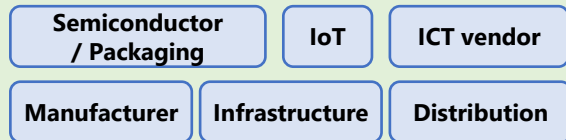


# Development of Security Assurance Scheme for SCU which can be embedded to low-cost IoT devices

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## Application Area



Systematic threat analysis clarifies security requirements and finds good tradeoffs between security evaluation rigor and development man-hour.

## Technical Features

### ■ Security level classification

Ensuring the validity of how to classify the level of certainty of security implementation and of how to show security for the low-cost IoT nodes.

### ■ Security assurance schemes

Building security assurance schemes (security evaluation technology and certification framework) optimal for devices using hardware roots of trust.

## Effects·Use Case·Technical Details

### ■ Effects

Third party security evaluation and certification of IoT devices equipped with SCU, which is the root of trust, is possible.

### ■ Use Case

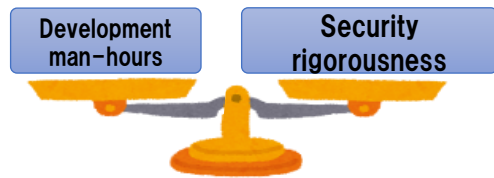
By applying this technology to devices equipped with SCU, it is possible to develop highly reliable equipment at a reasonable cost.

### ■ Technical Details

Evaluate the resistance of SCU-equipped chips to all relevant attacks in a rigorous evaluation in accordance with the international standard ISO/IEC 15408.

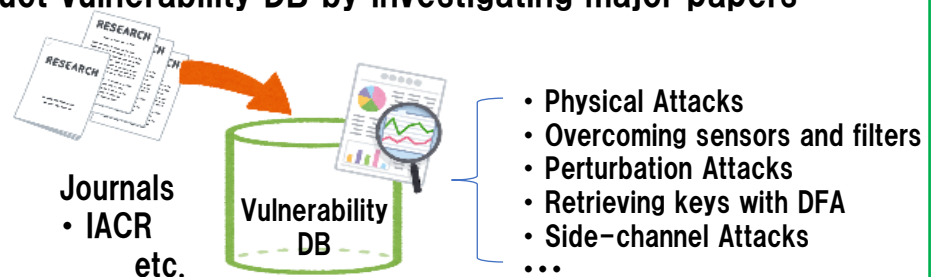
### Security assurance of SCU-used IoT devices

Based on cryptographic hardware roots of trust, develop highly reliable devices at reasonable cost



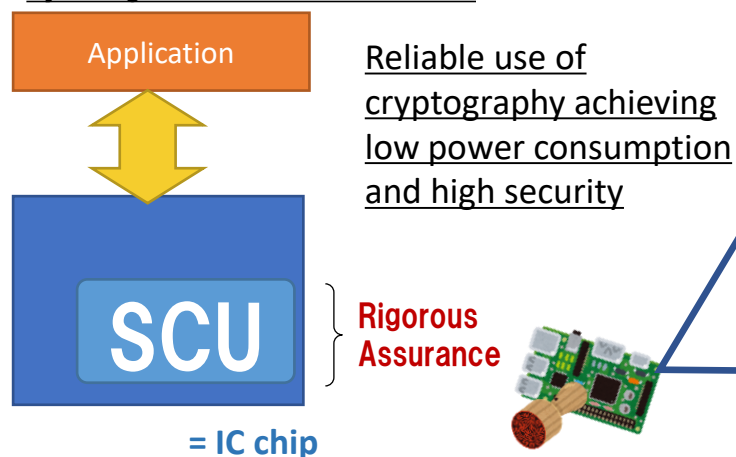
### Systematic aggregation of attack methods for IoT devices

Construct vulnerability DB by investigating major papers



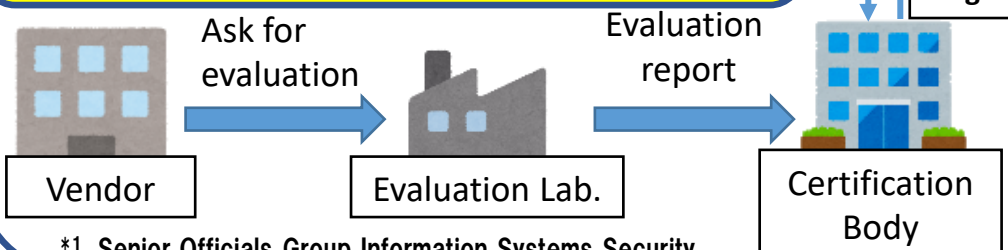
## Building security assurance schemes for roots of trust

Ensuring security of an IoT device by using an SCU as root of trust



### Building security assurance schemes for SCUs

Examine how to assure the security of SCU-equipped devices, based on discussion trends such as evaluation guarantee level and vulnerability rating in SOGIS\*1



\*1 Senior Officials Group Information Systems Security