



Press release
Communiqué de presse
Comunicato stampa
新聞稿 / 新聞稿
プレスリリース
보도자료

T4397S

Unique Nu Eyne Wearable Eye-Therapy Device Leverages STM32 Wireless Microcontroller from STMicroelectronics

*MCU-controlled eyewear promotes efficient tissue regeneration
and treats dry eye*

Geneva, Switzerland and Seoul, Korea, September 29, 2021 – STMicroelectronics (NYSE: STM), a global semiconductor leader serving customers across the spectrum of electronics applications, and **Nu Eyne**, Korea's innovative medical device manufacturer, have jointly announced a Nu Eyne wearable therapy device for eye care powered by an STM32WB55* dual-core Bluetooth® LE (BLE) microcontroller (MCU).

Nu Eyne's recently launched CELLENA wearable device utilizes electric current and light emitted to the eyes and associated nerves to relieve eye dryness and fatigue, as well as to promote healthy retinal functions. Durable and light for everyday use, the device supports multiple therapy sessions on a single charging cycle and records and stores product-usage logs. A mobile application will be released soon for greater user convenience and interactive therapy management.

The CELLENA device relies on the dual-core architecture of the STM32WB55 MCU for reliable wireless connectivity and real-time processing. With its embedded security features, ST's MCU also delivers multiple security mechanisms, including user data protection and encrypted firmware update over BLE. The STM32WB55's ultra-low-power performance also significantly extends battery runtime of Nu Eyne's wearable eye-therapy.

"The wireless performance of the STM32WB55 MCU inside CELLENA exceeded our expectations and made it easier to focus on our primary objective of delivering a product to promote tissue regeneration and relieve dry eyes and pain," said Joowan Seo, Director of Technology and Engineering, Nu Eyne. *"All Nu Eyne products are powered by MCUs from ST, which enables us to promptly integrate new STM32 chips in our designs using the easy-to-use STM32 development software. We have chosen ST for their consistent and reliable high-quality products and technical support. ST actively engages with their partners to find solutions from the early stages of development."*

"Nu Eyne's decision to rely on STM32 wireless MCUs for their innovative wearable eye-therapy device is a perfect example of our life.augmented mission to use technology to make a positive contribution to people's lives," said Arnaud Julienne, Vice President, Head of Marketing and Applications of MDG, IoT/AI Competence Center and Digital Marketing, Asia Pacific Region, STMicroelectronics. *"This collaboration with Nu Eyne demonstrates the tremendous potential of STM32WB MCUs for the healthcare market, where security, together with high performance and low power, is essential."*

*STM32 is a registered and/or unregistered trademark of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere. In particular, STM32 is registered in the US Patent and Trademark Office.

About STMicroelectronics

At ST, we are 46,000 creators and makers of semiconductor technologies mastering the semiconductor supply chain with state-of-the-art manufacturing facilities. An independent device manufacturer, we work with more than 100,000 customers and thousands of partners to design and build products, solutions, and ecosystems that address their challenges and opportunities, and the need to support a more sustainable world. Our technologies enable smarter mobility, more efficient power and energy management, and the wide-scale deployment of the Internet of Things and 5G technology. Further information can be found at www.st.com.

About NUEYNE

Nu Eyne is a medical R&D company that focuses on utilizing electroceuticals technology to treat various chronic diseases. For the past three years, we had been validating the safety and efficacy of treatment concepts in our pre-clinical animal studies, as well as from clinical trials with university-hospitals. Our targeting indications are as follows: dry eye disease, retinal dystrophies, migraine, facial palsy, ADHD, and ASD. We are also pioneering in the electroceuticals technology by focusing on novel anti-cancer treatment protocols with a wearable device and an artificial retina implant device for vision restoration. Further information can be found at <http://nueyne.com>

For Press Information Contact:

Laney Lee
Press Officer, Korea
STMicroelectronics
Tel: +82 2 3489 0114
Email: laney.lee@st.com