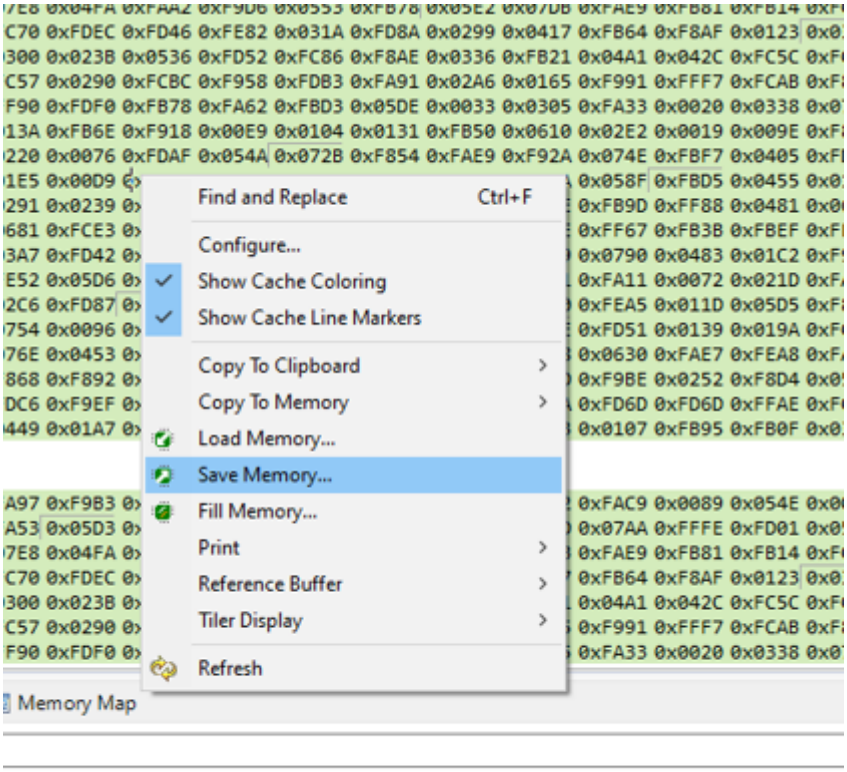
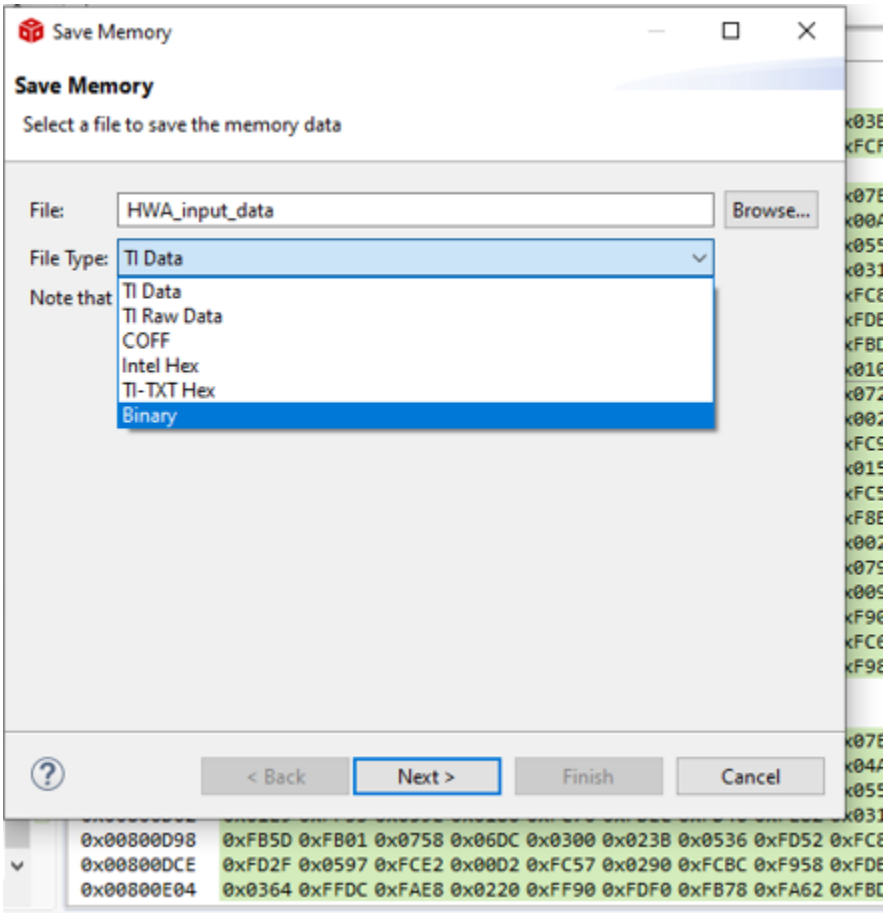
Save Data from Memory to a binary file using CCS Memory Save/Load

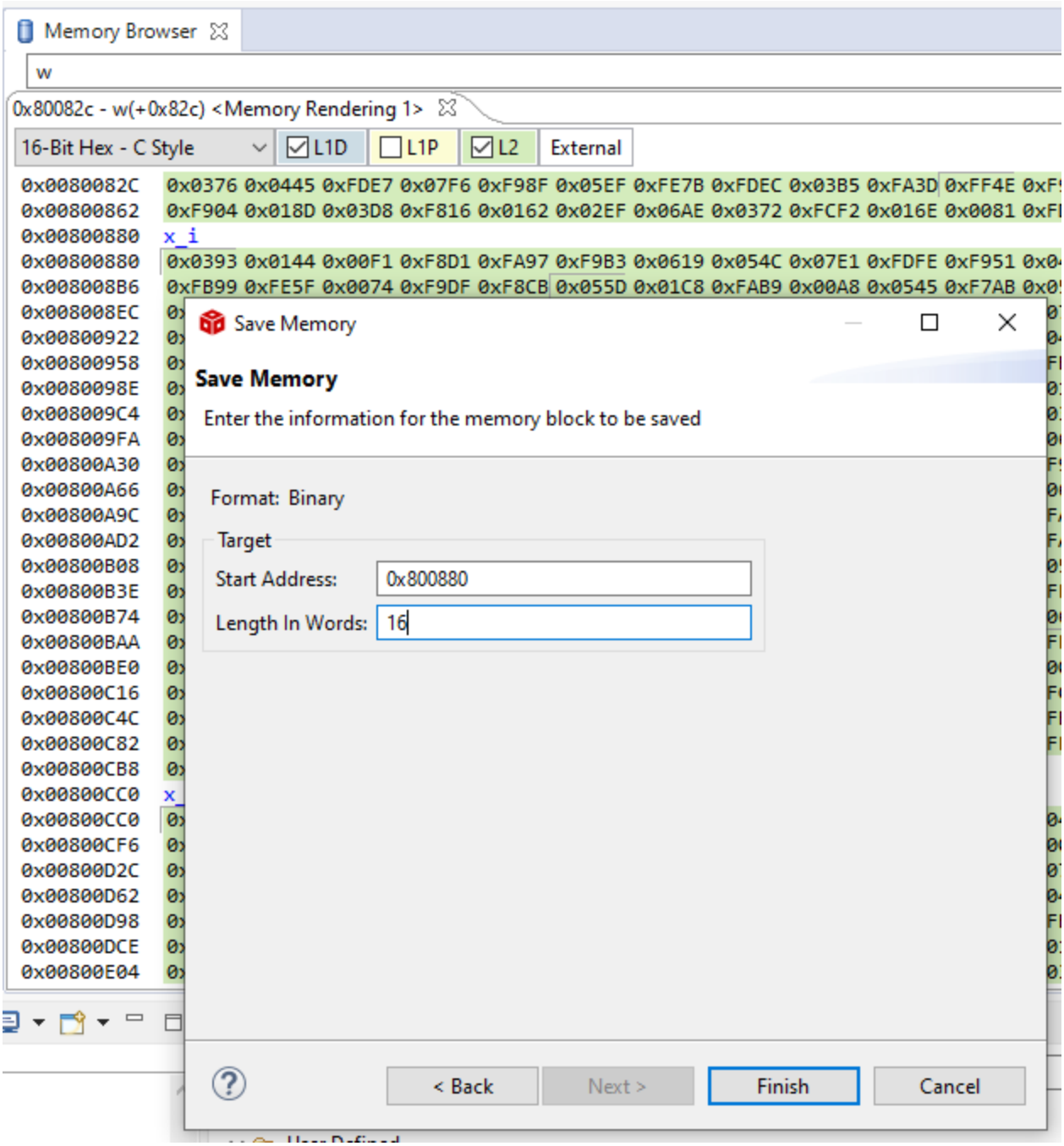
- Connect EVM to CCS
    - Make sure that following file is flashed on the 1843BOOST EVM: “C:\ti\mmwave_sdk_03_05_00_04\packages\ti\utils\ccsdebug\xwr18xx_ccsdebug.bin”
- Load the executable using CCS (we load to DSS or MSS core depending what we decided)
- Open Memory
- Do what is needed to make sure that the memory section we want to save to binary file is updated. For example:
    - Set Breakpoint
    - Run Code
- In “CCS Debug” Open “View-> Memory Browser”
    - One can type the address of memory
    - One can also type the name of the array if it is a global variable
- What data format should we use?
    -
- Right Click in the Memory Browser, Select Save Memory.



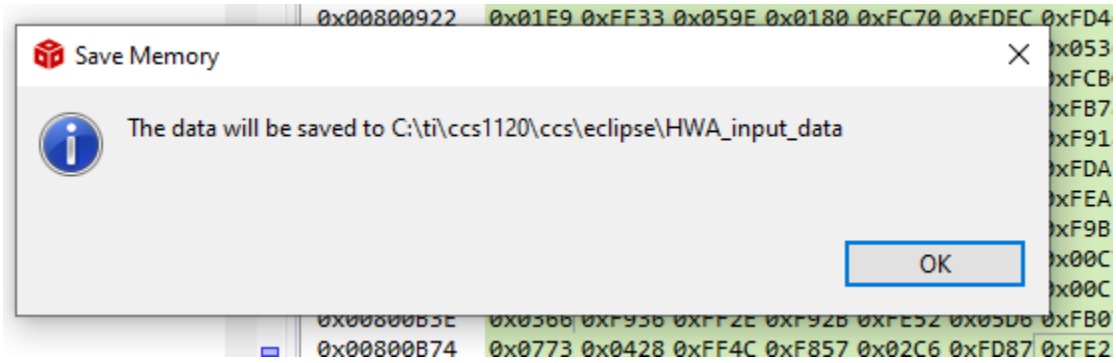
- Provide File Name
- Select File Type: Binary
- Select: Next



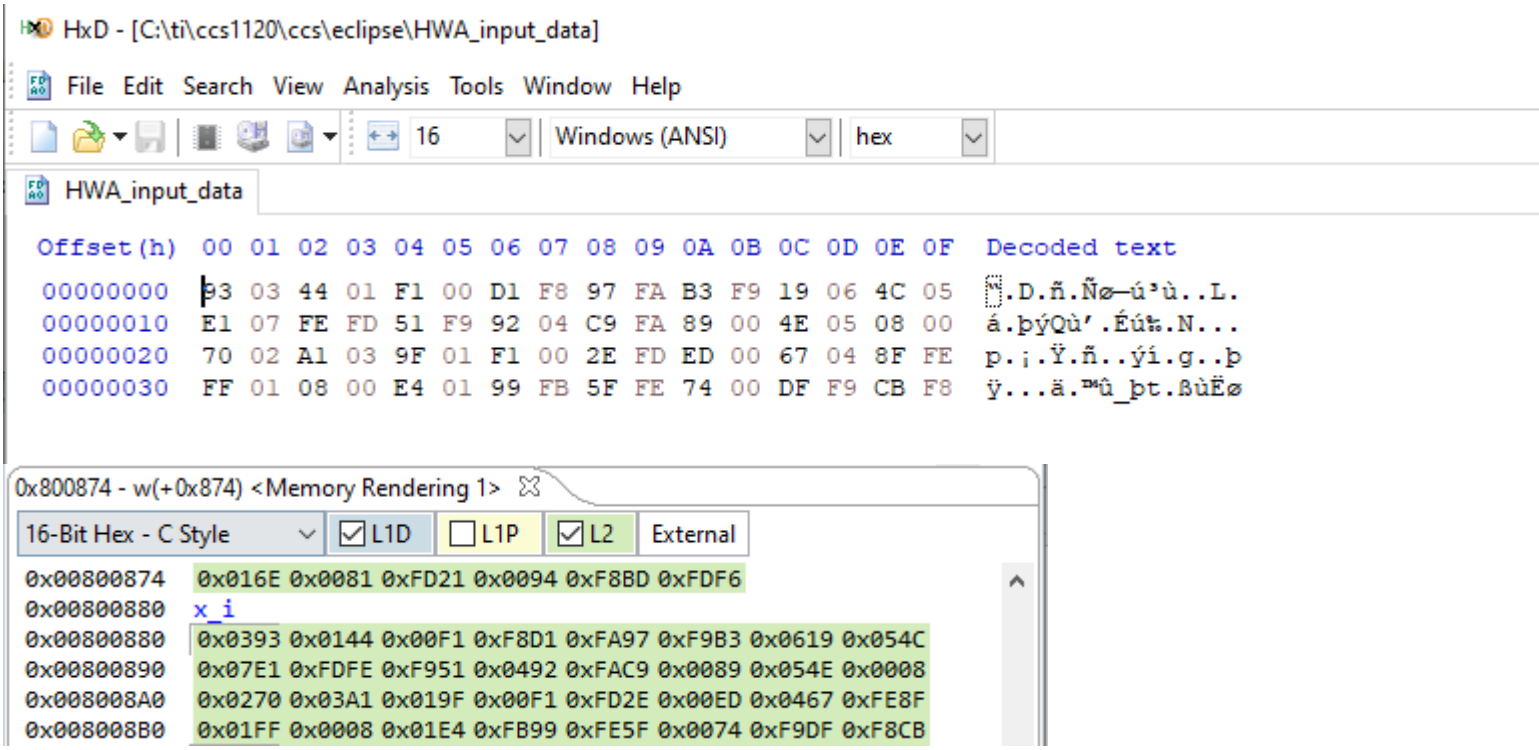
- Define
  - Start Address
  - Length in Words: IMPORTANT – A Word is 4 bytes – 32bit
  - Select Finish

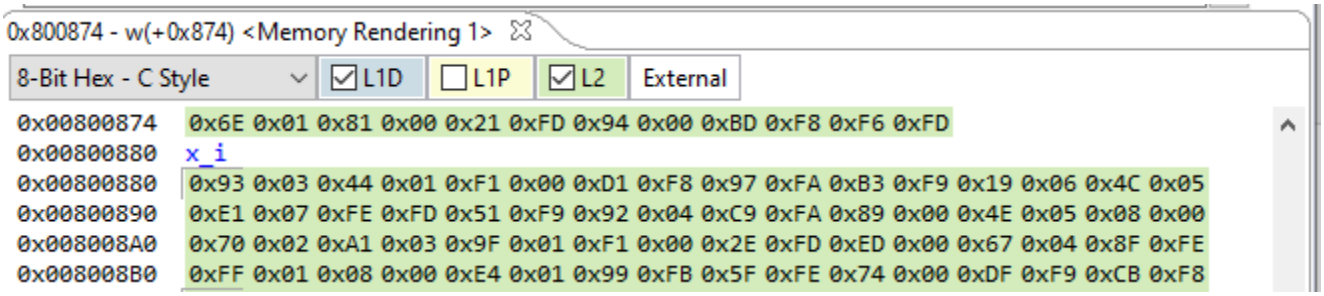


- The file will be saved to following location



- Use a Hex editor to open the binary file. Here is what the content looks like. Compare to the view in the CCS Memory Browser (for 16-bit and 8-bit)





Step 7: Using Matlab to Check that the HWA functionality is correct

- Here is some sample matlab code to read a bin file

```
dirName = 'C:\Data\Data_from_Dave\';
fileName = 'hwa_ping_output.dat';
filePath = strcat(dirName, fileName);
fid = fopen(filePath, 'rb');
I = fread(fid, 'int16');
sig_cplx = I(1:2:end)+j*I(2:2:end);
```

- Run this code in matlab
- Make sure that the data is similar to the data in CCS Memory Browser