

YRCNR5R0C0B4-TB

R20AN0254CC0100

示例程序使用说明

Rev.1.00

Apr, 2013

介绍

本使用说明包括以下:

- 示例程序烧写,
- 示例程序演示,
- 示例程序调试.

目标器件

R5R0C0B4

当应用此示例程序于其他微控制器时, 请根据目标微控制器规格修改程序, 并对修改的程序充分进行评估。

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1. 示例程序烧写

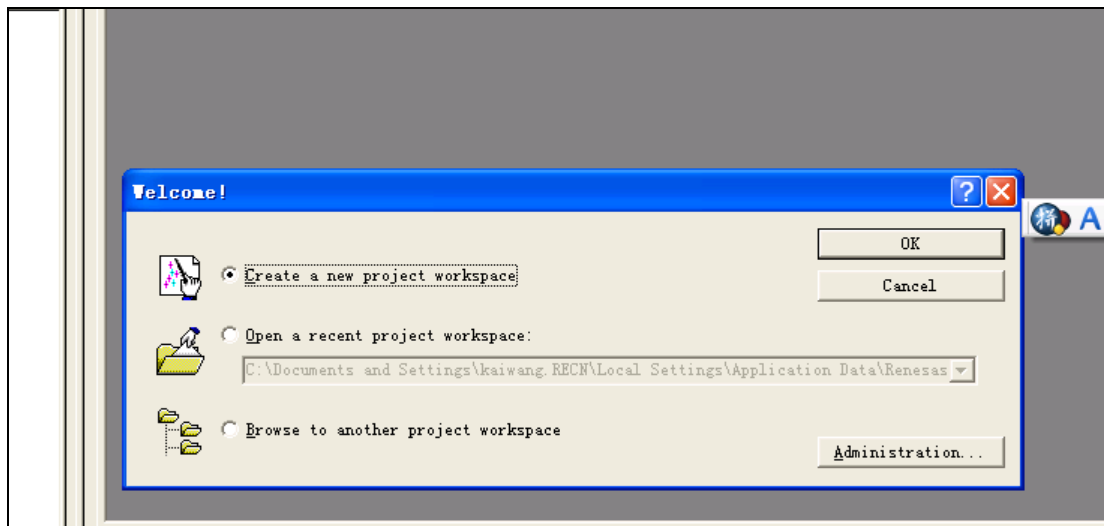
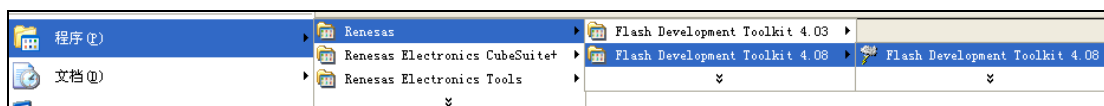
PC 软件使用软件 FDT（请使用 V4.08 及其以上版本）

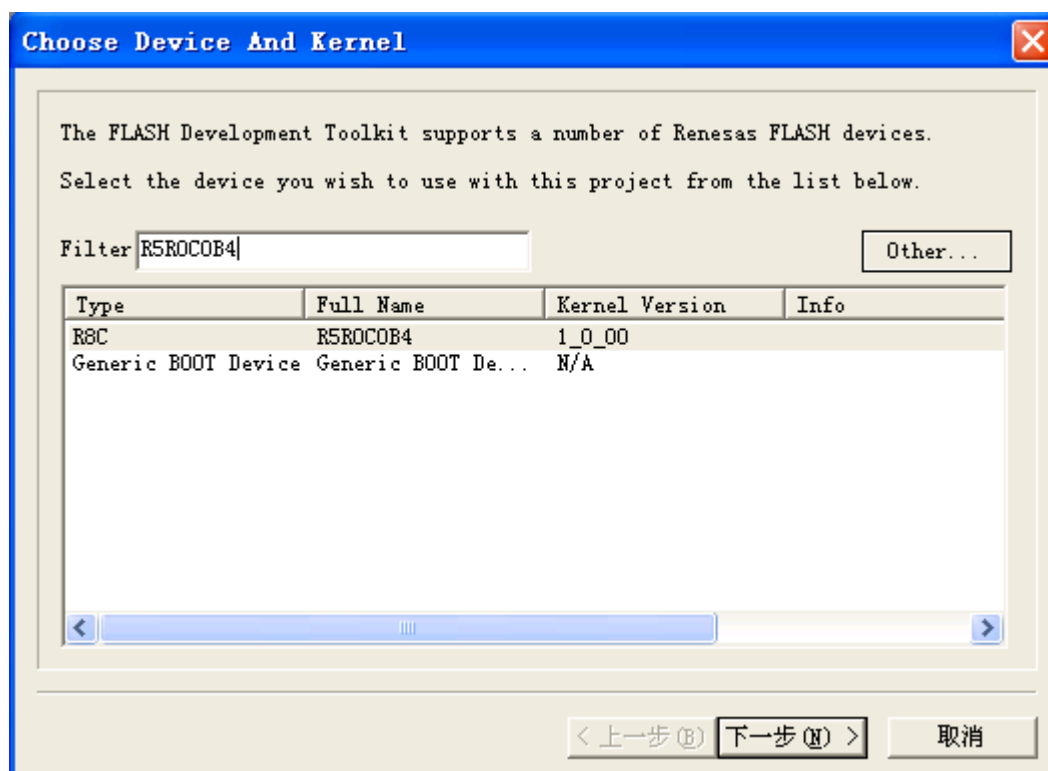
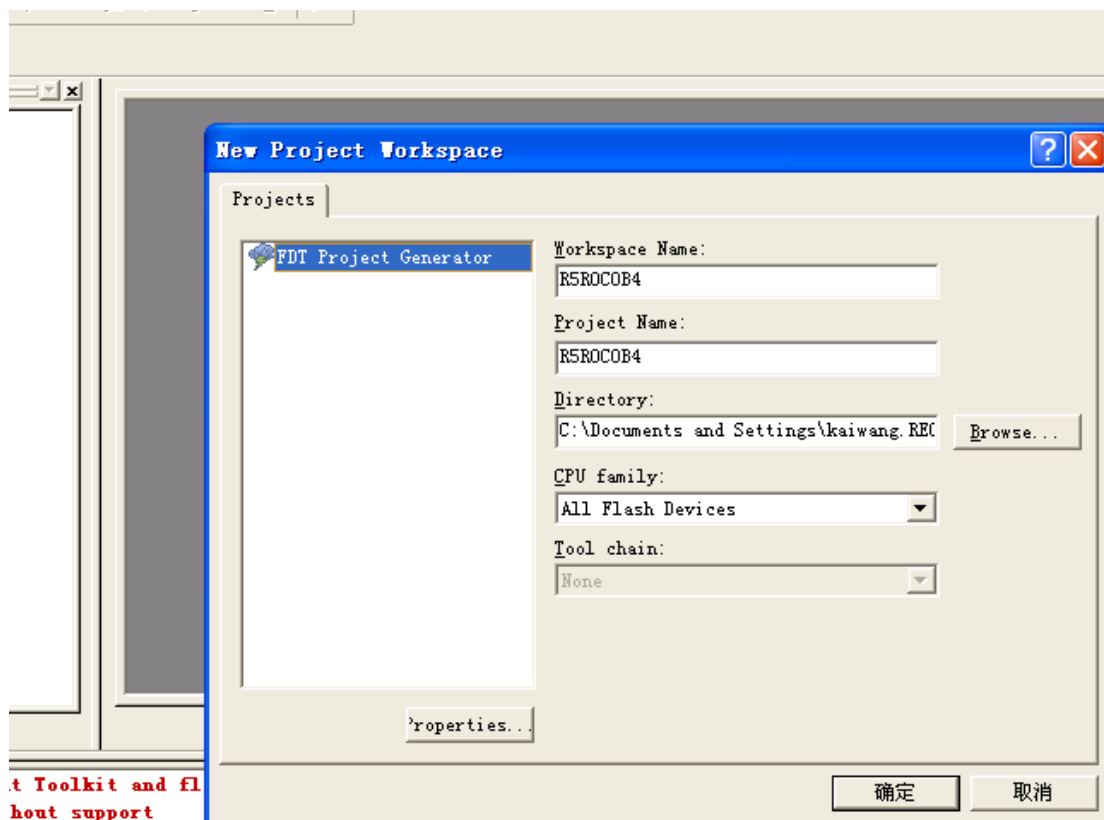
烧写硬件使用 E8A

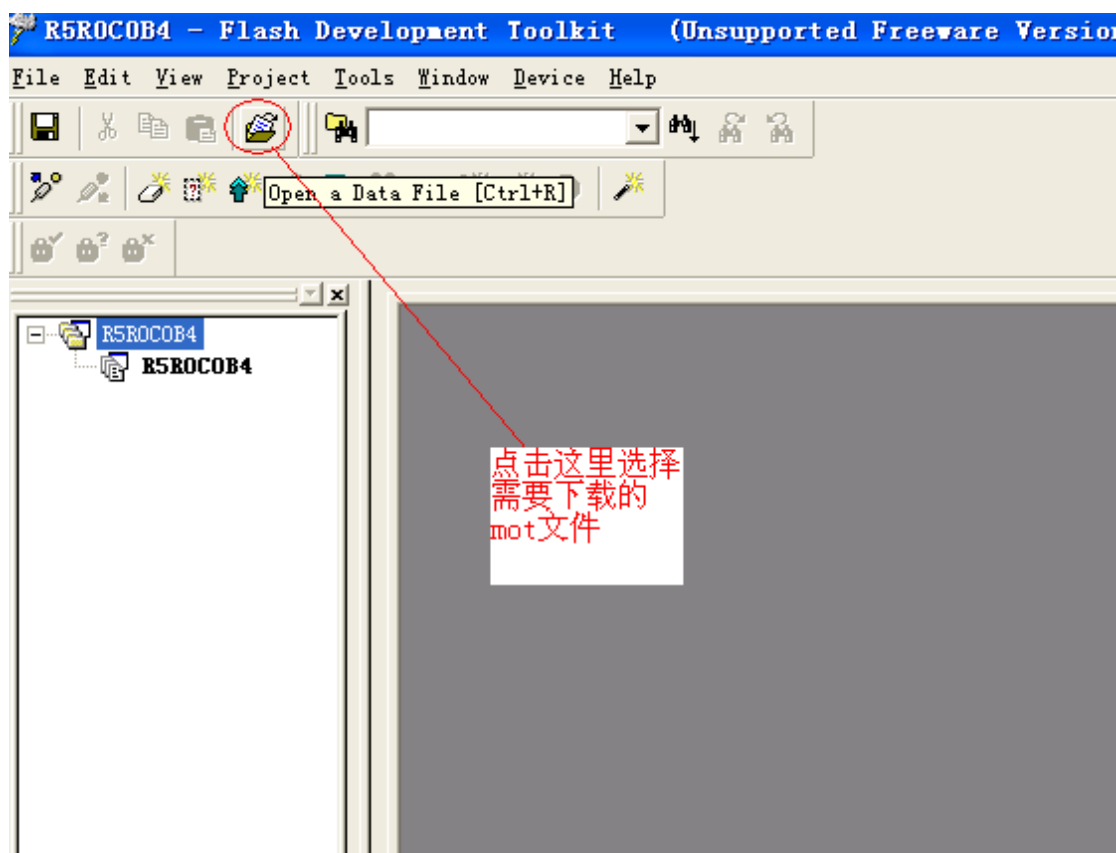
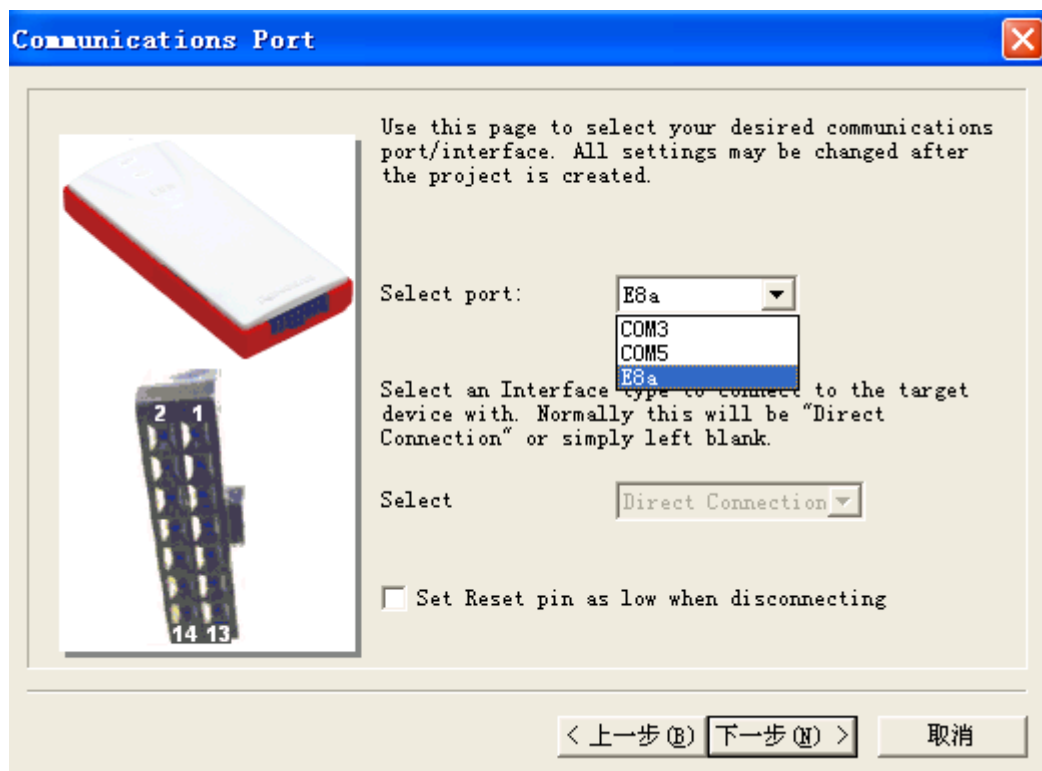
注意：FDT 软件不支持 R5R0C0B4 这个器件，请把附件文件夹拷贝到

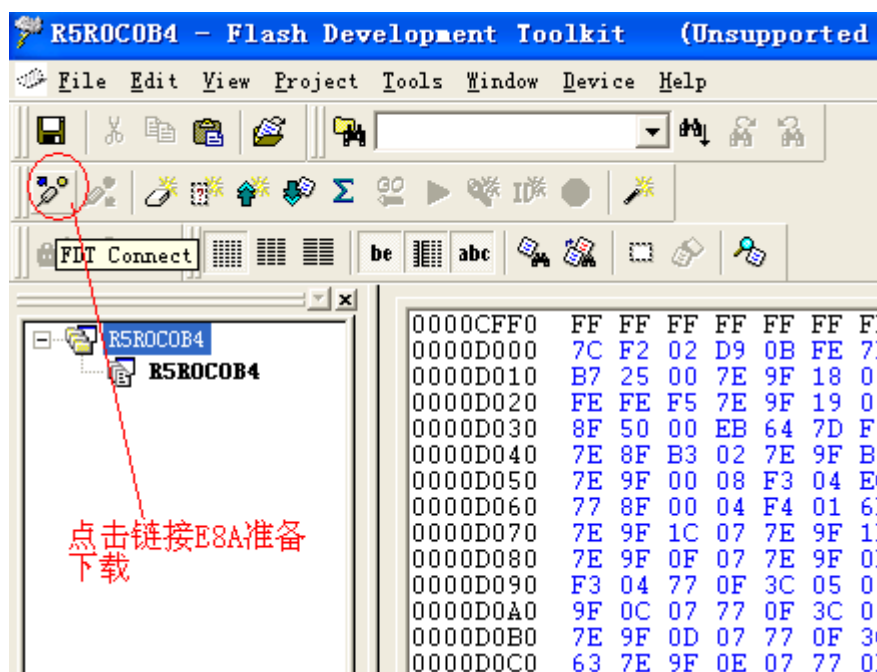
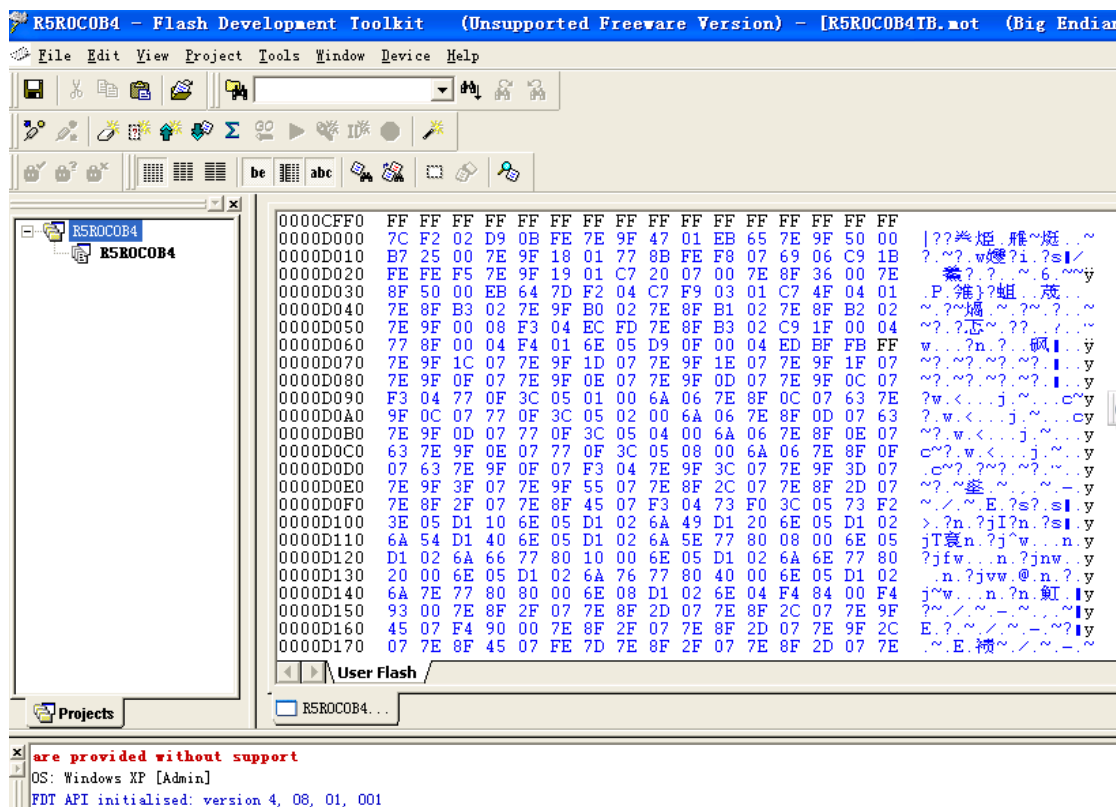
C:\Program Files\Renesas\FDT4.08\kernels\ProtD（如果系统没有安装到 C 盘请更改盘符）

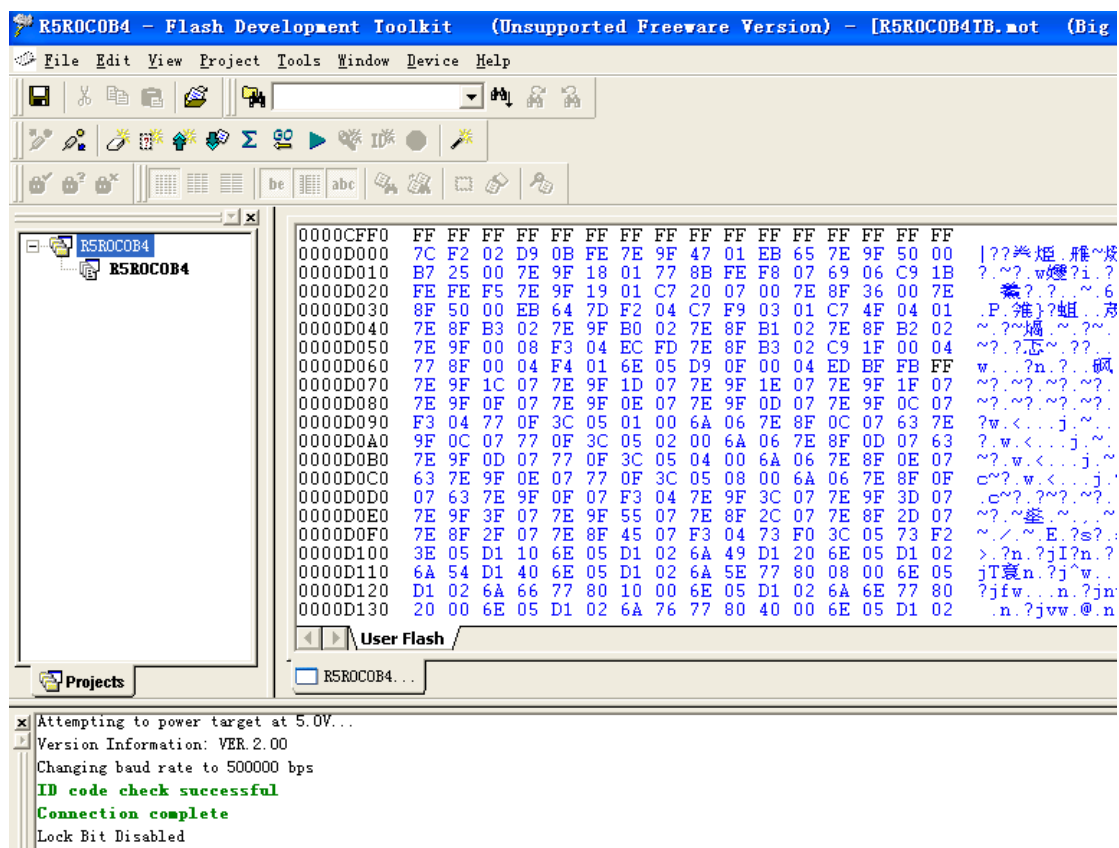
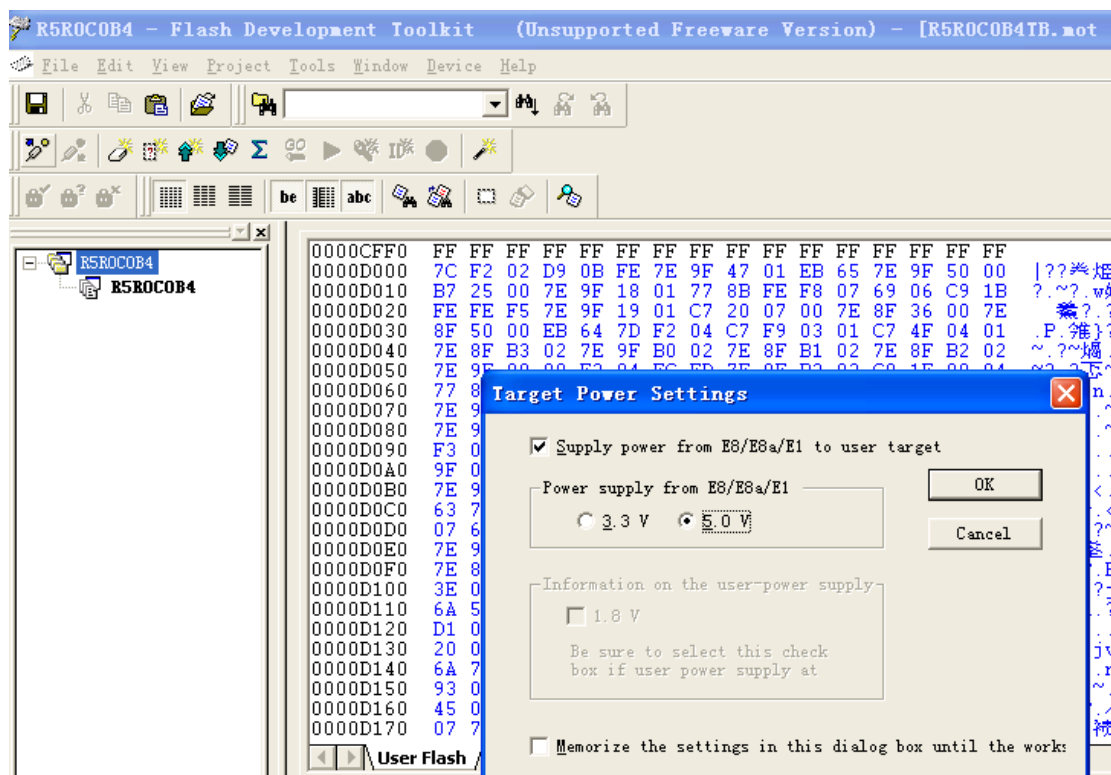
烧写文件：附件所带*.MOT 文件

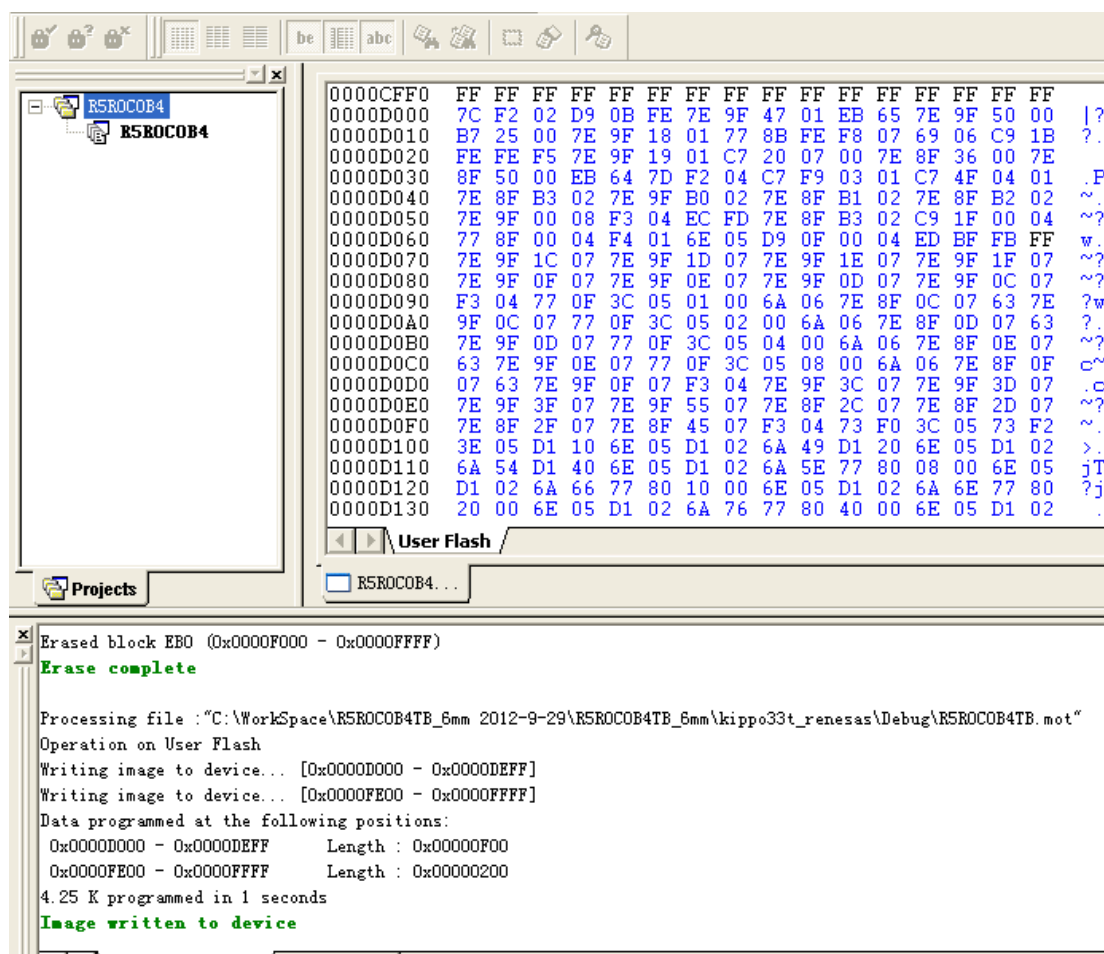
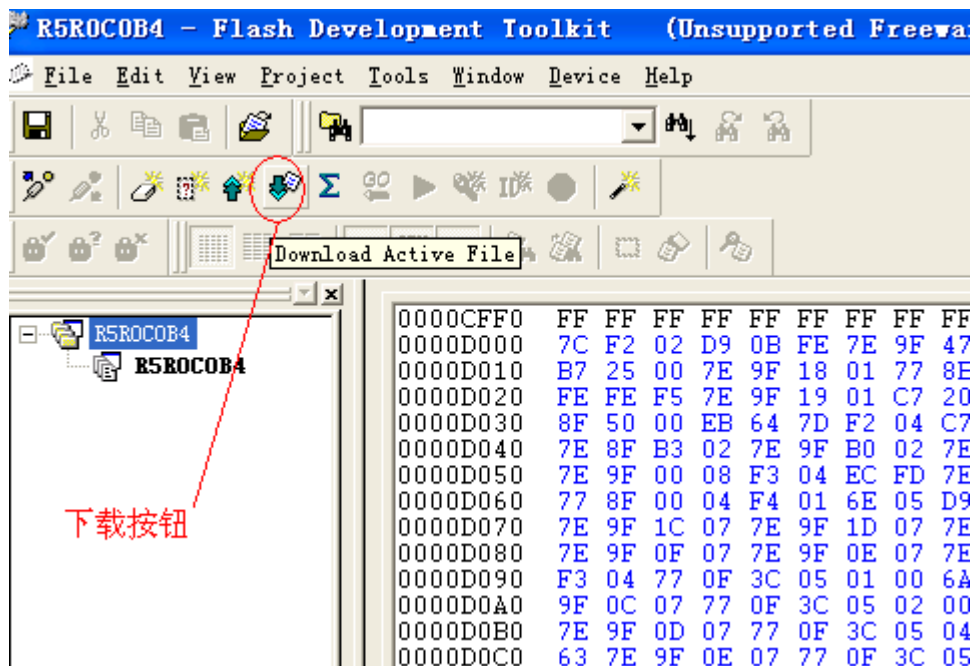












烧写成功。拔出 E8A 接口。然后连接电源则可以进入程序运行模式

2. 示例程序演示

该学习板功能简单。手指按压对应的 PAD0 PAD1 PAD2 PAD3 则 PAD 上端的 LED 灯会亮。

本程序出厂是按照 4mm 的亚克力板设置。更换其他厚度和材料的面板需要更改程序。

更改程序方法见调试章节。

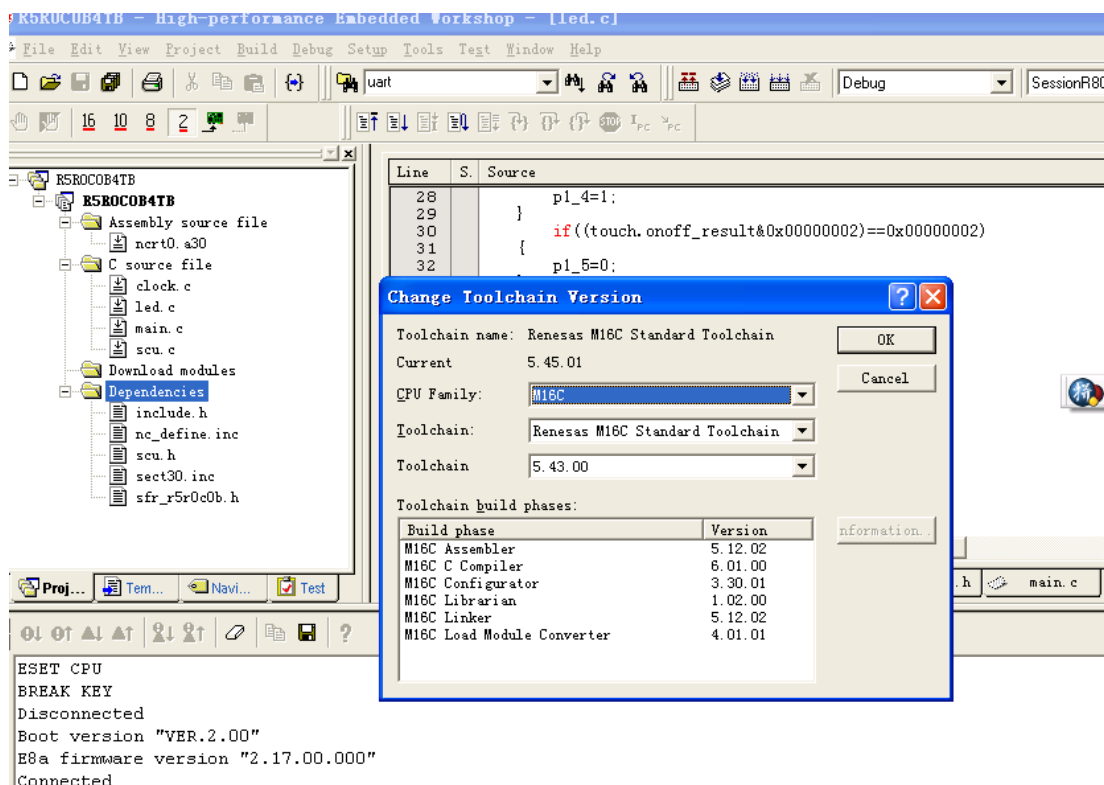
最厚设置为 6mm。

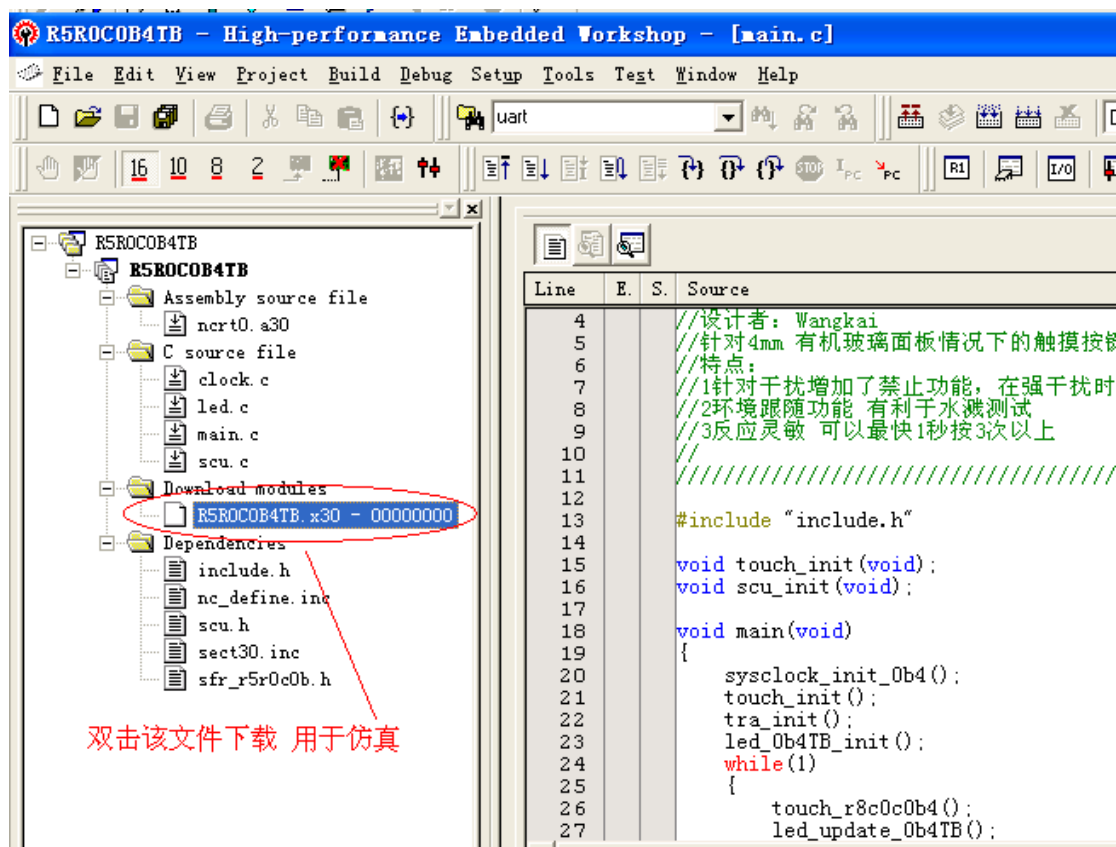
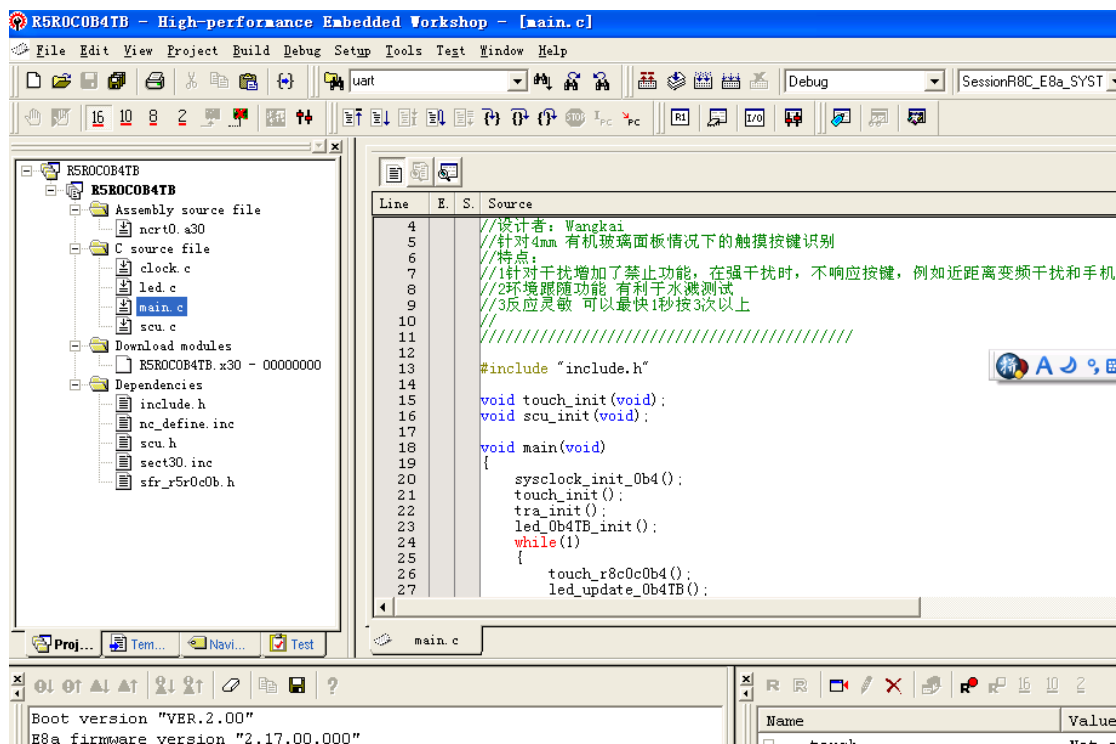
3. 示例程序调试

附件文件夹是该项目的源代码项目。

使用软件是 RENESAS 公司提供的 HEW 软件。编译版本是 5.43.00

调试工具使用 RENESAS 公司的 E8A 仿真器。





4. 附录

需要更改的变量在 include.h 中

	出厂设置 Default	备注
Channel_enable	0x0000000f	1 表示对应通道为使能，本开发板使用了 ch0-ch3 不能使用 ch4-ch7 因为被 LED 占用。
Panel_thinckness_mm	4	表示面板厚设定。出厂为 4mm
Drift_follow_CNT	10	1-255 default 10，值越小跟进速度越快，越要求按的时候快速按键盘
OFF_to_ON_CNT	15	1-255 default 20，设定值越大，按键反应越不灵敏，相当于防抖动时间加长
ON_to_OFF_CNT	5	1-255 default 20
SCU_frequent_set	Mhz_5	Mhz_5 Mhz_10Mhz_20 一般 R8C33T R5R0C0B4 选 10Mhz 和 5Mhz
SCU_period3_set	2	0-1-2-3
SCU_period2_set	5	0-15
SCU_second_cnt_set	30	0-31

软件可能会用更新，请登录 cn.renesas.com 下载最新软件版本

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修订记录

版本	日期	描述	
		页	概要
1.00	Apr, 2013	—	第一版发行

产品使用时的注意事项

本文对适用于单片机所有产品的“使用时的注意事项”进行说明。有关个别的使用时的注意事项请参照正文。此外，如果在记载上有与本手册的正文有差异之处，请以正文为准。

1. 未使用的引脚的处理

【注意】将未使用的引脚按照正文的“未使用引脚的处理”进行处理。

CMOS产品的输入引脚的阻抗一般为高阻抗。如果在开路的状态下运行未使用的引脚，由于感应现象，外加LSI周围的噪声，在LSI内部产生穿透电流，有可能被误认为是输入信号而引起误动作。未使用的引脚，请按照正文的“未使用引脚的处理”中的指示进行处理。

2. 通电时的处理

【注意】通电时产品处于不定状态。

通电时，LSI内部电路处于不确定状态，寄存器的设定和各引脚的状态不定。通过外部复位引脚对产品进行复位时，从通电到复位有效之前的期间，不能保证引脚的状态。

同样，使用内部上电复位功能对产品进行复位时，从通电到达到复位产生的一定电压的期间，不能保证引脚的状态。

3. 禁止存取保留地址（保留区）

【注意】禁止存取保留地址（保留区）

在地址区域中，有被分配将来用作功能扩展的保留地址（保留区）。因为无法保证存取这些地址时的运行，所以不能对保留地址（保留区）进行存取。

4. 关于时钟

【注意】复位时，请在时钟稳定后解除复位。

在程序运行中切换时钟时，请在要切换成的时钟稳定之后进行。复位时，在通过使用外部振荡器（或者外部振荡电路）的时钟开始运行的系统中，必须在时钟充分稳定后解除复位。另外，在程序运行中，切换成使用外部振荡器（或者外部振荡电路）的时钟时，在要切换成的时钟充分稳定后再进行切换。

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