

# **S32 Design Studio for ARM, Version 2.0**

## **Installation manual**

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## SYSTEM REQUIREMENTS

### Recommended Configuration

- PC with 2.6GHz Intel® Pentium® compatible processor or better
- 4 GB of RAM
- 4 GB of disk space (when installing full product or updates)
- 3 GB on Windows system disk for storing temporary files
- USB port for communications with target hardware
- Ethernet port for communications with target hardware (optional)

### Operational Minimum Configuration

- PC with 1.8 GHz Intel® Pentium® compatible processor
- 2 GB of RAM
- 3 GB of disk space (when installing full product or updates)
- 2 GB on Windows system drive for storing temporary files
- USB port for communications with target hardware

### Host Operating System Support

- Microsoft Windows 7 32-bit and 64-bit
- Microsoft Windows 8 32-bit and 64-bit
- Microsoft Windows 8.1 32-bit and 64-bit
- Microsoft Windows 10 32-bit and 64-bit

To maximize performance, the S32 Design Studio for ARM, Version 2.0 tools should be installed on a computer with the recommended system configuration. While the tools will operate on a computer with the minimum configuration, the limited hardware will restrict its ability to function at desired performance levels.

This **Installation Manual** explains how to download and install the S32 Design Studio for ARM, Version 2.0 from the offline installer on a Microsoft Windows operating system.

See **Quick Start** to understand how to use the S32 Design Studio for ARM, Version 2.0 (S32DS ARM v2.0) to create, build, and debug a project.

## Quick Links

- S32 Design Studio page (overview, downloads) [www.nxp.com/S32DS](http://www.nxp.com/S32DS)
- S32 Design Studio community (for publicly shared cases) [community.nxp.com/community/s32/s32ds](http://community.nxp.com/community/s32/s32ds)
- Technical support (for confidential issues) [www.nxp.com/support](http://www.nxp.com/support) → **Hardware and Software** link (see [community.nxp.com/docs/DOC-329745](http://community.nxp.com/docs/DOC-329745))

The **Installation Manual** is organized as the following:

[Section 1. Download S32 Design Studio for ARM, Version 2.0 with offline installer](#)

[Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer](#)

### NOTE

Administrator rights are required to install S32DS ARM v2.0. When installing on Microsoft Windows 7 operating system and later, if User Account Control is enabled, make sure to run the installer with elevated privileges. Your project workspace needs to be setup in any folder to which you have full access permissions.

# Section 1. Download S32 Design Studio for ARM, Version 2.0 with offline installer

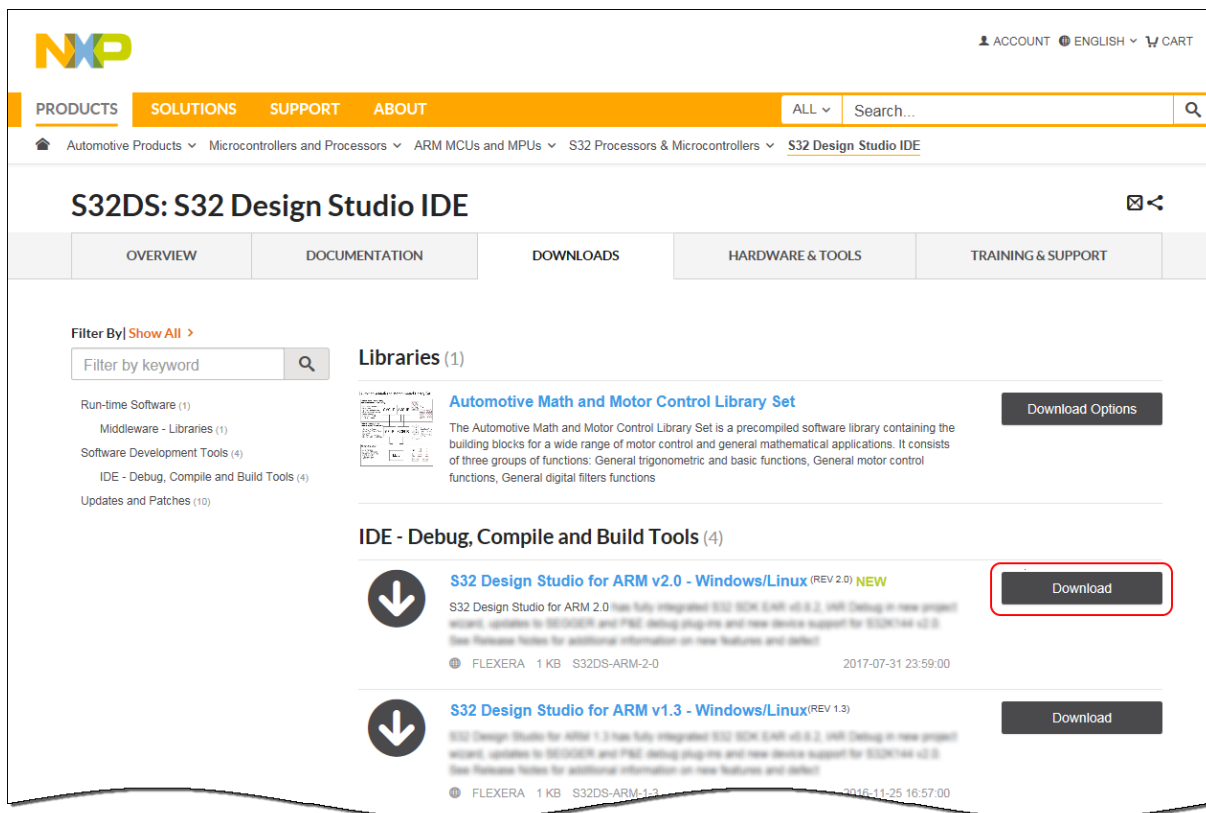
This section describes the steps to download the offline installer.

## NOTE

The downloaded installer package contains the complete S32DS ARM v2.0 tool. The installer package can be used on the computer without internet access.

To download the offline installer, perform these steps:

- a) Go to the following S32 Design Studio IDE site: [nxp.com/S32DS](http://nxp.com/S32DS). The S32 Design Studio IDE **Overview** page appears.
- b) Open the **Downloads** tab:



The screenshot shows the NXP website for S32 Design Studio IDE. The navigation bar includes 'PRODUCTS', 'SOLUTIONS', 'SUPPORT', and 'ABOUT'. The breadcrumb trail is: Automotive Products > Microcontrollers and Processors > ARM MCUs and MPUs > S32 Processors & Microcontrollers > S32 Design Studio IDE. The main heading is 'S32DS: S32 Design Studio IDE'. Below the heading are tabs for 'OVERVIEW', 'DOCUMENTATION', 'DOWNLOADS', 'HARDWARE & TOOLS', and 'TRAINING & SUPPORT'. The 'DOWNLOADS' tab is active. On the left, there is a 'Filter By' section with 'Show All >' and a search box. Below this are categories: Run-time Software (1), Middleware - Libraries (1), Software Development Tools (4), IDE - Debug, Compile and Build Tools (4), and Updates and Patches (10). The main content area shows 'Libraries (1)' with 'Automotive Math and Motor Control Library Set' and a 'Download Options' button. Below that is 'IDE - Debug, Compile and Build Tools (4)' with two entries: 'S32 Design Studio for ARM v2.0 - Windows/Linux (REV 2.0) NEW' and 'S32 Design Studio for ARM v1.3 - Windows/Linux (REV 1.3)'. The 'Download' button for the v2.0 version is highlighted with a red box.

- c) Click **Download** next to the **S32 Design Studio for ARM v2.0 – Windows** hyperlink. If you have not logged in, you will be directed to the **NXP Sign In** page.
- d) Enter your e-mail address and password provided during registration on the [nxp.com](http://nxp.com) site, and then click the **Sign in** button.

## NOTE

If you are not a registered user, click **Register** and follow the on-screen instructions. Make sure to verify the provided email address by following the verification link sent to you in the registration confirmation email.

NXP > Sign In or Register

**Sign in**

Email Address

Password

Remember me

**Sign in**

[Forgot your password?](#)

**Not yet registered?**  
Start here to become a new member

**Register**

**Why register?**

Get easy access to all your embedded design needs when you register on nxp.com:

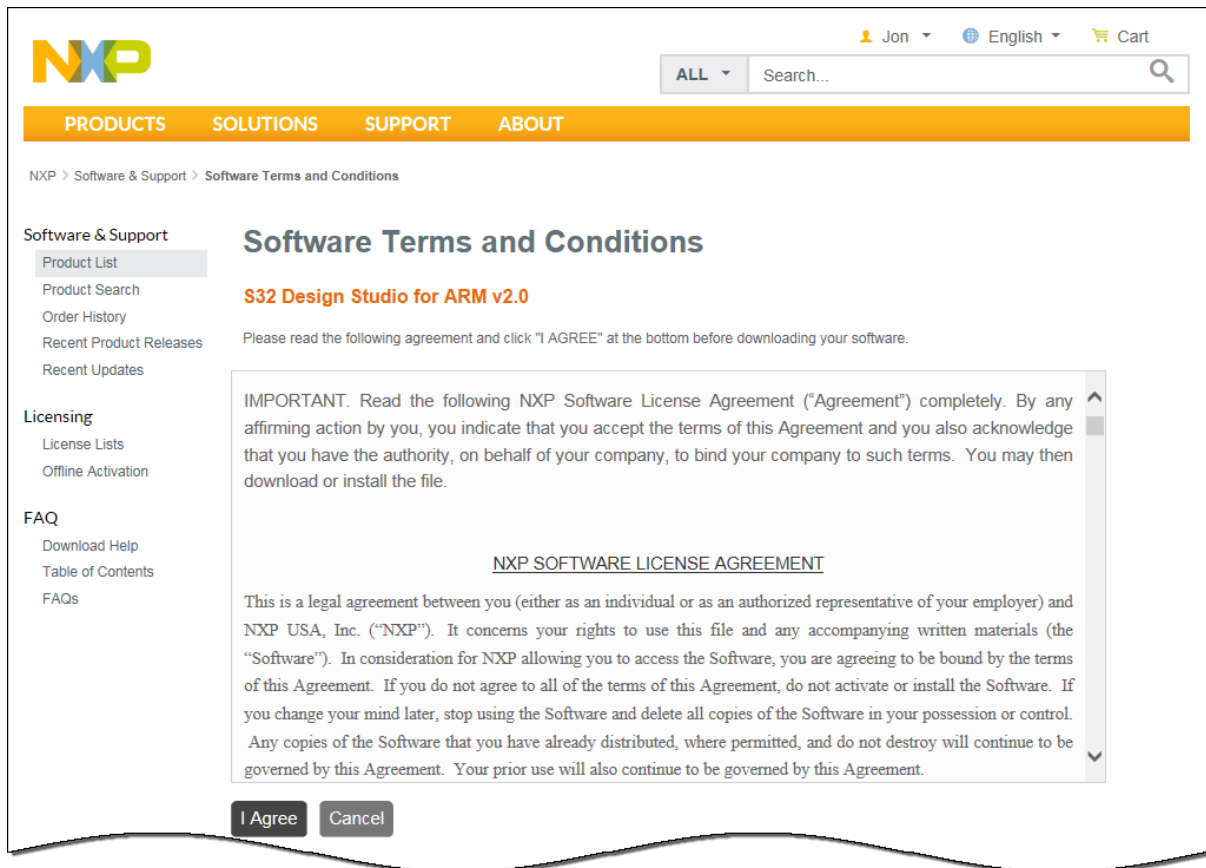
- Download software and tools
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- Access on-demand training and register for live courses
- Receive weekly Design News to stay up-to-date—particularly with errata and new documentation
- Track your browsing history for easy access to previously viewed items

**Still having trouble logging in?**  
If this is your first login, you will be required to review and agree to the Access Agreement before access is granted. By clicking "Register" you signify your ACCEPTANCE OF THE TERMS contained in the Access Agreement.  
Freescale employees should log in using their core ID and oneIT password.

Write down the Software Activation Code (hereinafter also referred to as **Application ID**) sent in the notification email. If necessary, upon registering, return to the **Overview** page.

## Section 1. Download S32 Design Studio for ARM, Version 2.0 with offline installer

On the **Software Terms and Conditions** page review the text of license terms as you scroll down it, and then click **I Agree**.



The screenshot shows the NXP website's 'Software Terms and Conditions' page for 'S32 Design Studio for ARM v2.0'. The page features a navigation bar with 'PRODUCTS', 'SOLUTIONS', 'SUPPORT', and 'ABOUT'. A search bar is located in the top right corner. The main content area is titled 'Software Terms and Conditions' and includes a sub-heading 'S32 Design Studio for ARM v2.0'. A prominent message states: 'Please read the following agreement and click "I AGREE" at the bottom before downloading your software.' Below this is a scrollable text box containing the 'NXP SOFTWARE LICENSE AGREEMENT'. The agreement text begins with: 'IMPORTANT. Read the following NXP Software License Agreement ("Agreement") completely. By any affirming action by you, you indicate that you accept the terms of this Agreement and you also acknowledge that you have the authority, on behalf of your company, to bind your company to such terms. You may then download or install the file.' The agreement text continues: 'This is a legal agreement between you (either as an individual or as an authorized representative of your employer) and NXP USA, Inc. ("NXP"). It concerns your rights to use this file and any accompanying written materials (the "Software"). In consideration for NXP allowing you to access the Software, you are agreeing to be bound by the terms of this Agreement. If you do not agree to all of the terms of this Agreement, do not activate or install the Software. If you change your mind later, stop using the Software and delete all copies of the Software in your possession or control. Any copies of the Software that you have already distributed, where permitted, and do not destroy will continue to be governed by this Agreement. Your prior use will also continue to be governed by this Agreement.' At the bottom of the scrollable area are two buttons: 'I Agree' and 'Cancel'.

- e) On the **Files** tab, in the **File name** column, click the link next to the S32DS product for your target platform. Alternatively, select the checkbox in the table header, and then click **Download selected files** to download all selected installer packages.
- f) Confirm the download and specify the location where you want to save the installer package as you normally do with the browser.

[Top of the Document](#)

## Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer

This section describes the steps to install the downloaded offline installer of the S32DS ARM v2.0 product.

To install S32DS ARM v2.0, perform these steps:

- a) Navigate to the location where you saved the S32DS ARM v2.0 offline installer package, and then double-click the package to start the installation of S32DS ARM v2.0.

### NOTE

When installing on Microsoft Windows 7 operating system and later, if User Account Control (UAC) is enabled, make sure to allow the installer to run with elevated privileges. When asked by UAC, grant the S32DS ARM v2.0 installer permissions to make changes on your computer.

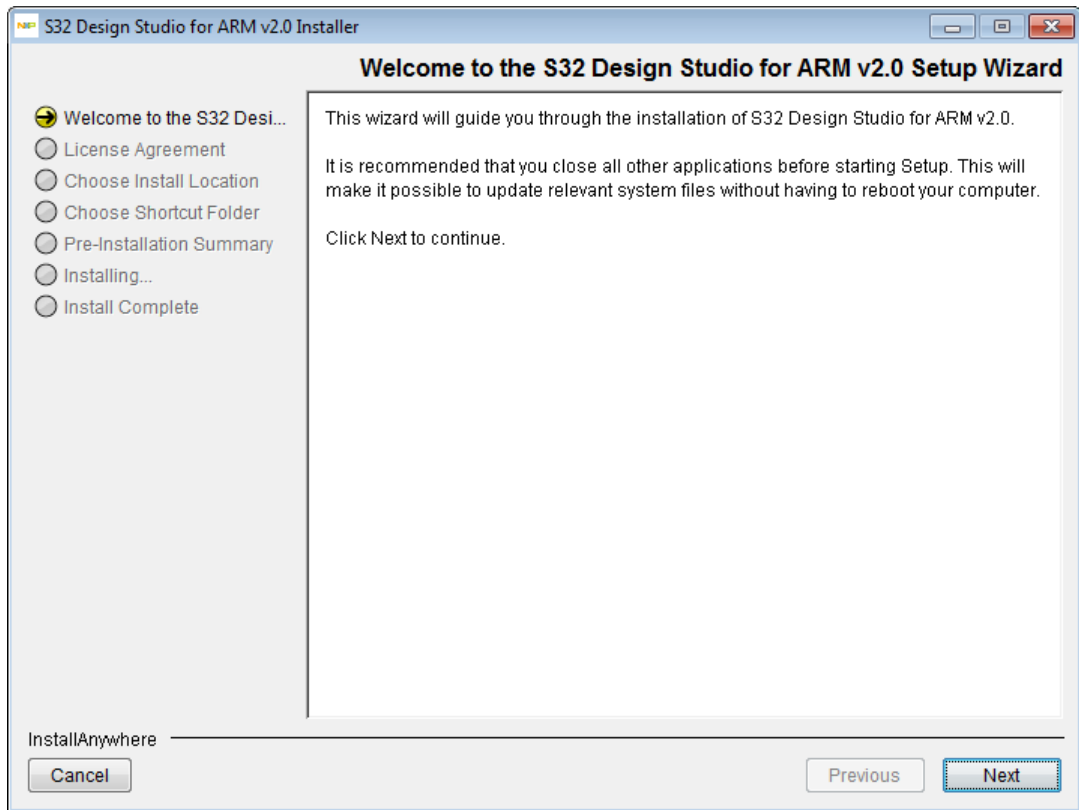
The S32 Design Studio splash screen appears.



- b) When the install wizard appears, click the **Next** button:

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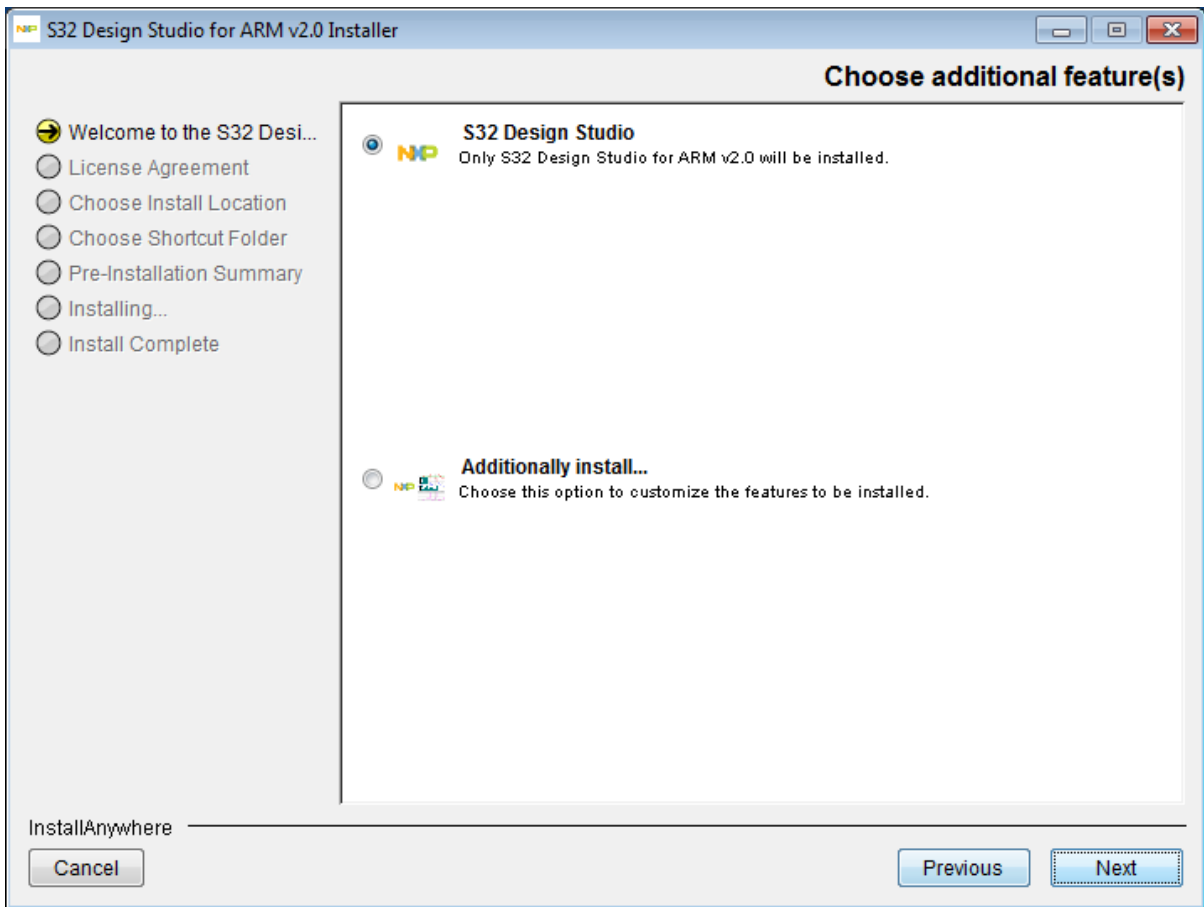
## Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer



If you install S32DS ARM v2.0 on Windows, the **Choose additional feature(s)** page opens.

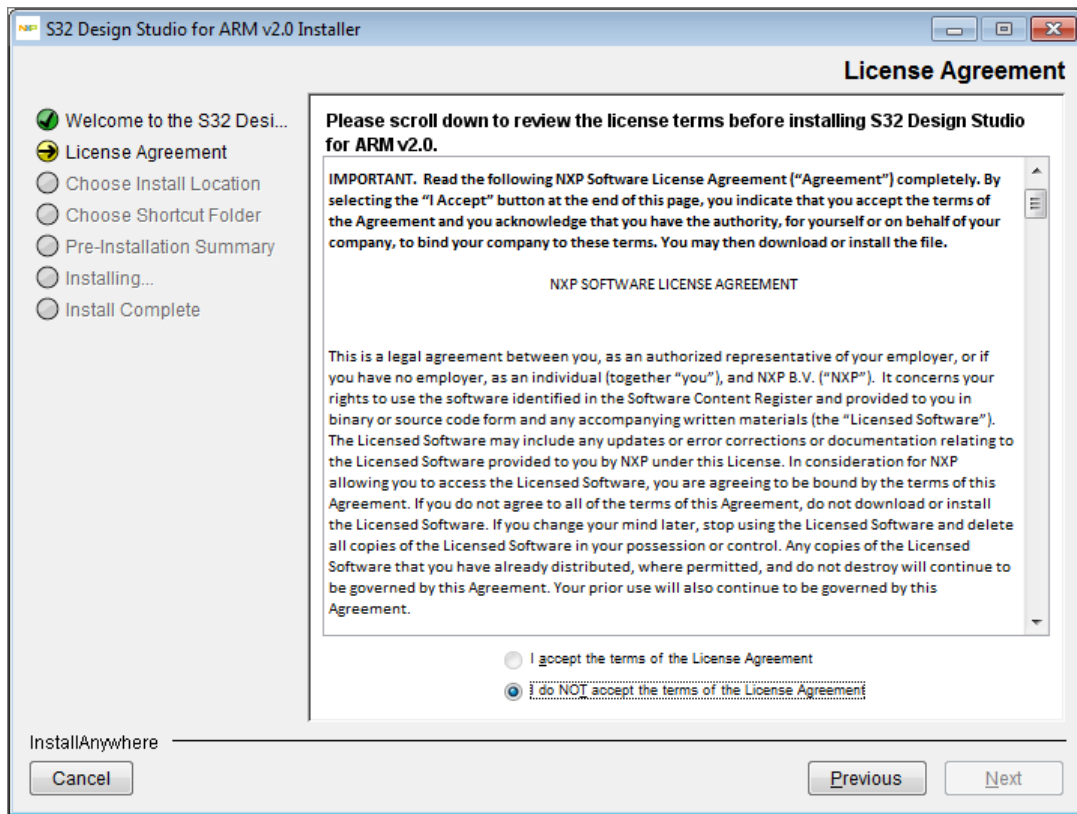


c) Choose the installation type for S32DS ARM v2.0, and then click **Next**:

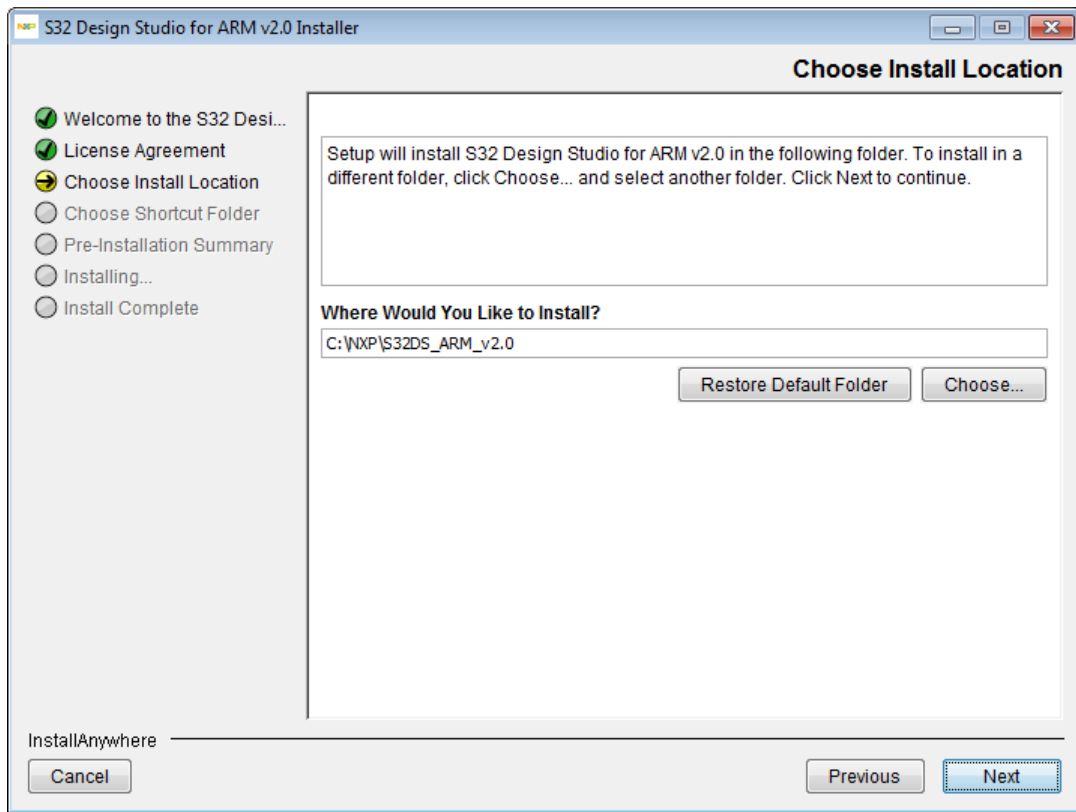


- If you choose **S32 Design Studio**, the **License Agreement** page opens. Wait a few seconds until the text of license terms appears.
- If you choose **Additionally install...**, you can install FreeMASTER 2.0 software. For detailed description of FreeMASTER installation process, refer to **S32 Design Studio for ARM, Version 2.0. Reference Manual** (see section “FreeMASTER installation during S32DS ARM v2.0 installation”).

- d) Review the text of license terms as you scroll down it, and then select the **I accept the terms...** option. Click **Next**:

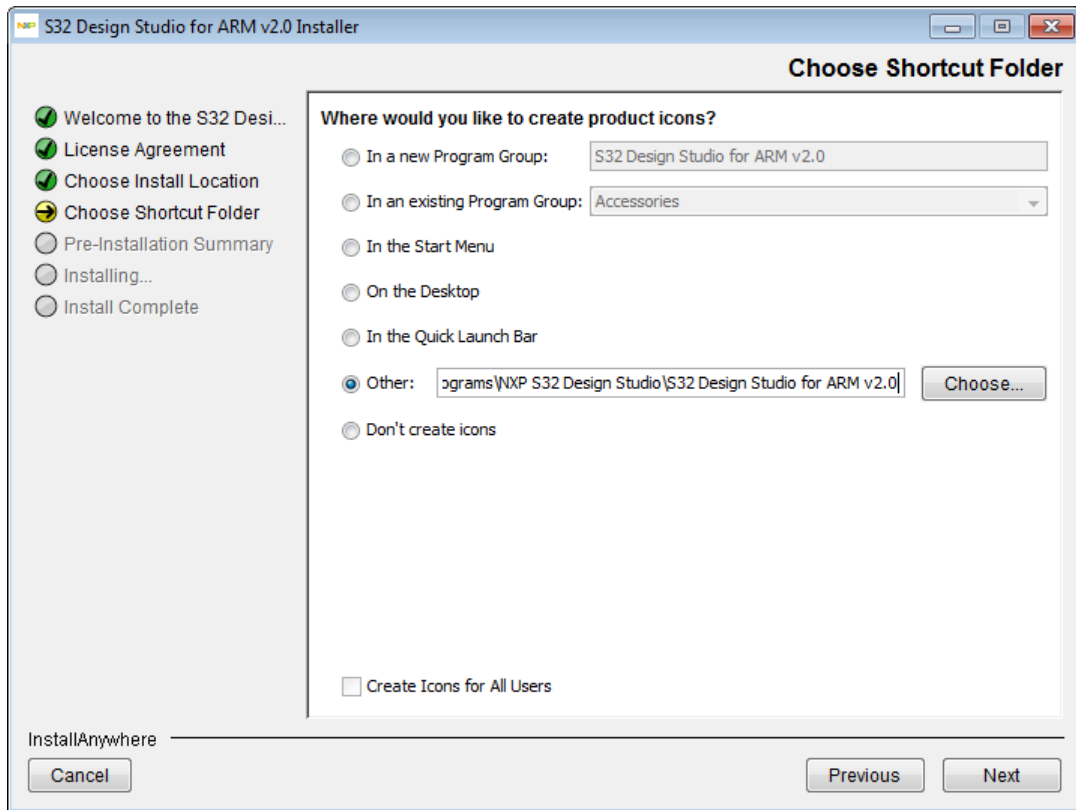


e) Specify the install location for S32DS ARM v2.0. Click **Next**:

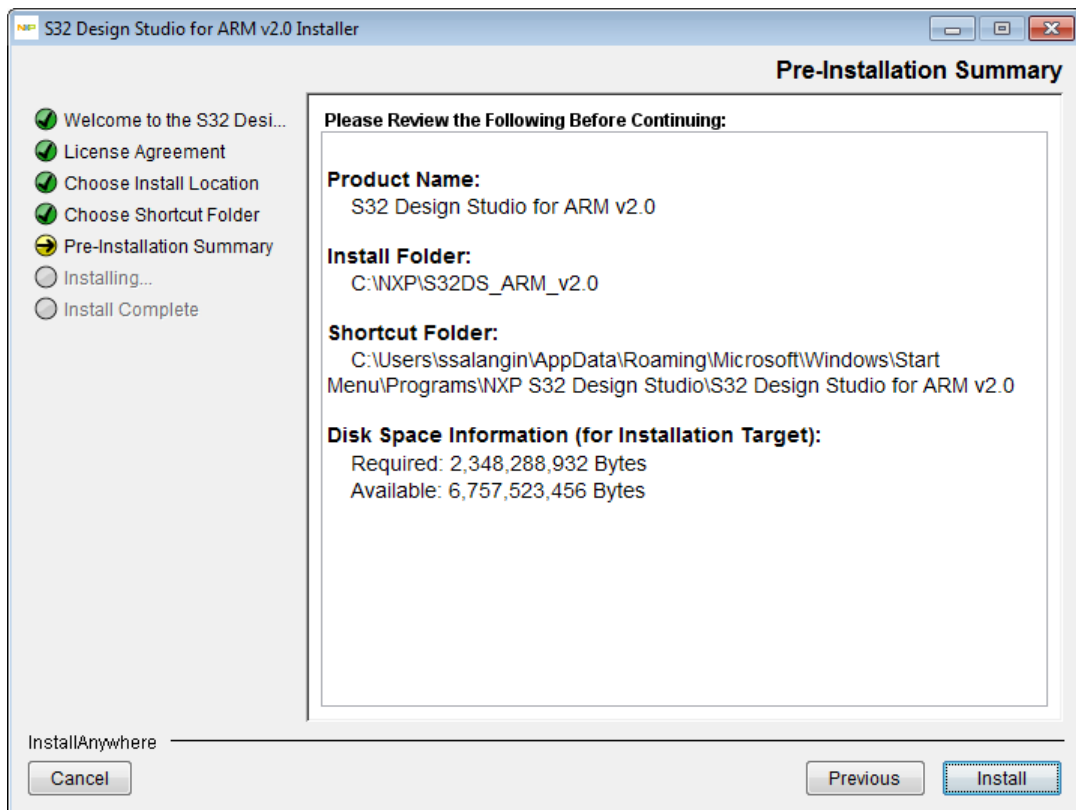


f) Choose the folder for S32DS ARM v2.0 program shortcuts; select **Create Icons for All Users** if you want the shortcuts to be available for all users of this computer. Click **Next**:

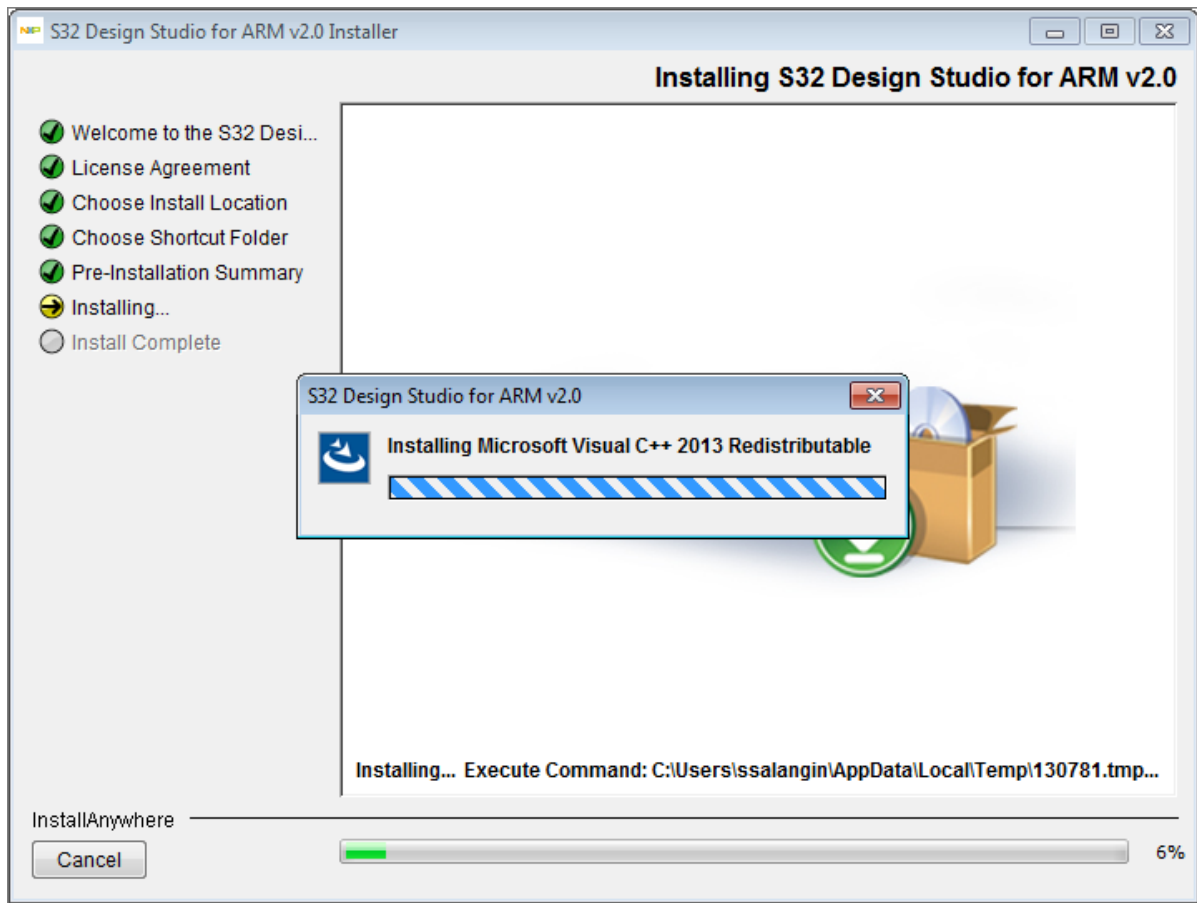
## Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer



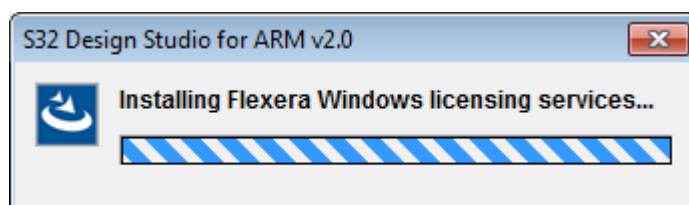
g) Review the pre-installation summary before installing:



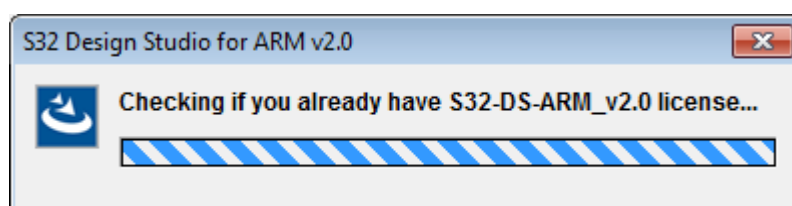
- h) Click the **Install** button. If you do not have the C++ runtime installed, the S32DS ARM v2.0 installation starts by installing required libraries from the Microsoft Visual C++ 2010 and 2013 packages:



- i) The installation continues by checking your Windows permissions and installing Flexera Windows licensing services on your computer. The services are required to license your copy of S32DS ARM v2.0:



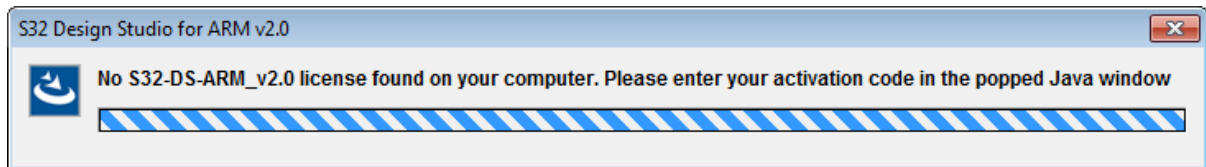
- j) The installation looks for the S32DS ARM v2.0 license on your computer:



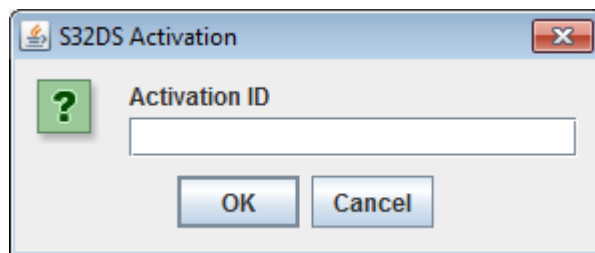
## NOTE

S32DS ARM v2.0 requires its own license and cannot be licensed by using licenses issued for S32DS ARM v1.3 or any previous version of S32DS ARM.

- k) If no valid license is found on your computer, the installer notifies you and asks you to provide the **Activation ID** to obtain the license:



The **S32DS Activation** dialog box opens.

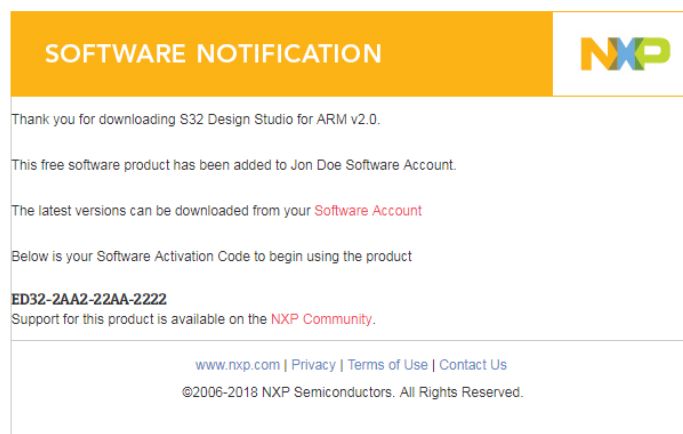


## NOTE

If you click **Cancel**, the installation rolls back.

If you don't have an **Activation ID**, refer to the notification email sent to you after registering on the NXP site.

From: [nxp@flexnetoperations.com](mailto:nxp@flexnetoperations.com)  
Date: 03/07/2017 16:43:26  
To:  
Subject: NXP Software Notification- Thank you for your interest in S32Design Studio for ARM v2.0  
Attachments:



## Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer

Alternatively, sign in on the NXP web to obtain one. Open the **Sign In or Register** page: [www.nxp.com/security/login](http://www.nxp.com/security/login).

The **My Account** page opens after you login to the NXP site. Click **Software Licensing and Support**, and then click **Product List**. On the **Product Information** page follow the *S32 Design Studio for ARM v2.0* link.

The screenshot shows the NXP website's Product Information page for S32 Design Studio IDE. The page features a navigation bar with 'PRODUCTS', 'APPLICATIONS', 'SUPPORT', and 'ABOUT'. A search bar is located at the top right. The main content area includes a 'Register' button and a table of product versions. The table has columns for 'Version' and 'Description', with rows for versions 2.0 and 1.3, each with a 'Download Log' link. A footer section contains links for 'ABOUT NXP', 'RESOURCES', 'FOLLOW US', and 'NEWS', along with a copyright notice for 2006-2017 NXP Semiconductors.

NXP > Software & Support > Product Information : S32 Design Studio IDE

Software & Support

- Product List
- Product Search
- Order History
- Recent Product Releases
- Recent Updates

Licensing

- License Lists
- Offline Activation

FAQ

- Download Help
- Table of Contents
- FAQs

### Product Information

#### S32 Design Studio IDE

To register a New Product please click on the button below

[Register](#)

**Current** Previous

Version	Description	
2.0	S32 Design Studio for ARM v2.0	<a href="#">Download Log</a>
1.3	S32 Design Studio for ARM v1.3	<a href="#">Download Log</a>

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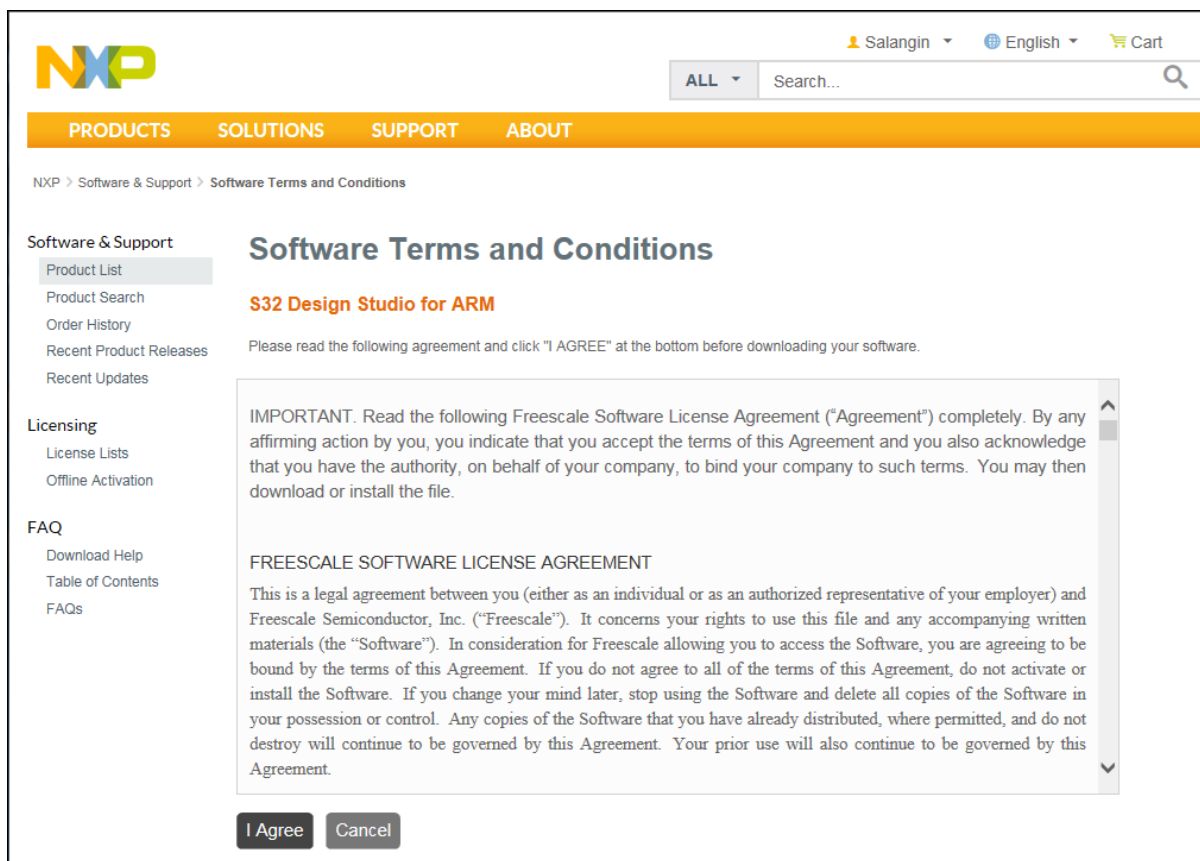
- NXP News
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The **Software Terms and Conditions** page opens. Read the text of agreement, as you scroll down it, and then click **I Agree**:

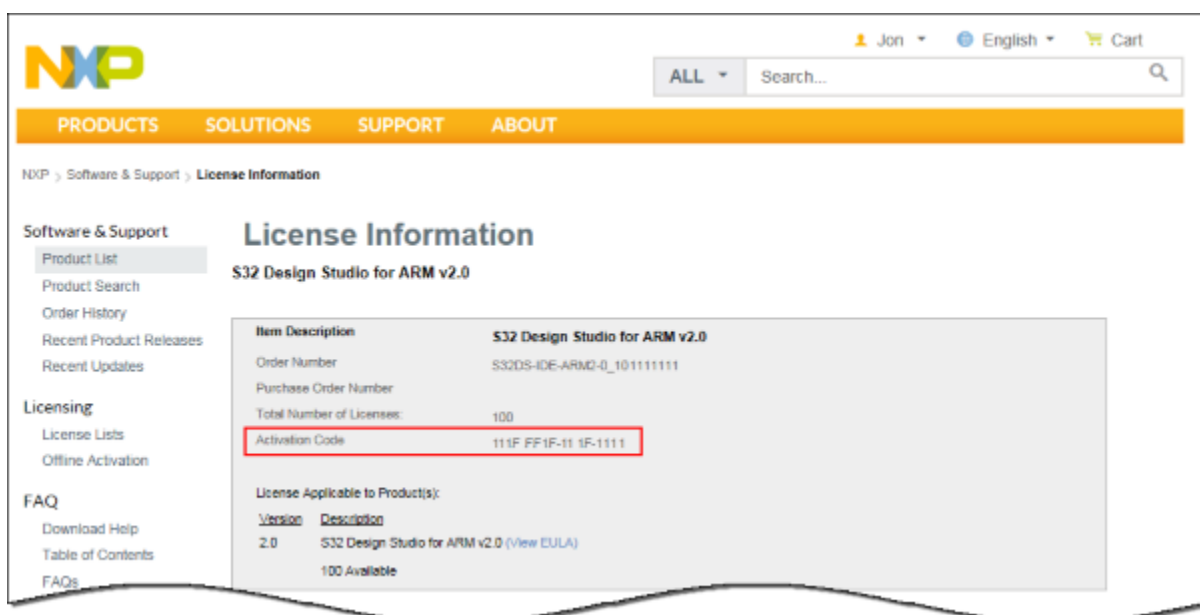
## Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer



The **Product Download** page opens. Click the **License Keys** tab to open the **License Information** page. Write down or copy the **Activation Code**, you will need it to continue the installation.

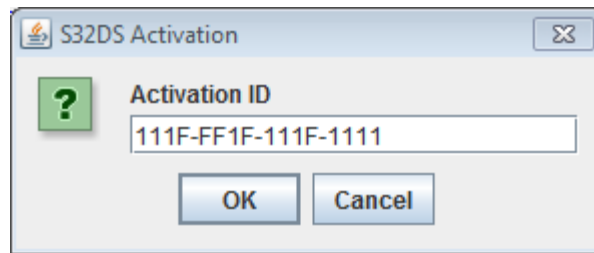
### NOTE

Codes depicted in this document are provided for illustration only and are fictitious.

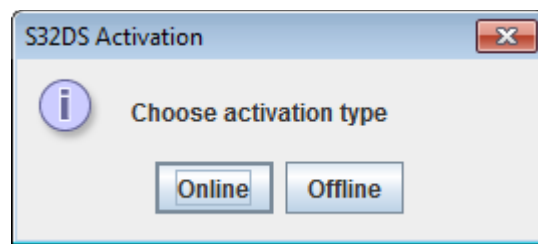




- l) **Switch to the installation wizard**, and then paste the code into the **Activation ID** field. Click **OK**.



- m) Choose the activation type for S32DS ARM v2.0:



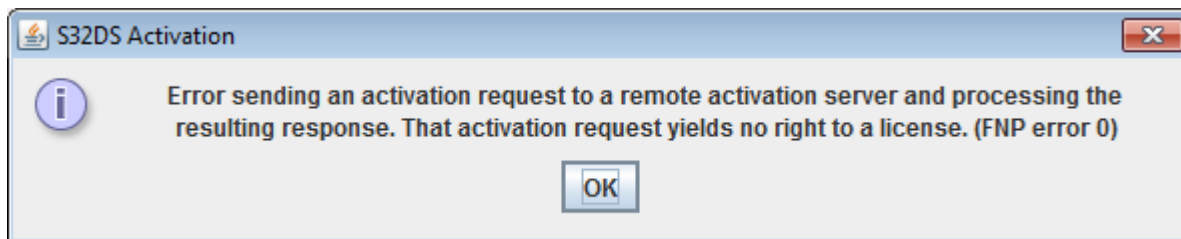
- *Online* activation  
If you click **Online**, the installer sends an activation request to a remote online activation server and automatically activates your copy of S32DS ARM v2.0.
- *Offline* activation  
If you click **Offline**, the Activation request dialog box appears that allows you to activate S32DS ARM v2.0 without internet connectivity. You will need another internet enabled device to obtain the activation details for the computer where you are installing S32DS ARM v2.0.

### NOTE

Online activation type requires an active internet connection on the computer where you are installing S32DS ARM v2.0. If you have no active internet connection, choose **Offline** activation type.

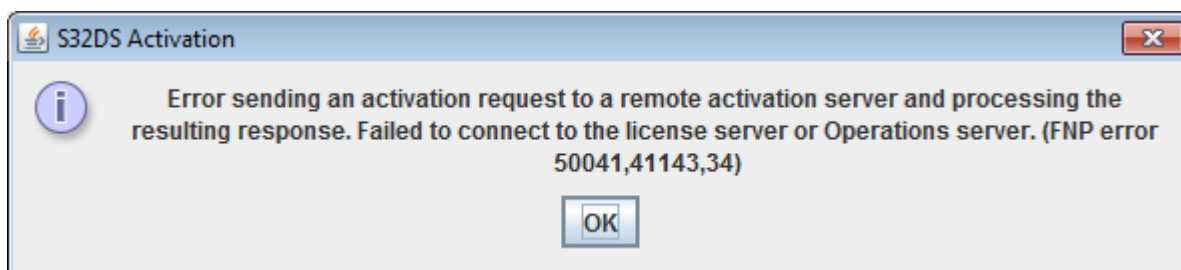
The following describes messages that you may see if you choose Online activation type.

- If entered **Activation ID** is valid and activation succeeds, S32DS ARM v2.0 will be automatically licensed and registered on your computer.  
If the **Activation ID** is not valid, the licensing service returns the FNP error 0. The error message may indicate that you are attempting to activate S32DS ARM v2.0 by using an incorrect **Activation ID**.



Please verify that you have typed the code correctly, click **OK** in the error message, and then reenter the **Application ID** in the **S32DS Activation** dialog box.

- If the activation cannot be completed because of connectivity issues to the remote activation server, the installer shows an error message and allows you to repeat the activation attempt. The following is an example of the error message:



- The following error message indicates that you are attempting to activate S32DS ARM v2.0 by using the **Activation ID** obtained for a previous version of the product. Click **OK** to release the obtained license, or click **Cancel** to leave the license on your computer.



## NOTE

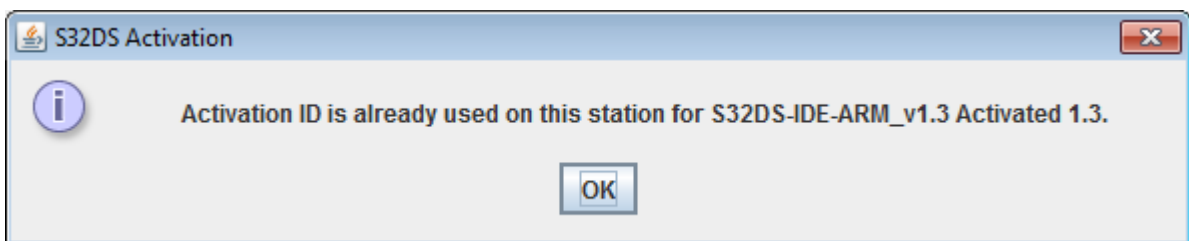
The installer does not verify that the **Application ID** you have entered matches the version of S32DS you are installing. If the provided code is valid for another version of S32DS, the Online activation service returns the license that will be registered for the current computer.

S32DS ARM v2.0 requires its own license and cannot be licensed by using licenses used for S32DS ARM v1.3 or any previous version of S32DS ARM. You will not be able to continue with installation of the

S32DS ARM v2.0 product by using the license obtained for another version of the product.

However, because the activation service has issued a license for another product, your computer has borrowed this license. You can release the borrowed license by clicking **OK**. If you click **Cancel**, the obtained license will be associated with this computer and you will not be able to use it on another computer. If you open the **License Information** page on the NXP site, you will see that the amount of available license has decreased.

- If you have previously used an earlier version of S32DS ARM on this computer, or if you have clicked **Cancel** when asked to return the license obtained in error, the installer notifies you with a special message. The following error message indicates that you are attempting to reactivate S32DS ARM v2.0 by using the **Activation ID** obtained for a previous version of the product. Click **OK**, and then enter the **Activation ID** provided on the **License Information** page on the NXP site.

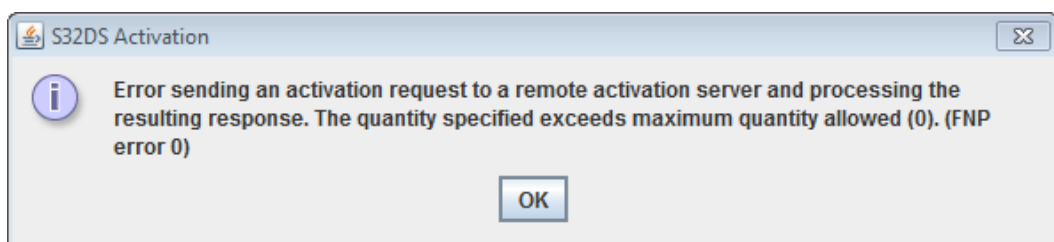


### NOTE

To access the **Online activation** service, the installer uses connection settings specified in Internet Explorer®. If you use a proxy server, please ensure that it is configured to allow access to the NXP Online licensing service and allow outgoing HTTPS connections to *\*.flexnetoperations.com*.

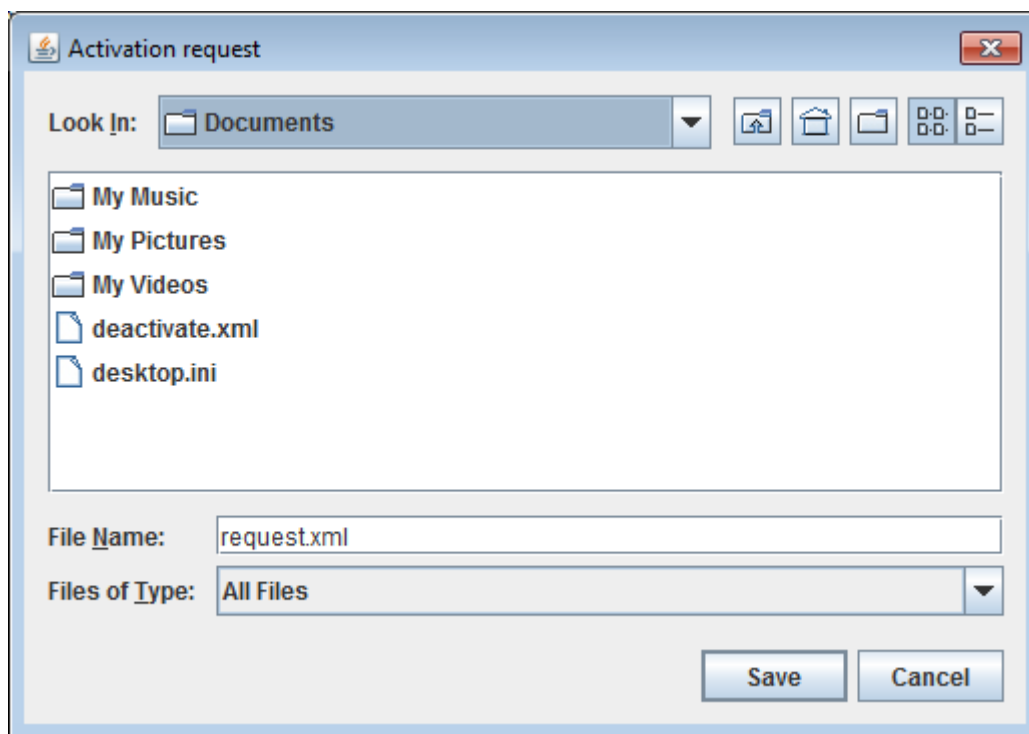
If you experience connectivity issues, choose **Offline** activation type.

- The following error message indicates that the entered **Activation ID** has been already used to activate S32DS ARM v2.0 on other computer(s):



The following describes messages that you may see if you choose Offline activation type.

After you click **Offline** in the S32DS Activation message box, the **Activation request** dialog box appears allowing you to prepare the XML file with the request for offline activation. This file can be later used on a computer with access to the NXP site to activate your copy of S32DS ARM v2.0.



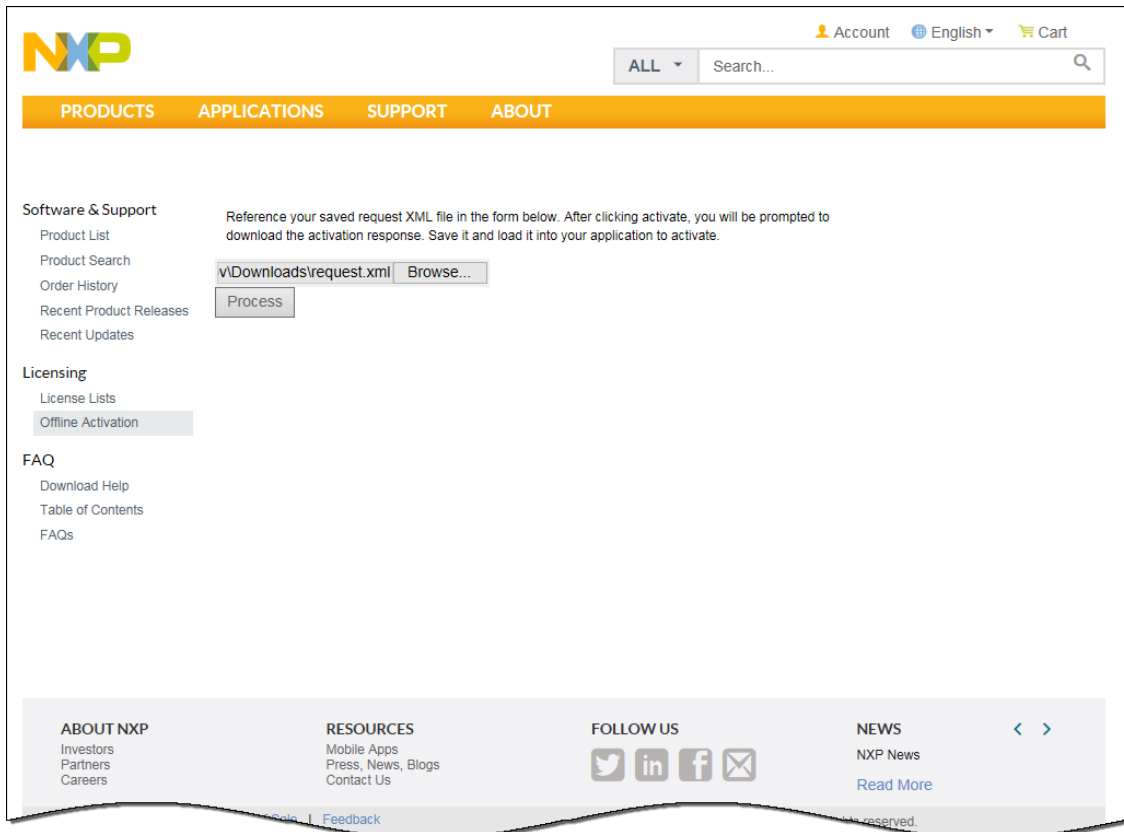
Select a location to store the XML file with the request for offline activation, and then click **Save**.

Copy the saved *request.xml* file on a flash drive, and then take it to the computer with internet access. On that computer, sign in on the NXP web site: [www.nxp.com/security/login](http://www.nxp.com/security/login). Open the **My Account** page that you were using to download the installation package, and then click **Offline Activation**.

### **NOTE**

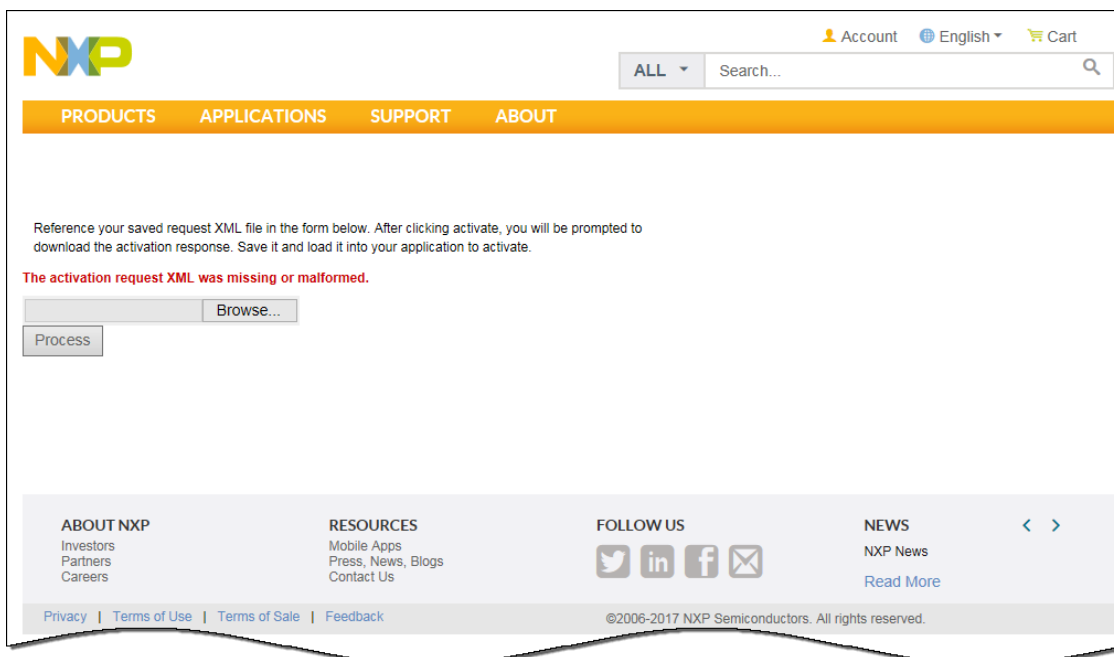
You do not necessary have to license the S32DS ARM v2.0 in this installation session. Once you have created the offline activation request file, you can close the installer.

After you obtain the *activation.xml* on another computer, you can run the installer again. If computer configuration did not change, the installer would generate the *request.xml* with the same data as was created in the first installation session. The newly generated request yields to the *activation.xml* you have obtained on the computer with internet access.



On NXP site, on the **Offline Activation** page, browse for the *request.xml* file created on the offline computer, and then click **Process** to submit the request file to the NXP licensing service. Wait while the **Offline Activation** service processes the activation request, and then save the provided *activation.xml* file as you normally do with the browser.

If the offline activation request XML file was corrupted, the **Offline Activation** page notifies you with the message:



### NOTE

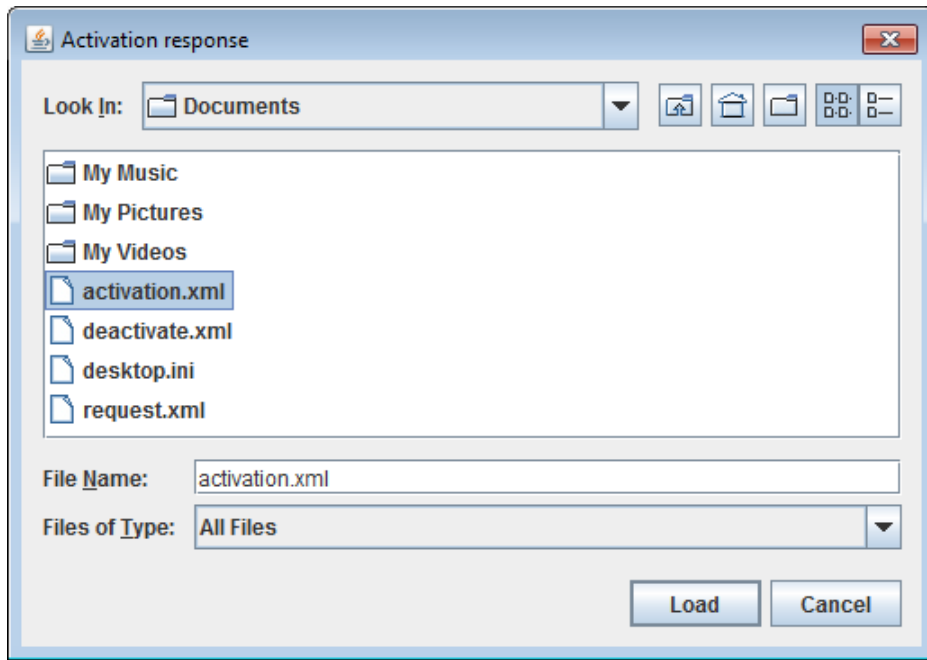
The **Offline Activation** service only checks the format of the request XML file. If the file contains a broken or a non-compliant product hash, you will receive a non-compliant license. Trying to use the corrupt *activation.xml* file in the S32DS ARM v2.0 installer will result in error.

If you get the error message stating that provided request XML was missing or malformed, run the installer package again to recreate the offline activation request file.

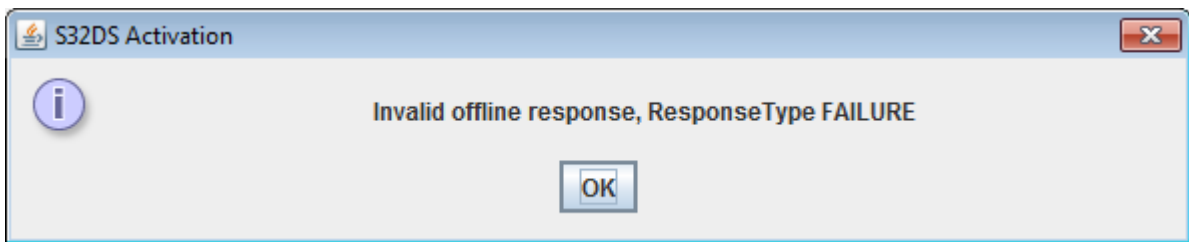
Copy the saved *activation.xml* file on a flash drive, and then take it to the computer without internet access.

Return back to the computer where you are installing S32DS ARM v2.0. If you have previously closed the installer, run the installer again and generate the *request.xml* file. Leave the generated request file intact.

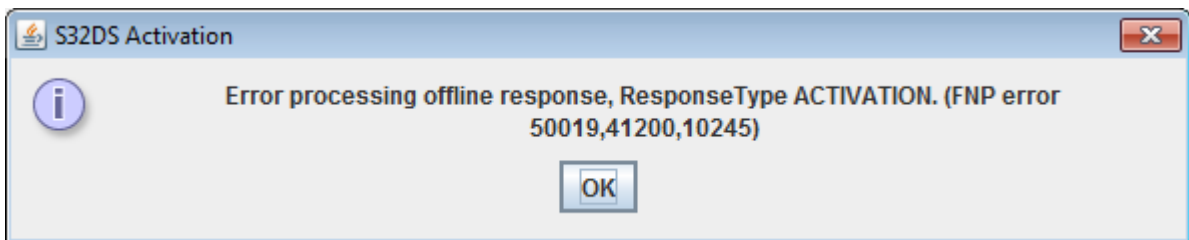
After you save the activation request file, **Activation response** dialog box appears. Locate the *activation.xml* file obtained on the computer with online connection. Click **Load**.



If the activation response file contains a malformed XML structure, the installer shows the error message.



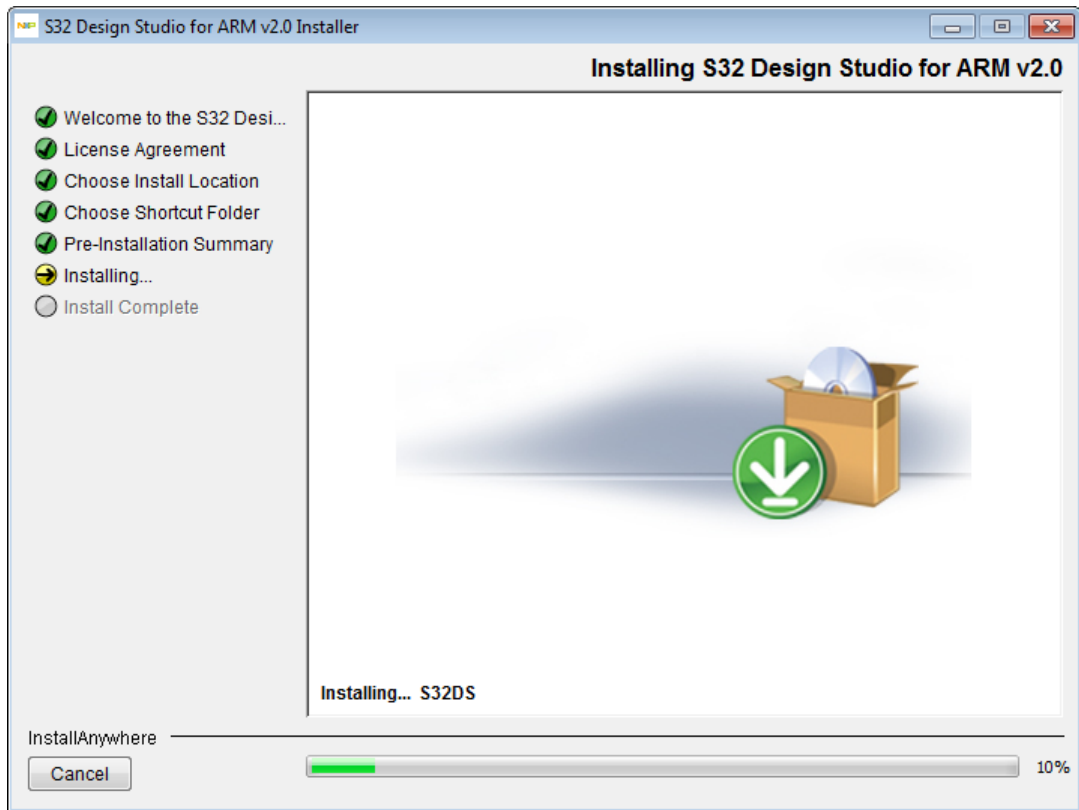
The following error indicates that activation response has been corrupted, or you are attempting to activate S32DS ARM v2.0 by using the *activation.xml* file obtained for another version of S32DS ARM.



Click **OK**, obtain another *activation.xml* file, and then specify it in the **Activation response** dialog box.

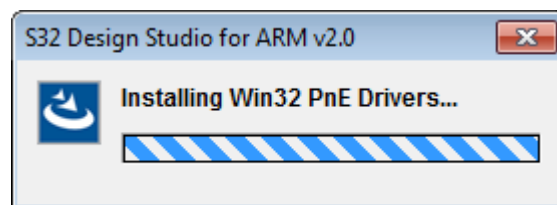
- n) If the loaded *activation.xml* file is valid, the installation continues automatically. Wait a few seconds while the S32DS ARM v2.0 software installs.

## Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer



At some point during the installation process, additional drivers are installed, and you may be prompted to proceed with the installation wizards of the specific drivers.

- o) The progress bar notifies about the start of **PnE Device Drivers Setup**.

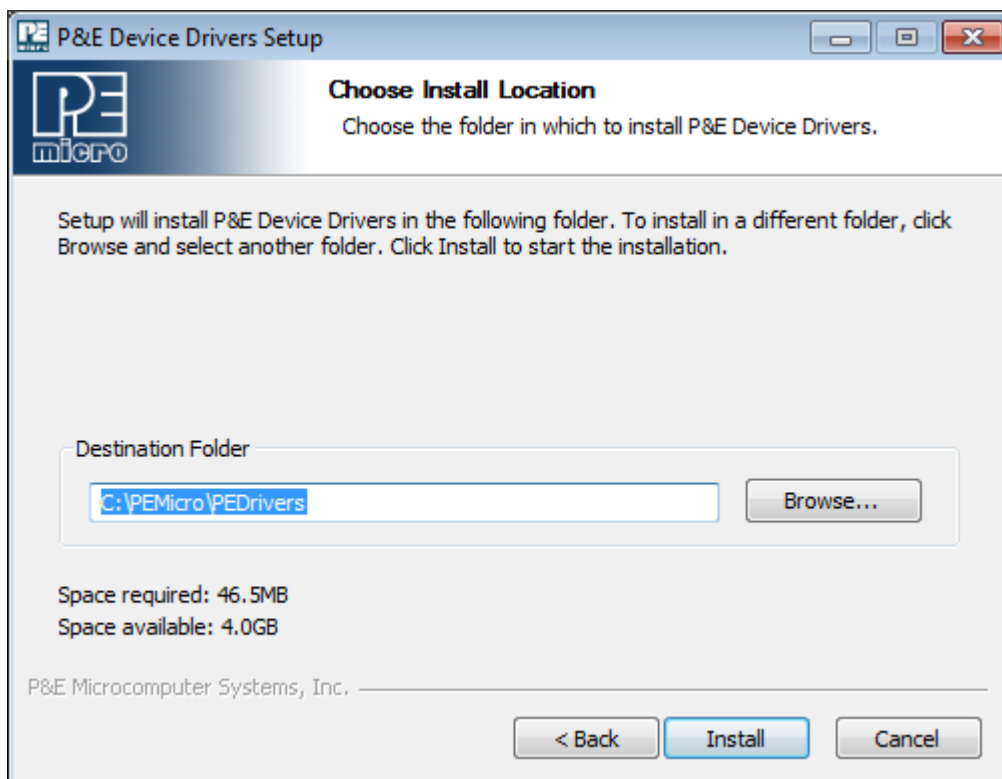


- p) In the P&E Device Drivers Setup, review the license terms and click **I agree**:



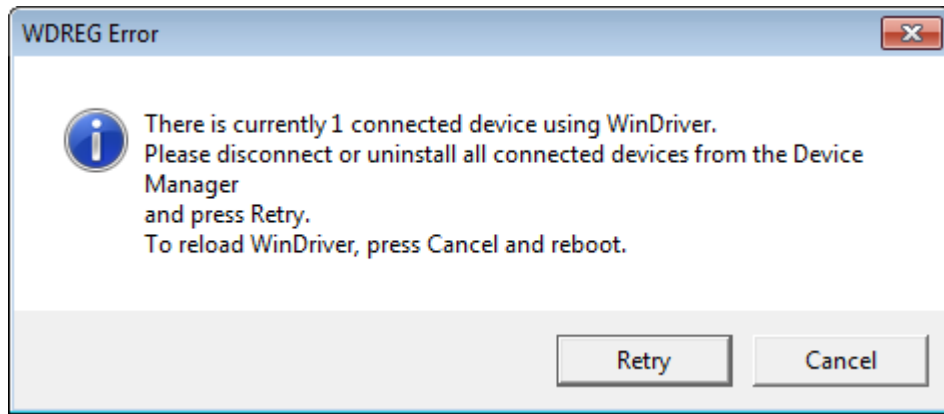


q) Choose destination folder to install P&E Device Drivers and click the **Install** button:

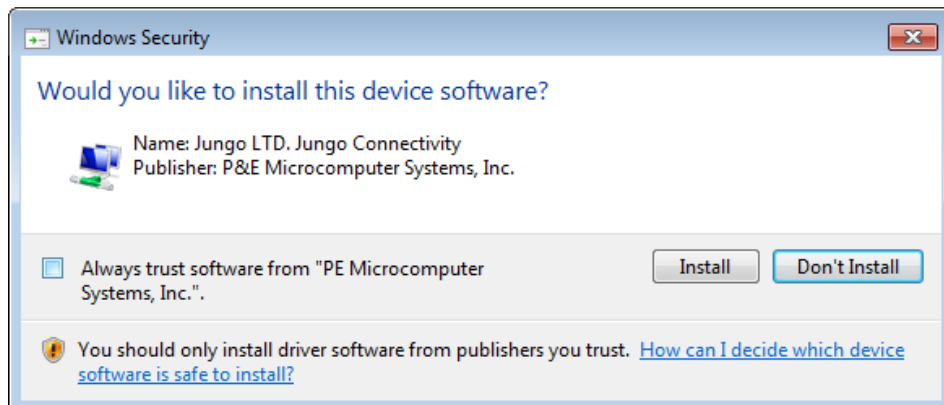
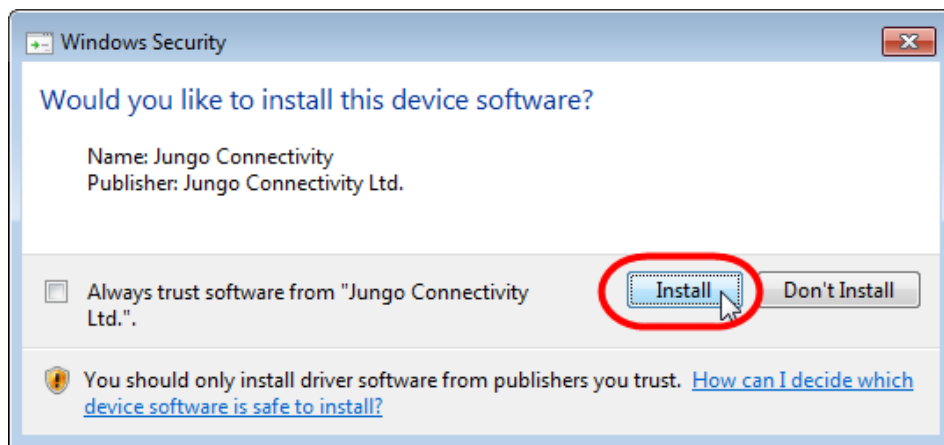


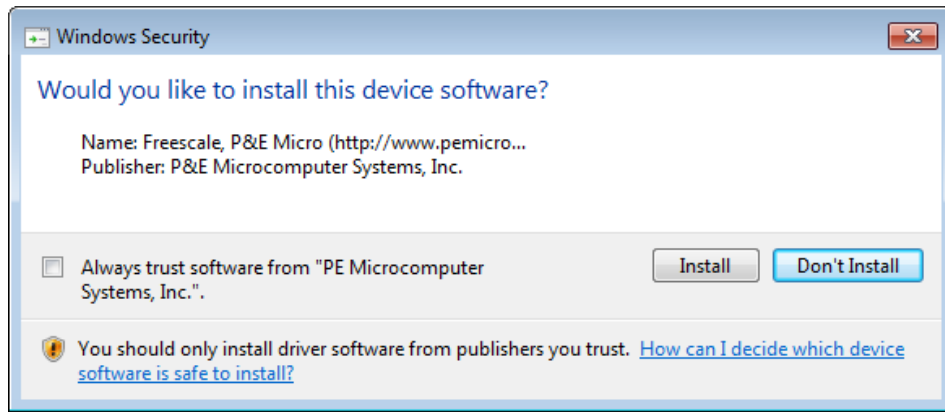
PnE Device Drivers Setup checks device connection. If a device is connected to computer, the installer shows the error message:

## Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer



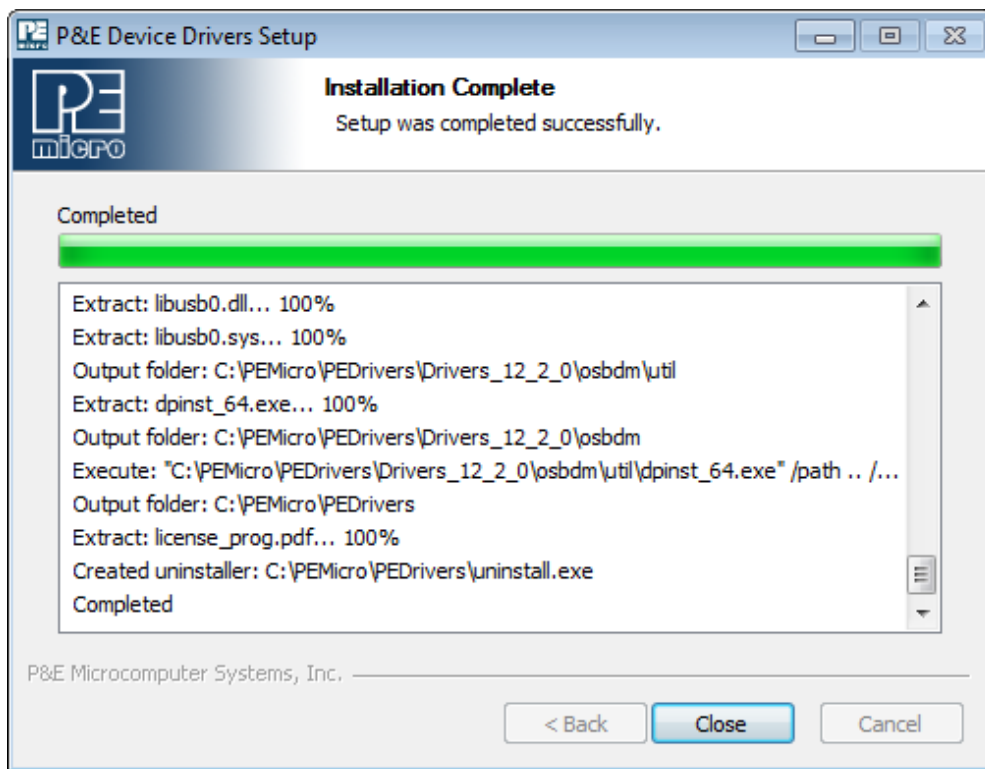
Windows Security checks publishers of installed software. Click **Install**:





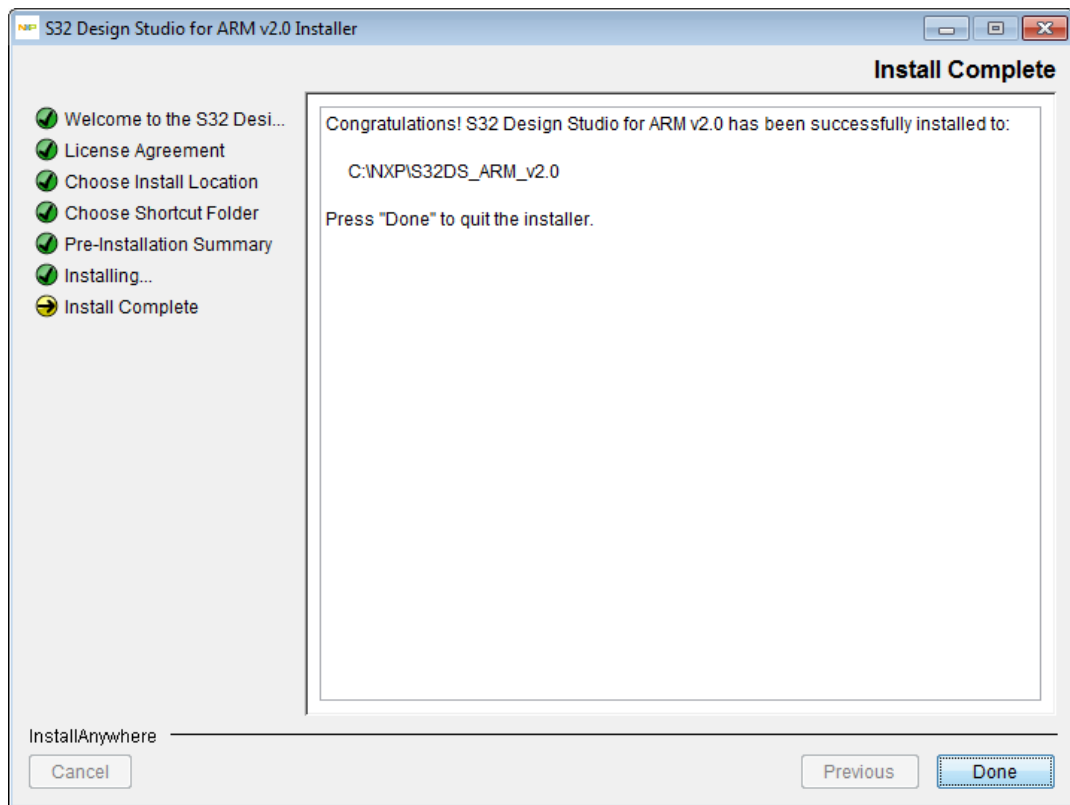
PnE Device Drivers installation continues.

- r) When the PnE Device Drivers installation is completed, click **Close**:



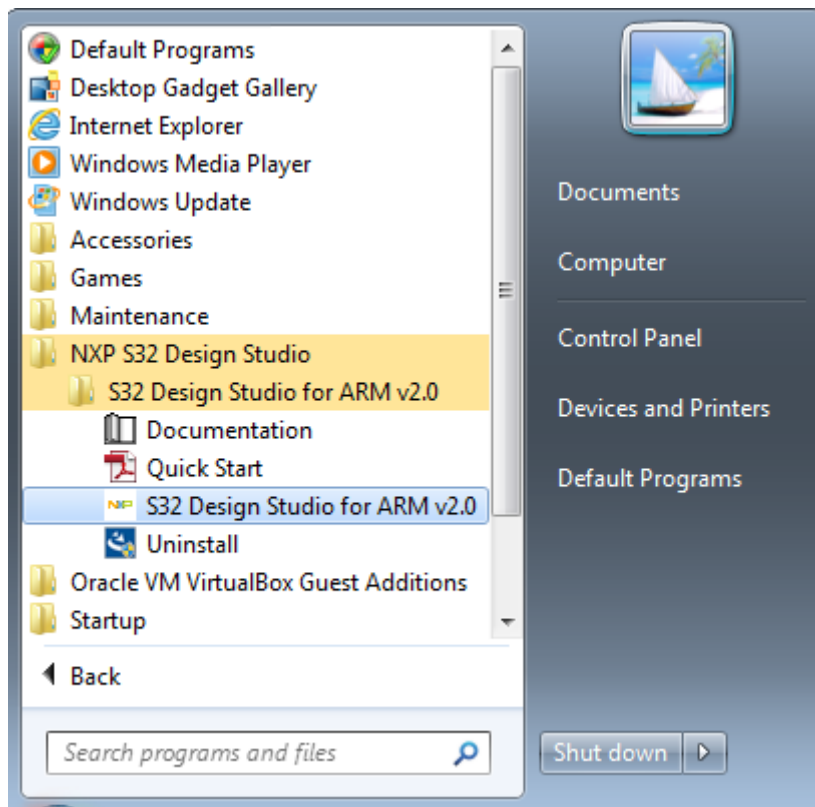
- s) Wait until the S32DS ARM v2.0 installer finishes the installation and opens the **Install Complete** page. Click **Done** to close the wizard:

## Section 2. Install S32 Design Studio for ARM, Version 2.0 with offline installer



- t) You can start S32DS ARM v2.0 by using the product shortcuts created during the installation. Locate the shortcuts depending on your selection during the installation.

If you have chosen the default location for product shortcuts, open the NXP S32 Design Studio program group in the Windows **Start** → **All Programs** menu, and then click S32 Design Studio for ARM v2.0:



## NOTE

New functionality including support for new devices can be added to S32DS ARM v2.0 with service packs, updates and patches. Service packs add specific support for new devices. Updates and patches correct software defects and add general functionality affecting more than one device family.

You can check for updates to the product by selecting **Help** → **Install New Software...** in the main window of S32DS ARM v2.0.

If your computer does not have internet access, you can use another computer to download the archive that contains the service pack, update or patch from the NXP site. Copy the downloaded archive to your computer, and then follow the Service Pack Updater procedure posted on the NXP site.

**Congratulations!**  
**You have installed S32DS ARM v2.0!**

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