

AN13044

如何使用MCUXpresso SDK和配置工具在MC56F83xxx和MC56F81xxx上启用FreeMASTER的EOnCE连接

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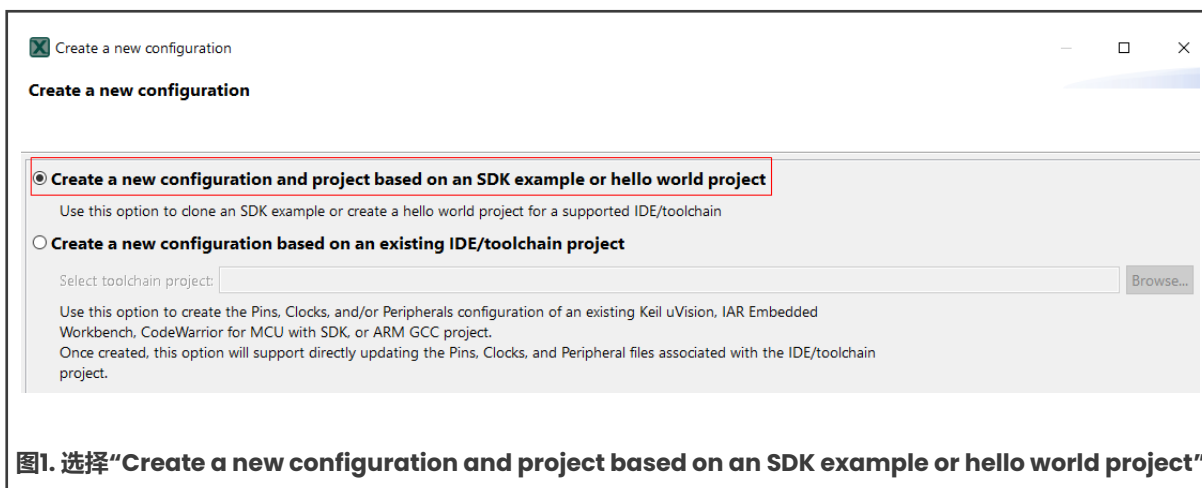
应用笔记

1 简介

对于FreeMASTER的通信接口，配置工具v8.1尚未直接支持增强型片上仿真器（EOnCE），但FreeMASTER驱动程序能够支持。在即将发布的第9版中，配置工具将支持此功能。本文介绍了如何使用配置工具v8.1启用FreeMASTER的EOnCE连接，以便人们可以使用MultiLink或OSBDM代替串行端口进行FreeMASTER连接。当用户的电路板上没有额外的串行端口时，此种连接非常有用。

2 步骤

1. 使用配置工具将project_template工程克隆到CodeWarrior工作区中。
 - a. 打开配置工具v8.1，单击**File -> New...**，然后选择 **“Create a new configuration and project based on an SDK example or hello world project”**，如图1所示。然后单击 **“Next”**。

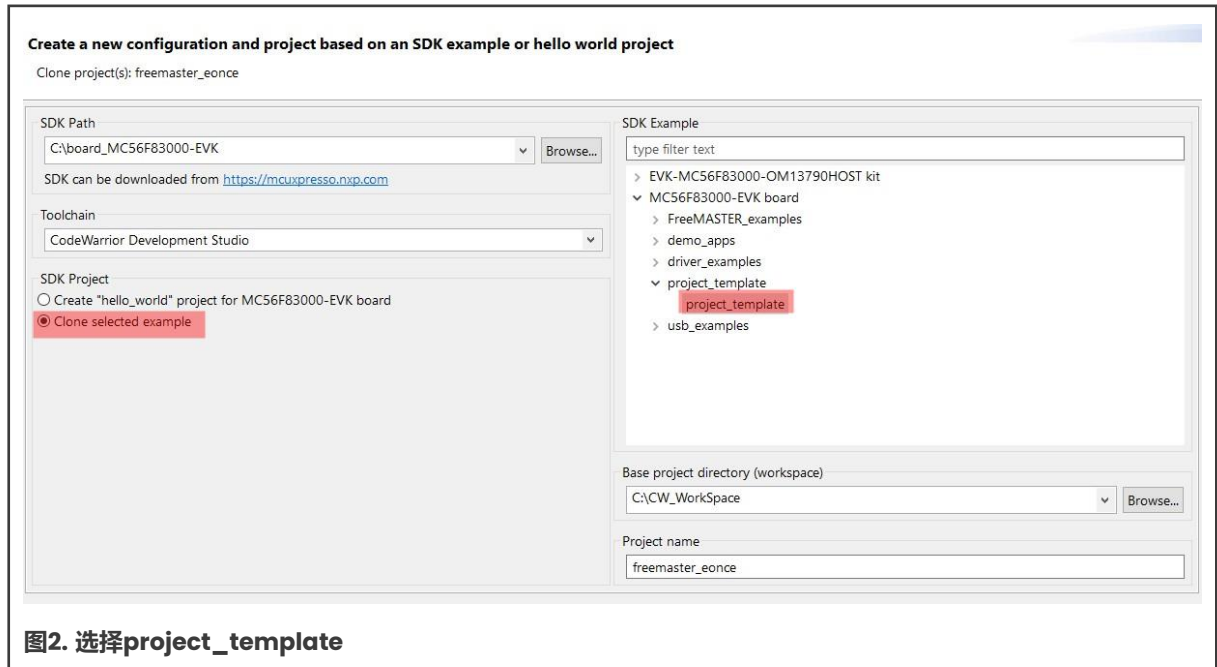


- b. 在弹出的窗口中，选择正确的SDK路径。选择 **“Clone selected example”** 并选择 **“project_template”**，如图2所示。在 **“Project name”** 文本框中输入正确的CodeWarrior工程名称。单击 **“Finish”**。

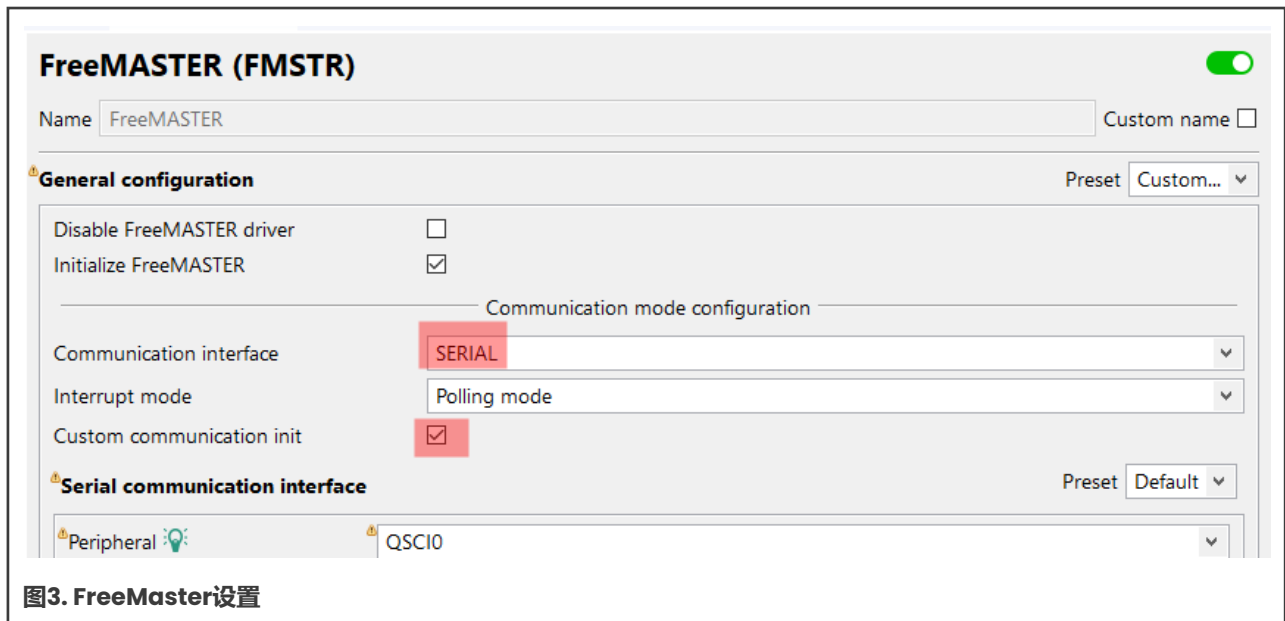
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- 将FreeMASTER组件添加到中间件面板中，并进行必要的设置，如图3所示。选择SERIAL作为通信接口，并勾选Custom communication init。其余的FreeMASTER设置（例如范围、记录器、TSA等）可根据需要进行配置。单击工具中的Update Code（更新代码）按钮。



- 将克隆的工程导入CodeWarrior。打开freemaster_cfg.h文件并进行以下两处修改：
 - 将FMSTR_SERIAL_MCUX_QSCI更改为FMSTR_SERIAL_56F800E_EONCE。
 - 注释FMSTR_SERIAL_BASE定义。

```

    ///! Select communication interface
    #define FMSTR_TRANSPORT          FMSTR_SERIAL // Select FMSTR_SEI
    #define FMSTR_SERIAL_DRV        FMSTR_SERIAL_56F800E_EONCE // 1

    @///! Define communication interface base address or leave undefin
    // #define FMSTR_SERIAL_BASE      QSCIO
  
```

图4. 修改freemaster_cfg.h文件

4. 现在，FreeMASTER已配置为使用EOnCE进行通信。在main.c文件的while(1)中添加FMSTR_Poll()，FreeMASTER即可正常运行。

注

切记自此以后不要使用该工具更新FreeMASTER配置，因为它会修改freemaster_cfg.h文件。

取消选中图5中突出显示的复选框，这样FreeMASTER配置就不会被更新。

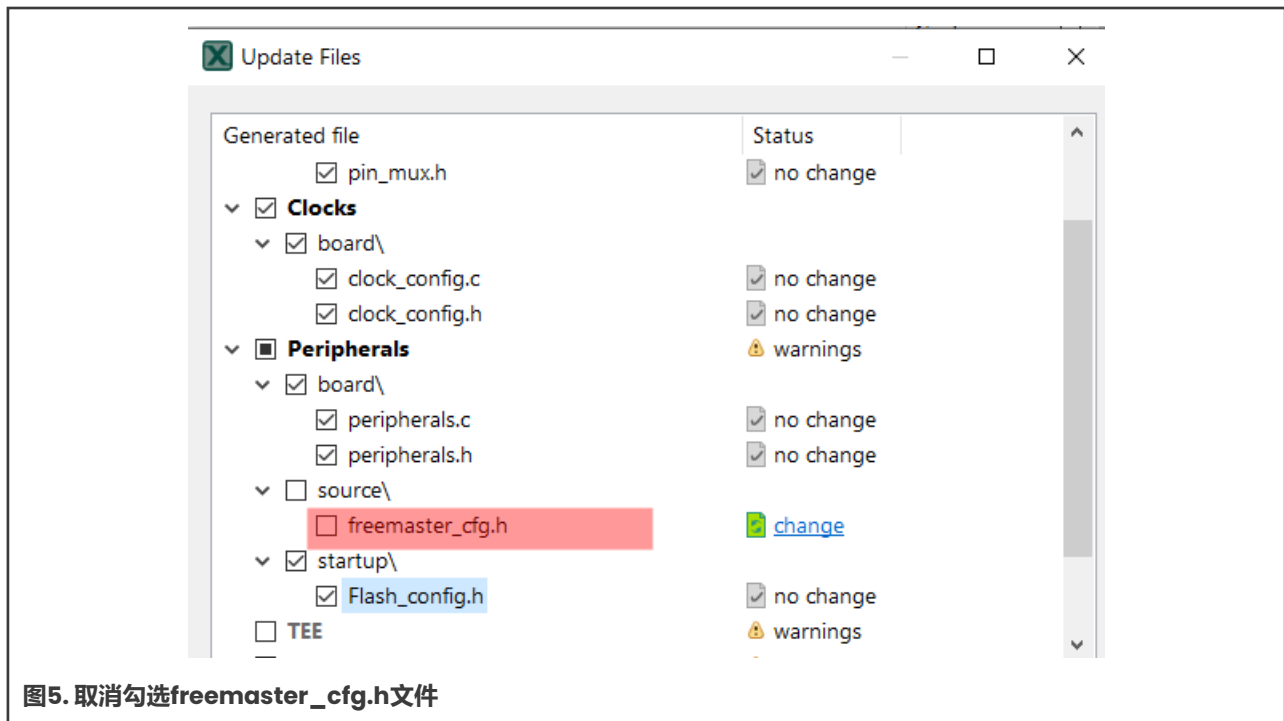


图5. 取消勾选freemaster_cfg.h文件

默认情况下，EOnCE通信采用轮询模式，需要在应用程序主循环或主任务中调用FMSTR_Poll()。有关在EOnCE通信中启用中断驱动模式的更多信息，请参阅SDK包中提供的fmstr_eonce示例。另请参阅fmstr_uart和其他使用FreeMASTER驱动程序的SDK示例。

3 参考资料

- [Codewarrior IDE](#)
- [Freemaster](#)
- [MCUXpresso配置工具](#)
- [MCUXpresso SDK](#)

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