



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

T4308D

## STMicroelectronics and Quanta Computer Collaborate on Reference Design for Augmented-Reality Smart Glasses

- Leverages Quanta's expertise in system design for manufacturability
- Builds on ST leadership and successes in MEMS¹ micro-actuation and LBS² systems

Geneva, Switzerland, and Taiwan, November 11, 2020 – STMicroelectronics (NYSE: STM), a global semiconductor leader serving customers across the spectrum of electronics applications, and Quanta Computer, a world-leading notebook computer manufacturer, have agreed on a joint effort to develop a reference design for augmented-reality (AR) smart glasses. Based on ST's Laser-Beam Scanning technology and Quanta's AR eyewear design and manufacturing capabilities, the AR-glasses reference design will enable faster development of OEM products.

Together, ST and Quanta are developing the optical, electronic, and photonics design to enable volume manufacturing of AR smart glasses that satisfy the demanding technical challenges of all-day-wearable smart glasses. The reference design aims to integrate and build upon the expertise of the members of the LaSAR<sup>3</sup> Alliance into small, light-weight, and fashionable AR glasses that operate at extremely low power and assure a good Field-of-View (FoV) with a large eye box, while assuring a range of avenues for value-added customization.

"The simultaneous and spirited efforts of ST within the LaSAR Alliance to develop AR eyewear applications and with Quanta to create a foundational reference design emphasize our ambition to be an important contributor to the growth of AR," said Benedetto Vigna, President Analog, MEMS and Sensors Group, STMicroelectronics. "With Quanta, we are working with a team that shares our excitement and complements our expertise, to assure we collectively meet the challenges of incredibly cool, low-weight and -power smart glasses with large field-of-view and eye box."

"Imagine smart glasses that are as comfortable to wear as your regular eyewear or sunglasses, yet deliver directions as you approach an intersection, explain exhibits when you look at them in a museum, or remind you of the name of familiar face coming toward you, and you'll appreciate why we see so much value in contributing our design-for-manufacturing expertise to work with ST and its LBS-based solution," said C.C. Leung, Vice Chairman and President, Quanta Computer.

ST and Quanta anticipate the reference design being made available to OEMs in Q1 2021.

<sup>&</sup>lt;sup>1</sup> MEMS (Micro-Electro-Mechanical Systems) are miniaturized mechanical and electro-mechanical elements manufactured on a small piece of silicon using semiconductor processing and manufacturing technology. Micro-actuators are MEMS devices capable of producing precision movement of solids or fluids, including the movement of micro-mirrors in Laser Beam Scanners.
<sup>2</sup> LBS (Laser Beam Scanning) uses MEMS micro-mirrors in conjunction with laser diodes and related optics to create a miniaturized display.

<sup>&</sup>lt;sup>3</sup> Announced Oct 7, 2020, the LaSAR Alliance (Laser Scanning for Augmented Reality), is an ecosystem of leading technology developers, suppliers, and manufacturers collaborating to develop and accelerate AR smart-glass solutions.

## **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 our 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 <a href="https://www.st.com">www.st.com</a>.

## **About Quanta Computer**

Quanta Computer is a Fortune Global 500 Company and the world's leading provider for notebook computers, datacenter equipment and other technology products. Quanta provides innovative products with superior technology that range from information, communication, networking, consumer electronics, and car electronics to cloud computing infrastructure solutions. Founded in 1988, Quanta Computer is headquartered in Taiwan with major operation facilities set up in Asia, North America, South America, and Europe. Quanta Group currently employs over 90,000 employees worldwide with consolidated revenues exceeding US\$34 billion for fiscal year 2019. For further information, please visit Quanta Computer's website at <a href="http://www.quantatw.com/">http://www.quantatw.com/</a>.

## **For Press Information Contact:**

Michael Markowitz Director Technical Media Relations STMicroelectronics

Tel: +1 7 81 591 0354

Email: michael.markowitz@st.com