

# **Model-Based Design Toolbox**

## **License Installation & Management Manual**

**An Embedded Target for S32K1xx Family of Processors  
Version 3.0.0**

**Target Based Automatic Code Generation Tools**  
For MATLAB™/Simulink™/Stateflow™ Models working with Simulink Coder™ and Embedded Coder®



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# 1 Installation

License generation and installation is an important part of your first steps in getting up and running with the NXP’s Model-Based Design Toolbox. Please follow the steps below to obtain a license and install it correctly on your machine. If you encounter issues getting a license, submit a ticket at <http://www.nxp.com/support/sales-and-support:SUPPORTHOME> describing the issue.

If you have already installed NXP’s Model-Based Design Toolbox and would like a license, please perform the following steps.

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**NOTE** Guiding screenshots below have been taken for a release candidate of NXP’s Model-Based Design supporting S32K1xx processor family since the final version was not yet published on the website at the time when this document was created.

However, the entire license registration and installation process for toolbox revision 3.0.0 will be identical with the one presented below.

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1. Go to [www.nxp.com/mctoolbox](http://www.nxp.com/mctoolbox)

The screenshot shows the 'Model-Based Design Toolbox' website. At the top, there is a navigation bar with tabs for OVERVIEW, DOCUMENTATION, DOWNLOADS, DEVELOPMENT TOOLS, and TRAINING & SUPPORT. The 'OVERVIEW' tab is selected. Below the navigation bar, there is a 'Jump To' section with links for Overview & Features, Supported Devices, Target Applications, and System Requirements. The main content area is titled 'Overview' and contains text describing the toolbox's capabilities, such as providing an integrated development environment and tool chain for configuring and generating software automatically. It also lists features like code generation for standalone applications, optimized motor control library blocks, I/O blocks, on-target profiling, data acquisition, and boot loader utility. At the bottom of the overview section, there are two buttons: 'User Guide' and 'Download Eval'.

2. Click on “Download Eval”
3. Login. If not registered yet, click register.

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## Product Information

### Motor Control Toolbox

To register a New Product please click on the button below

[Register](#)

- Current
- Previous

Version	Description	
2.0.0	Model Based Design Toolbox for MATLAB/Simulink MBD supporting MPC574xP	<a href="#">Download Log</a>
1.0	Model Based Development Toolbox for MATLAB/Simulink MBD supporting S12ZVC	<a href="#">Download Log</a>
1.2	Motor Control Toolbox for MATLAB/Simulink MBD supporting MC9S12ZVMx	<a href="#">Download Log</a>
1.1.0	Motor Control Toolbox for MATLAB/Simulink MBD supporting MPC574xP	<a href="#">Download Log</a>
1	Motor Control Toolbox for MATLAB/Simulink MBD for Kinetis V series	<a href="#">Download Log</a>
1	Motor Control Toolbox for MATLAB/Simulink MBD for DSC	<a href="#">Download Log</a>
1	Motor Control Toolbox for MATLAB/Simulink MBD supporting MPC564xL	<a href="#">Download Log</a>
1	SW Motor Control Toolbox for MATLAB/Simulink MBD supporting MPC567xK	<a href="#">Download Log</a>
3.00	Model Based Design Toolbox for S32K1xx Automotive Microprocessors Family	<a href="#">Download Log</a>
2.00	Model Based Design Toolbox for MATLAB/Simulink MBD supporting S32K	<a href="#">Download Log</a>
1.00	Motor Control Toolbox for MATLAB/Simulink MBD supporting S32K	<a href="#">Download Log</a>

4. Product Information page appears, click on “Model Based Design Toolbox for S32K1xx Automotive Microprocessor Family”.

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## Software Terms and Conditions

### Model Based Design Toolbox for S32K1xx Automotive Microprocessors Family

Please read the following agreement and click "I AGREE" at the bottom before downloading your software.

IMPORTANT. Read the following Freescale Software License Agreement (“Agreement”) completely. By selecting the “I Accept” button at the end of this page, you indicate that you accept the terms of this Agreement. You may then download, or otherwise use the file.

**FREESCALE SOFTWARE LICENSE AGREEMENT**

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5. Click “I Agree” to consent to the software license agreement.

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## Product Download

### Model Based Design Toolbox for S32K1xx Automotive Microprocessors Family

**Files**
License Keys
Notes
[Download Help](#)

	+	File Description	File Size	File Name
<input type="checkbox"/>	+	Model Based Design Toolbox for S32K v3.0.0	224.3 MB	<a href="#">MBDToolbox_S32K1xx_PRC1_20171006.mltbx</a>

6. If you need to download the tool, click on the linked file name. Otherwise, click on “License Keys” tab.

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## License Information

### Model Based Design Toolbox for S32K1xx Automotive Microprocessors Family

Item Description	Motor Control Toolbox for MATLAB/Simulink MBD
Order Number	MCTB-EX_64522011
Purchase Order Number	
Total Number of Licenses:	1

License Applicable to Product(s):

<u>Version</u>	<u>Description</u>
3.00	Model Based Design Toolbox for S32K1xx Automotive Microprocessors Family ( <a href="#">View EULA</a> )
1 Available	

7. Verify the correct tool is identified, check the box and click on “Generate”.

NXP > Software & Support > **Generate Licenses**

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## Generate Licenses

Instructions for finding your host ID details are available [here](#).

Please do not use spaces in the **Name** field (for node-locked licenses) or **Host Description** field (for floating licenses). These fields are available to add brief text notes to your license.

License Applicable to Product(s):		Number of Licenses Available
Version	Description	1
3.00	Model Based Design Toolbox for S32K1xx Automotive Microprocessors Family	

Node Host ID

Disk Serial Number

Name

8. Enter your Disk Serial Number as the “Node Host ID”. If you do not know your Disk Serial Number, go to [Locating the Host ID](#) to learn how to locate your Disk Serial Number, which is needed to generate your license.

9. Enter a name for your license. (Optional)

10. Click “Generate”

NXP > Software & Support > **View Licenses**

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## View Licenses

Below are the licenses you just generated.

**License Applicable to Product(s):**

Version	Description
3.00	Model Based Design Toolbox for S32K1xx Automotive Microprocessors Family

License Quantity: 1 Expiration Date: permanent

Disk Serial Number: 126cb046 (dp\_laptop)  
Generated By: Dumitru-Daniel Popa on Oct 12, 2017

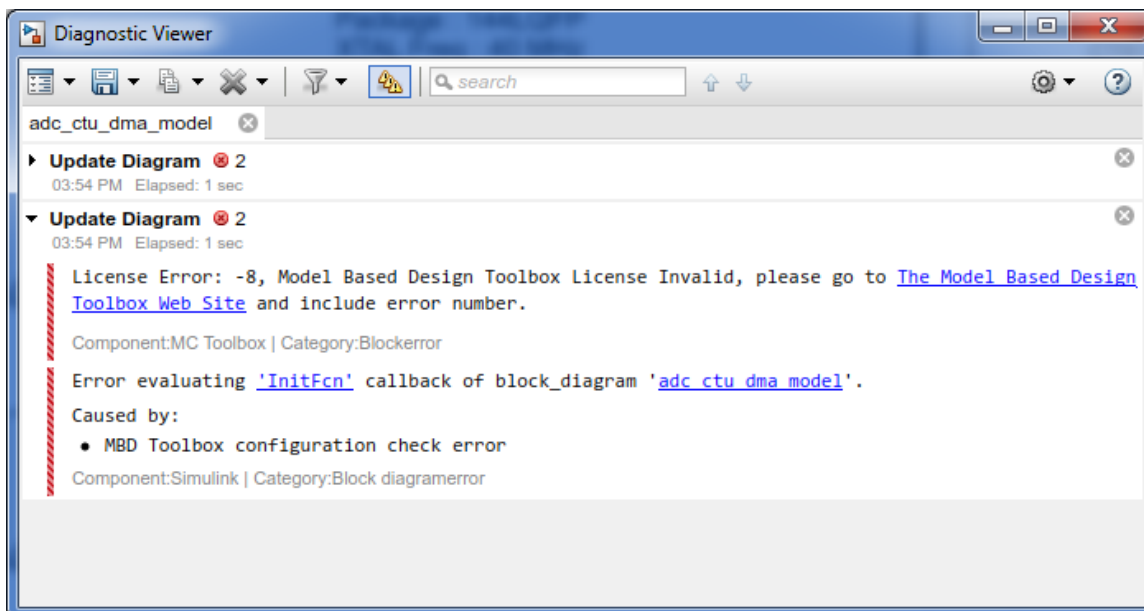
```
#Motor Control Toolbox for MATLAB/Simulink MBD - Model Based Design Toolbox
#for S32K1xx Automotive Microprocessors Family for Dumitru-Daniel Popa
#Software Account
# License for DISK_SERIAL_NUM=126cb046 dp_laptop
INCREMENT MC_Toolbox_S32K_freescale 1.00 permanent uncounted \
  VENDOR_STRING="Model Based Design Toolbox for S32K1xx \
  Automotive Microprocessors Family" \
  HOSTID=DISK_SERIAL_NUM=126cb046 ISSUER="Freescale \
  Semiconductor" ISSUED=12-oct-2017 ck=214 SN="FSL - 21239887" \
  TS_OK SIGN="11C2 024C 3796 16B1 A0AF 31A4 E0F5 B63C EC50 891D \
  DE0C 0810 2481 625A 015F 18AE 2D3B CDC3 34AE 7DF2 B5A5 6A24 \
  C496 58C9 0305 2EFA 2CA4 9A9B 000E 22B5"
```

11. Either click on “Save All” or copy and paste the file into a text editor, and save the file as “license.lic” to the “Toolbox installed dir\lic” folder.

12. Your installation of the license is now complete.

## 2 License Repair

If you get an error while using NXP’s Model-Based Design Toolbox indicating a problem with the license, you can try to repair the license at [www.nxp.com/mctoolbox](http://www.nxp.com/mctoolbox).



1. Go to [www.nxp.com/mctoolbox](http://www.nxp.com/mctoolbox) and login.
2. Select “Software Licensing and Support” to bring up a listing of your purchased licenses
3. Select the one for which you are experiencing the issue.
4. Select the “License Keys” tab.
5. Now you have a choice. If the error was due to incorrect Host ID, click on the “Return” button. If the error was due to a corrupted license file, click the “View” button.
  - a. If you clicked “Return”, then you will have the opportunity to re-register the license for a new Host ID.
  - b. If you clicked “View” then you will have the opportunity to re-save the license file to your PC.

If this fails to resolve your issue, see [License Failure](#).

### 3 License Failure

If you followed the steps under [License Repair](#), and this did not solve your issue, then there is some other problem occurring. Should this happen, submit a ticket at <http://www.nxp.com/support/sales-and-support:SUPPORTHOME> and provide the Host ID and any license error code that is provided in the error window.

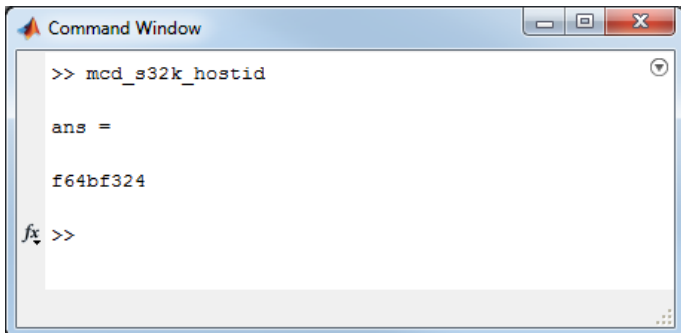


## 4 Locating the Host ID

If the `Disk ID` is used for the `Host ID` in the Model Based Design Toolbox software license, there are some different ways to obtain this:

### A. From MATLAB Command

1. Open Matlab
2. In Command Window, enter “`mbd_s32k_hostid`”.
3. The `Host ID` is the code returned.



```
Command Window
>> mbd_s32k_hostid

ans =

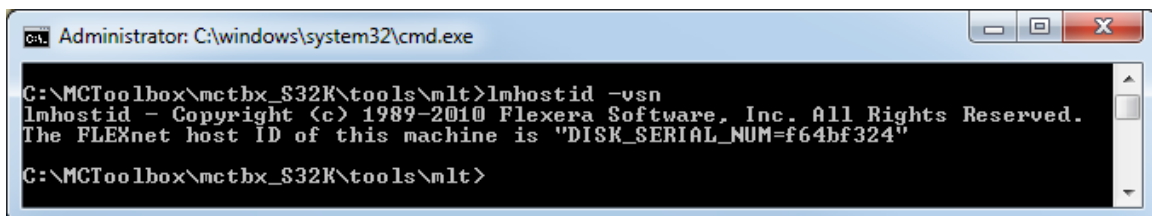
f64bf324

fx >>
```

In this example, `Host ID` is: `f64bf324` (not case sensitive)

### B. From DOS Command

1. Open CMD Prompt at {Model Based Design Toolbox installation folder}\mbdtbx\_S32K\tools\mlt
2. In CMD Prompt window, enter “`lmhostid -vsn`”
3. `Host ID` is the value that follows `DISK_SERIAL_NUM`



```
Administrator: C:\windows\system32\cmd.exe
C:\MCToolbox\mctbx_S32K\tools\mlt>lmhostid -vsn
lmhostid - Copyright (c) 1989-2010 Flexera Software, Inc. All Rights Reserved.
The FLEXnet host ID of this machine is "DISK_SERIAL_NUM=f64bf324"
C:\MCToolbox\mctbx_S32K\tools\mlt>
```

In this example, `Host ID` is: `f64bf324` (not case sensitive)

**How to Reach Us:**

**Home Page:**

[www.nxp.com](http://www.nxp.com)

**Web Support:**

[www.nxp.com/support](http://www.nxp.com/support)

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