

# NHS31xx evaluation kit: first steps

Dear customer,

Thank you for evaluating our *NHS31xx* chip. This page wants to get you started as fast as possible.

## Preparing the chip for demonstration purposes

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### Initial firmware

The firmware loaded in the chip is the *One-time NFC program downloader*. To demonstrate the *Temperature Logger* or *Therapy Adherence* use case, the corresponding firmware image needs to be downloaded in the FLASH memory of the *NHS31xx* chip.

This can be done in three steps:

1. Download the latest firmware of the firmware you're interested in.
2. Setup the HW, making a physical connection between the Demo PCB and to your PC.
3. Download the firmware from your PC to the *NHS31xx* chip.

### Firmware image

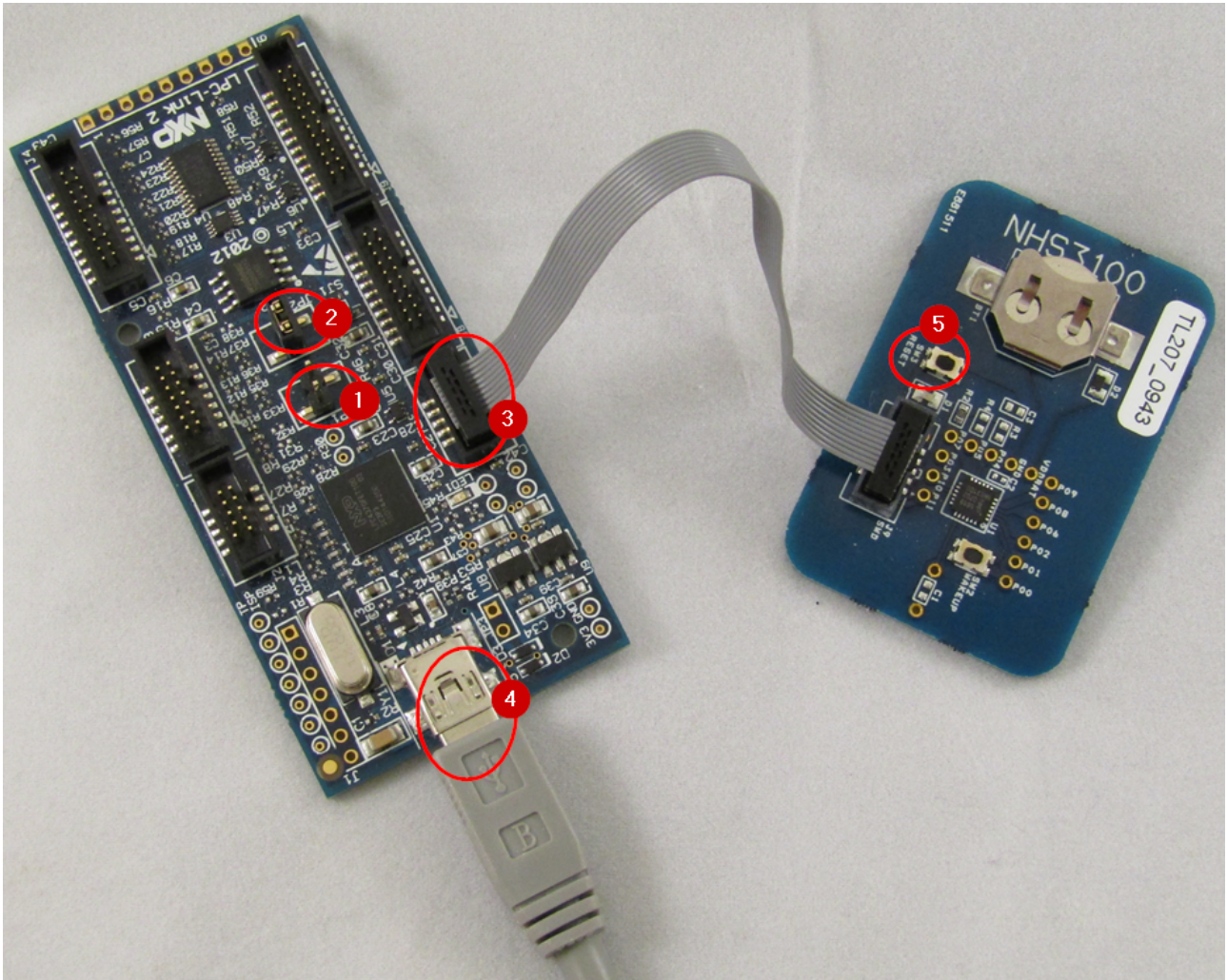
Download the firmware image of your choice, using the direct download links below:

- Temperature Logger demo: [app\\_demo\\_dp\\_tlogger.hex](#).  
To be used with the *NHS3100 Temperature Logger APP*, available in the [Google Play Store](#).
- Therapy Adherence: [app\\_demo\\_dp\\_tadherence - gpio14.hex](#).  
To be used with the *NXP Therapy Config*, available in the [Google Play Store](#).
- Blinky: [app\\_demo\\_dp\\_blinky.hex](#).  
A basic *Hello World* image, which just continually toggles a LED and nothing else.

### LPC-Link2

In the *Application Development Kit* you can also find an LPC-Link2 board with a JTAG connector, and a mini USB cable. Connect the *NHS31xx* chip with the LPC-Link2 board, and the LPC-Link2 board

with your workstation as shown in the picture below:



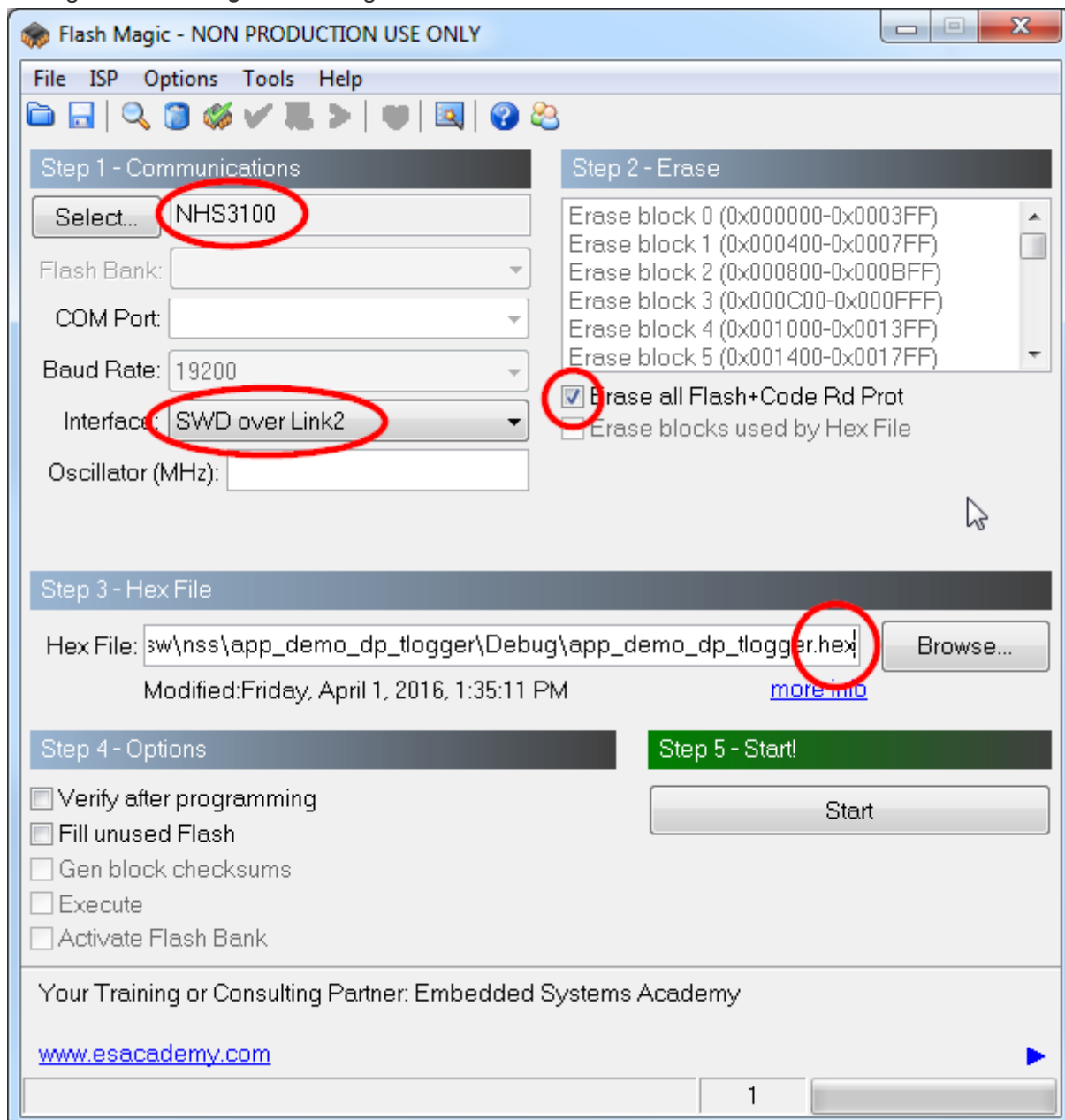
1. Check that *no* jumper is placed over `JP1` .
2. Check that a jumper *is* placed over `JP2` .
3. Plug in the JTAG cable in connector `J7` , and the SWD connector on the Demo PCB.
4. Plug in the mini USB cable in both the LPC-Link2 board and the PC.
5. The location of the `RESET` button on the Demo PCB. After flashing, you need to press it to run the newly flashed firmware.

## Flash Magic

This is the easiest tool to quickly change the firmware image in any *NHS31xx* chip.

1. Download and install *Flash Magic* from [flashmagictool.com](http://flashmagictool.com)

2. Configure *Flash Magic* according to this screenshot:



3. Click **Start**.

4. When the download is complete, disconnect the chip again and press the *reset* button on the Demo PCB.

## Preparing the chip for development purposes

No special action is required: you can immediately start preparing your workstation by downloading the latest SDK from the *NHS31xx* product page on [nxp.com](http://nxp.com) - tab *SOFTWARE & TOOLS*, and following the steps outlined in *docs/UM\_NHS31xx\_GettingStarted.pdf*.

## Support

Support is best provided by a local *Field Application Engineer*. If none is available or unknown to you, file your question or problem by emailing [nhs-support@nxp.com](mailto:nhs-support@nxp.com).

