

The .SOF file named “simple_ipod_solution.sof” is located in directory “*/rtl/ simple_ipod_solution.sof”

The .PSM file named “pracPICO.psm” is located in the directory “*/rtl/KCPSM/pracPICO.psm”

State of the Lab: working functionality includes:

Blinking LED0 (every second): I edited the main program and uses the original “seven segment output” as output to control LED[0]. In “simple_ipod_solution.v”, the related output signal is “not_in_used_sseg[0]”.

Audio intensity indicator: Interrupt is triggered in 44kHz, which is the same as the rate of “audio_data” generation. Thus, by taking the “audio_data” and adding it to the accumulator after taking the absolute value in the ISR, we are able to obtain the average value by getting rid of the lower 8 bit of the summation result (equivalent to shifting to the right by 8 bits), and outputting it to LEDS.