# [Notes] EEPROM Emulation Library Pack01 for RL78 Family, EEPROM Emulation Library T01 for RL78 Family

## Outline

When using the EEPROM Emulation Library Pack 01 for RL78 Family and the EEPROM Emulation Library T01 for RL78 Family, note the following point.

1. When a reset or power outage occurred during data writing

## 1. When a Reset or Power Outage Occurred During Data Writing

### 1.1 Applicable Products

- EEPROM Emulation Library Pack 01 for RL78 Family (RL78 EEL Pack01) Package, Japan Release all versions earlier than V2.10
- EEPROM Emulation Library T01 for RL78 Family (RL78 EEL T01) Package, European Release all versions earlier than V2.10<sup>(Note)</sup>

Note: For the installer that contains only EEL without FDL, all versions earlier than V1.15 are applicable.

# 1.2 Applicable MCUs

RL78 family: RL78/D1A, RL78/F12, RL78/F13, RL78/F14, RL78/F15, RL78/F1A, RL78/G13, RL78/G14, RL78/G1A, RL78/G1D, RL78/G1E, RL78/G1F, and RL78/G1H groups

RL78/I1A, RL78/I1E, RL78/L13, RL78/L1A, and RL78/L1C groups

Other RL78 family products for which RL78 EEL Pack01 or RL78 EEL T01 is available

## 1.3 Details

The following phenomena may occur:

- (a) When existing data is 0xFF, user data or the reference table (DRP) managed by EEL is destroyed.
- (b) When the last valid block does not have enough write area, write processing does not end.
- (c) The management table of the EEL data is destroyed.

#### 1.4 Conditions

This problem may arise if all of the following specific conditions are met.

- (1) A reset or power outage occurs while RL78 EEL Pack 01 or RL78 EEL T01 is writing the DRP in the processing of data writing.
- (2) Although the DRP is incompletely written, the checksum (RCS) happens to match.
- (3) After the STARTUP processing is executed, the write processing (EEL\_WRITE command or maintenance processing) is executed.



# 1.5 Rate of Occurrence (Reference)

The probability of occurrence under the following conditions of use is about 0.362 ppm. (An error may occur in 0.362 of 1 million units.)

- Example of use conditions
- Data writing is performed 100 times a day.
- A total of 400 reset and power outage events occur in a year.
- The device has been in operation for 20 years.

## 1.6 Workaround

There is no workaround for this problem.

# 1.7 Solution

This problem will be fixed in the next version. The next version will be available from January 22, 2018.



# **Revision History**

			Description	
	Rev.	Date	Page	Summary
ſ	1.00	Jan. 16, 2018	-	First edition issued

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