Quintic Device Database for SW Development User Manual

Version 0.4

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1. Introduction

This manual describes how to use Quintic device database to ease software development of Bluetooth Low Energy applications based on Quintic QN9020 platform. The debugging and download functions of Keil and IAR are supported in this tool.

2. How to Install

After running the application of Quintic device database for SW development, a window prompts out as shown in Figure 1.

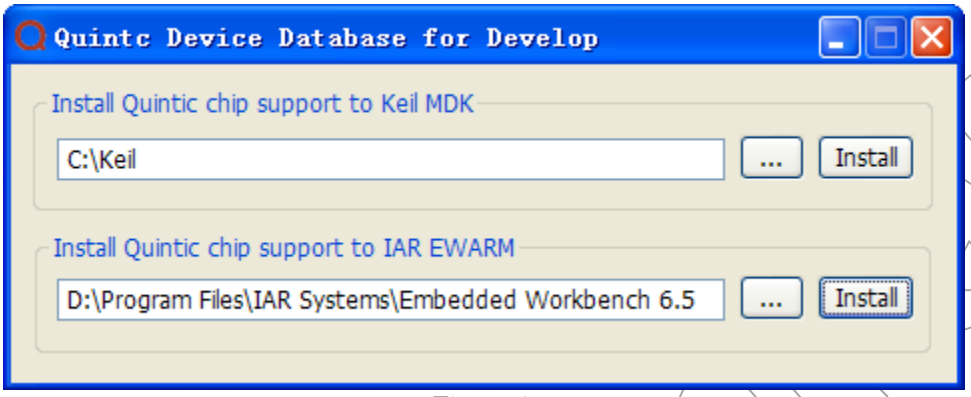

Figure 1

The paths of installed IAR and Keil are filled automatically. Press the appropriate “Install” button to intall the Quintic device database to Keil or IAR. If the installation is successful, a message box will be shown as Figure 2.

Figure 2

3. How to Use in Keil

After installing Quintic device database to Keil successfully, it can be used properly.

3.1 Create New Project

To create a new project for Keil, please select the Quintic CPU data base from list as shown in Figure 3.

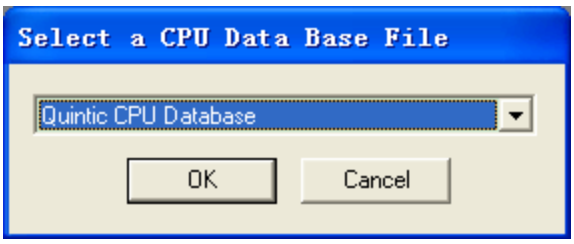

Figure 3

After selecting the database, the QN9020 chip should be selected as in Figure 4.

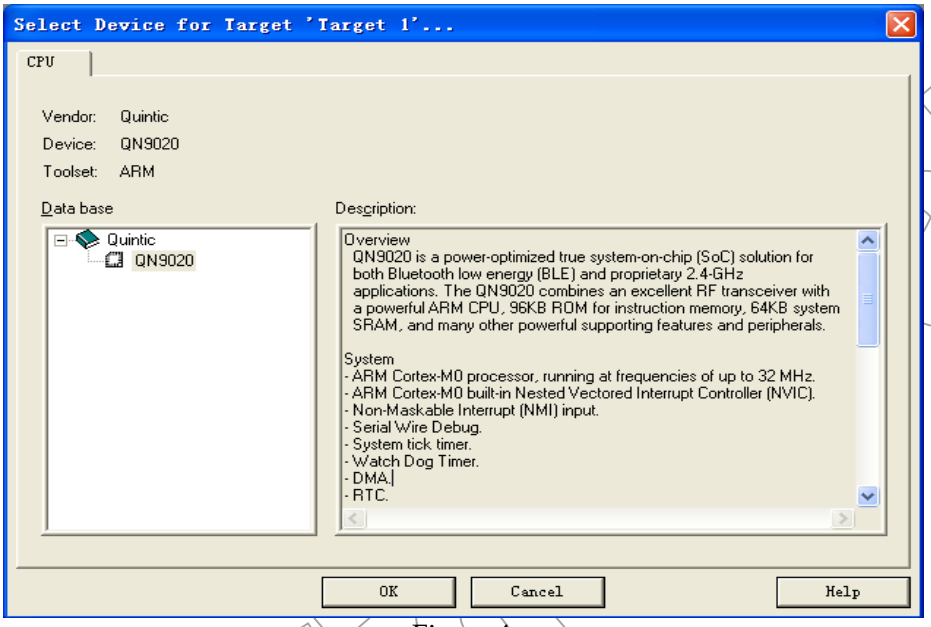

Figure 4

After that, a window shown in Figure 5 prompts out. Please click "Yes".

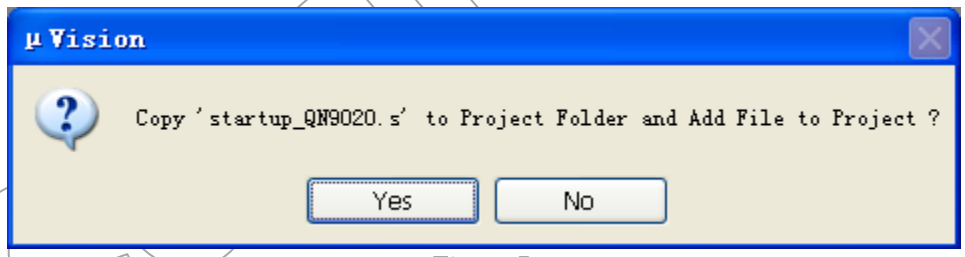

Figure 5

Done above, a new project of QN9020 is created successfully.

3.2 Modify Project Option

To modify project options, please open the "Option for … " window(Alt + F7) in Keil MDK firstly. Switch to "Device" tab, and the database and chip should be set up as shown in Figure 6.

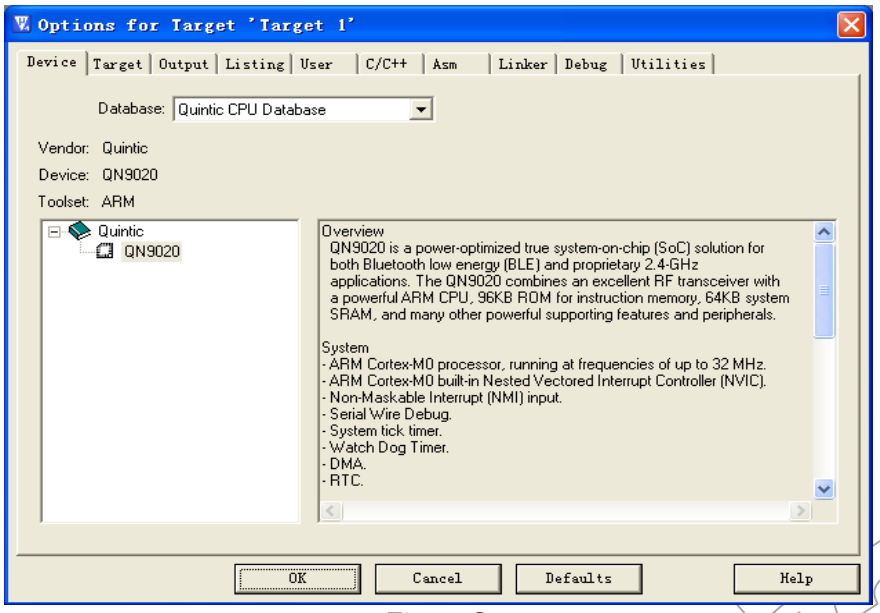

Figure 6

The primary parameters of the "Target" tab (shown in Figure 7) have been filled automatically. If you use ULINK, the "Flash download" tab is also filled automatically in "Utilities". Otherwise its parameters must be set manually. Those valid setting are shown in Figure 7 and Figure 8.

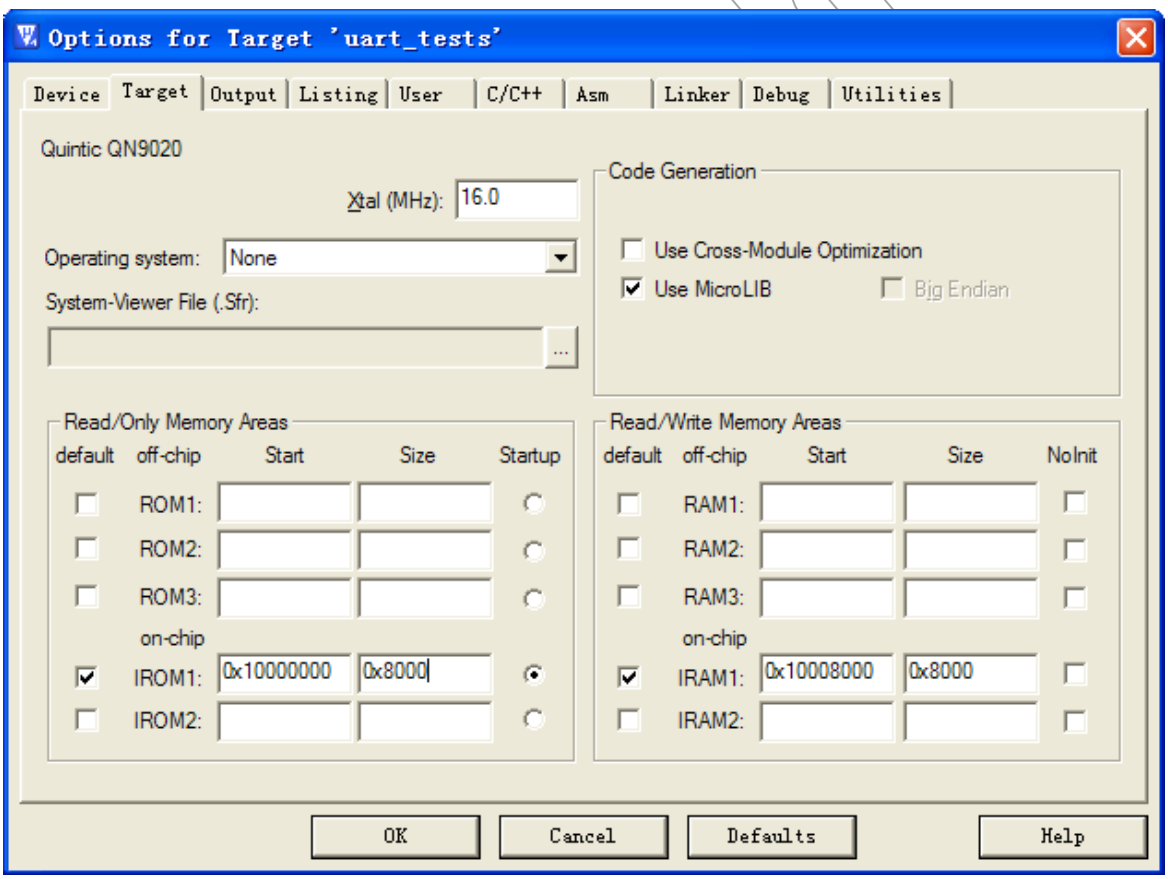

Figure 7

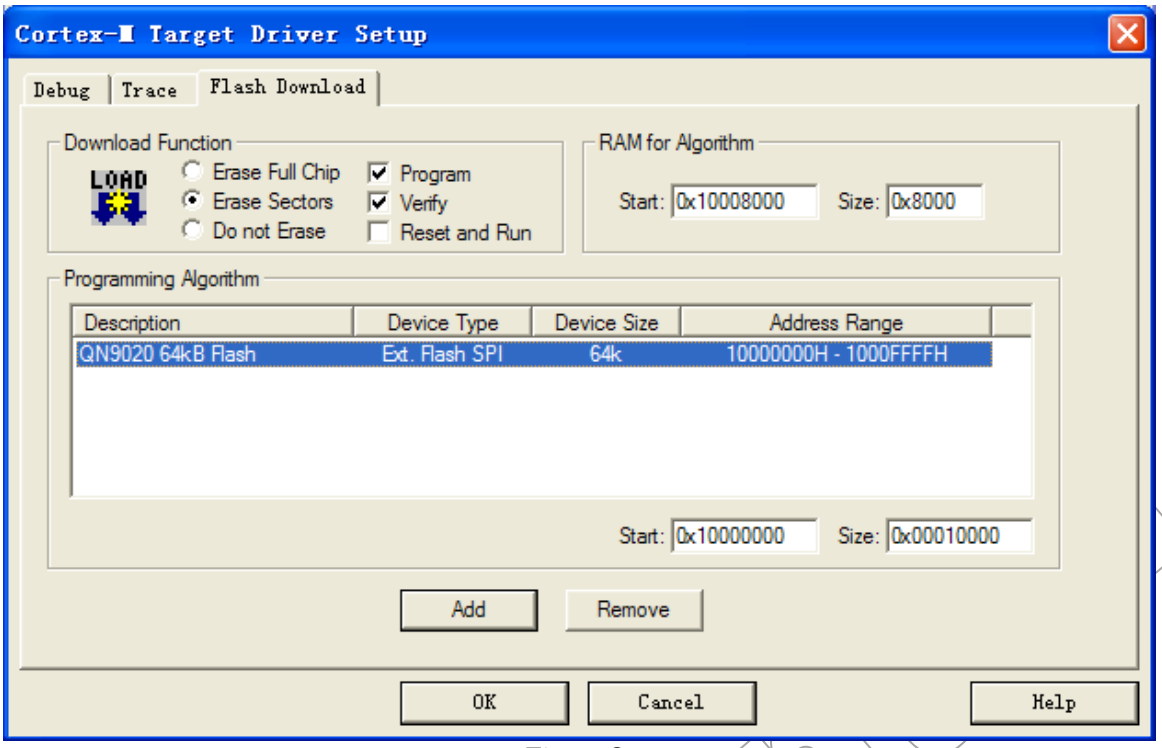

Figure 8

Note:

As shown in Figure 8, there are three options to erase flash. The difference is as below:

- **Erase Full Chip**: Erase full Flash data including the configuration data.
- **Erase Sectors**: Erase full Flash data except the configuration data.
- **Do not Erase**: Don't select this.

3.3 Start to Debug

After done above, you can use the function of debugging and download in Keil MDK with Quintic chip as shown in Figure 9.

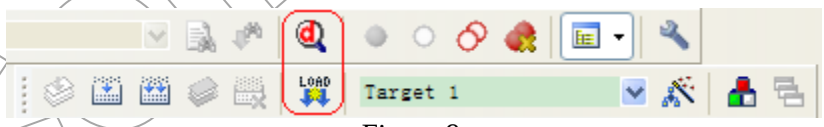

Figure 9

4. How to Use in IAR

The IAR project option is similar to Keil, but there are three points need to pay attention:

First, select the Quintic chip for development which is show as Figure 10.

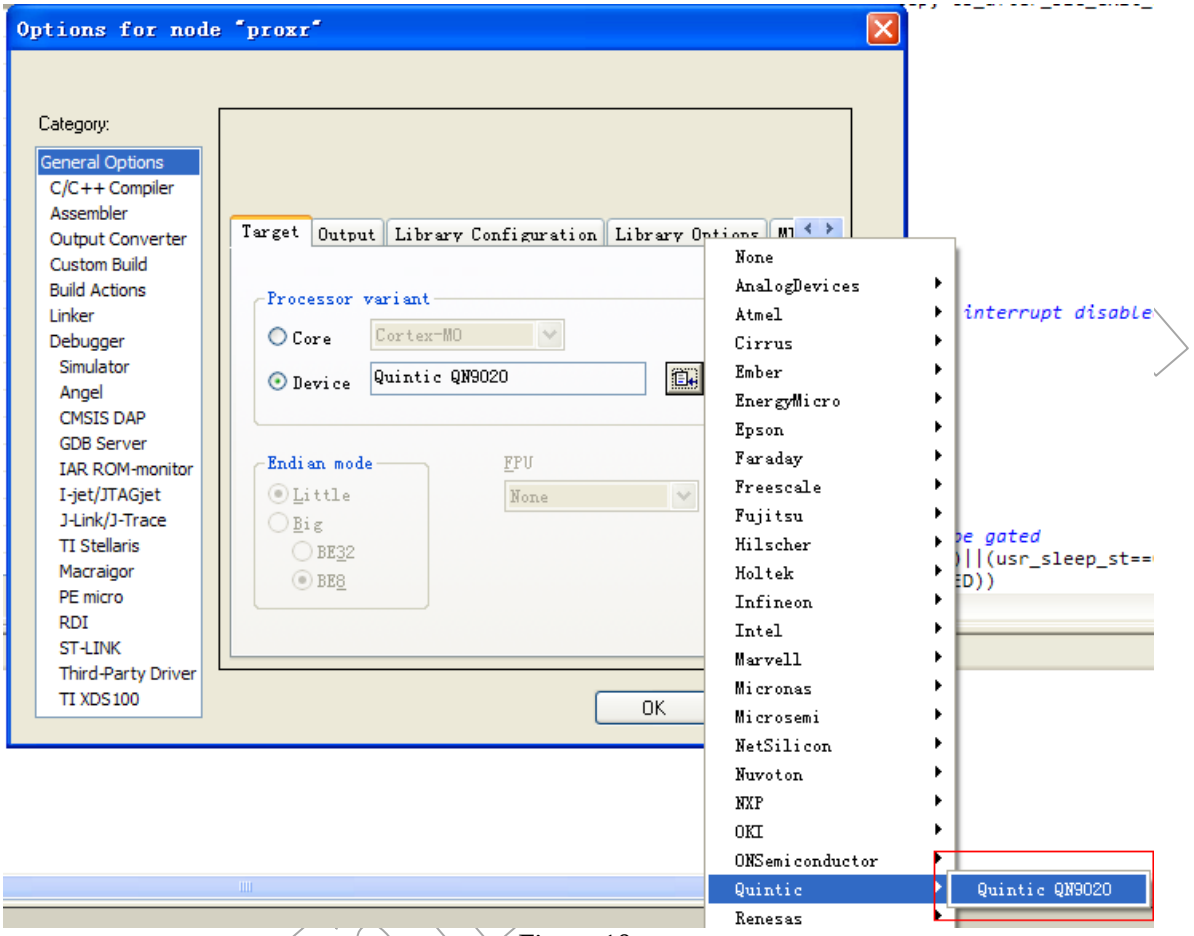

Figure 10

Second, set the debugger setup macro as "$TOOLKIT_DIR$\config\flashloader\Quintic\FlashQN9020.mac", this is shown in Figure 11.

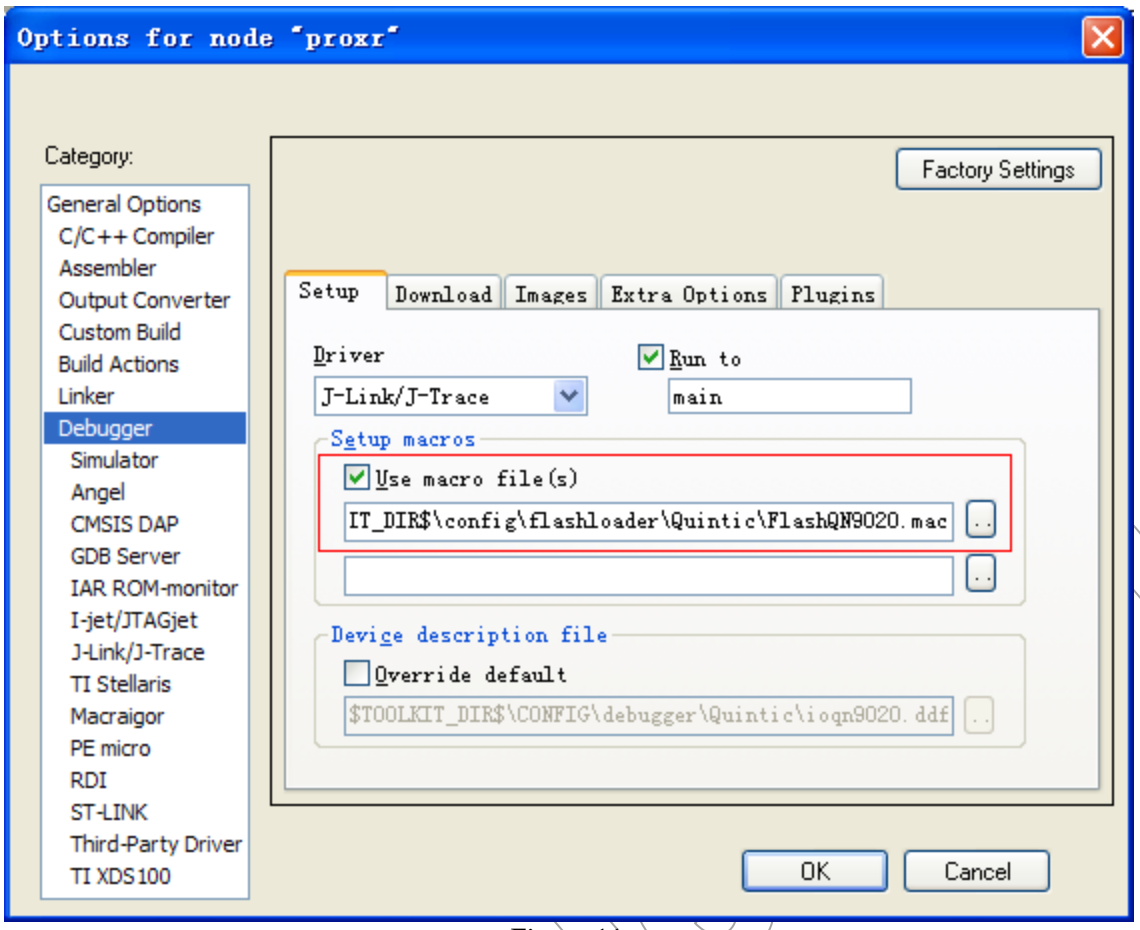

Figure 11

Third, use flash loader to download, it is shown as Figure 12.

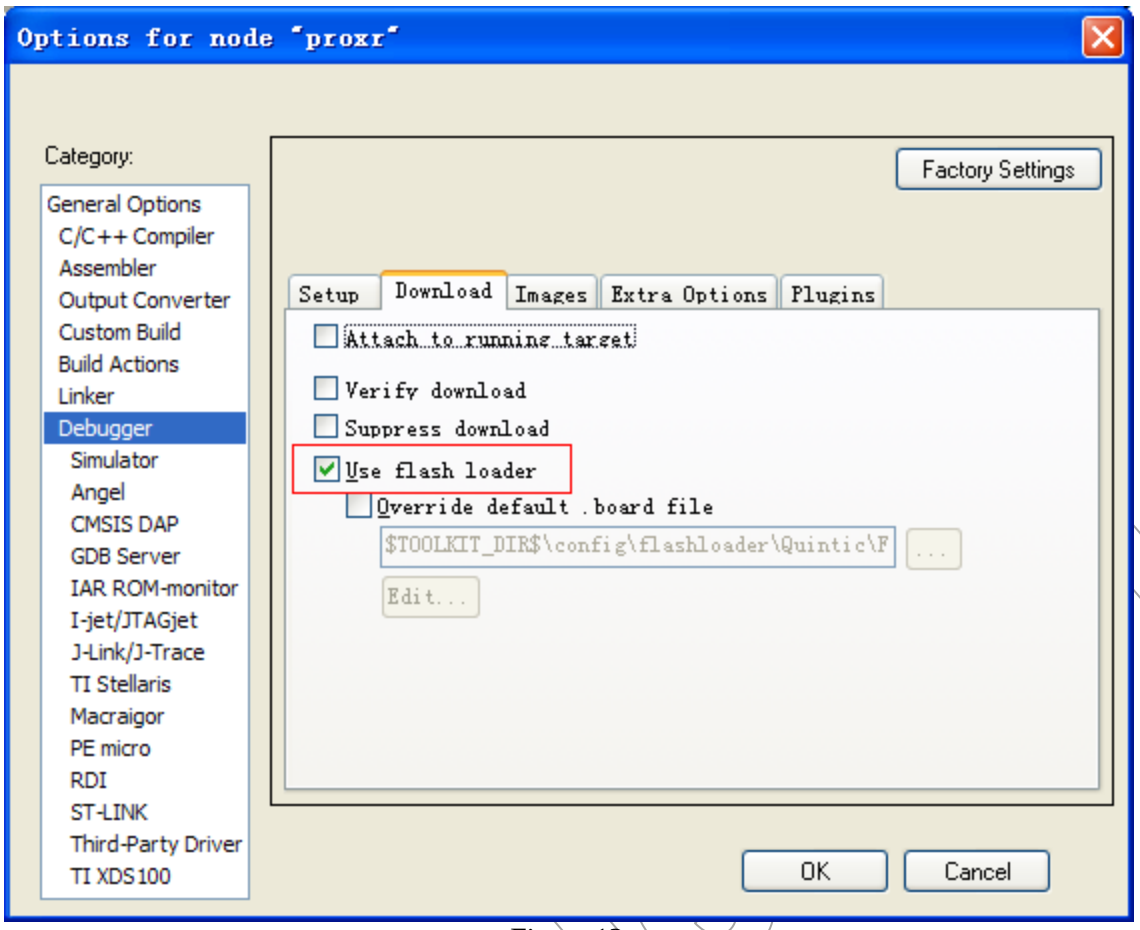

Figure 12

Release History

REVISION	CHANGE DESCRIPTION	DATE
0.1	Initial release	2012-12-10
0.2	Add Figure 5	2012-12-26
0.3	Update figure 8 & 9	2013-04-12
0.4	Add IAR support	2013-07-12

