

General FAQs

Q: Can I understand the software design and setting if I don't know anything about embedded system?

A: Yes, the materials we provide are well-documented and all library functions we provide has general comments that help you understand.

Q: What are we going to develop based on the technical package?

A: The package provides the basic structure that help you to collect audio data from AIC23 chip and send data back to the host computer. You should first try to understand the package's functionality and then develop your signal processing computation based on the data you collect.

Q: Where should I create a user interface (UI) to display my data?

A: We recommend to use Matlab to create your own UI and display the data. We don't recommend you use "printf" or related c functions to print in console because usually printf function take longer running time of your CPU.

Q: I don't understand the hardware setting on the DE2i-150 board and data collection.

A: It is totally fine if you don't understand them. Please focus on the important variables we point out in the tutorial and understand what they are and how they are updated.

Q: What if some errors occur but they are not covered in your tutorial?

A: If the error happens when compile your code, please check your software design and research error message online. If the error occurs when you are configuring or programming the board, check you running setting and hardware connection. If the performance of our package is not the same as we descript, please first try to re-configure the board and re-run it. If it is still wrong, try to re-start the board. If the error is still there, please contact us for help.

Q: What should be take care when we are developing our own project?

A: You should carefully think about the CPU timing issue. Every line of code or functions occupy specific amount of CPU time. We are using interrupt service routine (ISR) function to collect, store, play back data, which means that this process occupies specific amount of CPU time. Your data processing function should be as efficient as possible, otherwise your old data flame may be covered by a new one.