

December 6, 2022

NEXTY Electronics Corporation

## **NEXTY Electronics and ZEROKEY Signs Distributorship Agreement**

**- High-precision indoor positioning system enables more accurate location information -**

Toyota Tsusho Group's electronics trading company, NEXTY Electronics Corporation (Head Office: Minato-ku, Tokyo; President: Yasuhiro Kakihara; hereinafter referred to as "NEXTY Electronics") entered into a distributorship agreement with ZeroKey Inc. (Head Office: Canada; Founder and CEO: Matthew Lowe; hereinafter referred to as "ZEROKEY"), which has strengths in high-precision indoor positioning systems, in December 2022.

### 1. Background and Purpose

Indoor facilities such as factories, warehouses, and offices require more accurate location information on people, forklifts, and robots in order to prevent collisions and improve work efficiency. Outdoors, GPS satellites can be used for positioning, but indoors, GPS satellite signals cannot be received, and alternative technologies are needed.

The main methods of indoor positioning include UWB<sup>\*1</sup>, Bluetooth, Wi-Fi, and RFID<sup>\*2</sup>. However, these are difficult to calibrate<sup>\*3</sup>, and only two-dimensional coordinate information can be obtained. Meanwhile, ZEROKEY's high-precision indoor positioning system (patented in the United States) utilizes proprietary ultrasonic technology to construct a system similar to GPS using ultrasonic signals, enabling high-precision 3D positioning in the sub-centimeter class<sup>\*4</sup>. For example, in large indoor spaces such as warehouses and factories, observation points up to 20 meters apart can be observed with an accuracy of up to 1.5 millimeters. In addition, the proprietary calibration technology enables installation, adjustment and start-up to be carried out in a very short time compared to conventional technologies. We aim to expand sales to Japan in the future by combining the technical support capabilities of NEXTY Electronics with ZEROKEY's technical capabilities.

### 2. Future Developments

The high-precision positioning system provided by ZEROKEY is expected to be used in various situations in the future, such as by making AGVs<sup>\*5</sup> and AMRs<sup>\*6</sup> trackless, hence improving the freedom of equipment layout and AGV tracks, etc. in factories, and tracking people and objects to analyze the flow lines of skilled workers and transport machines to streamline work. Proof of concept tests have already begun in Japan in the fields of in-plant logistics and equipment inspections.

As the only distributor in Japan, NEXTY Electronics contributes to the creation of a prosperous society by providing everything from equipment layout design to operation support tailored to the needs of customers and the environment.

\*1 Ultra Wide Band: Ultra wide band wireless technology

\*2 Radio Frequency IDentification: A technique for contactless reading and writing of data using radio waves

\*3 Calibration: In order to obtain standard values with a measuring instrument, the deviation of the instrument is measured using a standard instrument, etc., and the measuring instrument is adjusted so that correct values are obtained.

\*4 Sub-centimeter class: Measurements can be made with an accuracy higher than 1 centimeter

\*5 Automatic Guided Vehicle

\*6 Autonomous Mobile Robot

■ Use Cases

① Trackless AGV and AMR



② Tracking of people and objects



■ Signing ceremony



Left : ZEROKEY Founder and CEO, Matthew Lowe  
 Right : NEXTY President, Yasuhiro Kakihara

**■ About NEXTY Electronics**

NEXTY Electronics, an electronics trading company headquartered in Tokyo, Japan is one of the core members of the Toyota Tsusho Group's electronics business and boasts top-of-class scale in the automotive electronics sector. With its core strengths of technology and products, NEXTY Electronics meets customer and global needs in a broad range of areas and provides solutions to the challenges faced by society. It achieves this by actively adapting the autonomous driving, connected and other leading-edge technologies it has cultivated in the automotive electronics sector for use in other industries. It offers optimum global solutions that transcend regions and business boundaries by leveraging the Toyota Tsusho Group's global network and intensifying its discovery of the cutting-edge proprietary technologies of startups from around the world. Visit the links below for more information.

NEXTY Electronics website: <https://www.nexty-ele.com/english/>

**■ About ZEROKEY**

Company name: ZeroKey Inc.  
Location: Canada

A supplier of indoor positioning solutions using ultrasonic sensors that enable high-precision positioning. ZEROKEY products can acquire three-dimensional (X-, Y-, and Z-axes) coordinate information in spaces that were previously difficult to measure, and are expected to be an optimal positioning solution in cases where high precision spatial recognition is required, such as in factories, warehouses, and construction sites. Visit the links below for more information.

ZEROKEY HP: <https://zerokey.com/>

[For inquiries concerning this release]

NEXTY Electronics Corporation Public Relations Team, Corporate Planning Dept.  
Tel: 03-5462-9666 E-mail: [nexty\\_contact@nexty-ele.com](mailto:nexty_contact@nexty-ele.com)