Outline
When using the products in the title, note the following point.

1. When using data CRC

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1.1 Applicable Products

- CS+ Code Generator for RH850 V1.00.00 (CS+ for CC V4.00) or later
- AP4 for RH850 V1.00.00 or later

1.2 Applicable Devices

RH850 family: RH850/F1K group
100-pin, 144-pin, and 176-pin products

1.3 Details
Because unnecessary initialization code is generated when using the following data CRC function A (DCRA), CRC calculation is not carried out correctly.

- RH850/F1K group: 100-pin, 144-pin, and 176-pin products
  DCRA0 to DCRA3

■ When using DCRA unit 0

![Peripheral Functions Diagram]

### Peripheral Functions
- Generate Code
- DCRA0
- DCRA1
- DCRA2
- DCRA3

- **Operation setting**
  - Unused
  - Used

- **Control setting**
  - CRC input data width: 32bits
  - CRC generating polynomial: 32-Ethernet
1.4 Workaround

Manually delete the unnecessary initialization code from the generated code in the following source file of data CRC function A\(^{\text{Note}}\):

- Functions in r_cg_dcra.c:
  
  "void R_DCRA\_Create(void)"
  
  "void R_DCRA\_Input32bitData(const uint32\_t * data, uint32\_t data\_num)"
  
  "void R_DCRA\_Input16bitData(const uint16\_t * data, uint32\_t data\_num)"
  
  "void R_DCRA\_Input8bitData(const uint8\_t * data, uint32\_t data\_num)"

  \( n = \text{unit number} \)

Note: If code is generated again, the previous state is restored. Modification is necessary each time you perform code generation.
The following is an example of the required modification for DCRA\textsubscript{n} in the RH850/F1K group. Delete the unnecessary initialization code shown in red.

Details of modification

void R\_DCRA\_n\_Create(void)
{
    ...
    DCRA\_n\_CIN = _DCRA\_CLEAR\_DATA;
    /* Synchronization processing */
    ...
}

void R\_DCRA\_n\_Input32bitData(const uint32\_t * data, uint32\_t data\_num)
{
    ...
    DCRA\_n\_CIN = _DCRA\_CLEAR\_DATA;

    for(i=0; i<data\_num; i++)
        ...
}

void R\_DCRA\_n\_Input16bitData(const uint16\_t * data, uint32\_t data\_num)
{
    ...
    DCRA\_n\_CIN = _DCRA\_CLEAR\_DATA;

    for(i=0; i<data\_num; i++)
        ...
}

void R\_DCRA\_n\_Input8bitData(const uint8\_t * data, uint32\_t data\_num)
{
    ...
    DCRA\_n\_CIN = _DCRA\_CLEAR\_DATA;

    for(i=0; i<data\_num; i++)
        ...
}

\(n = \text{unit number}\)
1.5 Schedule for Fixing the Problem

There is no schedule for fixing this problem.
Revision History

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<td>-</td>
<td>First edition issued</td>
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