

Note on Using the e2 studio(Code Generator Plug-in) and the AP4 Coding Assistance Tool for RZ

When using the e2 studio (code generator plug-in) and the AP4 coding assistance tool for RZ, take note of the problem on the following point that is described in this note.

- Setting to permit or prohibit suspension of transfer in response to the reception of NACK over the I2C bus interface (RIIC)
Applicable products: RZ/T1 group

1. Applicable Products

- V4.0.0.26 and later versions of the e2 studio (V2.0.0 and later versions of the code generator plug-in)
- V1.00.00 and later versions of the AP4 coding assistance tool for RZ

2. Applicable MCUs

RZ family: RZ/T1 group

3. Description

When using the I2C bus interface (RIIC) in master or slave mode, permitting or prohibiting the suspension of transfer in response to negative-acknowledge (NACK) reception is not configured properly, due to errors in two symbol definitions in `r_cg_riic.h`.

4. Workaround

Modify the symbol definitions in `r_cg_riic.h` as described below.

This modification is required every time code is generated. However, the "user code protection function" can be used to maintain the modified symbol definition when code is generated again. Refer to the following FAQ for the details.

Before modification:

```
-----  
/*  
 I2C bus function enable register (ICFER)  
*/  
/* NACK reception transfer suspension enable (NACKE) */  
#define _IIC_NACK_SUSPENSION_ENABLE          (0x00U)  
      /* Transfer operation not suspended during NACK */  
#define _IIC_NACK_SUSPENSION_DISABLE        (0x10U)  
      /* Transfer operation suspended during NACK */  
-----
```

After modification:

```
-----  
/*  
 I2C bus function enable register (ICFER)  
*/  
/* NACK reception transfer suspension enable (NACKE) */  
#define _IIC_NACK_SUSPENSION_ENABLE          (0x10U)  
      /* Transfer operation not suspended during NACK */  
#define _IIC_NACK_SUSPENSION_DISABLE        (0x00U)  
      /* Transfer operation suspended during NACK */  
-----
```

5. Schedule for Fixing the Problem

This problem will be fixed in the next version.

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