

A Note on Using C Compiler M3T-NC308WA

Please take note of the following problem in using the M3T-NC308WA C compiler (with an assembler and integrated development environment) for the M32C/80 and M16C/80 series MCUs:

- On arithmetic right shift of a variable of type long long

1. Versions Concerned

The M3T-NC308WA V.5.00 Release 1 and V.5.10 Release 1
for the M32C/80 and M16C/80 series MCUs

2. Description

Arithmetically right shifting a variable of type signed long long and then storing the result back into the variable causes incorrect code to be generated.

3. Example

```
-----  
long long l;  
  
void func( char c )  
{  
    l >>= c; /* The result of arithmetically right shifting a  
             variable is stored back into it */  
}
```

4. Workaround

Assign the variable to be shifted to a temporary variable; next, arithmetically right shift the latter; then store the result of shift into the former.

```
long long l;
```

```
void func( char c )
```

```
{
```

```
    long long tmp; /* Temporary variable tmp defined */
```

```
    tmp = l; /* Variable l is assigned to tmp */
```

```
    l = tmp >> c; /* The result of arithmetically right shifting  
                  tmp stored back into variable l */
```

```
}
```

5. Schedule of Fixing the Problem

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

[Disclaimer]

The past news contents have been based on information at the time of publication. Now changed or invalid information may be included. The URLs in the Tool News also may be subject to change or become invalid without prior notice.

© 2010-2016 Renesas Electronics Corporation. All rights reserved.