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瑞萨电子公司网址：<http://www.renesas.com>

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瑞萨电子公司

【发行】瑞萨电子公司（<http://www.renesas.com>）

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低电压 CMOS 逻辑 IC HD74LV_A/LVC 系列

设计系统时的注意事项

1. 未使用输入引脚的处理

因为 HD74LV_A/LVC 系列的输入阻抗非常高，如果在输入引脚为开路的状态下使用，就容易吸收噪声。另外，如果不定义输入引脚的电位（输入引脚为开路状态），输出的逻辑电平就不固定而处于不稳定的工作状态。

在此，必须将未使用的输入引脚连接 V_{CC} 或者 GND。

另外，当同一封装内有未使用的其他门和触发器时，因为构成 CMOS 反相器的 P 沟道 MOS 和 N 沟道 MOS 都会处于导通状态，可能会有电源电流 (I_{CC}) 流过，所以同样需要注意。

2. 输出短路

在不小心将输出引脚与 V_{CC} 或者 GND 短路时，因为没有附加限制输出电流的保护电路，所以 HD74LV_A/LVC 系列限制了电流值（取决于输出的 P 沟道 MOS 和 N 沟道 MOS 的夹断效应）。

必须注意：如果这样的输出短路电流长时间地持续流过，就有可能因功耗的增加或者金属化电流密度过大而产生引线熔化等的性能老化。从安全工作和可靠性的角度来看，必须将输出电流限制在绝对最大额定值的范围内。

修订记录

Rev.	发行日	修订内容	
		页	修订处
1.00	2008.03.25	一	初版发行

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