

致尊敬的顾客

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NEC电子公司与株式会社瑞萨科技于2010年4月1日进行业务整合（合并），整合后的新公司暨“瑞萨电子公司”继承两家公司的所有业务。因此，本资料中虽还保留有旧公司名称等标识，但是并不妨碍本资料的有效性，敬请谅解。

瑞萨电子公司网址：<http://www.renesas.com>

2010年4月1日  
瑞萨电子公司

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## M16C, R8C 保护寄存器设置问题

### 适用范围:

文档适用于 Renesas M16C, R8C 微控制器。

### 问题:

有客户在使用 R8C/2K 时, 发现 PD0 某些端口不能正常设置, 认为 R8C/2K 微控制器有问题。

### 分析:

经检查软件, 发现客户在处理 PD0 端口时是按位 (bit) 进行操作的。对于 PD0 的设置, 由于 PRC2 在置“1”后进行任意一次写操作, PRC2 会自动被设置成“0”, 因此, 当设置 PD0 时, 最好以字节 (byte) 的形式设置, 如果需要以位 (bit) 的形式设置时, 必须在每次设置之前将 PRC2 置“1”关保护。

### 解决:

以字节(byte)的形式进行设置, 或者以位(bit)的形式设置时, 在每次设置之前将 PRC2 置“1”。

**注:** 对于 M16C 和 R8C 不同型号的 MCU, 受 PRC2 保护的寄存器是不同的, 因此在开发时要参照具体型号的数据手册。