

Product brief

Blockchain Security 2Go starter kit

Meeting blockchain security challenges

Infineon's Blockchain Security 2Go starter kit provides a fast and easy way to build best-in-class security into your blockchain system design.

This generic kit supports an evaluation environment for many different kinds of Blockchain technologies. It provides a lean feature set as well as open source application examples, which enable new ideas to flourish and to generate a secured physical link from the digital to the real world.

The Blockchain Security 2Go starter kit includes:

- › Five ready-to-use NFC cards, supporting basic blockchain functionalities such as secure key generation, signing methods, pin protection and many more
- › On-card software that supports commands for key-management, signature creation and PIN authentication
- › Access to Infineon's blockchain git hub: Open source example application code, such as a smartphone app operating with the card

Where to buy

Either from www.infineon.com/blockchain or from distributors' e-Store: The list is available on www.infineon.com

Where to get support

<https://github.com/Infineon/Blockchain>



Key features and benefits

NFC cards

- › Credit card size format (ID1)
- › Infineon security controller chip
- › Contactless communication interface ISO 14443 Type A

On-card software commands

- › Key-management
- › Signature creation
- › PIN authentication

Open-source software

- › Android example app demonstrating a crypto wallet for Ethereum/ERC-20 tokens and a Smart Contract voting demo
- › Python library abstracting the Blockchain Security 2Go API

Customer benefits

- › Starter kit for fast and easy design of Blockchain applications
- › Low effort to integrate security (protection of credentials)

Main features of the NFC cards

- › Creation and storage of up to 255 private/public key pairs for Blockchain applications
- › Loading and storing a key that is provided by the user in an encrypted form
- › Signature generation for signing Blockchain transactions
- › User authentication with PIN

Blockchain in a nutshell

Basically, a blockchain is a decentralized digital ledger that manages a continuously growing list of data points (chain of blocks). Every block is cryptographically linked to the previous block. The ledger records all transactions which are used to send assets (e.g. crypto currency) from one account to another. Each transaction is protected by a digital signature. To create such a digital signature, a secret private key that corresponds to the public key of an account is needed.

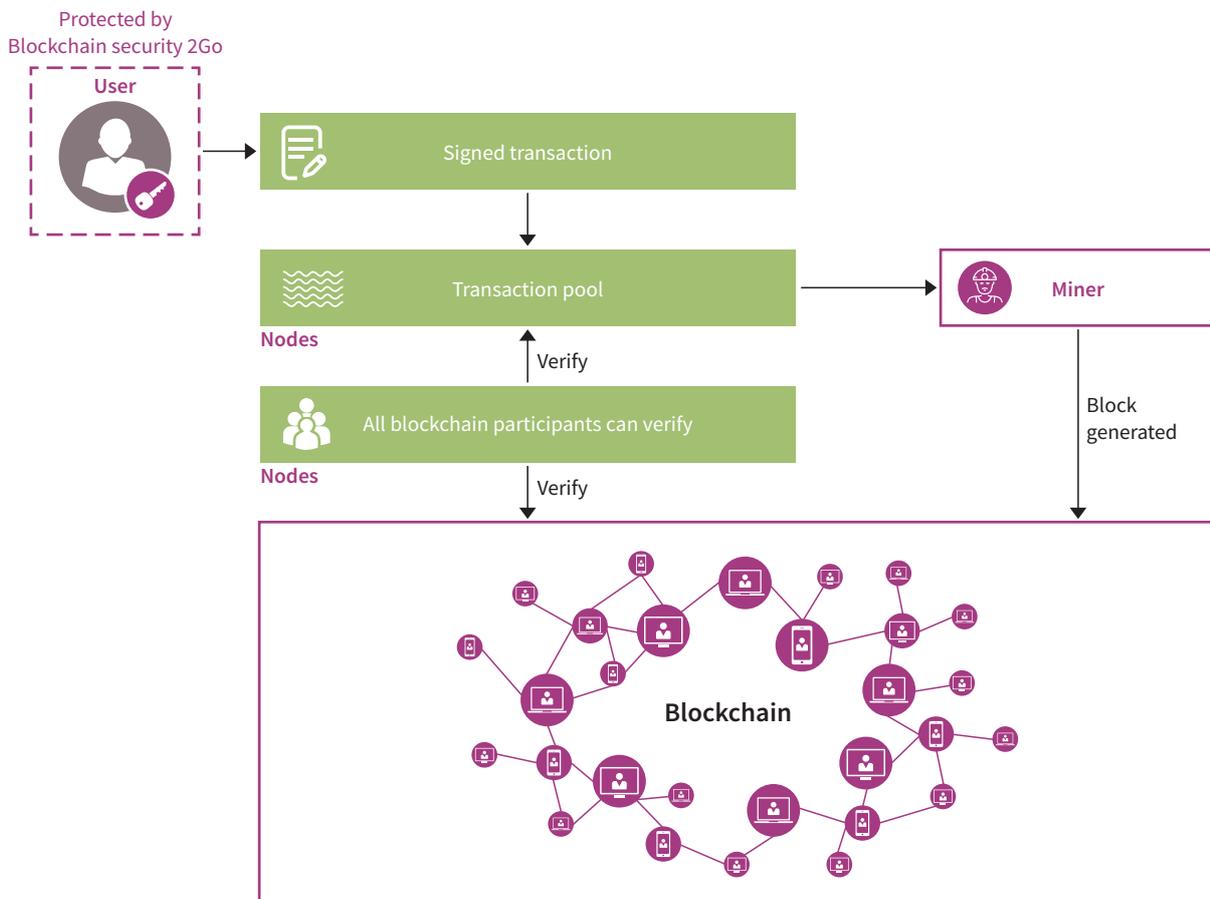
Why is security so important for Blockchain applications?

The private key of a user plays a critical role. If the private key is lost, all assets are lost. Moreover, if the private key is stolen and hacked, the attacker has full access to all assets which allows the creation of seemingly valid transactions.

Private key storage requires best possible protection!

Hardware-based security tokens are the most effective way against attacks and unauthorized access.

Infinion's Blockchain Security 2Go starter kit features hardware-based protection mechanisms to generate and store private keys in a secured way.



Published by
Infineon Technologies AG
81726 Munich, Germany

© 2019 Infineon Technologies AG.
All Rights Reserved.

Please note!

THIS DOCUMENT IS FOR INFORMATION PURPOSES ONLY AND ANY INFORMATION GIVEN HEREIN SHALL IN NO EVENT BE REGARDED AS A WARRANTY, GUARANTEE OR DESCRIPTION OF ANY FUNCTIONALITY, CONDITIONS AND/OR QUALITY OF OUR PRODUCTS OR ANY SUITABILITY FOR A PARTICULAR PURPOSE. WITH REGARD TO THE TECHNICAL SPECIFICATIONS OF OUR PRODUCTS, WE KINDLY ASK YOU TO REFER TO THE RELEVANT PRODUCT DATA SHEETS PROVIDED BY US. OUR CUSTOMERS AND THEIR TECHNICAL DEPARTMENTS ARE REQUIRED TO EVALUATE THE SUITABILITY OF OUR PRODUCTS FOR THE INTENDED APPLICATION.

WE RESERVE THE RIGHT TO CHANGE THIS DOCUMENT AND/OR THE INFORMATION GIVEN HEREIN AT ANY TIME.

Additional information

For further information on technologies, our products, the application of our products, delivery terms and conditions and/or prices, please contact your nearest Infineon Technologies office (www.infineon.com).

Warnings

Due to technical requirements, our products may contain dangerous substances. For information on the types in question, please contact your nearest Infineon Technologies office.

Except as otherwise explicitly approved by us in a written document signed by authorized representatives of Infineon Technologies, our products may not be used in any life-endangering applications, including but not limited to medical, nuclear, military, life-critical or any other applications where a failure of the product or any consequences of the use thereof can result in personal injury.