

Avalue Highlights the Next Wave of IoT Transformation Driven by AI, Edge Computing and Low-Power Technologies

TAIPEI, TAIWAN, December 2, 2025 /EINPresswire.com/ -- (Press Release - November 28, 2025) – Avalue Technology Inc. (TPEx: 3479.TWO), a global leader in industrial computing solutions, highlights the global Internet of Things (IoT) landscape is rapidly advancing from concept to large-scale deployment. In 2024, IoT devices grew to 18.8 billion units, a 13% increase year over year, generating unprecedented volumes of sensor data. As industries such as manufacturing, transportation,



healthcare, retail and public infrastructure embrace IoT technologies, the demand for real-time computing, data integration and flexible system architectures continues to rise. According to Avalue, IoT is transitioning from simple connectivity to intelligent, data-driven operations—entering a phase of accelerated evolution.

Artificial intelligence (AI) has become essential for unlocking the value of IoT. By analyzing data collected from distributed devices, AI enhances anomaly detection, predictive maintenance and decision-making accuracy, preventing resource waste and improving operational efficiency. In smart city environments—covering areas like energy management, video analytics and public safety—Avalue's <u>AIB-3588</u> ARM-based system offers high performance and scalability for ondevice processing, enabling cities to operate more intelligently and efficiently.

Edge computing is emerging as a critical enabler of IoT's next phase. By processing data directly at the source, edge systems reduce latency, bandwidth usage and security risks associated with cloud-dependent architectures. Avalue's <u>ACS10-TGU</u> provides powerful edge performance suited for industrial monitoring, environmental sensing and real-time video analytics. Meanwhile, sensor technology is evolving beyond temperature and humidity measurements to capture atmospheric pressure, biometric signals and magnetic field variations. Compact solutions like the <u>EZX-EHLP</u> embedded motherboard allow businesses to deploy large numbers of front-end

devices with greater flexibility.

Connectivity advancements will further shape IoT development. With global 5G coverage expected to reach 85% by 2030, low-latency and high-bandwidth networks will create new opportunities for IoT expansion. Avalue's ACP-Q6490 ARM-based SBC delivers the processing performance required to leverage next-generation connectivity. At the same time, IoT decentralization is driving rapid changes in cybersecurity, data privacy and sustainability regulations. Avalue emphasizes that future-ready IoT solutions must balance computing power, energy efficiency and regulatory compliance.

Avalue provides a comprehensive portfolio of IoT, AI, ARM-based and edge computing solutions designed to support the next wave of technological transformation. With a focus on efficiency, flexibility and low power consumption, Avalue enables industries to accelerate digital transformation and build resilient, intelligent and sustainable IoT ecosystems. Businesses can explore Avalue's full product lineup or contact the company's technical team for further assistance.

For more information, visit Avalue Website, or contact us using our online contact form.

About Avalue Technology

Avalue Technology was founded in 2000 and is a global leader in industrial computer solutions. Avalue Technology has a proven track record of success in the industrial control industry, and we leverage that experience to provide reliable and trustworthy customized products and services. Our primary products are embedded and industrial computer solutions, with a focus on smart healthcare, smart manufacturing, smart transportation, smart retail, and Internet of Things (IoT) applications. Avalue is committed to the sustainable growth of our company. We are guided by the business philosophy of "stability, innovation, diligence, and enthusiasm, and enjoyment of work and life." We are dedicated to leveraging the power of intelligence and sustainability to disrupt the future of digital blueprints and to drive positive, long-term change in the smart industry.

Olivia Wang Avalue Technology 0282262345 email us here

This press release can be viewed online at: https://www.einpresswire.com/article/871777298

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.		