RENESAS Tool News

A Note on Using the SQMlint
(the MISRA C Rule Checker)

Please take note of the following problem in using the SQMlint, the MISRA C Rule Checker:

- On a violation of Rule 29

1. **Versions Concerned**
   SQMlint V.1.00 Release 0 through V.1.02 Release 00

2. **Description**
   Though no expression where an integer is assigned to an enumeration variable violates Rule 29, it delivers the error message that says "[MISRA(29) Complaining: "file name",line "X"] enum type object to which has not been assigned own enumerator."

   - "file name" denotes the name of the file in which a violation of Rule 29 is found.
   - "X" denotes the number of the line in which the description that violates Rule 29 is found.

3. **Conditions**
   This problem occurs if the following conditions are both satisfied:

   (1) In the source program exists an expression where an integer is assigned to an enumeration variable.

   (2) The source program is compiled using the option to check the violation of Rule 29 in MISRA C (option names depend on compilers).

   Example:
   ----
   enum E { ONE = 1, TWO };
   enum E e;

```
e = 1;        /* Condition (1) */
-------------------------------------------------------------
```

4. Workaround

This problem can be circumvented in either of the following ways:

  (1) Neglect the error message if the above conditions are satisfied.

  (2) To the enumeration variable, assign an enumeration constant; not an integer.

```
-------------------------------------------------------------
-----
enum E { ONE = 1, TWO };
enum E e;

e = ONE;        /* Assign enumeration constant ONE
                      to enumeration variable "e" */
-------------------------------------------------------------
-----
```

5. Schedule of Fixing the Problem

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