



Block chain meets NFC: New ways to protect luxury goods & brands

Infineon's virtual show 2020



Agenda

1

What would you do if...?

2

Insights into the block chain

3

Block chain for brand protection or sustainable luxury

4

SECORA™ Blockchain: connects block chain to the physical world



... How can you be sure that
your newly purchased product
is genuine and not a fake?

A background image of a man with a beard, wearing a blue shirt, looking at a laptop screen. The image is overlaid with various digital and network-themed graphics, including glowing blue and red lines, nodes, and icons like a cloud, a key, and a gear.

In a test of the US Government Accountability Office **over 40 % of the supposedly brand name products** purchased thru 3rd party sellers were **counterfeit**.

[GAO, 2018](#)

Counterfeit and pirated goods amounted to up to **6.8% of EU imports** from 3rd countries.

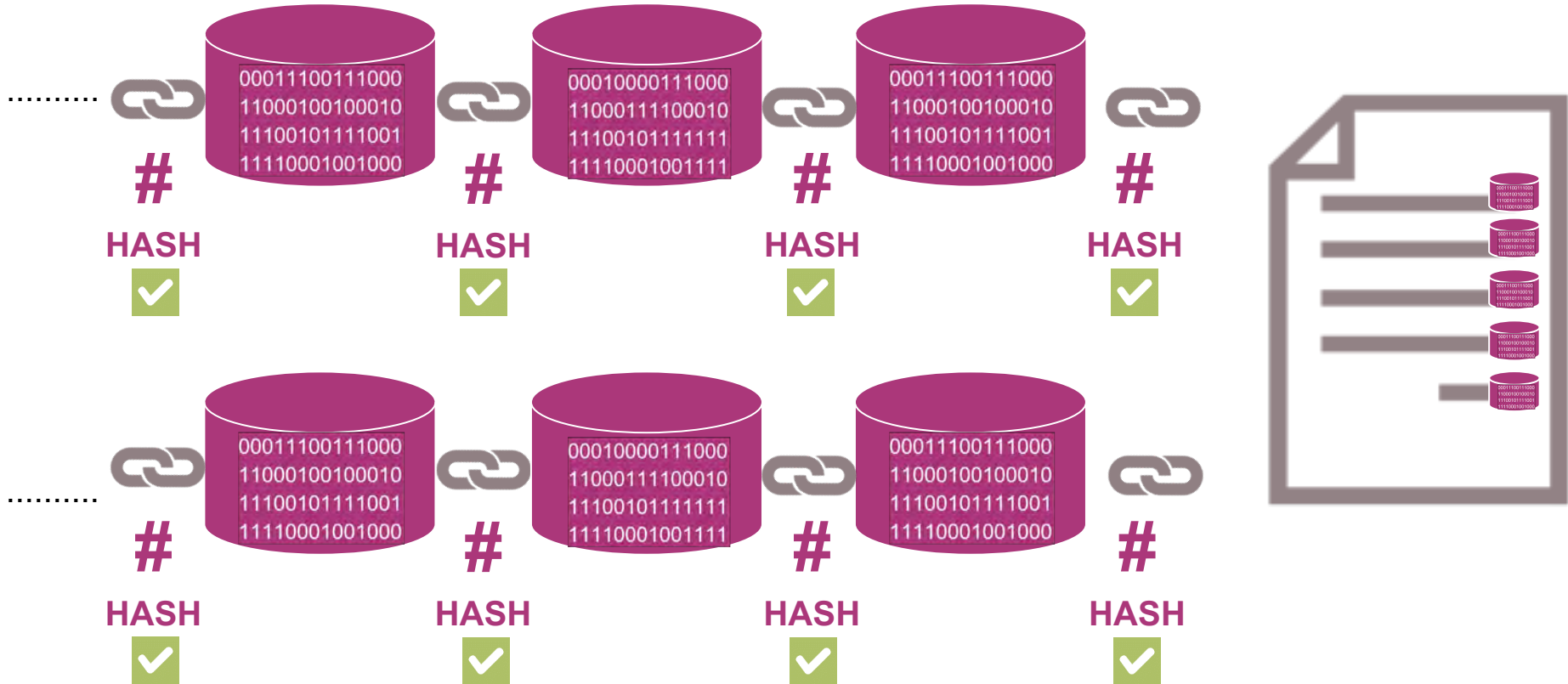
[OECD/EUIPO \(2019\)](#)

Legitimate electronics companies miss out on about **\$100 billion of global revenue every year** because of counterfeiting

Pecht & Tiku, 2006

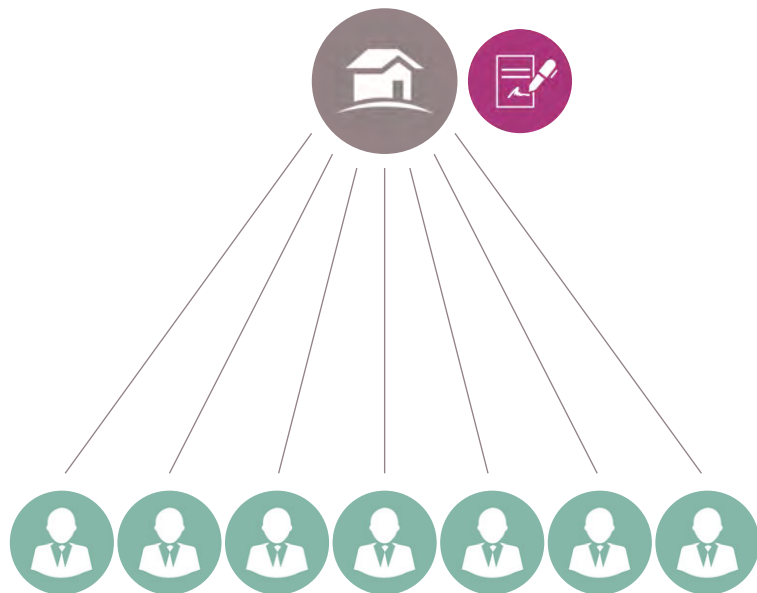
Block chain:

An Accounting Book which stores all Transactions



Centralized and decentralized system

Centralized System



Decentralized System



Protection of user credentials is essential

Block chain is a decentralized system

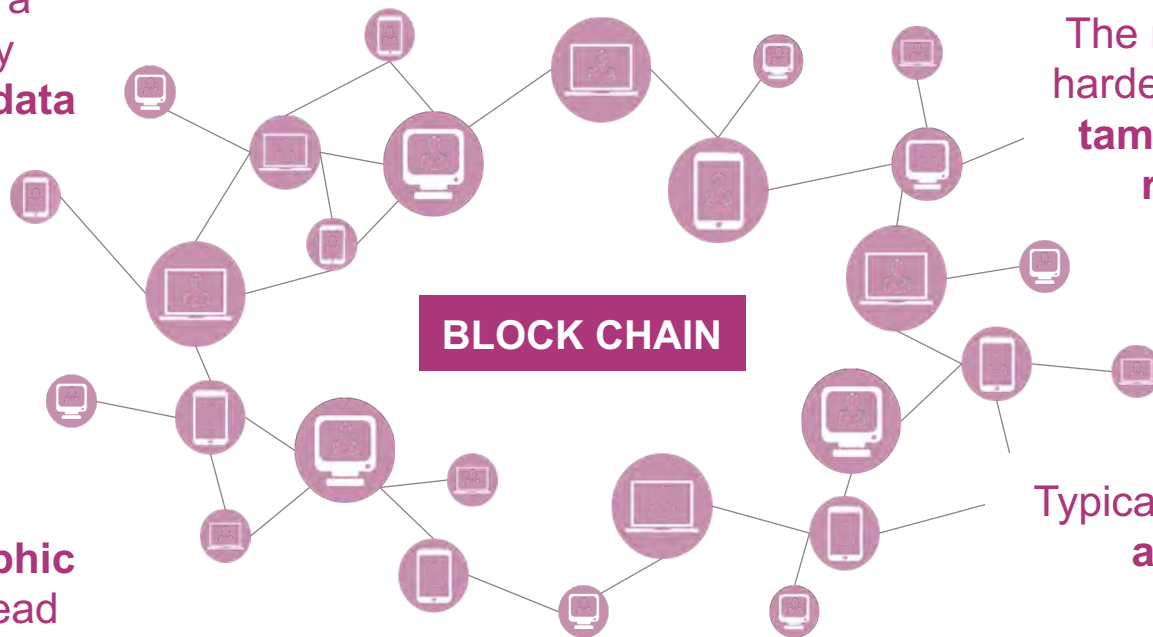
It **maintains** a continuously growing list of **data**

The **records** are hardened **against tampering** and **revision**

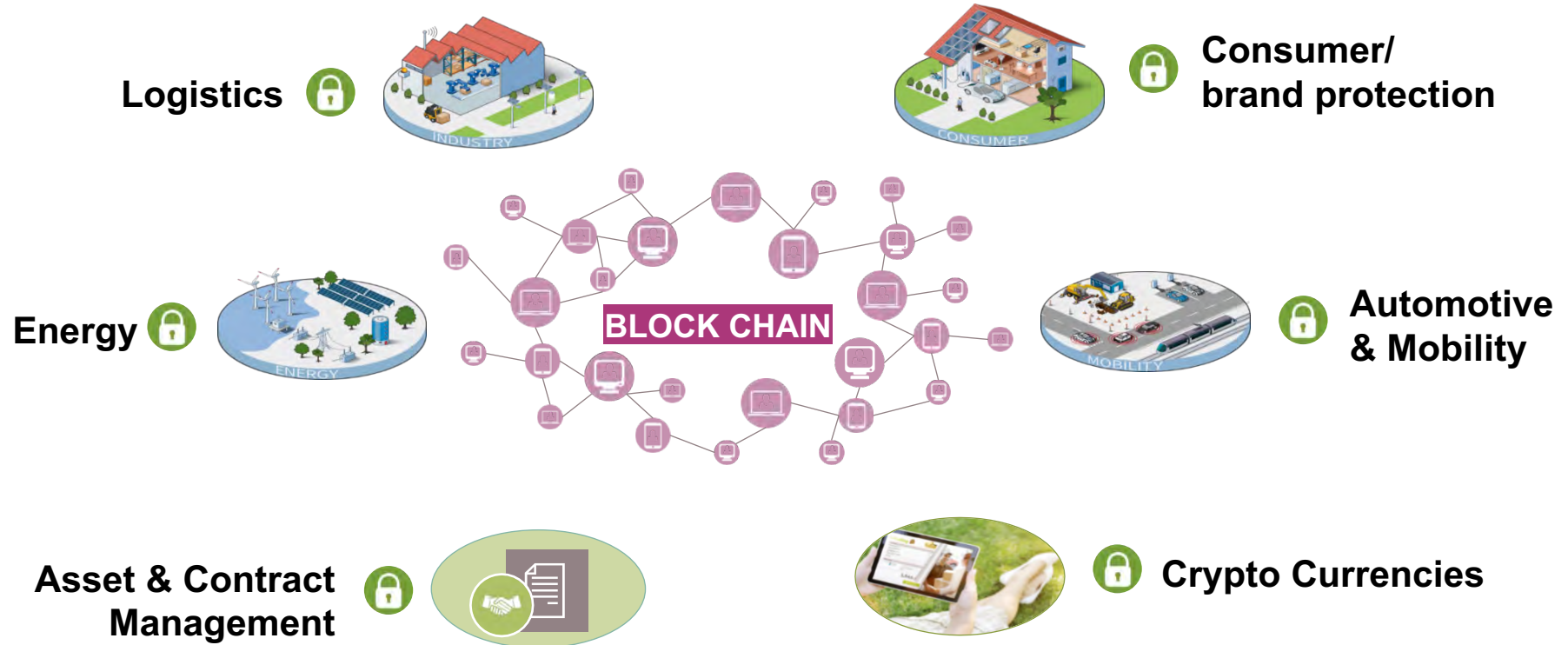
Cryptographic proof instead of central trust

Nodes don't have to trust each other

Typically no central authority



Wide and growing number of use cases in various application areas



Block chain Value Propositions for Use Cases

Proof of history

Proof of history
(e.g. of supply chain)

Immutability

Data stored on Block chain
can **not** be **tampered**

Extensible

Data stored on Block chain
can be used for **different**
use cases

**Use Case
Value
Proposition
of
Block chain**

Infrastructure

Interoperability
due to world wide
standardized
infrastructure

Block chain for Brand Protection

- Brand protection**
- › Prevents counterfeit of product
 - › Protects asset

Every product has a **story**, **block chain** makes it visible



Proof sustainability
based on **traceable**
supply chain



Check of
limited editions with
block chain



2nd hand transaction
can be stored on the
block chain

Convenient thanks to NFC

SECORA™ Blockchain NFC: connects block chain to the real world



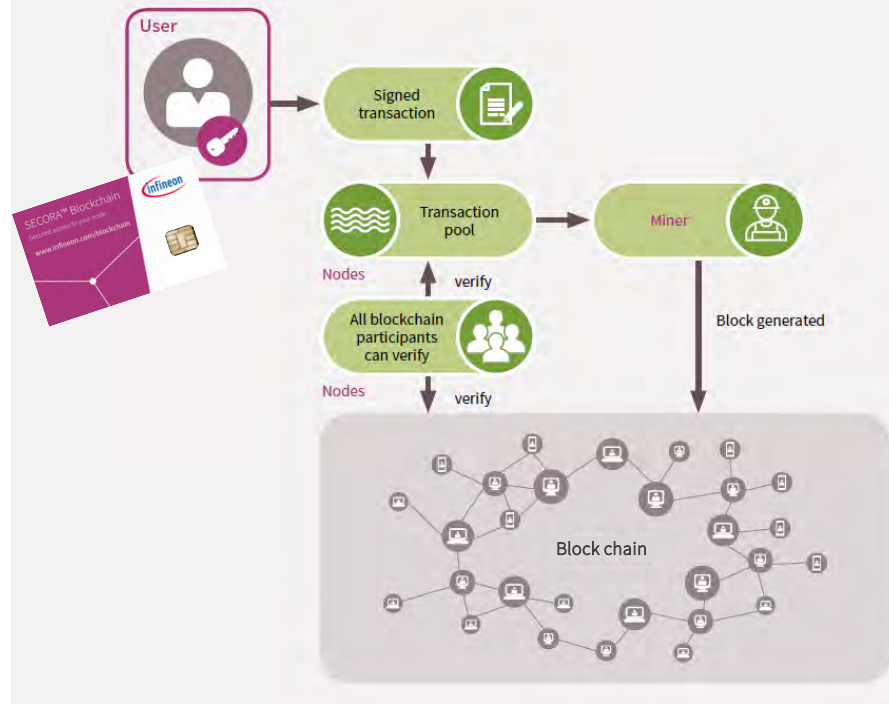
SECORA™ Blockchain NFC



- ✓ Infineon's **block chain solution** based on Java Card™ platform
- ✓ **Hardware-based security tokens** for secured access to the block chain
- ✓ **Ready-to-use** solution enable rapid block chain project implementation
- ✓ Supports a **broad range of crypto schemes**, such as Ethereum, Bitcoin, ETR ERC-20

SECORA™ Blockchain in the Block Chain Environment

Protected by SECORA™ Blockchain



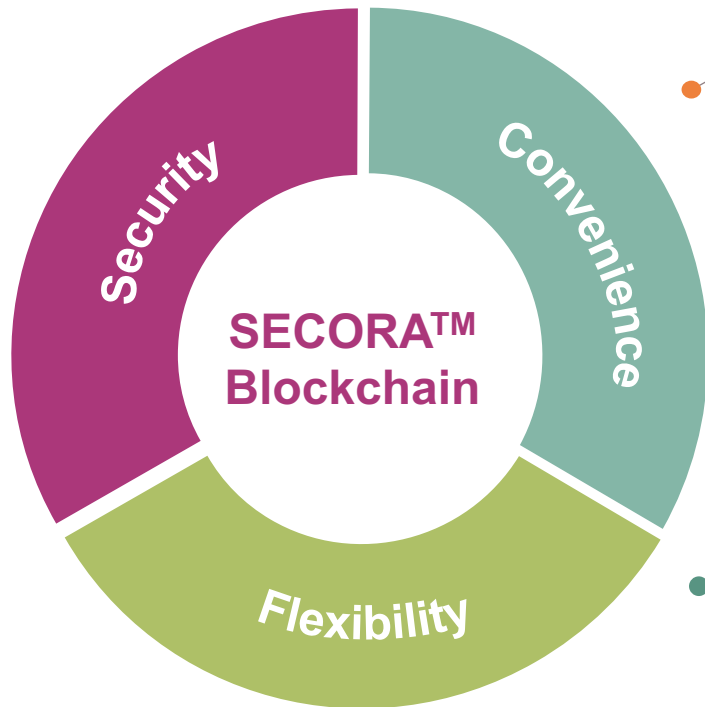
Block chain Security

- › **Block chain infrastructure** provides **inherent security**
- › **Private key**, identity and **security credential**, enables **interaction with block chain**
- › **Securing the private key** is **essential**

SECORA™ Blockchain

- › Features **hardware based protection mechanisms**
- › **Generates and stores private keys** in a **secured way** based on a **security controller**
- › **Secure backup for key restorage** included

SECORA™ Blockchain – all you need



Starter kits



GitHub

Tools & Support



Various form factors



Divers applications

Conclusion

Blockchain tells the **story**
about the **product**



Sustainability:
Full **life cycle** of product is
checked against **ethical**
an **environmental**
circumstances

SECORA™ Blockchain
connects the product to
the **block chain**



Secured connection of
product to **block chain**

Consumer can **check**
genuinity of product.
Manufacturer can avoid
faked products.



Brand protection:
Value for **manufacturer**
of product and **consumer**

Thank you
for your attention

www.infineon.com/blockchain



Part of your life. Part of tomorrow.