



Press release

Connected Medical Devices: Linxens and Clayens collaborate to develop a Mini NFC Tag, directly Integrated into the material of the Medical Device



Levallois-Perret, France – March 5, 2024 – In a significant advance for the medical sector, Linxens, a pioneer in the design and manufacturing of electronic components, is collaborating with Clayens, a European leader in the transformation of polymers, composites, and precision metal parts, to develop a unique medical tracker directly integrated into the material.

Unlike conventional methods, which apply NFC tags via adhesive or assembly to external elements such as labels, Linxens and Clayens have chosen to innovate by integrating the NFC tag directly into the polymer matrix of the medical device. This approach allows for the tag to be inseparably fused with the product, offering unprecedented security through an unfalsifiable Unique Identifier (UiD).

At the heart of this initiative is the development of a **revolutionary mini-tag**, directly molded into the polymer of the medical device. This circular tag combines **durability and discretion** through the use of a **flexible polymer substrate enriched with copper loops and an integrated chip.**

The encapsulation process, which involves a double overmolding (first the overmolding of the tag, and then the overmolding of the new insert), ensures **resistance to moisture, heat, and chemicals**, offering unmatched reliability for demanding medical environments.

Critical information, such as expiration date, lot number, and dosage information, is programmed onto the NFC tag immediately after molding. This crucial step takes place during the industrialization process, using a **specialized NFC writing device that ensures constant traceability and increased security** against counterfeiting and unauthorized removal.

The mini-tag strictly complies with regulatory standards for medical devices and syringes, including the European Directive on Counterfeit Medicines, ensuring complete compatibility with existing inventory or tracking systems.

"Linxens, a historical leader in micro-connectivity technologies, is positioning itself strongly in the health sector, bringing technology and expertise that find their full meaning in this context," **said Yvan Malépart, SVP Healthcare & Smartcard at Linxens**. "Global health challenges demand the convergence of technical and clinical expertise, with a growing need for remote monitoring, secure connections, data quality, in an aging population, increasing patient autonomy, and overburdened healthcare services. By partnering with Clayens, Linxens is committed to addressing the demands of a constantly evolving market and a dynamic innovation landscape. With this revolutionary mini-tag, Linxens offers a solution that embraces cutting-edge technological advancements, ensuring reliability, enhanced security, and unmatched traceability in the administration of treatments."

"Working with Linxens on the integration of this mini-tag marks a significant step towards safer and more traceable medical devices," **said Matthieu Besse, R&D Manager at Clayens**. "This collaboration is a tangible example of our ability to integrate advanced technological innovations directly into our products, while maintaining our commitment to quality and security."

About Linxens :

Linxens is a key player in innovative solutions across various industrial sectors and aims to provide tailored solutions to its commercial partners to help them improve their operations and deliver seamless experiences to end-users. Linxens is the preferred supplier for numerous global pioneers in technology shaping markets in telecommunications, transportation, hospitality, leisure and entertainment, financial services, e-Government, access control, healthcare, and the Internet of Things (IoT).

About Clayens

CLAYENS HEALTHCARE, the healthcare business unit of the Clayens Group, supports industrial healthcare players (medical devices, pharmaceuticals, and diagnostics) in the development, industrialization, and manufacturing of medical devices and custom plastics, in compliance with international regulatory standards. CLAYENS Healthcare offers a comprehensive service, from R&D to production, and covers industrialization, qualification, validation, and regulatory support. With a workforce of approximately 5,100 people and 32 manufacturing sites, the Clayens Group is present in 9 countries. Clayens Healthcare's medical device production sites, including ISO7 and ISO8 cleanrooms, are located in Europe and North America (France, Mexico, and the USA).

For more information: <u>https://www.clayens-np.com/healthcare</u>

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