

HOW TO

Install Green Hills compiler plug-in into S32 Design Studio

Rev. 1 — 25 March 2022



Revision History

Revision	Date	Author	Description
1.0	25/03/2022	NXP RTD Team	Create document how to install GHS compiler plugin into S32 Design Studio

1 Introduction

S32 Design Studio (S32DS) supports Eclipse plug-in of Green Hills Software (GHS) compiler to compile S32DS projects via GHS compiler. This document describes how to install this plug-in and enable GHS in the new project wizard.

After the GHS Eclipse plug-in is installed successfully, you can be able to create and build S32DS project using GHS compiler under S32DS Eclipse environment if the device and SDKs support GHS compiler.

2 Installation instructions

To able to use GHS compiler, you need to make sure that GHS compiler is installed with a valid license. Follow the steps below to install eclipse plugin:

2.1 Install GHS Eclipse plug-in

- On S32DS graphical user interface, go to menu "Help" -> "Install New Software"

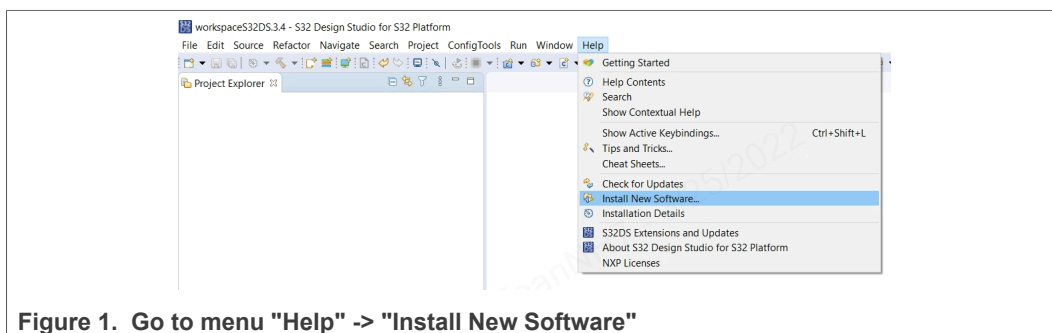


Figure 1. Go to menu "Help" -> "Install New Software"

- In the "Install" dialog appears, click on "Add" button. In the "Add Repository" dialog appears, click on "Local". Navigate to the eclipse directory located in your MULTI compiler installation(eg: C:\ghs\comp_202114\eclipse)

Install Green Hills compiler plug-in into S32 Design Studio

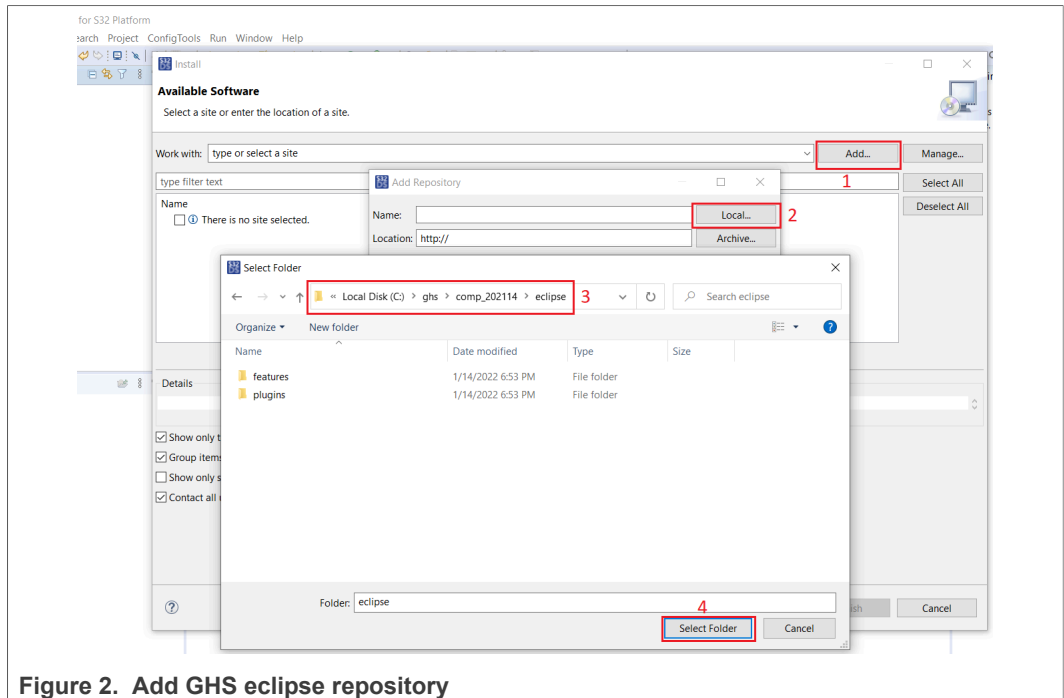


Figure 2. Add GHS eclipse repository

- In the Name box, enter "GHS Eclipse". Click on "Add" button.

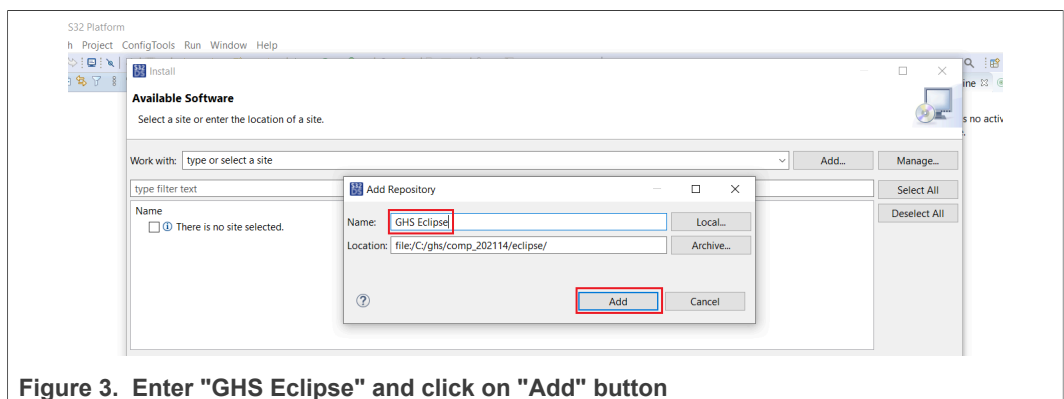


Figure 3. Enter "GHS Eclipse" and click on "Add" button

- In the Name/Version list, expand the Green Hills MULTI for Eclipse item. Select Green Hills MULTI for Eclipse corresponding to your target architecture(eg: Green Hills MULTI for Eclipse(ARM) and Green Hills MULTI for Eclipse(ARM64)). If you have MULTI licenses for more than one architecture, you can select all the targets you are licensed for. Click Next until you see the license acceptance page.

Install Green Hills compiler plug-in into S32 Design Studio

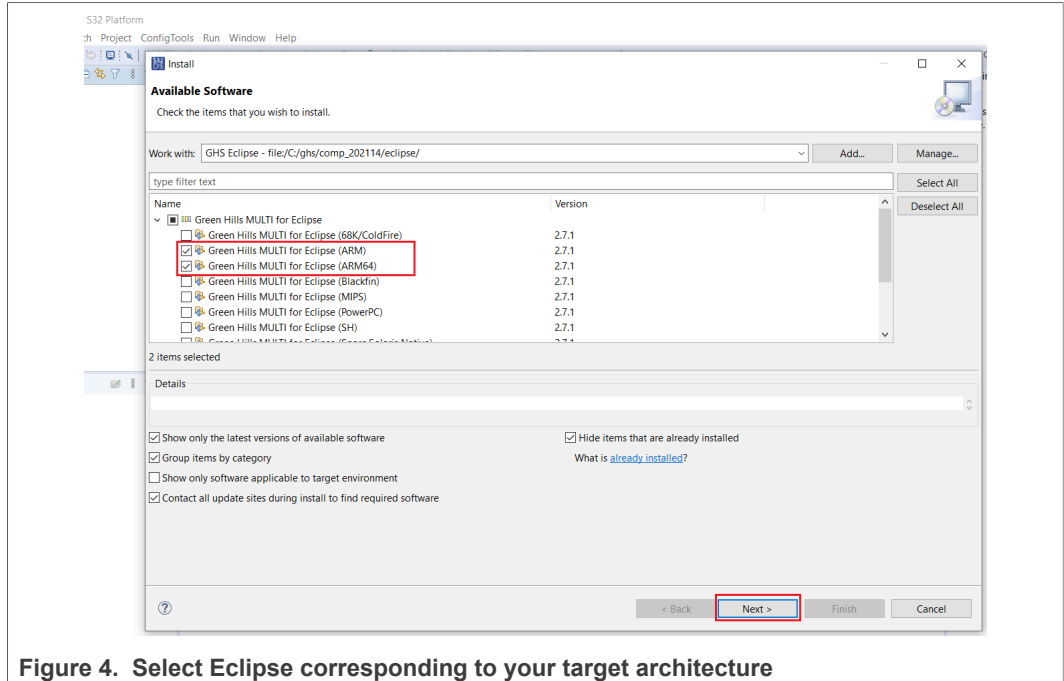


Figure 4. Select Eclipse corresponding to your target architecture

- If you accept the terms of the feature license, select I accept the terms in the license agreement. And click on "Finish" button.

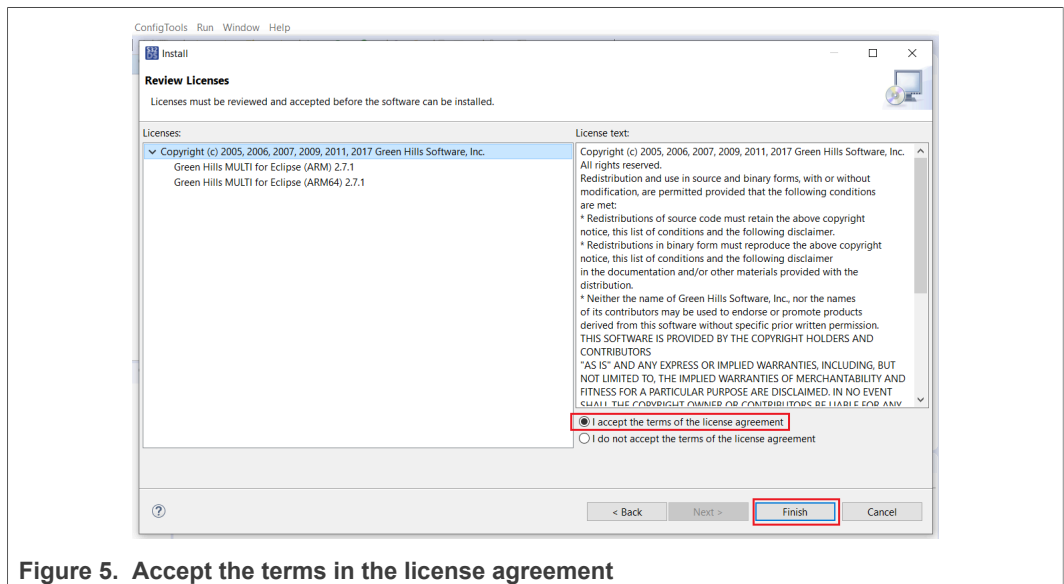


Figure 5. Accept the terms in the license agreement

- If the Security Warning window appears, click on "Install anyway".

- In the "Software Updates" dialog box appears, click on "Restart Now" to restart S32DS.

Install Green Hills compiler plug-in into S32 Design Studio

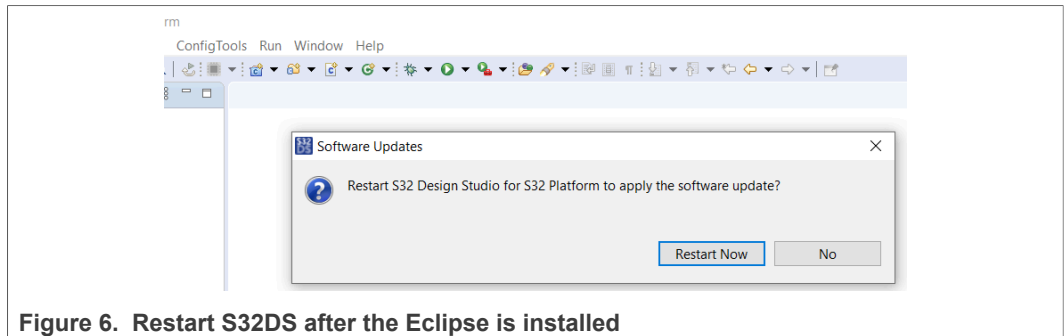


Figure 6. Restart S32DS after the Eclipse is installed

- Go to "Window" -> select "Preference" -> "S32 Design Studio for S32 Platform" -> "S32DS Variables". Set your GHS installation path for S32DS_GHS_PATH variable (ex "C:\ghs\comp_202114").

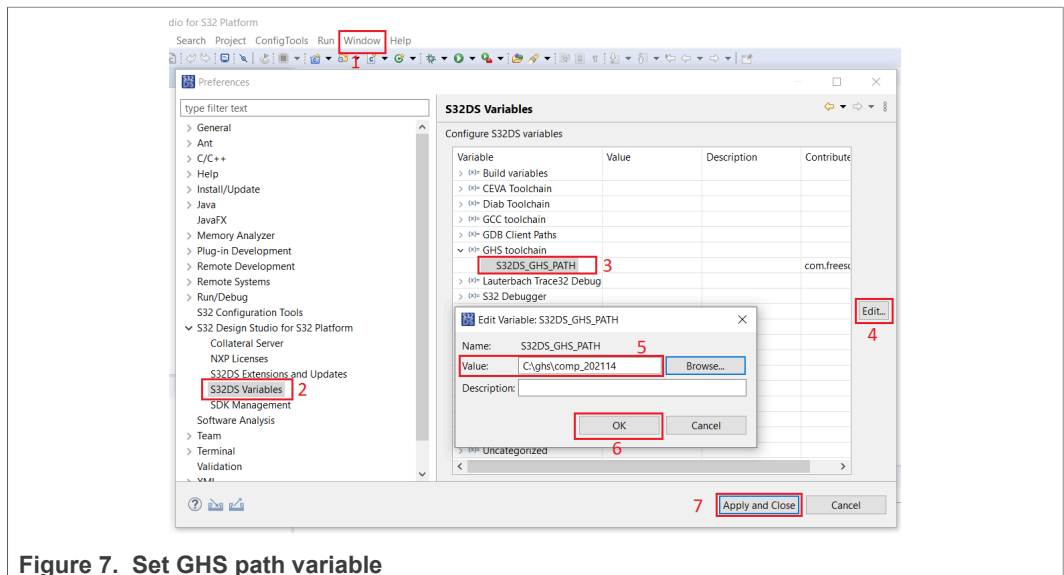


Figure 7. Set GHS path variable

2.2 Create new S32DS project using GHS in the project wizard.

- Now you can create a new S32DS project and select GHS toolchain for the device and SDKs support GHS toolchain.

Install Green Hills compiler plug-in into S32 Design Studio

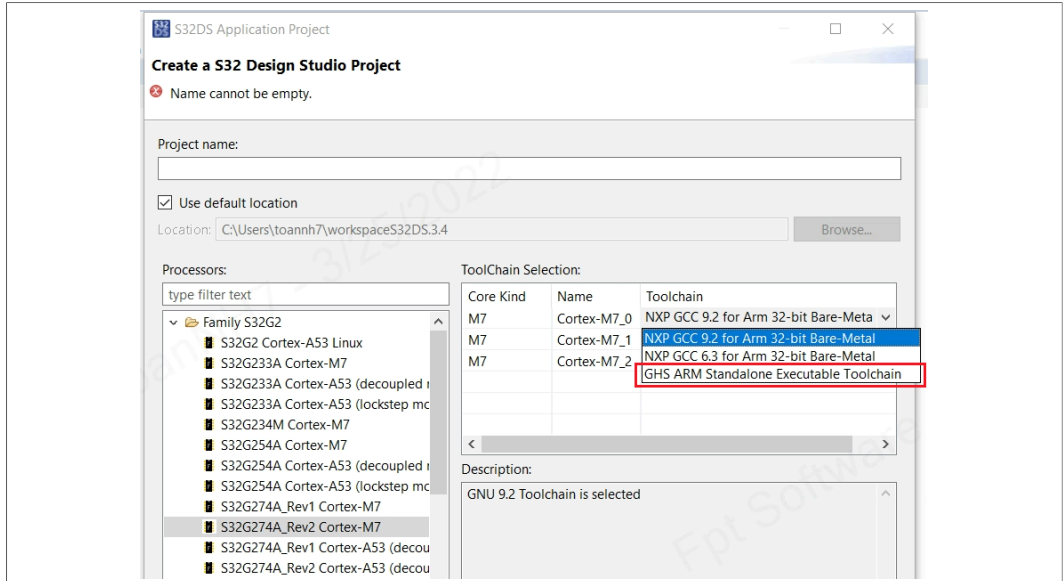


Figure 8. Select GHS toolchain when create new S32DS project

- And you can see the GHS settings are showed in the S32DS project properties.

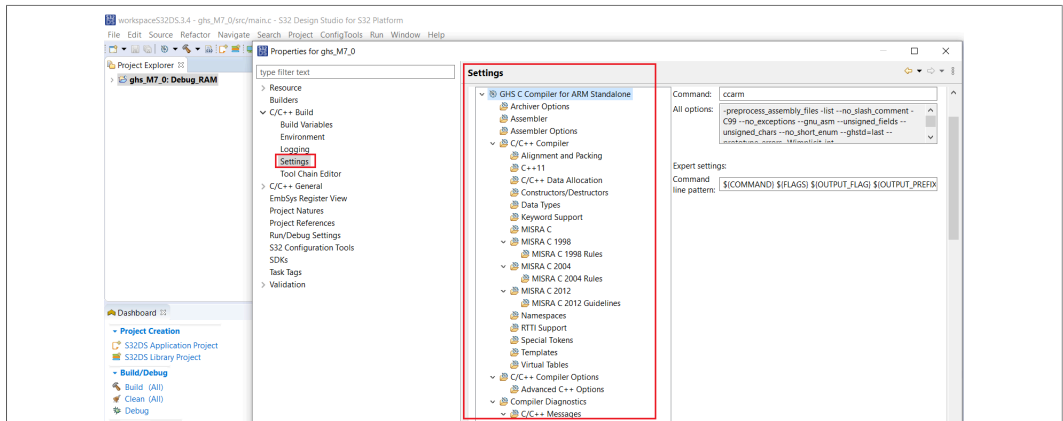


Figure 9.

3 Legal information

3.1 Definitions

Draft — A draft status on a document indicates that the content is still under internal review and subject to formal approval, which may result in modifications or additions. NXP Semiconductors does not give any representations or warranties as to the accuracy or completeness of information included in a draft version of a document and shall have no liability for the consequences of use of such information.

3.2 Disclaimers

Limited warranty and liability — Information in this document is believed to be accurate and reliable. However, NXP Semiconductors does not give any representations or warranties, expressed or implied, as to the accuracy or completeness of such information and shall have no liability for the consequences of use of such information. NXP Semiconductors takes no responsibility for the content in this document if provided by an information source outside of NXP Semiconductors. In no event shall NXP Semiconductors be liable for any indirect, incidental, punitive, special or consequential damages (including - without limitation - lost profits, lost savings, business interruption, costs related to the removal or replacement of any products or rework charges) whether or not such damages are based on tort (including negligence), warranty, breach of contract or any other legal theory. Notwithstanding any damages that customer might incur for any reason whatsoever, NXP Semiconductors' aggregate and cumulative liability towards customer for the products described herein shall be limited in accordance with the Terms and conditions of commercial sale of NXP Semiconductors.

Right to make changes — NXP Semiconductors reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.

Suitability for use — NXP Semiconductors products are not designed, authorized or warranted to be suitable for use in life support, life-critical or safety-critical systems or equipment, nor in applications where failure or malfunction of an NXP Semiconductors product can reasonably be expected to result in personal injury, death or severe property or environmental damage. NXP Semiconductors and its suppliers accept no liability for inclusion and/or use of NXP Semiconductors products in such equipment or applications and therefore such inclusion and/or use is at the customer's own risk.

Applications — Applications that are described herein for any of these products are for illustrative purposes only. NXP Semiconductors makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification. Customers are responsible for the design and operation of their applications and products using NXP Semiconductors products, and NXP Semiconductors accepts no liability for any assistance with applications or customer product design. It is customer's sole responsibility to determine whether the NXP Semiconductors product is suitable and fit for the customer's applications and products planned, as well as for the planned application and use of customer's third party customer(s). Customers should provide appropriate design and operating safeguards to minimize the risks associated with their applications and products. NXP Semiconductors does not accept any liability related to any default, damage, costs or problem which is based on any weakness or default in the customer's applications or products, or

the application or use by customer's third party customer(s). Customer is responsible for doing all necessary testing for the customer's applications and products using NXP Semiconductors products in order to avoid a default of the applications and the products or of the application or use by customer's third party customer(s). NXP does not accept any liability in this respect.

Export control — This document as well as the item(s) described herein may be subject to export control regulations. Export might require a prior authorization from competent authorities.

Evaluation products — This product is provided on an "as is" and "with all faults" basis for evaluation purposes only. NXP Semiconductors, its affiliates and their suppliers expressly disclaim all warranties, whether express, implied or statutory, including but not limited to the implied warranties of non-infringement, merchantability and fitness for a particular purpose. The entire risk as to the quality, or arising out of the use or performance, of this product remains with customer. In no event shall NXP Semiconductors, its affiliates or their suppliers be liable to customer for any special, indirect, consequential, punitive or incidental damages (including without limitation damages for loss of business, business interruption, loss of use, loss of data or information, and the like) arising out of the use of or inability to use the product, whether or not based on tort (including negligence), strict liability, breach of contract, breach of warranty or any other theory, even if advised of the possibility of such damages. Notwithstanding any damages that customer might incur for any reason whatsoever (including without limitation, all damages referenced above and all direct or general damages), the entire liability of NXP Semiconductors, its affiliates and their suppliers and customer's exclusive remedy for all of the foregoing shall be limited to actual damages incurred by customer based on reasonable reliance up to the greater of the amount actually paid by customer for the product or five dollars (US\$5.00). The foregoing limitations, exclusions and disclaimers shall apply to the maximum extent permitted by applicable law, even if any remedy fails of its essential purpose.

Translations — A non-English (translated) version of a document is for reference only. The English version shall prevail in case of any discrepancy between the translated and English versions.

Security — Customer understands that all NXP products may be subject to unidentified or documented vulnerabilities. Customer is responsible for the design and operation of its applications and products throughout their lifecycles to reduce the effect of these vulnerabilities on customer's applications and products. Customer's responsibility also extends to other open and/or proprietary technologies supported by NXP products for use in customer's applications. NXP accepts no liability for any vulnerability. Customer should regularly check security updates from NXP and follow up appropriately. Customer shall select products with security features that best meet rules, regulations, and standards of the intended application and make the ultimate design decisions regarding its products and is solely responsible for compliance with all legal, regulatory, and security related requirements concerning its products, regardless of any information or support that may be provided by NXP. NXP has a Product Security Incident Response Team (PSIRT) (reachable at PSIRT@nxp.com) that manages the investigation, reporting, and solution release to security vulnerabilities of NXP products.

3.3 Trademarks

Notice: All referenced brands, product names, service names and trademarks are the property of their respective owners.

NXP — wordmark and logo are trademarks of NXP B.V.

Contents

1	Introduction	3
2	Installation instructions	3
2.1	Install GHS Eclipse plug-in	3
2.2	Create new S32DS project using GHS in the project wizard.	6
3	Legal information	8

Please be aware that important notices concerning this document and the product(s) described herein, have been included in section 'Legal information'.

© NXP B.V. 2022.

All rights reserved.

For more information, please visit: <http://www.nxp.com>

For sales office addresses, please send an email to: salesaddresses@nxp.com

Date of release: 25 March 2022

Document identifier: HOWTO_Install_GHS_Compiler_Plugin