Cost Effective Market Leading Secure Authentication Solution

ORIGA™ 2 Lite – Authentication IC Offers the Best Security to Cost Ratio in the Market

The Infineon ORIGA™ ORIGinal product Authentication chip helps OEMs and system manufacturers to ensure the authenticity and safety of their original products. It offers a cost effective yet very robust cryptographic solution to protect against unauthorized aftermarket replacements and copies.

With more than 0.5 Billion ORIGAs deployed at major OEM customers, the new ORIGA™ 2L in extra small chip scale package is particularly suited for applications with very stringent space and cost requirements. The product reduces cost by eliminating the need for additional secure key storage ICs in the host system.

ORIGA™ 2L also features the market leading strong asymmetric cryptography engine introduced with ORIGA™ 2 and 3.5 kbits of user non-volatile lockable memory with a well-defined data map covering all functions. The incorporated power management unit reduces power consumption and has over-under voltage protection up to ±20 V. The MIPI BIF compliant single wire host interface allows operation using a single dedicated contact which reduces size and, in turn, improves reliability, robustness, performance, and system cost.

Applications
- Battery authentication for mobile phones, computing devices, digital imaging, power tools, drones etc.
- Power supply units and (fast) AC adaptors
- USB power cables

Key advantages
- Advanced security using unique asymmetrical public/private key cryptography with two different keys for encryption and decryption
- ORIGA™ Digital Certificate (ODC) enables unique key pairs usage for each device
- Improved system cost by allowing robust host-side implementation in software (no need for extra HW) without compromising security
- Avoiding liabilities and reducing warranty or support efforts created by counterfeited batteries or accessories
- Save space and cost for extra components to comply to UN battery transportation regulation thanks to ±20 V integrated over/under voltage protection
- Large Non-Volatile Memory (NVM) for storing of device behavior or logistic information (e.g. usage cycles, user data, traceability)
- Minimize design effort by complying to mobile market standard MIPI BIF (Battery InterFace)

www.infineon.com/origa
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Application Diagram – Smart Battery Pack Design

Package Outline – SG-WFWLB-5-1

Evaluation Kit available
Please contact Infineon regional sales

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