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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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7544 群
输入/输出端口（键唤醒）

要点
这是输入/输出端口的键唤醒（键输入中断）的应用例子。

动作确认器件
本资料说明的应用例子适合下列单片机和使用条件：

• 单片机：7544 群

目录

1. 应用例子的说明 .................................................................................................................. 2
   1.1 键唤醒的应用例子（1）.......................................................................................... 2
   1.2 键唤醒的应用例子（2）.......................................................................................... 4
2. 参考文献 ............................................................................................................................ 5
1. 应用例子的说明

1.1 键唤醒的应用例子（1）

■要点
使用内部上拉电阻。

■说明
如果给端口P0输入下降沿，就产生键唤醒中断，从等待模式返回。

注. 对于键唤醒中断，仅下降沿有效。

应用电路例子如图1所示，控制步骤例子如图2所示。

图 1 应用电路例子
图 2  控制步骤例子
### 1.2 键唤醒的应用例子（2）

#### 系点
将键唤醒中断作为通常的外部中断使用。

#### 说明
如果给端口P0输入下降沿，就产生键唤醒中断。按需要，可使用内部上拉电阻。

注. 对于键唤醒中断，仅下降沿有效。

控制步骤例子如图3所示。

<table>
<thead>
<tr>
<th>初始设定</th>
<th>0</th>
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<tbody>
<tr>
<td>SEI</td>
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<tr>
<td>CLD</td>
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<tr>
<td>CLT</td>
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<td>CPU(3B及地址) → 10000X00h</td>
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</tr>
<tr>
<td>等待(等待稳定时间(注1))</td>
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<tr>
<td>CPU(3B及地址) → XX000X00h</td>
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根据需要，设定上拉控制寄存器

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<tr>
<th>P0.0 上拉ON/OFF</th>
<th>P0.1 上拉ON/OFF</th>
<th>P0.2 上拉ON/OFF</th>
<th>P0.3 上拉ON/OFF</th>
<th>P0.4 上拉ON/OFF</th>
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<tbody>
<tr>
<td>P0.0</td>
<td>P0.1</td>
<td>P0.2</td>
<td>P0.3</td>
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中断边缘选择寄存器的设定 (注2)

<table>
<thead>
<tr>
<th>CPU(3B及地址)</th>
<th>向键唤醒允许位置位“1”</th>
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<tbody>
<tr>
<td>CPU(3B及地址)</td>
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</tr>
<tr>
<td>CPU(3B及地址)</td>
<td>1</td>
</tr>
</tbody>
</table>

给键唤醒中断请求位置位“0”

给键唤醒中断允许位位置位“1”

(允许键唤醒中断)

**图3** 控制步骤例子
2. 参考文献

数据表

7544群数据表（最新版本请从瑞萨科技网页取得）

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