>

YouTube : https://www.youtube.com/channel/UCZyZdK8yFY52Ot-SvaGkM_A

Twitter : <https://twitter.com/CanderaGmbH>

Linkedin : <https://www.linkedin.com/company/candera-cgistudio/>

CONTACT

4-15-7 Nishi-shinjuku, Shinjuku-ku, Tokyo, Japan

e-mail : press@artspark.co.jp