EE 211

Lecture 12
April 2, 2006
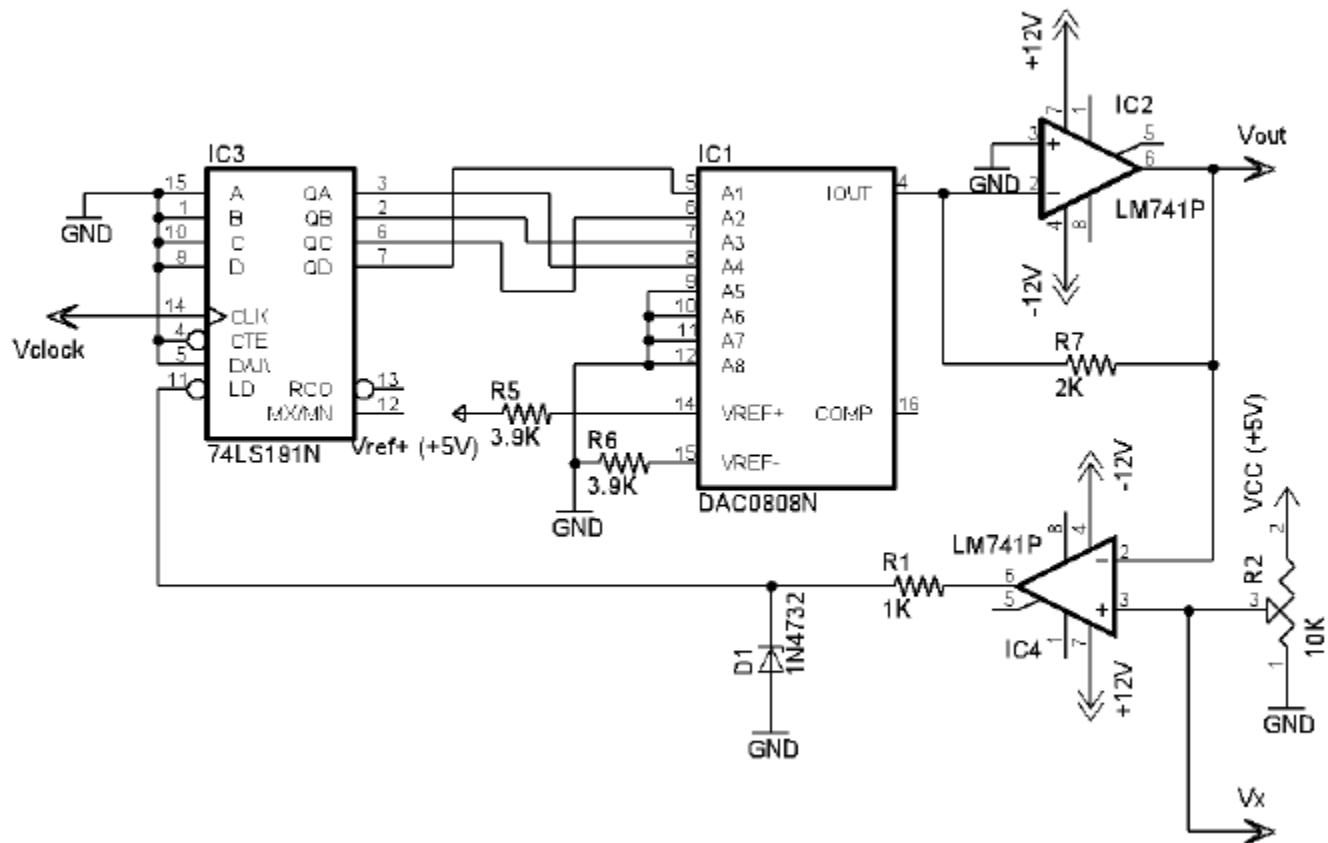
Topics

- Course Assessment
- Dead Week Schedule
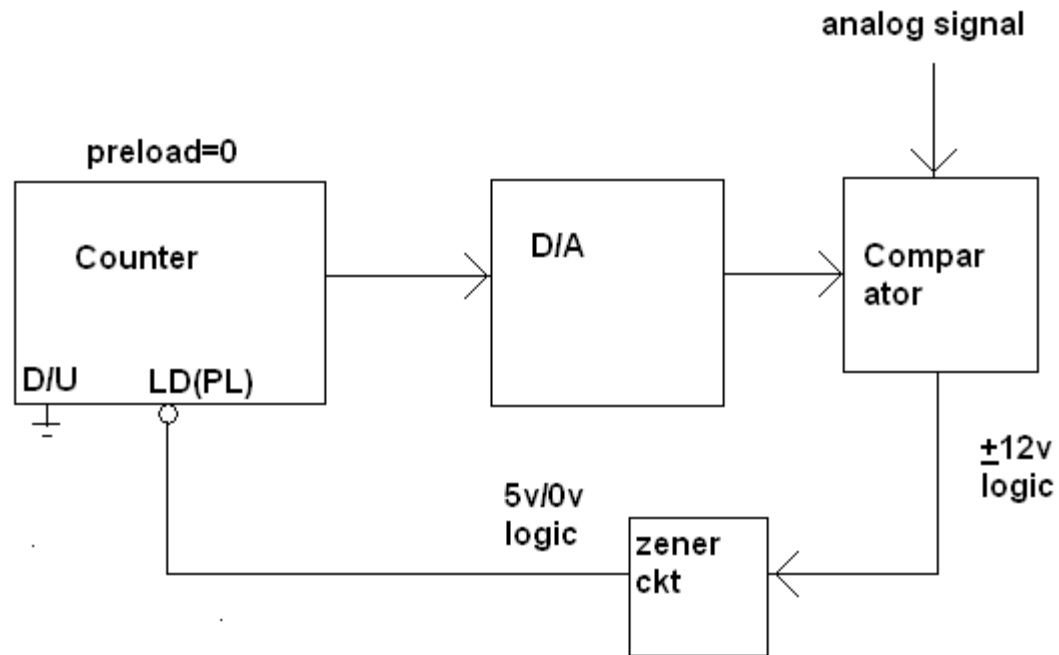- A/D conversion
- Final Exam

Dead Week Schedule

- Monday/Tuesday– A/D Converter
- Wednesday/Thursday—
  - Lab Section Evaluation
  - Final Exam Preparation
- Friday– no class
- Writing Assignment--

A/D Converters

Block Diagram

First Converter

- Ramp converter counts
  - Comparator flips when D/A passes analog signal
  - Resets/recounts

Ramp Converter Counter Op's

Figure 8-4. Chart Display of the Ramp ADC in Operation

How do you count down?

- What changes are made to
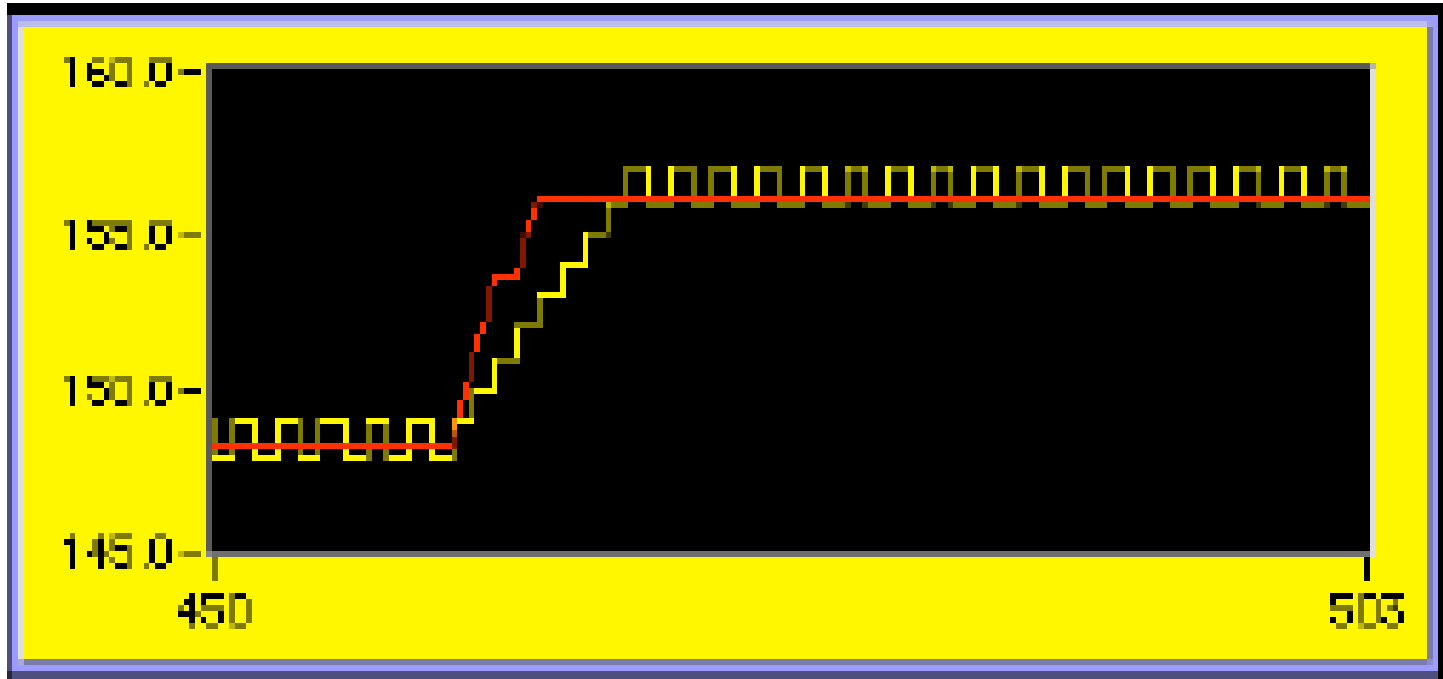 - D/U
  - LD(PL)
  - comparator

Tracking A/D

Figure 8-7. A Sudden Change in the Input Level Causes the Test Level to Ramp Up to the New Level

How do you make a tracking A/D

- Which 4 wires do you change?
  - D/U
  - LD(PL)
  - comparator

Successive Approximation A/D

- Why compare one step at a time?
- How are list searches done?
- Change MOST significant bit– and compare-----