

## Varjo and Socionext Collaborate on World's First Human-Eye Resolution VR/XR Headset

**Varjo's revolutionary VR/XR product using video-see-through (VST) technology  
will be powered by Socionext image signal processors**

**Langen/Germany and Helsinki/Finland, 28<sup>th</sup> February, 2018** --- Socionext and Varjo™ today announced the company's ongoing co-operation around Varjo's next-generation VR/XR solutions. Varjo's upcoming next-gen VR/XR headset is based on a combination of the company's patented human-eye resolution technology with Socionext's Milbeaut® image signal processing solutions.

Varjo has developed a VR/XR headset display that can visualize images at 70MP with a 100° field-of-view, which is far beyond what is supported by current first-generation VR headsets. Varjo takes advantage of the fact that the human eye doesn't actually see the world in high resolution across its entire field of view. Rather, the eye only sees full-resolution images at 2° in the center field of vision. Varjo uses this same approach for its Mixed Reality (XR) and video-see-through (VST) headset, which enables users to see the real world with augmented content in human-eye resolution through the device.

The camera processing required for both XR and VST is incredibly complex, so Varjo selected Socionext's Milbeaut high-performance image signal processor technology. Milbeaut is able to provide the necessary high imaging resolution and quality due to its high-definition image pipelines, fast processing speeds and low power consumption. Socionext has been providing optimized solutions for a wide range of acclaimed imaging applications in the area of DSLR cameras, smartphones and video equipment for nearly 2 decades.

Urho Konttori, Founder and CEO of Varjo, comments: "In Socionext, we have found a strong and reliable technology partner for state-of-the-art imaging solutions. With the Socionext Milbeaut technology, Varjo has built a unique way of combining the real and digital worlds in an unprecedented level of realism, quality and latency."

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Mitsugu Naito, Corporate Senior Vice President and head of Imaging Solution Business Unit at Socionext Inc. comments: "Socionext will continue to fully support Varjo's requirements whilst customizing Milbeaut to their specific needs. We are very pleased to announce both our collaboration and the design win for Milbeaut as part of their new incredible upgrade to the mixed reality experience."

Visit Socionext Europe (SNEU) at Embedded World in Nuremberg, 27<sup>th</sup> February – 1<sup>st</sup> March, Booth A3-119, Nuremberg Messezentrum where latest Milbeaut technology among other product highlights is on display.



Photo: Mr. Urho Konttori, Founder & CEO of Varjo and Mr. Toshihiko Tanaka, President of Socionext Europe

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Photo: Product vision of the first Human-eye resolution headset

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**About Varjo**

Varjo Technologies Oy is based in Helsinki and is creating the world's best hardware and software for groundbreaking VR/AR/XR computing devices, merging the real and digital worlds seamlessly together.

For more information, visit <https://varjo.com/>

**About Socionext Europe GmbH**

Socionext Europe GmbH (SNEU) plays a major role in the worldwide activities of Socionext Inc. Founded in 2015, Socionext Europe is headquartered in Langen, near Frankfurt, with other locations in Munich, Braunschweig, Maidenhead and Swindon (UK), Linz (Austria) and Istanbul (Turkey).

For more information, visit [eu.socionext.com](http://eu.socionext.com)

**About Socionext Inc.**

Socionext is a new, innovative enterprise that designs, develops and delivers System-on-Chip products to customers worldwide. The company is focused on imaging, networking and other dynamic technologies that drive today's leading-edge applications. Socionext combines world-class expertise, experience, and an extensive IP portfolio to provide exceptional solutions and ensure a better quality of experience for customers. Founded in 2015, Socionext Inc. is headquartered in Yokohama, and has offices in Japan, Asia, United States and Europe to lead its product development and sales activities.

For more information, visit [socionext.com](http://socionext.com)

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