RENESAS Tool News

A Note on Using the Real-Time OSes M3T-MR308K/4 and -MR308S/4

Please take note of the following problem in using the real-time OSes M3T-MR308K/4 and -MR308S/4, which are used for the M32C/80, and M16C/80 series of MCUs:

- On issuing the iunl_cpu service call

1. **Versions Concerned**
   M3T-MR308K/4 and -MR308S/4 V.4.00 Release 00 and V.4.00 Release 01

2. **Description**
   When the iunl_cpu service call is issued, the IPL value of the FLG register may become indefinite. As a result, an interrupt that should be masked will be generated.

3. **Condition**
   This problem occurs if the iloc_cpu service call is not issued, and the iunl_cpu service call is issued with the context being kept in the CPU-unlocked state.

4. **Workaround**
   Do not issue the iunl_cpu service call with the CPU being unlocked; that is, issue it after judging that the CPU is locked using the sns_loc service call as shown in Example below.

   Example
   ```
   ----------------------------------------------------------------
   void handler(void)
   {
   . . . . . . . . . . . . . .
      if( sns_loc() ){   /* Judge CPU locked */
        iunl_cpu();
      }
   ```

```
      ...............
    }
    ----------------------------------------------------------------
```

5. **Schedule of Fixing the Problem**

   We plan to fix this problem in the next release of the products.