

# SECURITY ADVISORY

## ID:202203101

REV.1.00

FEB.20<sup>TH</sup>, 2023  
RENESAS PSIRT  
RENESAS ELECTRONICS CORPORATION

# SECURITY ADVISORY [ID:202203101]

## BUFFER OVERREAD IN DTLS CLIENTHELLO PARSING(CVE-2022-35409, CVSS:9.1 CRITICAL)

### 1. CVEID – CVSS vector [base score]

CVE-2022-35409 - CVSS:3.1/AV:N/AC:L/PR:N/UI:N/S:U/C:H/I:N/A:H[9.1]

### 2. Publication date

Feb. 20<sup>th</sup>, 2023

### 3. Summary

An issue was discovered in Mbed TLS before 2.28.1 and 3.x before 3.2.0. In some configurations, an unauthenticated attacker can send an invalid ClientHello message to a DTLS server that causes a heap-based buffer over-read of up to 255 bytes. This can cause a server crash or possibly information disclosure based on error responses.

### 4. Affected products (and versions)

Product Family	Software	Version
RX Family	FreeRTOS IoT Integrations	202107.00 (Mbed TLS: 2.16.10)
RL78 Family		202002.00 (Mbed TLS: 2.16.0)
RE Family		202012.00 (Mbed TLS: 2.16.8)

### 5. (Potentially) Impacted features

Mbed TLS related S/W used(or implemented) in FreeRTOS.

### 6. Suggested fixes/actions/mitigations/remediations.

#### - RX Family

<https://github.com/renesas/iot-reference-rx>

includes Mbed TLS: 3.2.1 or later

#### - RL78 Family

No update needed. RL78 uses FreeRTOS but TLS process is off-loaded to wireless module.

#### - RE Family

No update.

### 7. Source/External references

<https://nvd.nist.gov/vuln/detail/CVE-2022-35409>

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Revision	Remarks	Date
1.0	Initial publication.	Feb.20, 2023

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