ncp-uart-hw in Yellow

Introduction

Home Assistant Yellow includes a radio module from Silicon Labs, which utilizes the same code base as **ncp-uart-hw**. However, additional modifications are made to ensure the binary is recognized by Home Assistant Yellow. This page aims to guide you through compiling a compatible binary using MS Windows and testing communication between the radio board and the CM4. If you are using GNU/Linux or macOS, please refer to the steps provided in their own repository.

Requirements

> You must have installed slc_cli, Simplicity Commander and MSYS2.

To install slc_cli, just download the zip file from here, uncompress under `C:/SiliconLabs` folder and add `slc_cli` to the PATH.

To install Simplicity Commander, just download the zip from here, uncompress under `C:/SiliconLabs` folder and add Simplicity Commander folder to the path.

To install MSYS2, if not installed yet, install it by issuing:

```
winget install MSYS2.MSYS2
```

after this is installed, open an MSYS2 terminal, and run:

```
pacman -S make
```

once done, add `C:/msys64/usr/bin` to the PATH (adapt the URI accordingly to your system).

Configuring and Compiling the project

The project does not need to be configured, it is already configured so new versions with new SDKs can be compiled and distributed. To get a new version of SDK, you can just download from here, once downloaded, the common approach is to unpack them under `C:/Users/YOUR_USER/SimplicityStudio/SDKs`

After that, in a terminal, run:

```
slc signature trust --sdk C:/Users/YOUR_USER/SimplicityStudio/SDKs/gecko_sdk_4.4.2
slc signature trust --sdk C:/Users/YOUR_USER/SimplicityStudio/SDKs/gecko_sdk_4.4.2 --extension-path
C:/Users/YOUR_USER/SimplicityStudio/SDKs/gecko_sdk_4.4.2/extension/nc_efr32_watchdog_extension
```

Now you can clone the project from the repository:

```
git clone git@bitbucket.org:seacomp-eu/silabs-firmware-builder.git
```

and inside the folder just created type this (adapt the paths to your needs):

```
python "tools/build_project.py" --sdk "C:/Users/Dell/SimplicityStudio/SDKs/gecko_sdk_4.4.4" --toolchain
"C:/SiliconLabs/SimplicityStudio/v5/developer/toolchains/gnu_arm/12.2.rel1_2023.7" --manifest
"C:/Users/Dell/SimplicityStudio/v5_workspace/silabs-firmware-builder/manifests/nabucasa/yellow_ncp-uart-
hw.yaml" --postbuild "C:/Users/Dell/SimplicityStudio/v5_workspace/silabs-firmware-builder/tools/create_gbl.py"
--build-dir build --output-dir output --output gbl --output out --output hex
```

You will find the builds on the `output` directory.