

EE521 Analog and Digital Communications

Instructor: James K Beard, PhD **Office:** Ft. Washington 115

Email:. jkbeard@temple.edu, jkbeard@comcast.net

Office Hours: Wednesdays 5:00 PM to 6:00PM

Location: Ft. Washington 107 **Time:** Wednesdays 6:00 PM – 8:30 PM

Web Page: <http://temple.jkbeard.com>

Texts:

- Bernard Sklar, Digital Communications, Second Edition, Prentice Hall P T R, 2001 (2004 printing), ISBN 0-13-084788-7
- Digital Communication Systems Using SystemVue, by Dr. Silage, ISBN 1-58-450850-7

Today's Topics

| | | |
|-----|---|---|
| 1 | Study Guide for Final Examination | 1 |
| 1.1 | Critical Dates | 1 |
| 1.2 | EE551 | 1 |
| 2 | Study Problems | 2 |
| 2.1 | SystemView | 2 |
| 2.2 | The Quizzes | 3 |
| 2.3 | The Existing Study Guide..... | 3 |

1 Study Guide for Final Examination

1.1 Critical Dates

- May 3, 2006 – STUDY DAYS; no scheduled class but I will come for a review and study session with you if you like.
- May 8, 2006 – FINAL EXAM here in this room at the usual class time.

1.2 EE551

We will address Sklar's Chapters 5 and 8 and the remainder of Chapter 9 in addition to the remainder of selections from Sklar as given in the Synopsis. See the EE551 course web page on <http://temple.jkbeard.com> for the synopsis.

2 Study Problems

2.1 SystemView

Study the primer on the web site. There will be questions on the final examination on SystemView usage. Topics may include, but are not limited to, the following:

- The SystemView Time Specification (Figure 1 below) – the first thing you do when you start a system design is set the Time Specification parameters of Sample Rate and Stop Time. You normally use “Set Power of 2” and the spin button to maximize speed by letting SystemView use radix 2 FFTs for cross-correlation, power spectra, etc. Also, you can set the number of loops and the behavior on the end of each loop.
- SystemView data types – floating point, signed integer, unsigned integer, binary with 0’s and 1’s, and binary with -1’s and +1’s. A “Threshold” setup parameter on a token means that it has one or more inputs that are binary format.
- Never ignore a SystemView error message or warning message. The only ones that you can go past are those warning of unused tokens that you have temporarily removed from your system model.

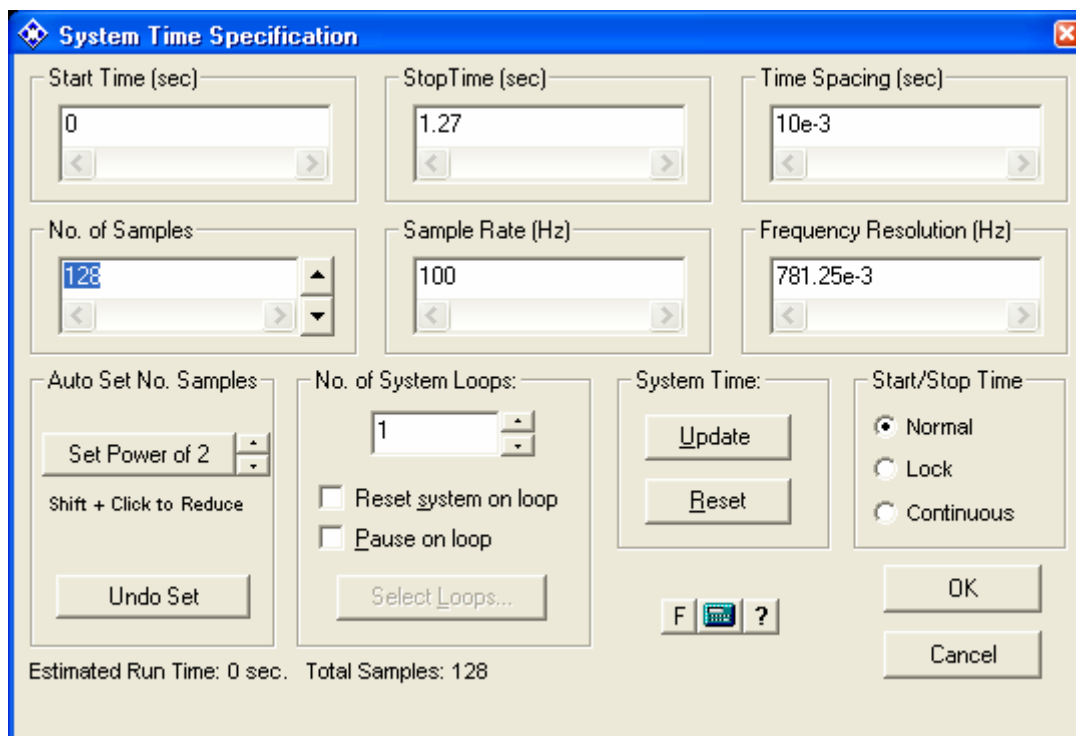


Figure 1 SystemView Time Specification Window

2.2 The Quizzes

Look at Quiz 1 and Quiz 2. I may modify one or more problems from these quizzes and repeat it on the Final Examination.

2.3 The Existing Study Guide

There is an excellent study guide on the web site:

http://temple.jkbeard.com/Data/EE521_Study_Plan.ppt

It's a PowerPoint file and six-to-a-page handouts are included today. I'll update the web site with a link to a PDF version of today's handout tomorrow.