

ET-460/494

DSP Lab 10

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

Lab 10

- (1.) Follow the slides for Chapter 10, “Multirate Processing”. **Again make sure the 551 chipset is still selected.**
- (2.) Up to this point, you have used a fixed sampling rate. This lab shows how the DSP can use different sampling rates for different purposes.
- (3.) The powerpoint does an excellent job of explaining how changing the sampling frequency will affect the output signal. This is a key concept in telecommunications.
- (4.) Questions:
 - a. What is an aliasing filter?
 - b. What is an anti-imaging filter?
 - c. What are the three steps involved in upsampling?
 - d. What does the phasing audio effect do?