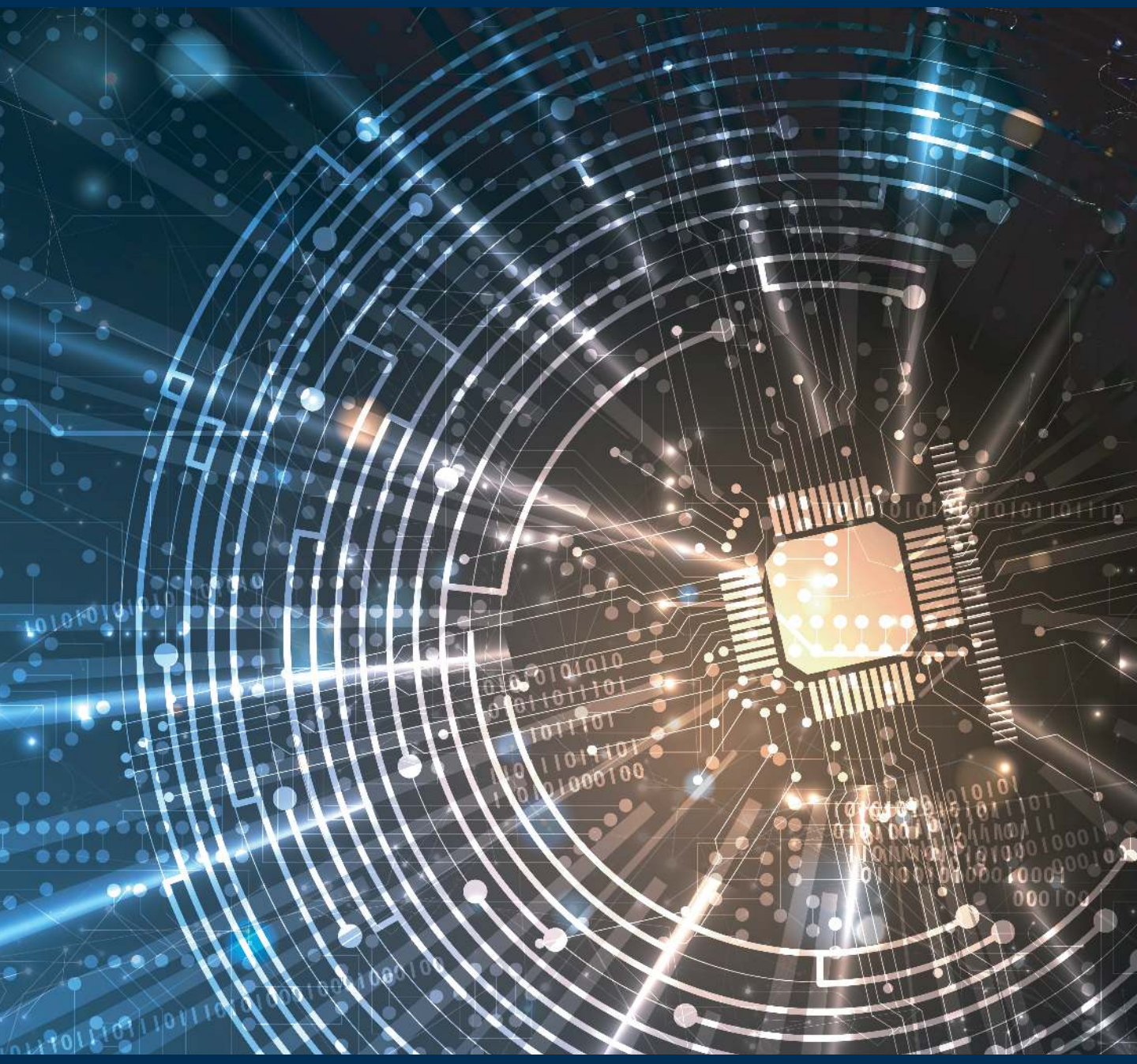


Authentication Chip

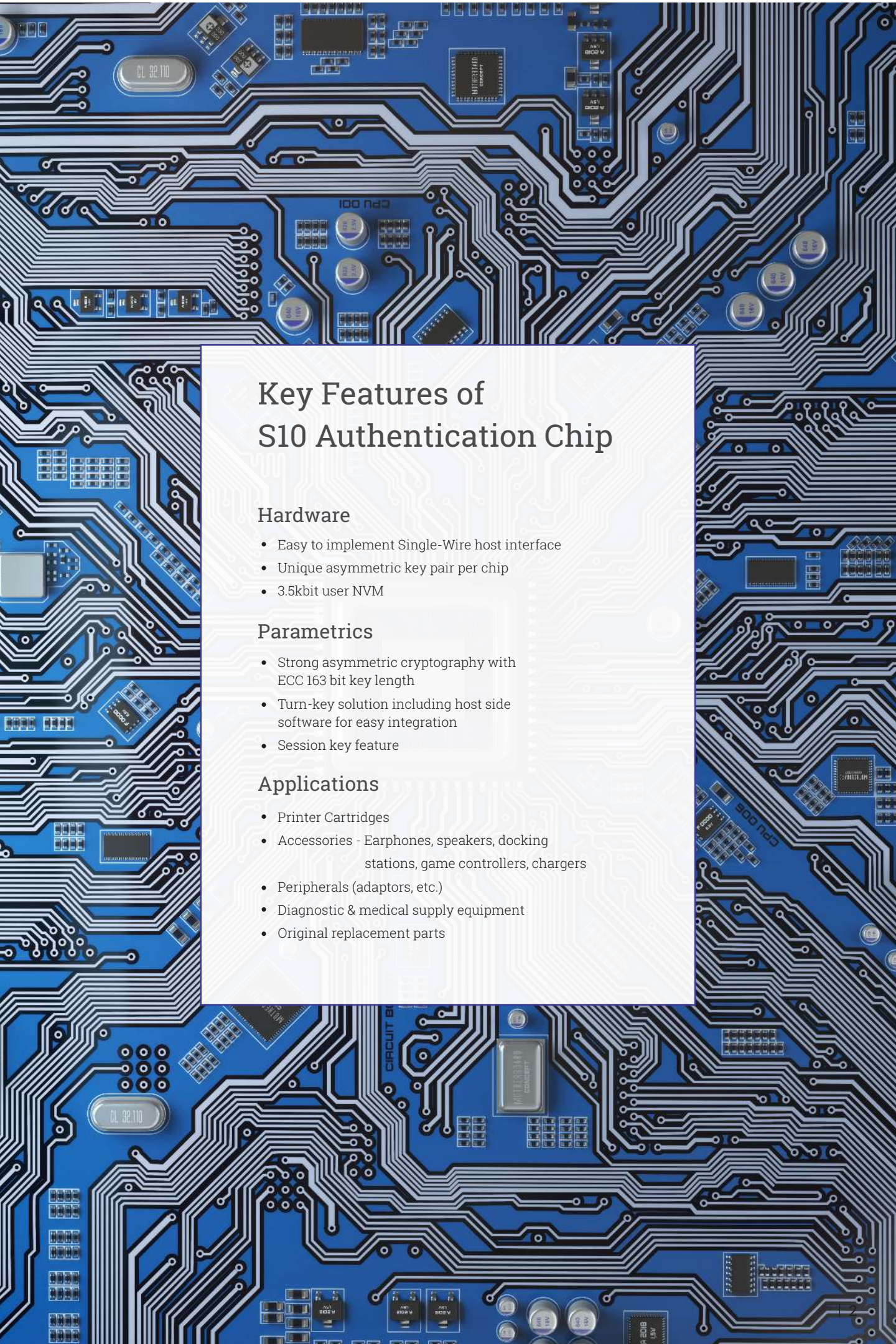
Device Identification Empowering Efficient Management

S10 Authentication Chip for Anti-counterfeiting and Device Management

Connected devices and electronic components possess characteristics of easy connection and deployment. Yet once the infrastructure is built but turns out to be immature, imminent threats are to cause large-scale losses of assets. In light of it, creating a unique identify for every unit and protecting digital assets from compromising are required for a robust and anti-counterfeiting system.

The S10 authentication chip centers on Infineon's OPTIGA™ Trust SLS 10ERE authentication solution, effectively assisting customers to fulfill authenticity, integrity and safety of their products. It features a turn-key solution that can alleviate any concern of aftermarket replacement or counterfeiting.

The dominant cryptographic algorithm, Elliptic Curve Cryptography (ECC), fulfills strong authentication in the embedded system. Whether it is intended for an offline environment or a connected system, the host can authenticate against the client to verify authenticity. The S10 authentication chip, though playing a trivial role in a device or a component, critically ensures the overall security and sustainability of the entire system.



Key Features of S10 Authentication Chip

Hardware

- Easy to implement Single-Wire host interface
- Unique asymmetric key pair per chip
- 3.5kbit user NVM

Parametrics

- Strong asymmetric cryptography with ECC 163 bit key length
- Turn-key solution including host side software for easy integration
- Session key feature

Applications

- Printer Cartridges
- Accessories - Earphones, speakers, docking stations, game controllers, chargers
- Peripherals (adaptors, etc.)
- Diagnostic & medical supply equipment
- Original replacement parts

Use Case Application

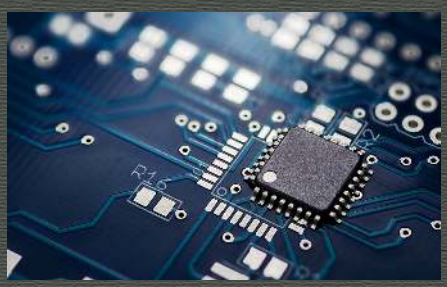
Over the past years, public awareness of security has been raised, specifically for those who confronted imminent attacks or targeted markets that abounded with counterfeit products. Under the circumstance, security becomes a must rather than a choice. A great number of vendors consequently reached us and voiced their concerns. They covered a wide range of use case applications, in which the security mechanism was designed aiming to safeguard the value of digital assets and intellectual properties. IKV authentication solution is taking effect even now. In these cases, the given solution has proven a real-world impact on cost, trustworthiness and target market penetrability.

The S10 authentication chip enables anti-counterfeiting in a wide range of applications with salient advantages as follows.

- Improved security with state of the art asymmetric elliptic curve authentication principle and uniqueness provided by chip individual key pair
- Optimized system costs with 1 chip solution
- Easy integration due to full turn key solution
- Lean and easy connectivity with Single Wire Interface

Automobile infotainment system

Smart Factory Connected Device

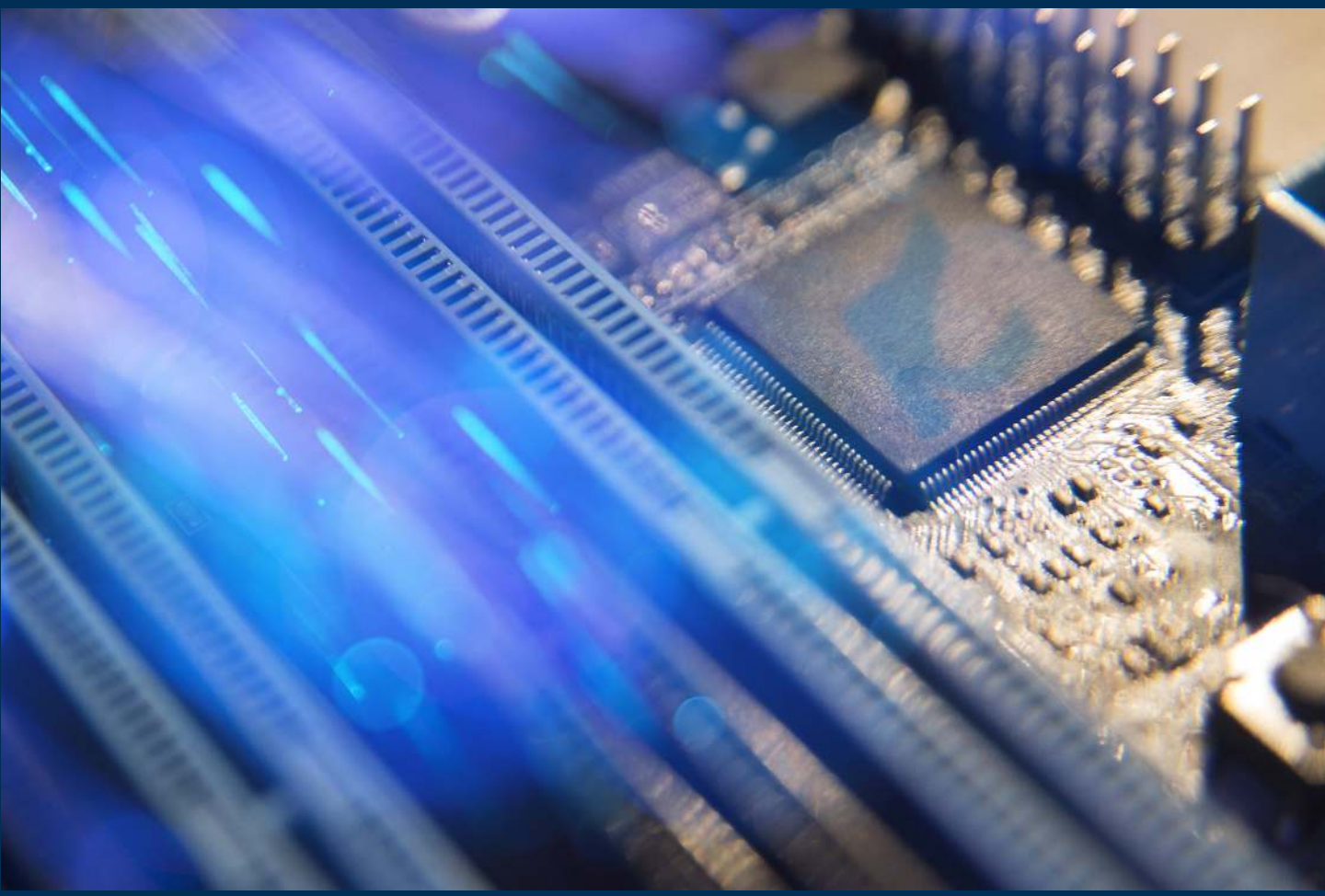


Input/Output Board

Medical Device and Supply Equipment

Surveillance Camera

Smart Electricity Meter



Secure Vault at your fingertips

With IKV-Tech expertise, a wide range of applications can attain tailor-made security leveraging the S10 authentication chip. We help customers optimize their existent security mechanism and enable security and usability to go hand in hand. All in all, our mission is to secure customers' business operation in an era where attacks always keep abreast.

About InfoKeyVault Technology

InfoKeyVault Technology (IKV-Tech) is a service company in embedded security, also an independent design house for security solutions from global security chip vendors, such as Infineon and Microsemi. IKV-Tech specializes in cryptographic implementation, software, firmware and hardware protection, cryptographic key management and countermeasures against hardware attacks so as to secure customers' digital assets and intellectual property.

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