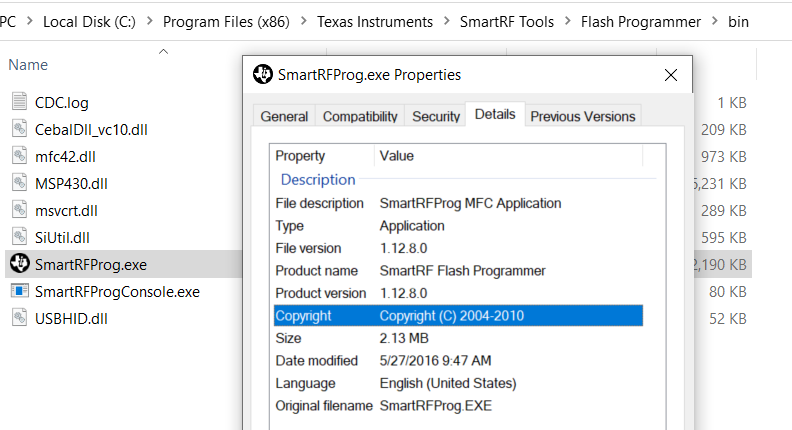
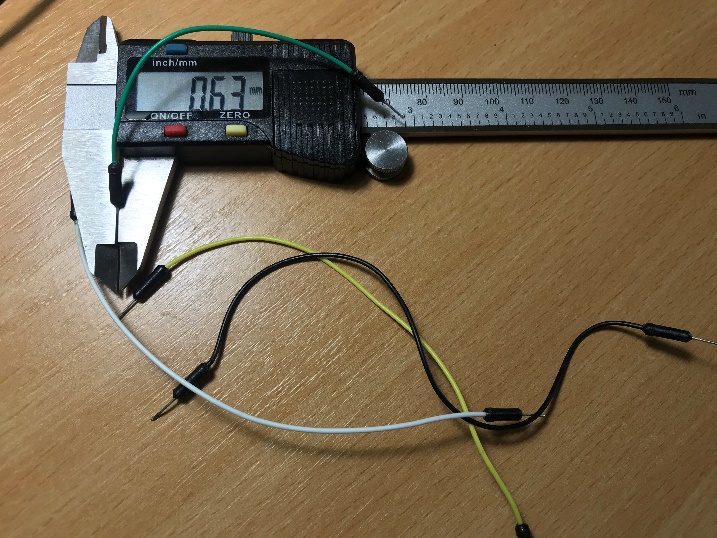
Prerequisites:

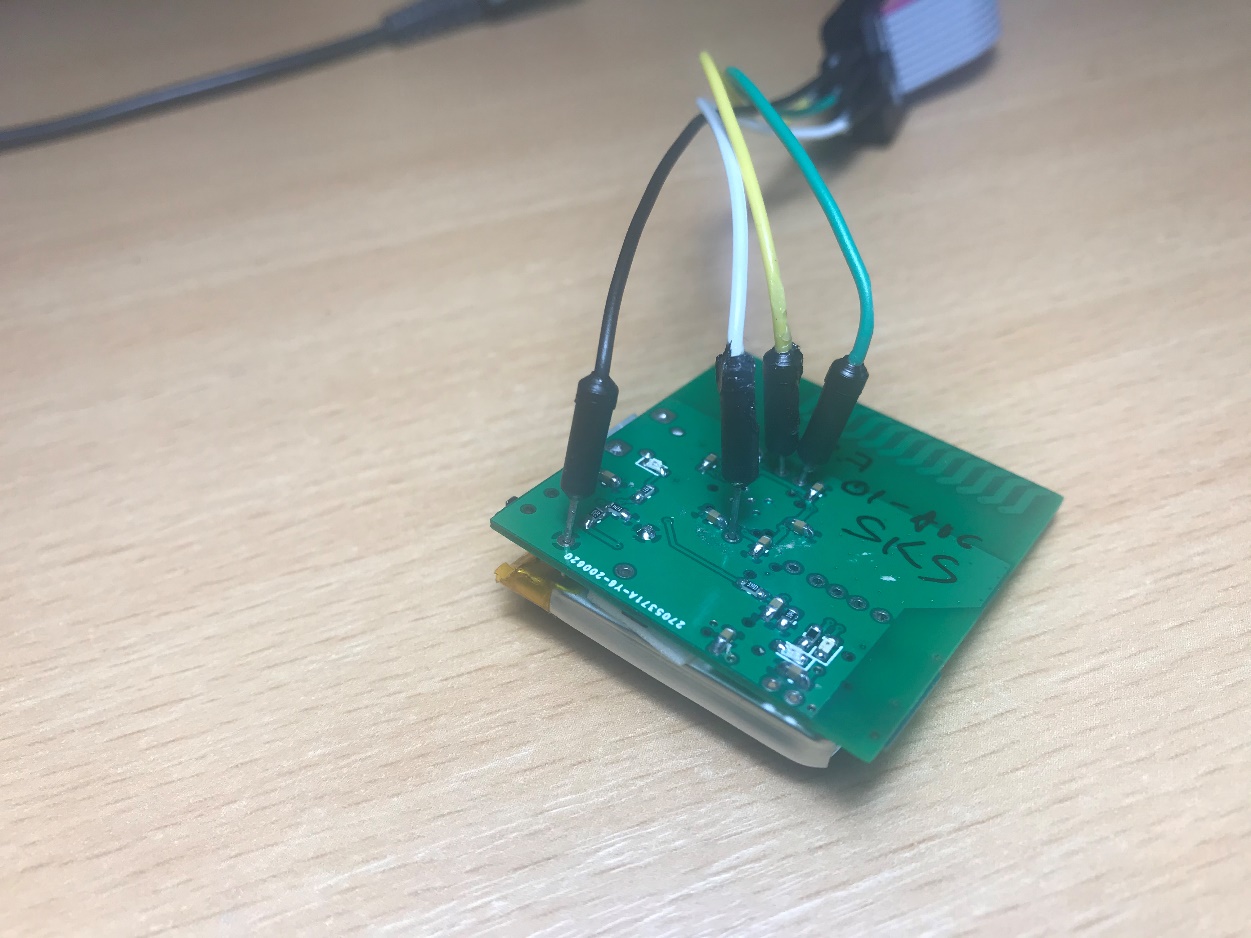
* CC Debugger ([original](https://ro.farnell.com/texas-instruments/cc-debugger/debuggerprogrammer-for-rf-soc/dp/3009896?scope=partnumberlookahead&ost=CC-DEBUGGER&searchref=searchlookahead&exaMfpn=true) – 50Euro or [clone](https://www.ebay.com/itm/CC-Debugger-Bluetooth-ZigBee-Emulator-For-2530-2531-2540-2541-protocol-analysis/402021598624?_trkparms=ispr%3D1&hash=item5d9a5ac5a0:g:HYkAAOSwGrBeDa87&enc=AQAEAAACcIQvEcHUrT7nmUC3yY5qbPyaBN1nJEDYW8MyypsJPgXKLefOeKDNbhl56Ddqr5qda01lSfqrJ5nwLsgziCHxz6z3wjrJIPoCU%2Bmpe1T2TMNTfdt0y%2BLZJQ3cQkQIw08uX274d5oNDqLz5TfL%2BdY29LqSxB2fxKbUq%2BGc4F8QHtsJk9RMESeSlgDytwrrkpAZTlEDc5K8pc72DBjmH7qo0DgT5fV8EF9nIPTqqBhtrW%2BFIWBX8C%2FuWUarhi%2B9GypYa%2FAwhGvASqG93JJCt5GM3aCVwEPi92xsn1aJRDVZAzuGbX7UdlED4cx2oquwB%2Fvu0nUN4FFPr7%2Ff%2BNLuNWC40Nnf9ikdc6WilBnEXYjUJF0oXCTk55zhDutTvwOcqz1Mu5duC7WztkpgcBNbsbxdmIQIATF1eUNer2E1CwlPxSXtr8fGabgRPl6gV6pKOP7J2oGxLUHv8AFeMXtabTzqhQKdYSjPuNADkzDlJTkjoUQ7kxbG31vkjnw2LuC0dqzxFTgSeCaHon2PQ4mesYMC4rMk6HArSsyHb9eCMPb3ZJMc6nH1qkofQGRg9Y2s8TUhkWavEIYZDRKdOgY9ws2Inv3bBLn4fQLxZ1Hstzl8bbkriGUDRtPz%2B3sCJLbqvOiVkaQprMGHIvtd1tx1oQXCi6B0cAnBVEg8GG1d88cwu5fi71YArr3JtJYZheVoI4%2FVpAUboLkjK5FwyYGL5MjNouI0faO3LKFgRfUFVQeBY6%2FATFJMu3U6nPb6qGEcETNlHrfxWEN5lM7cdzc2j6%2B29YPD2iiCyWXkkhPrQov%2FwgdGYBTcw6zEosonE2tedQVCxg%3D%3D&checksum=402021598624a37269ce3fa7453582433a21029d73c0) 10-25Euro)
* Computer with Microsoft Windows 10 and at least one USB port available to connect
* SmartRF Studio from <http://www.ti.com/tool/smartrftm-studio> (Make sure to 'Extract All' if prompted at install/unzip time) ; you will need an account to download it
* <http://www.ti.com/tool/FLASH-PROGRAMMER> - install the old 1.12.8 version; you will need an account to download it



* "Bluetooth Smart Software and SDK v.1.8.0" (or above) from (<https://www.silabs.com/documents/login/software/Bluegiga_ble-1.8.0-143.exe>)
* 4 breadboard wires with a 0.6 tip 

Hardware setup for flashing CC1110 (subg-rfspy):

* Plug the 4 wires to EmaLink as shown below



* Connect the wires to the CC cable like shown in the pictures below

A circuit board

Description automatically generatedA circuit board

Description automatically generatedA circuit board

Description automatically generated

* Connect the other side of the cable to CC link and the USB cable to CC debugger. The final conection should look like below

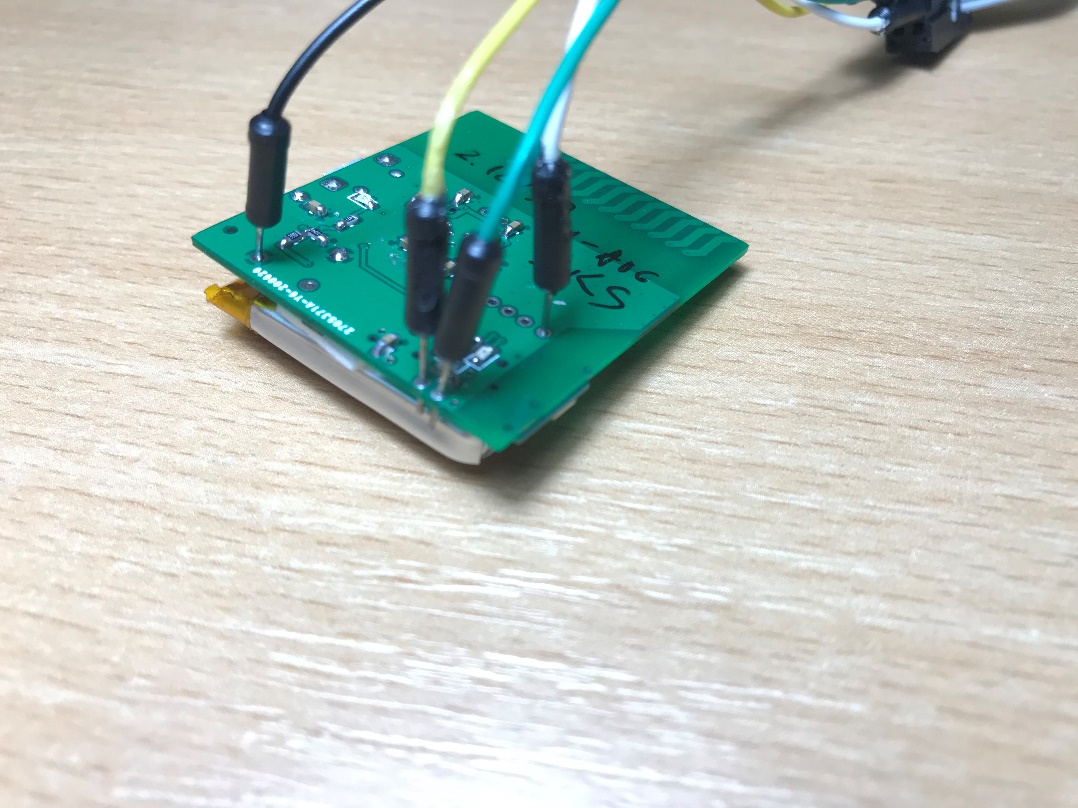
A circuit board

Description automatically generated

* Power ON EmaLink and push “Reset” button on CC debugger; the LED on CC Debugger should turn greed (a very dim green for a clone CC debugger)
* Start SmartRF Flash Programmer, select the .hex file in the “File image” and push “Perform Actions” button in it. After few seconds, the flashing an checking should be done
* Restart EmaLink to activate the new firmware

Hardware setup for flashing BLE113:

* Plug the 4 wires to EmaLink as shown below (the black wire has the same position as for CC1110)



* The connections on CC Debugger side stay the same as for CC1110
* Power ON EmaLink and push “Reset” button on CC debugger; the LED on CC Debugger should turn greed (a very dim green for a clone CC debugger)
* Start Bluegiga BLE SW Update Tool, select the “project.bgproj” file from the current firmware version and push “Update” button in it. After few seconds, the flashing and checking should be done
* Restart EmaLink to activate the new firmware