

Renesas Ecosystem Partner Solution

Future-Proof Security for RX100 IoT Edge Devices



Solution Summary

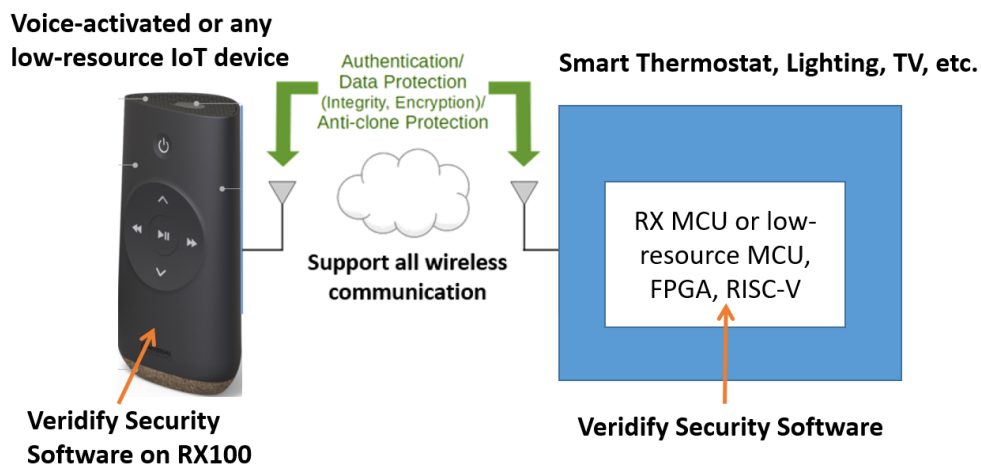
Veridify Security’s fast, small footprint, energy-efficient security tools make it easy to deliver critical device-to-device security features to RX100 devices and the low-resource IoT points they connect to. Now RX100 users can quickly and cost-effectively implement the same security features traditionally only available on larger, more expensive MCUs.

Features/Benefits

- RX100 users can secure their MCUs at the edge of the IoT with:
 - Easy and cost-effective implementation of critical security features like authentication, identification, data protection and other common protection features needed on RX series devices
 - Veridify’s methods are quantum-resistant to all known threats, delivering a future-proof security solution
 - Quick and inexpensive implementation in software; reducing time/cost to market

Sample Use Case: Authentication/Data Protection

With Veridify’s security tools, customers can easily and cost-effectively add authentication and data protection solutions to RX MCUs -- even at the IoT edge



Target Applications

- Industrial IoT
- Energy and Metering
- Home Appliances
- Consumer Applications
- Office/Building Automation
- Healthcare
- Motor Control

Award Winning Security for IoT Designs

Veridify Security provides fast, small footprint, ultra-low-energy, and quantum-resistant authentication and data protection solutions for 8-, 16- and 32-bit IoT endpoints like the Renesas RL78, RX, RA and the RE MCU families.

Adds Critical Security Features to Low Resource Devices

Veridify Security's fast, small footprint, energy-efficient security tools make it easy to deliver critical device-to-device security features on RX100 MCU devices and the low-resource IoT points they connect to. Now users can quickly and cost-effectively implement critical security features like authentication, identification, and data protection to devices where these features were traditionally not available. Veridify's tools are in software, allowing a quick and inexpensive implementation of the critical security features typically only available on larger, more expensive MCUs.

DOME Device Ownership Management and Enrollment™

DOME™ is a zero-touch device onboarding and lifetime Blockchain ownership management platform for Renesas RX devices and other globally distributed processors. DOME's provisioning and ownership platform simplifies security, management and provisioning of IoT devices in the field without needing a pervasive cloud or network connection. DOME enables a truly scalable platform that consolidates security functions and reduces costs and complexity for device owners.

Post-Quantum Ready

Quantum computers will become powerful enough to break legacy security methods like ECC and RSA. Veridify's cryptography is resistant to all known threats, making your solutions future-proof today.

ISO 26262 ASIL D and PSA Level 1 Certified

Our software development methods conform with the strictest requirements and are Automotive Safety Integrity Level (ASIL) D certified, the highest classification for safety-critical processes. Our DOME Client recently achieved PSA Level 1 Certification.

Markets

- Office/Building Automation
- Industrial IoT
- Energy and Metering
- Home Appliances
- Healthcare
- Motor Control

Applications

- Authentication
- Identification
- Data Protection
- Secure Boot
- Secure Firmware Update
- Command Validation

Free Security Consultation

Our experts will provide an initial security consultation and can help accelerate time-to-market by creating a security solution design for your devices. Contact us at info@veridify.com

Free SDK to Get Started

Our [IoT Embedded Security SDK](#) allows easy implementation of our solutions. The toolkit includes: WalnutDSA, Ironwood KAP, and sample source code and provides support for the Renesas e² studio.

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