Product Document

Published by
ams OSRAM Group

Application Note

AS7225 -Kit

AS7225_Director_Demo_2V0 Flash Programming Instruction

Content Guide

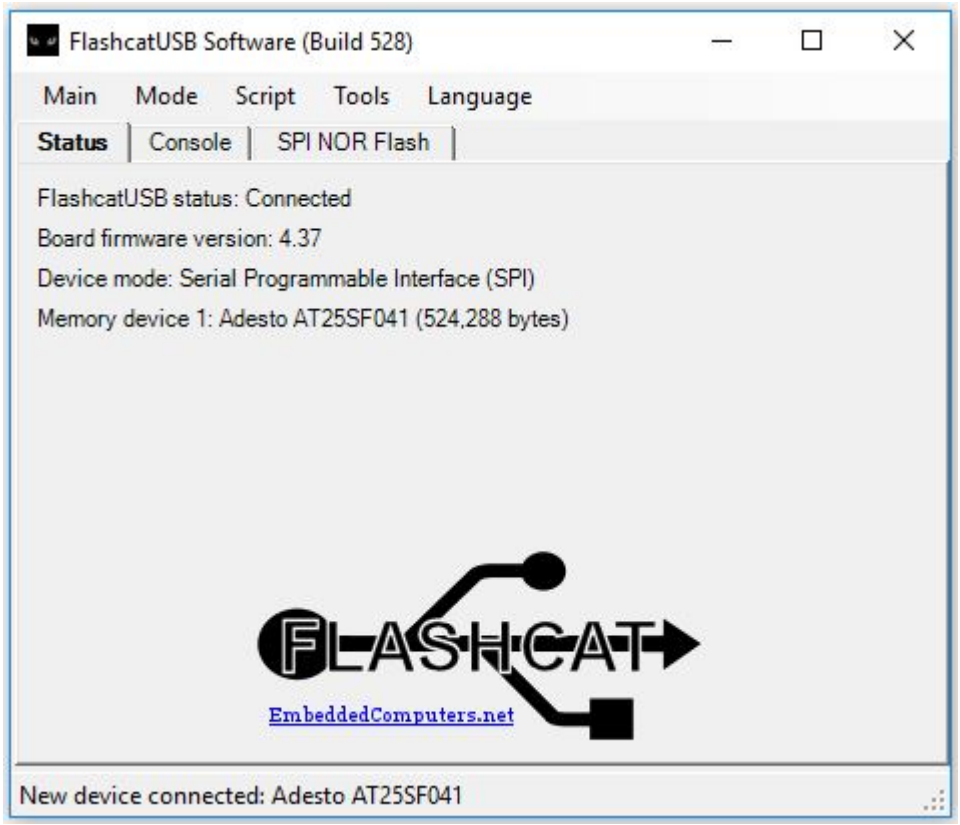
1 General Description 3
2 Flashing Instructions via FlashCat programmer 3
3 Updating the Host firmware using Evaluation UI software 7
4 Updating the AS7225 firmware using Evaluation UI software 10
5 Contact Information 12
6 Copyrights & Disclaimer 13
7 Revision Information 14

1 General Description

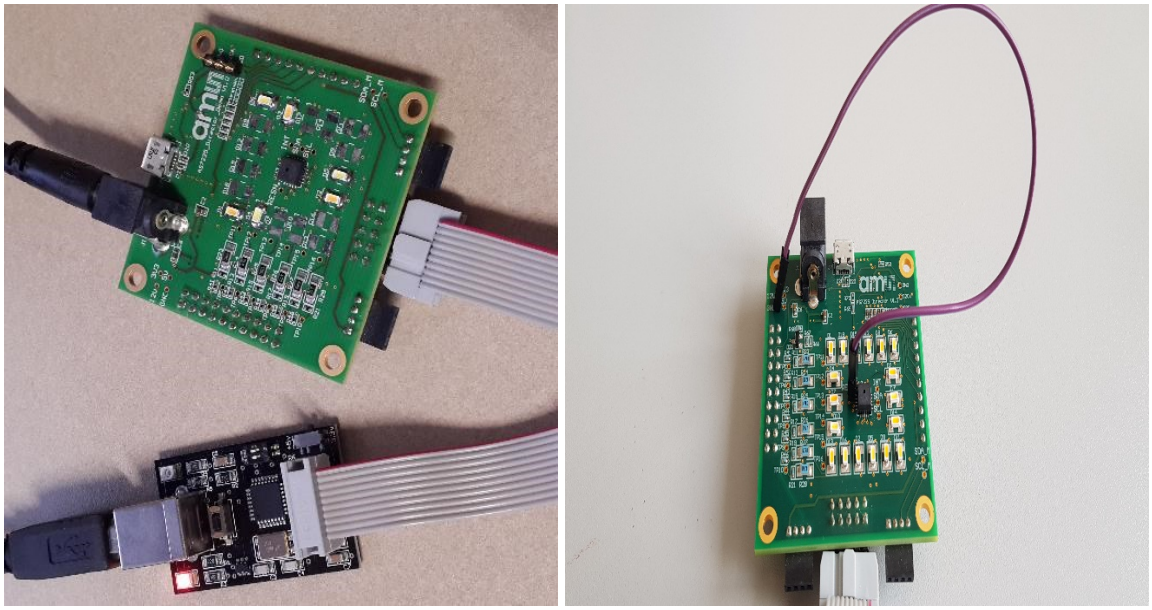
AS7225_Director_Demo_2V0 has a flash memory to work with and AS7225 firmware has to be programmed into the memory. This file briefly discusses how to program the onboard flash memory with FlashCatUSB programmer and AS7225 Evaluation UI software.

2 Flashing Instructions via FlashCat programmer

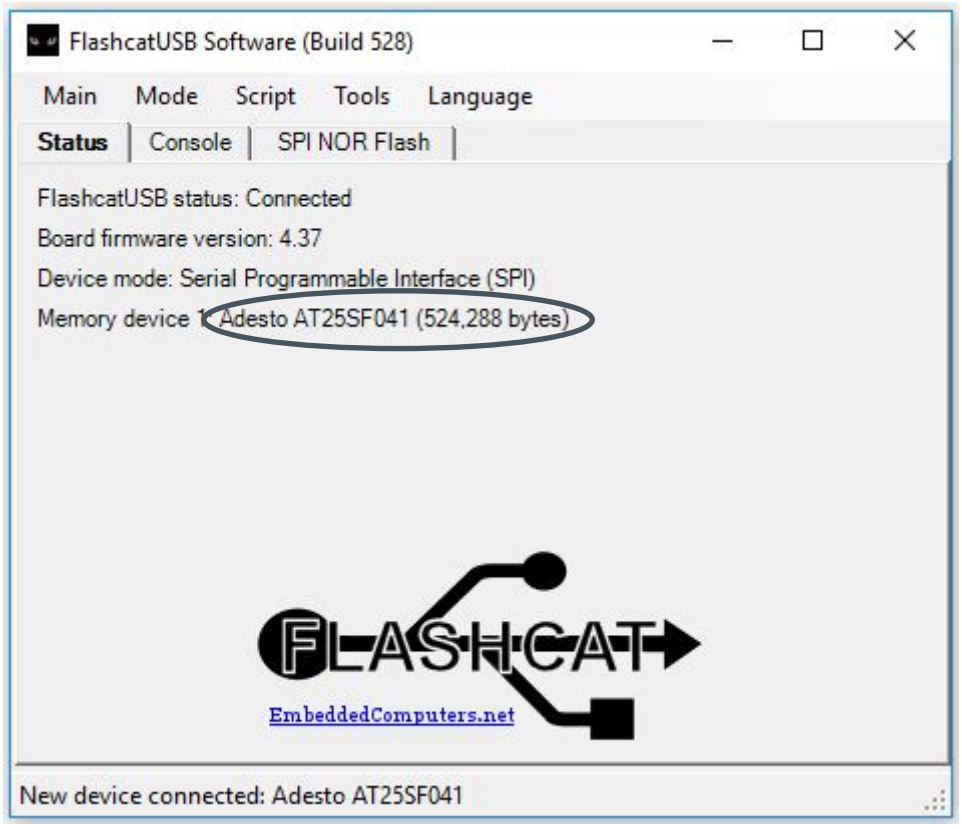
When you connect FlashCatUSB programmer to your computer for the first time, you may need to redirect the OS to the driver folder from FlashCatUSB utility package (the package could be downloaded from embeddedcomputers.net or provided in separated package file from ams) to install the driver. After the driver installation, please check FlashCatUSB firmware by double clicking “FlashCatUSB.exe” to bring the screen up as below. The firmware version should be the version 4.12 or later with SPI interface.



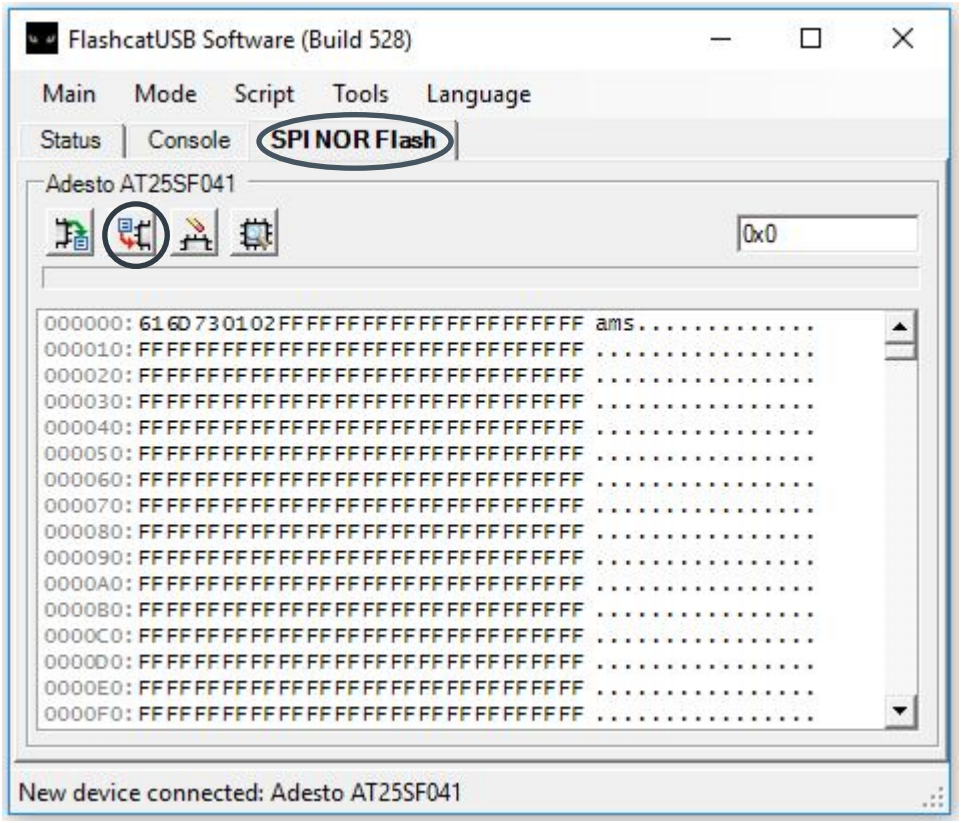
Connect FlashCatUSB cable to AS7225 demo board as below. Then connect 12V DC supply. Connect the Pin of FlashCat with the Pin in AS7225 demo board for flashCat Connection as shown in below figure. Then shot Rest pin to the Ground using a connector wire as in below figure.



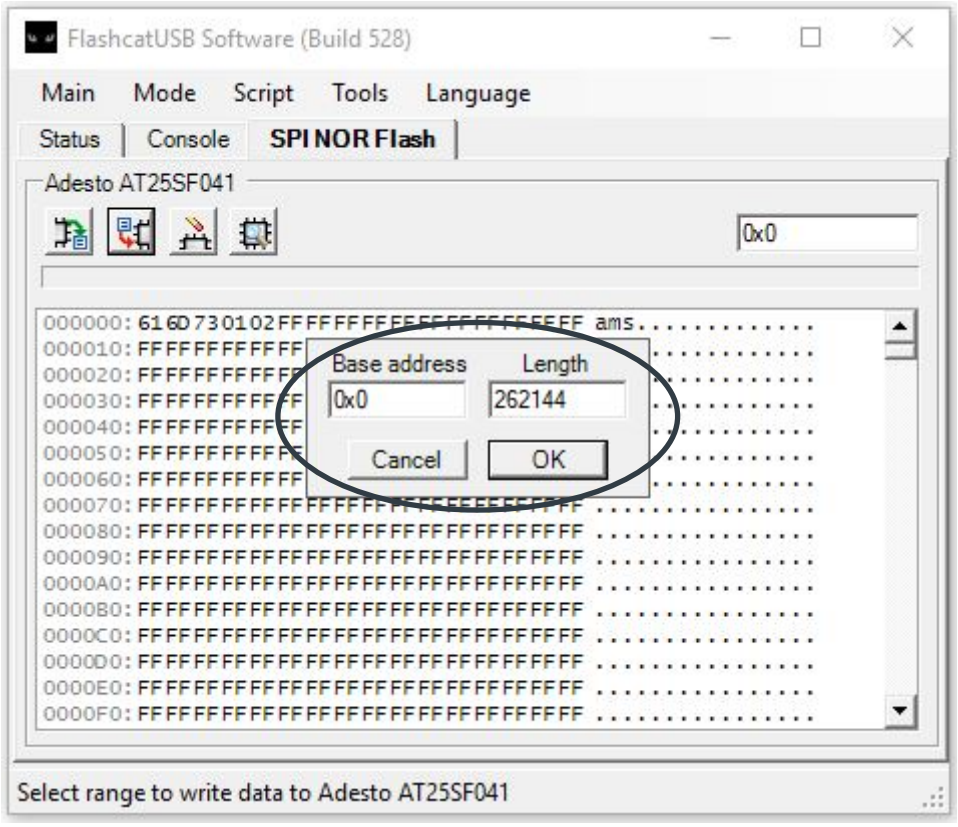
Run “FlashCatUSB.exe” to see the screen as below. (The version Build 528 as the example. Newer version of the utility should work as well). The utility automatically detected the flash memory with the name Adesto AT25SF041.



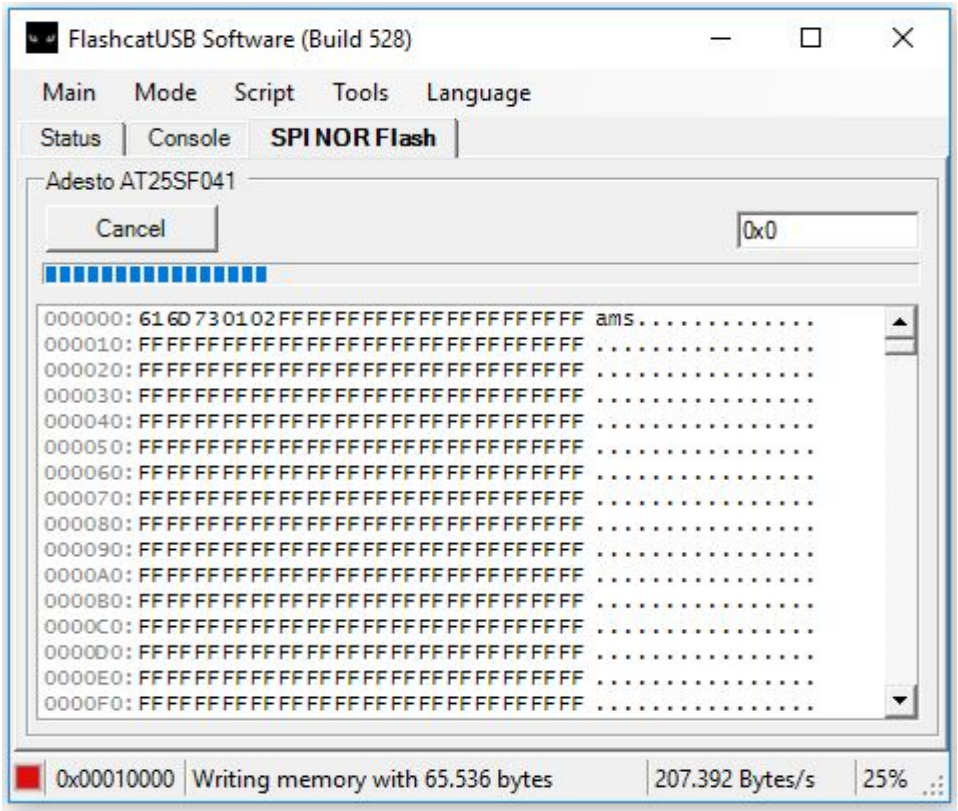
Click “SPI Flash” tab, you will see the interface as below.



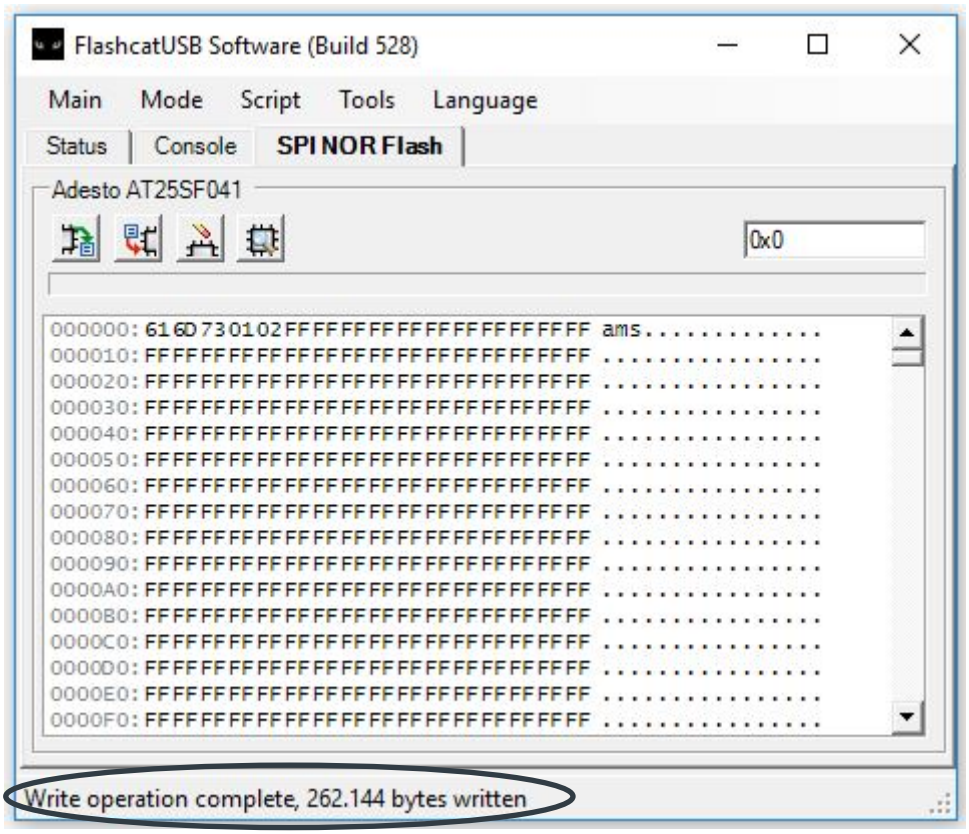
Then click the second button from left for programming the device. The file selection window will show up and please select the firmware you would like to program into the device and click ‘OK”. With the flashCat choose always the complete .bin file. Then click “OK” on the small window, which allows you to set Base Address and Length. We would take the default value as shown in the window below.



After clicking on “OK”, the programming starts and it will take several seconds to complete.

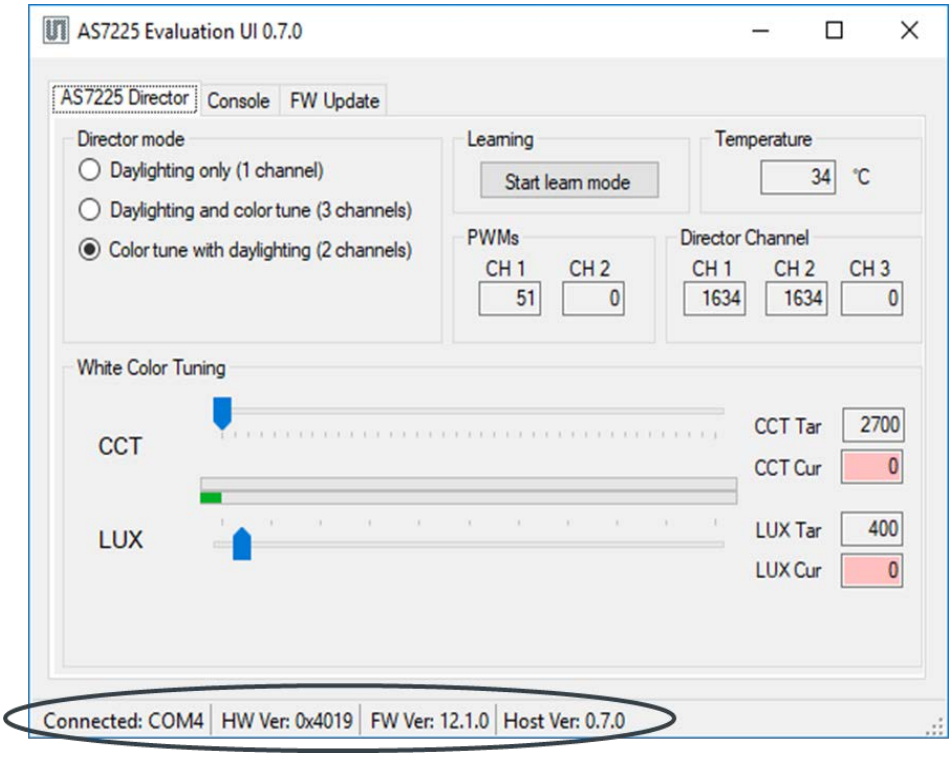


After flashing programming completes a status at the bottom as show below will be displayed.

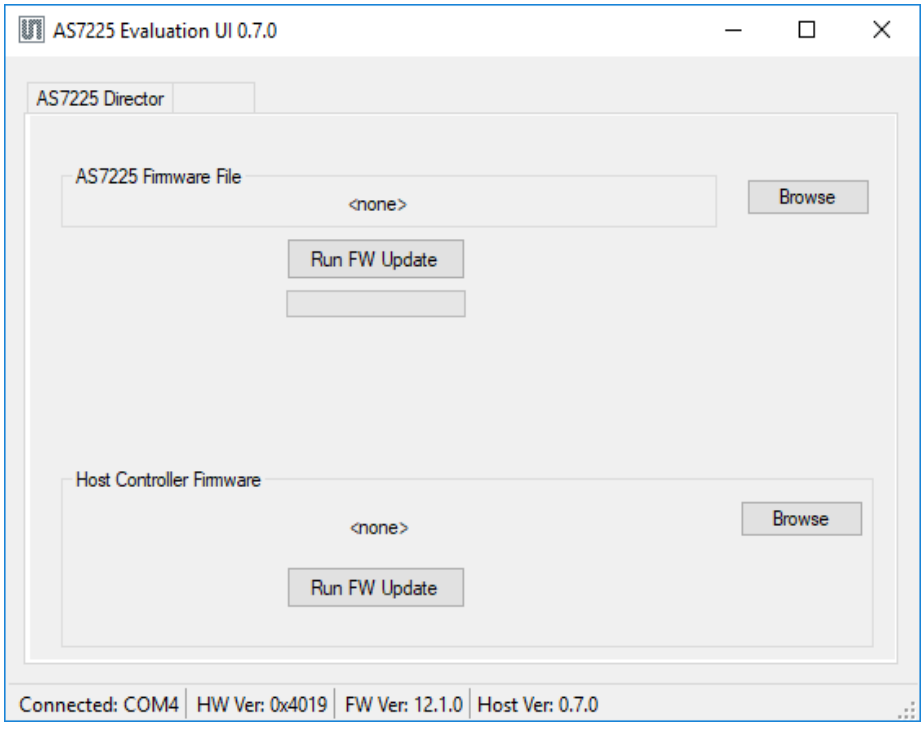


3 Updating the Host firmware using Evaluation UI software

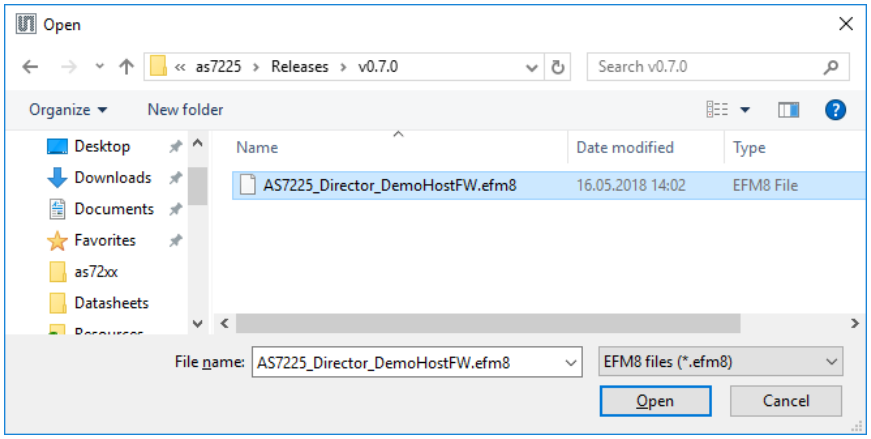
For updating the firmware on the host controller, please use the “AS7225 Evaluation UI” software. First, run the “AS7225_GUI.exe” to see the screen a below. (The version 0.7.0 is only an example. Newer version of the software should work as well). The software should find the connected AS7225 Light Director Board automatically. The version number of the Scotty and the host controller firmware are shown in the status bar below the control with the different tabs.



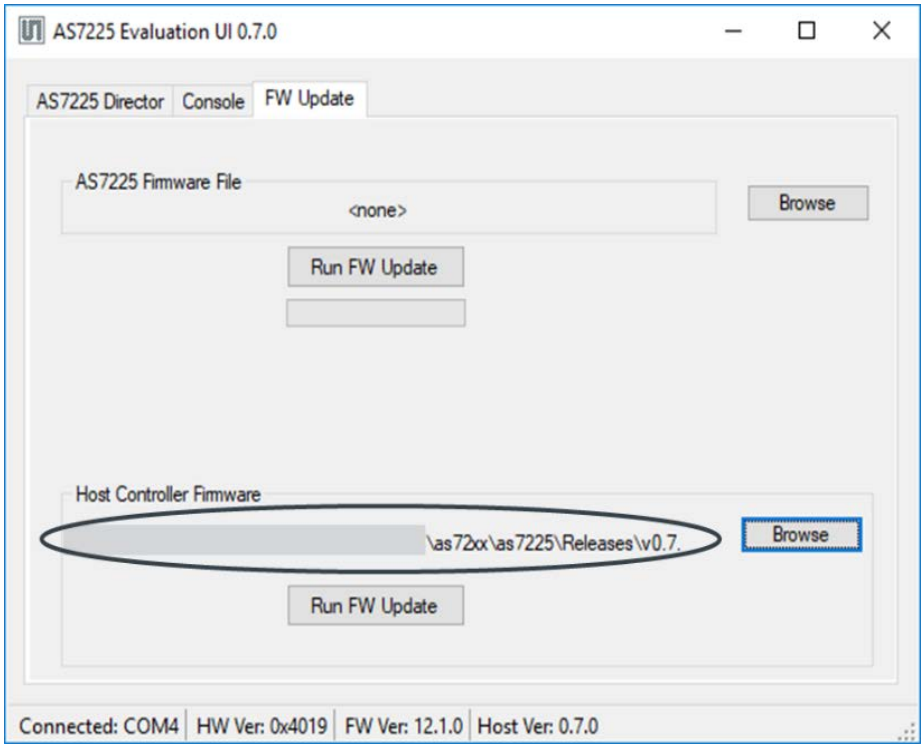
Click on the “FW Update” tab, you will see the interface as below.



Now, click on the “Browse” button to select the host firmware file “AS7225_Director_DemoHostFW.efm8”.

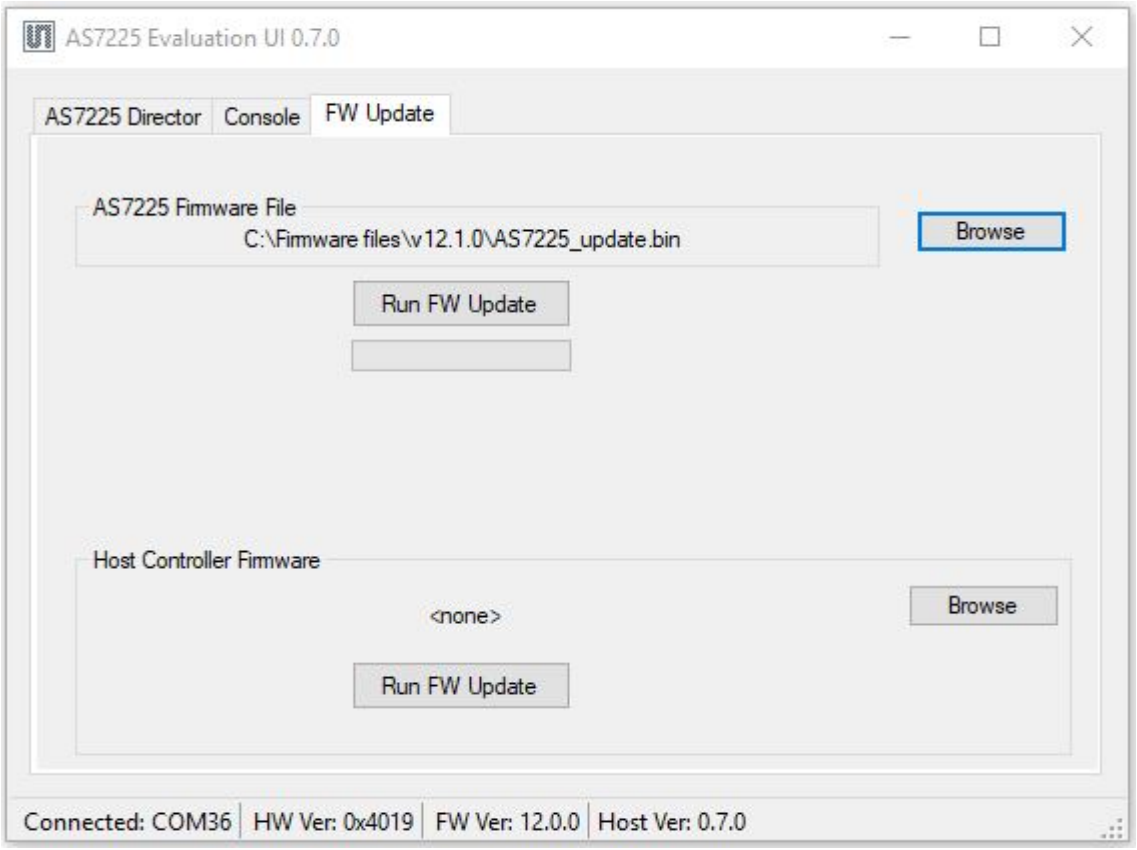


After clicking on the “Open” button, the selected file is shown in the “Host Controller Firmware” box. Now, click on the “Run FW Update” button to start the firmware update. The software calls a background console tool for the firmware upload. It is finished after a few seconds.



4 Updating the AS7225 firmware using Evaluation UI software

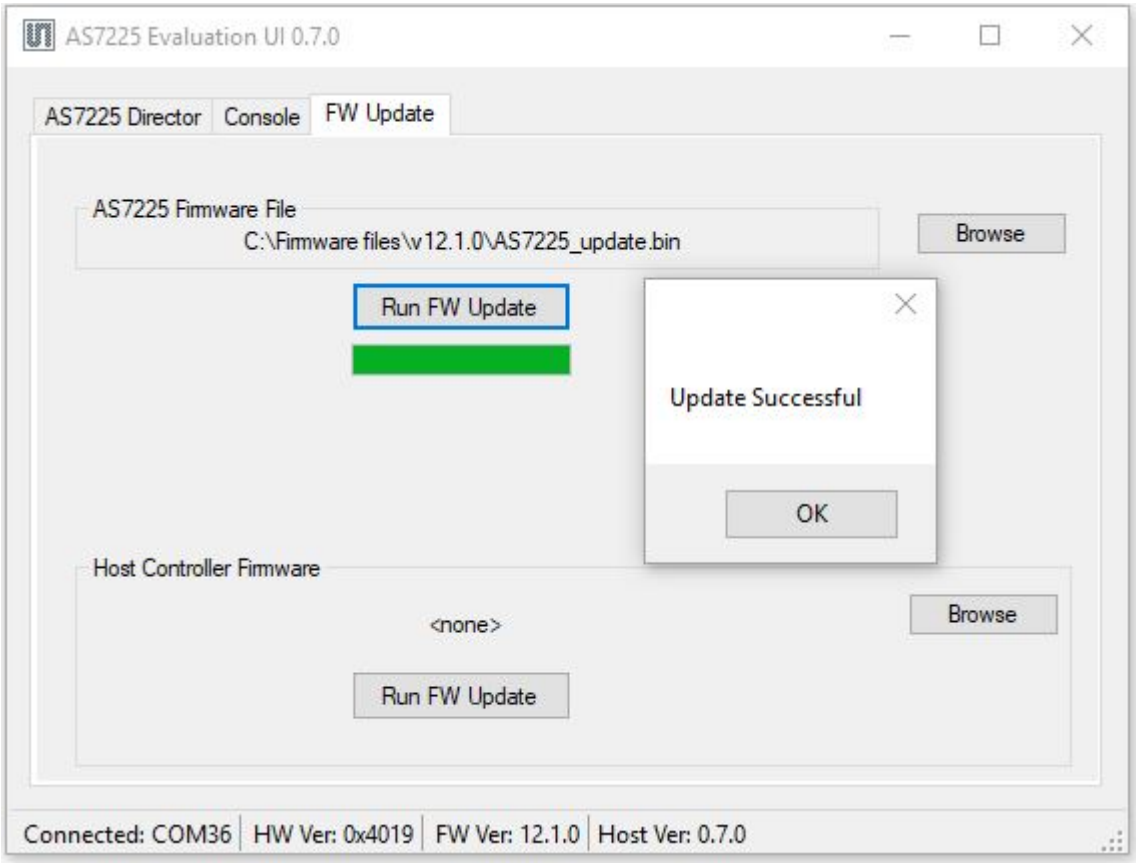
Click on the “FW Update” tab, as explained in the above case and navigate to the AS7225 firmware file.



Click on the “Browse” button to select the AS7225 firmware .bin file “AS7225_update.bin”.

After clicking on the “Open” button, the selected “AS7225_update.bin” file from the location where it is saved. Now, click on the “Run FW Update” button to start the firmware update.

After the update is finished, an “Update Successful” window pop up as shown below and clicking “OK” will update the Firmware version to the AS7225 and at the bottom of AS7225 evaluation UI window. Close and restart the window


AS7225 Evaluation UI 0.7.0
AS7225 Director
Console
FW Update
AS7225 Firmware File
C:\Firmware files\v12.1.0\AS7225_update.bin
Browse
Run FW Update
Update Successful
OK
Host Controller Firmware
<none>
Browse
Run FW Update
Connected: COM36
HW Ver: 0x4019
FW Ver: 12.1.0
Host Ver: 0.7.0

5 Contact Information

Buy our products or get free samples online at:
www.ams.com/ICdirect

Technical Support is available at:
www.ams.com/Technical-Support

Provide feedback about this document at:
www.ams.com/Document-Feedback

For further information and requests, e-mail us at:
ams_sales@ams.com

For sales offices, distributors and representatives, please visit:
www.ams.com/contact

Headquarters
ams AG
Tobelbader Strasse 30
8141 Premstaetten
Austria, Europe

Tel: +43 (0) 3136 500 0
Website: www.ams.com

6 Copyrights & Disclaimer

Copyright ams AG, Tobelbader Strasse 30, 8141 Premstaetten, Austria-Europe. Trademarks Registered. All rights reserved. The material herein may not be reproduced, adapted, merged, translated, stored, or used without the prior written consent of the copyright owner.

Information in this document is believed to be accurate and reliable. However, ams AG 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.

Applications that are described herein are for illustrative purposes only. ams AG makes no representation or warranty that such applications will be appropriate for the specified use without further testing or modification. ams AG takes no responsibility for the design, operation and testing of the applications and end-products as well as assistance with the applications or end-product designs when using ams AG products. ams AG is not liable for the suitability and fit of ams AG products in applications and end-products planned.

ams AG shall not be liable to recipient or any third party for any damages, including but not limited to personal injury, property damage, loss of profits, loss of use, interruption of business or indirect, special, incidental or consequential damages, of any kind, in connection with or arising out of the furnishing, performance or use of the technical data or applications described herein. No obligation or liability to recipient or any third party shall arise or flow out of ams AG rendering of technical or other services.

ams AG reserves the right to change information in this document at any time and without notice.

7 Revision Information

Changes from previous version to current revision 2-00 (2018-Jun-08)	Page
All	3-11

Note: Page numbers for the previous version may differ from page numbers in the current revision.
Correction of typographical errors is not explicitly mentioned.