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H8SX、H8S、H8 族 C/C++编译程序包 V.6.01 Release 02

注意事项和用户手册的修正

上述编译程序包的注意事项和《H8S、H8/300系列C/C++编译程序、汇编程序、优化连接编辑程序用户手册》(RCJ10B0001-0100)的修正如下，请结合用户手册阅读本注意事项。

下述 URL 的工具新闻也提供了最新信息：

http://tool-support.renesas.com/eng/toolnews/h8_1.htm

1. 注意事项

1.1 选择 structreg 选项时的浮点库运算

在选择 cpu=300L 或者 cpu=300 选项使用浮点库时，不能选择 structreg 选项。

1.2 有关内部函数 movfpe 和 movtpe 的使用

根据编译程序的优化，内部函数 movfpt 和 movtpe 的代码展开可能被削除，所以必须改为对实际参数进行了 volatile 限定的变量。

1.3 有关含有局部变量存取指令的__asm{}的内联展开

当满足以下的全部条件时，存取不正确的区域。

- (1) 指定 cpu=h8sxx、h8sxa、h8sxm、h8sxn、2600a、2600n、2000a 或者 2000n（无 legacy=v4 指定）
- (2) 含有__inline 或#pragma inline 指定函数，或者 speed=inline 选项有效。
- (3) 在内联展开函数内含有__asm 的记述。
- (4) 在(3)的记述内含有存取局部变量或者参数的 EA。
- (5) 在内联展开函数的调用函数内，含有通过局部变量进行的堆栈的存取。

2. 用户手册的修正事项

2.1 追加的信息

C1330 (W) 'max_unroll' option ignored

在 CPU 种类不为 H8SX 或 H8S（无 legacy=v4 选项的指定）时，指定了 max_unroll 选项。

C1800 (W) Variable “变量名” type mismatch in files.

在文件之间，变量型不匹配。

C5997 (E) Abstract class type "型" is not allowed as catch type.

不能用 catch 接受抽象类。

2.2 修正和追加的项目

<修正部分>

6.1 栈解析工具的启动 (P.125)

<追加内容>

【注】 中断函数的栈使用量总是包含保存条件码寄存器 (CCR) 的部分，在CPU种类为H8SX、H8S/2600、H8S/2000时，包含保存扩展寄存器 (EXR) 的部分。

<修正部分>

9.4.2 用 C++ 编译程序编译 C 程序时的注意事项 (P.223)

<追加内容>

(4) 位域的整数转换

位域的右边值被转换为 int 型的右边值。当用 int 型无法表现时，转换为 unsigned int。

```
struct str {  
    long aaa:16 ;  
} stst ;  
stst.aaa=10 ;  
printf("stst.aaa : %ld ¥n",stst.aaa); // 转换为 int 型
```

<修正部分>

__ptr16 的例 (P.252)

<修正内容>

例

不指定 __ptr16 时

```
__abs16 int a;  
int *b;  
func()  
{  
    b = &a;  
}
```

指定 __ptr16 时

```
__abs16 int a;  
int __ptr16 *b;  
func()  
{  
    b=(int __ptr16 *)&a;  
}
```

<代码展开例>

__func:

```
mov.l      #_a:32,@_b:32
```

<代码展开例>

__func:

```
mov.w      #LWORD _a:16,@_b:32
```