



Press Release

Geneva, October 5th 2020

ID Quantique and KCS join hands to increase the security of video surveillance and protect against hacking

By combining IDQ's ultra-small quantum random number generator (QRNG) technology and KCS' real-time video encryption technology, the two companies will target markets such as IP cameras, drones, video internet phone (VoIP), and remote automatic meter reading (AMI).

ID Quantique (IDQ), the world leader in Quantum-Safe security solutions and Korea Computer Systems (KCS), a maker of IoT security cryptographic chips (KEV7) today announce they are partnering to expand the market for quantum cryptography applications in IoT devices and video security.

Their mutual cooperation is expected to bring a new level of security to video service operators and users without compromising on quality and speed. The two companies will complete the development of a security reinforced solution which integrates IDQ's low profile, small footprint QRNG chip with KCS' video encryption chip (KEV7) by the end of this year to apply it to a variety of IoT sensors and instruments in the near future. KCS is developing a variety of crypto chip-based solutions aimed at ensuring and enhancing IT security.

Generating strong keys from a reliable entropy source is the cornerstone of any security system. IDQ's [Quantis QRNG chip](#) (IDQ250C2) is the first Quantum Random Number Generator designed and manufactured specifically for IoT devices. It generates provably unbiased and unpredictable randomness with high entropy from the very first bit from the shot noise of a light source captured by a CMOS image sensor, a patented quantum technology from ID Quantique.

The worldwide proliferation of video-enabled devices poses challenges from personal data privacy to national security. However, it also represents a significant opportunity for the image security sector, with experts predicting a market value in excess of US\$63 billion by 2021. As organizations and nations alike search for ways to secure a multitude of video streams they are increasingly turning to cryptography. As a pioneer in the market, KCS took the opportunity to develop a crypto chip in response to the growing demand for enhanced security, first applying the technology to IP cameras in 2019. Adding ID Quantique's new ultra-small QRNG chip to the solution will ensure trusted authentication and encryption of sensitive information and make our connected world more secure.

ID Quantique was the first company to develop a quantum random number generator (QRNG) in 2001 and it remains the market leader in terms of reliability and certifications, with its [Quantis QRNG product family](#). It is actively developing new QRNG products for its customers in various fields like automobile, consumer electronics, computer, mobile, financial, gaming and security markets.

At ID Quantique, we also focus on providing [long-term security solutions](#) for our customers' IT infrastructures. Our [Quantum Key Distribution](#) (QKD) solution is used to distribute encryption keys, whose security is based on quantum physics and is thus guaranteed for the long-term.

Ho-sung Lee, CEO of KCS said: *“KCS has a long-established reputation in this field. For over forty years we have been developing and integrating security-first solutions and software. One of our most outstanding achievements is the real-time image encryption solution using the KEV7 chip. With the addition of IDQ’s ultra-small chip, we will be able to guarantee the highest level of security on the market.”*

“We are very proud of partnering with KCS to enhance security to the edge” said Grégoire Ribordy, CEO and co-founder of ID Quantique. *“Our quantum technology provides the most secure encryption keys today, and in the quantum computing era, guaranteeing the highest level of trust for consumers. We are looking forward to further collaboration with KCS to enter new markets requiring an increasing demand for security.”*

About KCS

Established as a spin-off from the Korea Computer Holdings Incorporated, which has pioneered Korea’s financial IT since its establishment in 1974, KCS is an IT solution provider which covers enterprise solutions, IT consulting services, and system integration. Through its accumulated experience and cooperation with affiliates, KCS has invested actively in the semiconductor business over the past few years and finally succeed in releasing a cryptographic SoC (system-on-chip) chip called KEV7.

For more information, please visit www.kcins.co.kr

About ID Quantique

Founded in 2001 as a spin-off of the Group of Applied Physics of the University of Geneva, ID Quantique is the world leader in quantum-safe crypto solutions, designed to protect data for the future. The company provides quantum-safe network encryption, secure quantum key generation and Quantum Key Distribution solutions and services to the financial industry, enterprises and government organizations globally. IDQ’s quantum random number generator has been validated according to global standards and independent agencies, and is the reference in highly regulated and mission critical industries- such as security, encryption, critical infrastructure and IoT- where trust is paramount.

Additionally, IDQ is a leading provider of optical instrumentation products, most notably photon counters and related electronics. The company’s innovative photonic solutions are used in both commercial and research applications.

IDQ’s products are used by government, enterprise and academic customers in more than 60 countries and on every continent. IDQ is proud of its independence and neutrality, and believes in establishing long-term and trusted relationships with its customers and partners.

For more information, please visit www.idquantique.com.

Contact info:

Catherine Simondi – VP Marketing & Communications
catherine.simondi@idquantique.com or +41 (0) 22 301 83 71