

Using Flash Programmer Task for Standalone programming

By Jennie Zhang

Standalone Programming is widely used when user doesn't need a debugger for programming in CodeWarrior 10. Thus people only uses elf/s19 file to program target without using project and source files.

There is a very famous article written by Erich Styger regarding using "Flash File to Target" as a standalone programmer for target programming.

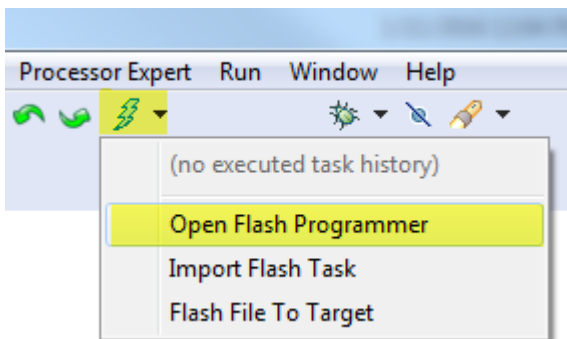
<https://mcuoneclipse.com/2012/08/02/standalone-flash-programmer/>

Besides this method, **Flash Programmer Task** is also good for standalone programming. As I know some customers prefer to use this method because it can also do checksum, dump flash, etc during programming. I will introduce how to utilize **Flash Programmer Task** step by step in the following for brainstorming. This article is based on CodeWarrior 10.6.4 and FRDM-K64 board, but the method is same for all Kinetis, HCS08, HCS12Z, etc devices

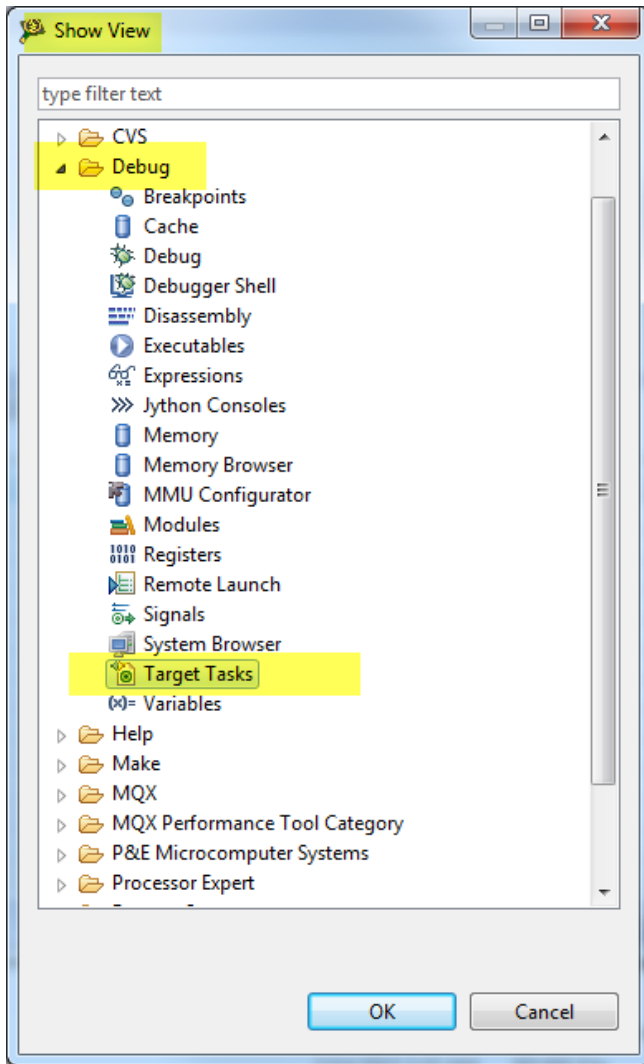
1. Open Target Task

Flash Programmer Task is contained in Target Task window. There are two methods to open Target Task:

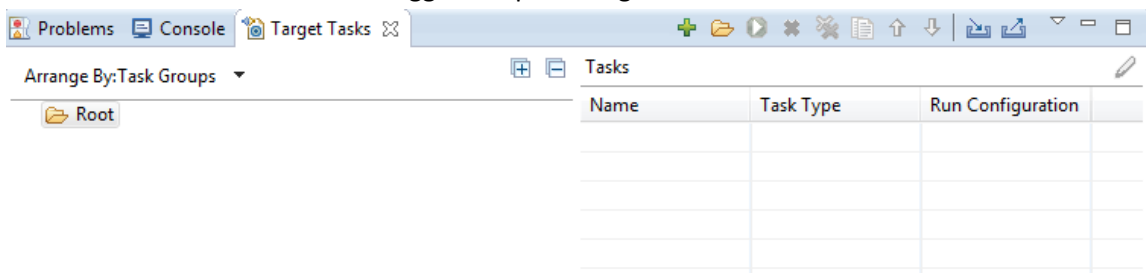
Method 1: Open Target Task from "Open Flash Programmer"



Method 2: Open Target Task from CodeWarrior menu "Window", "Show view", "Others", "debug", "Target Task"



Both of these two methods will trigger to open “Target Task” window:



2. Create flash Programmer task

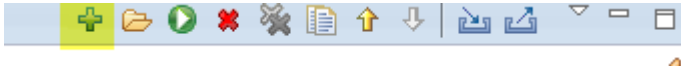
2.1 Before creating the target task, we need create a dummy K64 project for generating the connection configuration.

2.2 generate *.ttl file

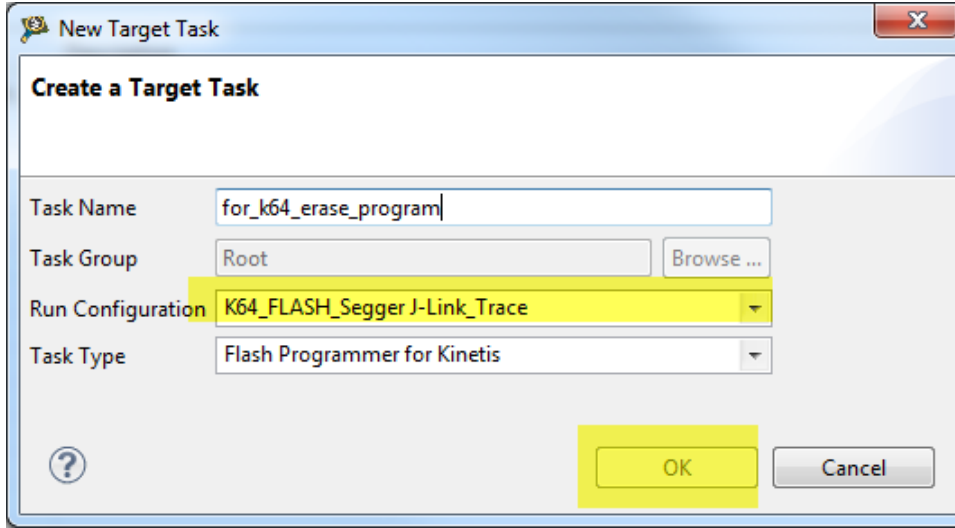
*.tff file is for targeting the needing target tasks for flash programming. Let’s take K64 project as example. There are two methods to generate .tff file.

Method 1: Generate flash Programmer target task from Target Task window:

Hit “new” button:

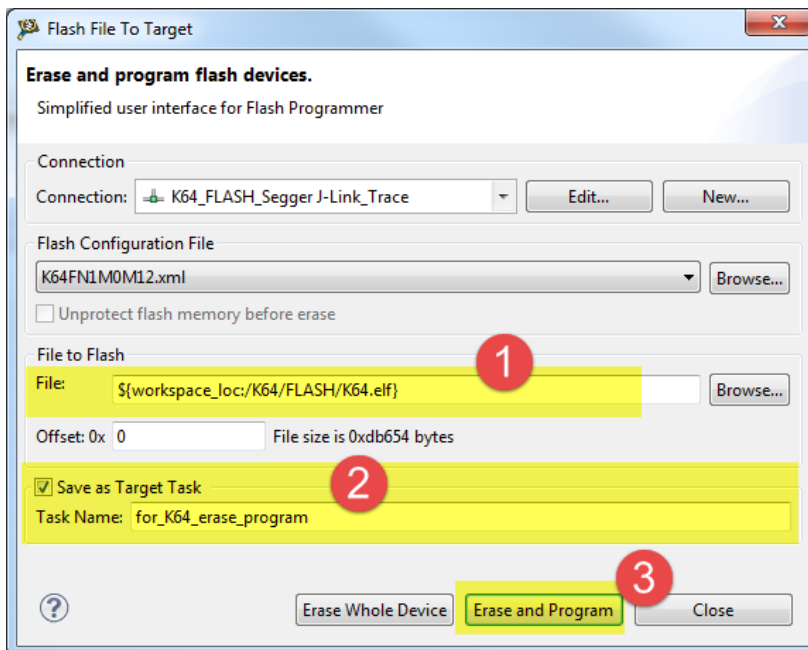


Then fill the Task Name, set Run Configuration as the dummy project connection configuration generated in 2.1.

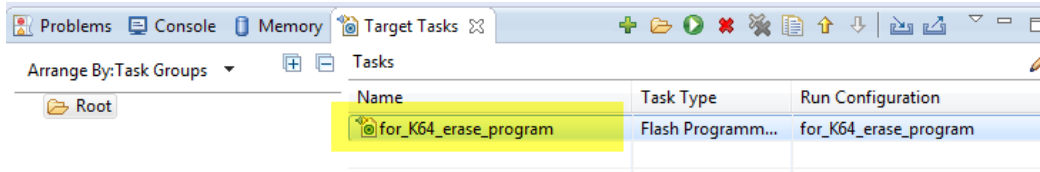


Method 2: Generate a Target Task file by using “Flash File To Target” .

This screenshot is to generate a erase and program target:

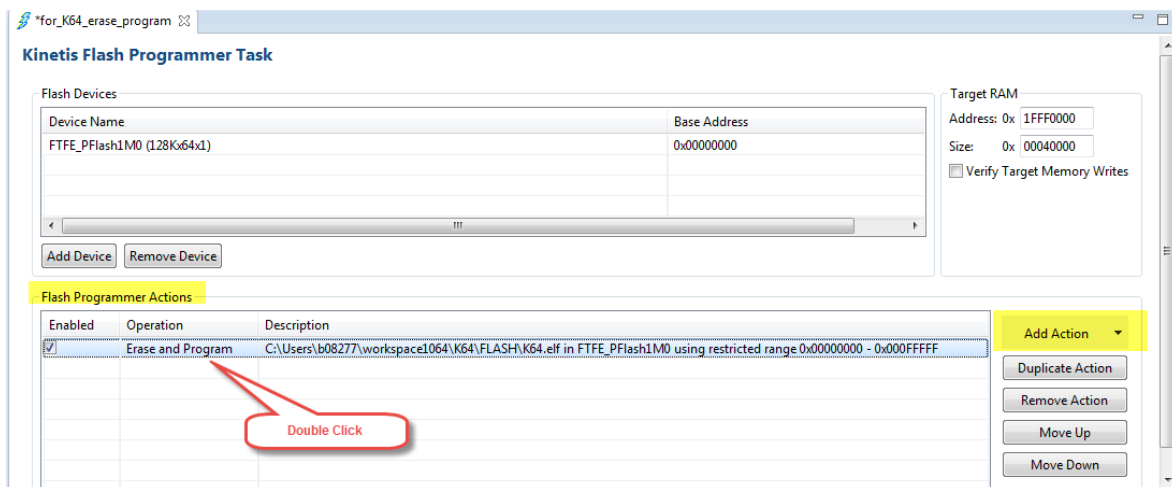


Click on “Erase and Program” button, erase and program is executed and the target “for_k64_erase_program.ttf” is saved to local disk and contained in Target Tasks window:

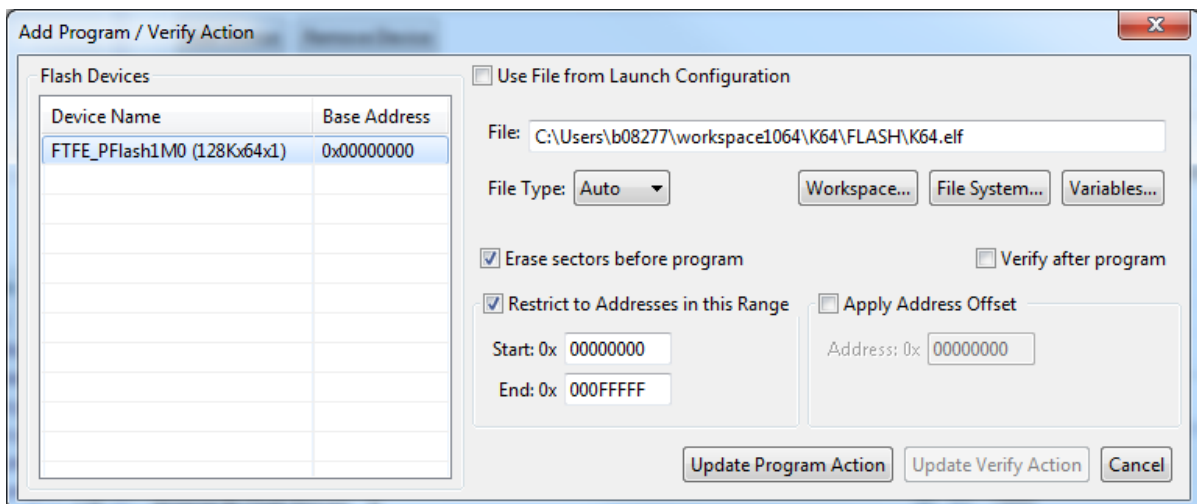


2.3 Configure Flash Programmer Task

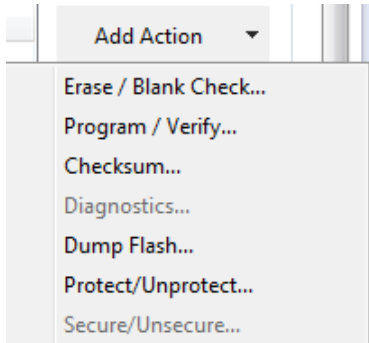
Double click on “for_k64_erase_program”, the Flash Programmer Task is shown up



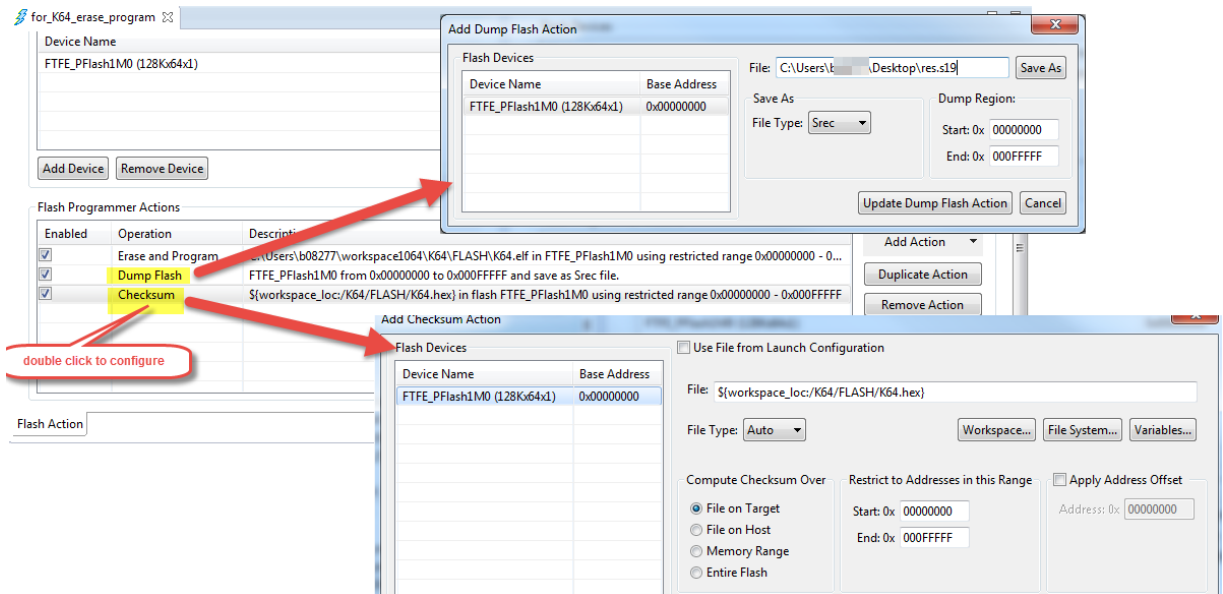
With the 2.2 method 1 Flash Programmer Actions field is empty, and with method 2 “Erase and Program” operation is loaded automatically. Double click on “Erase and Program”, we can see how it is configured:



No matter in which of the cases, user can easy add Action in Flash Programmer Actions window to customize your own sequence. See the action options:



For example, if we want to dump a specific Flash range to a s19 file, we can add “Dump Flash”. While adding “Checksum” can do checksum for flash.



2.4 Run Flash Programmer Task

After above configuration, click on Run button, Flash Programmer Task can do “Erase and Program”, “Dump Flash”, “Checksum” in continuously.

See attached video for running result.

