Akaria

ReSA

Awaken of brand-new network security platform

*Revolutional Security Architecture

Due to the expansion of cyber-physical systems, the number of Internet-based products is rapidly increasing.

By connecting products and services, you can build a more convenient system.
On the other hand, although it is convenient, there is a risk of attack via the network.

Exponential increase in network attacks on embedded devices.

Due to the impact of COVID-19, the digital shift has progressed at once.
Many things are connected to the network, increasing the attack surface.
Embedded devices are no exception. Immediate action is required.

Security Essential for Network Connections of Embedded Devices.

With a platform that supports anti-DDoS[*1] shielding functions, TLS 1.3[*2], and thoroughly implements functions into hardware, it is possible to provide a high-speed, low-consumption, safe and secure Internet connection environment.
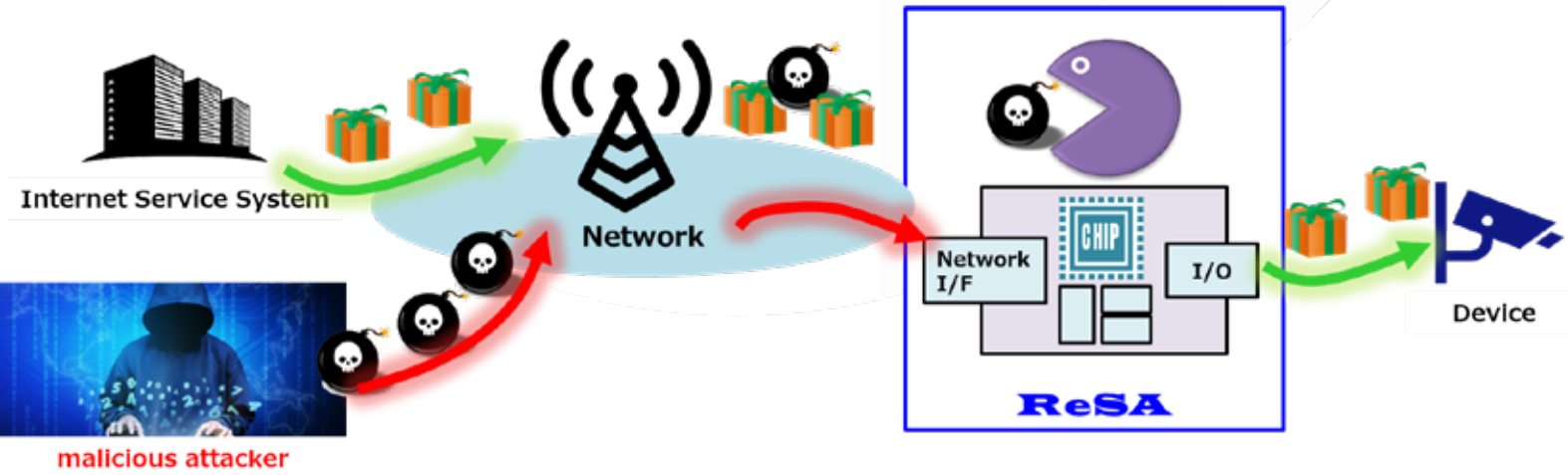
*1   Distributed Denial of Service attack
*2   Transport Layer Security

ReSA

Concept of "ReSA"

– "Prey" DDoS attacks and malicious packets and allow only secure communications to pass

– Protect against unauthorized use and attacks at the network layer

Internet Service System

malicious attacker

Network

Network I/F | **CHIP** | **I/O**

ReSA

Device

【Challenges】
Countermeasures for low-level devices such as IoT sensors, secure cameras and etc. are required

Full hardware implementation of network security-related processing

Full HW implementation for heavy workload up to 5th network layer
Reliable, secure, and robust communications with low power consumption

World 1st

Advantages of using hardware

| Neutralization of DDoS | Unbreakable Network function |
| Reduction of power consumption | Ultra Low Latency |

ReSA | conventional solutions

7th layer	Application layer	@ 🌐
6th layer	Presentation layer	Data Format
5th layer	Session layer	🔒 https://
4th layer	Transport layer	TCP • UDP
3rd layer	Network layer	🌐 IP
2nd layer	Datalink layer	P2P Connection
1st layer	Physical layer	∿∿∿

Hardware / Software

SUSTAINABLE DEVELOPMENT GOALS

JSA
QMS
ISO9001