

ET-460/494

## DSP Lab 5

Equipment Required: Texas Instruments eZdsp USB Stick  
Male-to-Male Audio Cable  
Audio Source (e.g. computer, mp3 player, microphone)  
Headphones (or speakers)

### Lab 5

- (1.) Follow the slides for Chapter 5, “Comb Filters”. **Again, make sure the 5515 chipset is still selected.**
- (2.) This lab calls for a signal generator. If you are unable to find one that can interface with the DSP module, just use an audio source.
- (3.) Pay close attention to the order of which files to exclude. Failing to do so will cause undesirable results.
- (4.) Questions:
  - a. Why was a comb filter named comb?
  - b. Write the term used for complex impedance.
  - c. What formula is used to calculate frequency response of a digital filter?
  - d. What are you effectively doing when you exclude a file from the program during the build process?