

Project Template User Guide

1 Usage

To develop any part of 56F8xxx series with Config Tool, please use corresponding project template. These template projects are extracted from related SDK packages and contain all the necessary drivers. Config tool provides GUI interface to easily configure pins, clock, peripherals and middleware such as FreeMASTER. Follow below steps to start the development:

- 1) Download and unzip the package
- 2) Import the project with desired part number to CodeWarrior workspace. Suggest copying the project into workspace during the importing by checking "Copy projects into workspace" checkbox in "Import Projects" dialogue
- 3) Go to the imported project folder and open the mex file with Config tool to start the development

2 Limitation and improvement

2.1 Image size improvement

The original image size of project template is ~20KB in debug configuration.

This is because the default `assert()` function will call `printf()` function to print information on CodeWarrior console. So it occupies a big amount of memory (~16kB).

An improvement can be applied if users don't want to use default `assert()` behavior for debug configuration to avoid such a big image.

Add below code into `fsl_common.c`.

```
void __misl_assertion_failed(char const *failedExpr, char const
*file, char const *func, int line)
{
    asm(DEBUGHLT);
}
```

Note:

`__misl_assertion_failed()` is invoked by `assert()`. The system default `__misl_assertion_failed()` will call `printf()`, however it is a weak function, so we can re-define it without calling `printf()`.