D. Richard Brown III
Associate Professor
Worcester Polytechnic Institute
Electrical and Computer Engineering Department
drb@ece.wpi.edu

# ECE4703 REAL-TIME DSP LAB HARDWARE INTRODUCTION

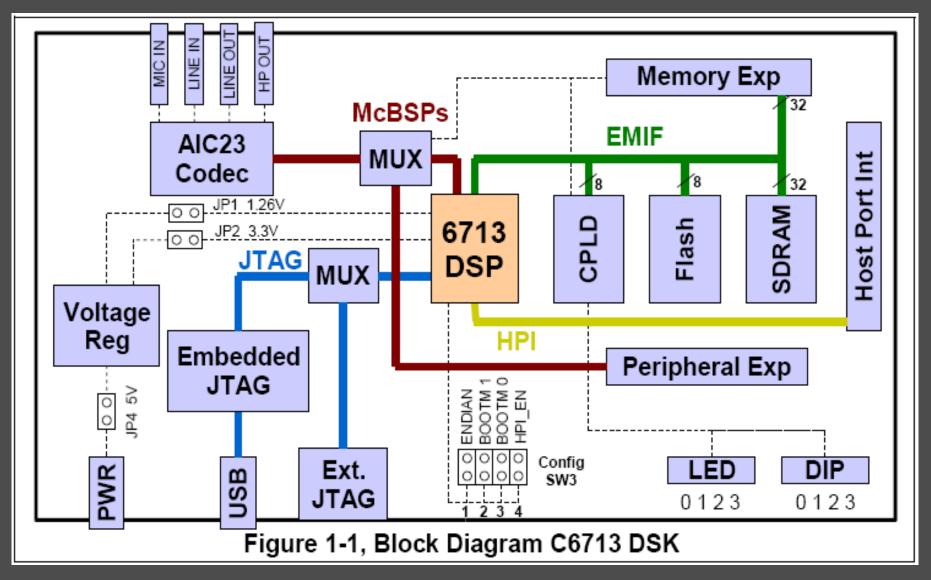


### C6713 DSK Overview

- Texas Instruments TMS320C6713 floating point DSP running at 225 MHz
- AIC23 stereo codec (ADC and DAC)
  - Ideal for audio applications
  - 8-96 kHz sample rates
  - Line in/out (we use these most of the time)
  - Microphone in
  - Headphone out
- Memory
  - 16 MB dynamic RAM
  - 512 kB nonvolatile FLASH memory
- General purpose I/O
  - 4 LEDs
  - 4 DIP switches
- USB interface to PC

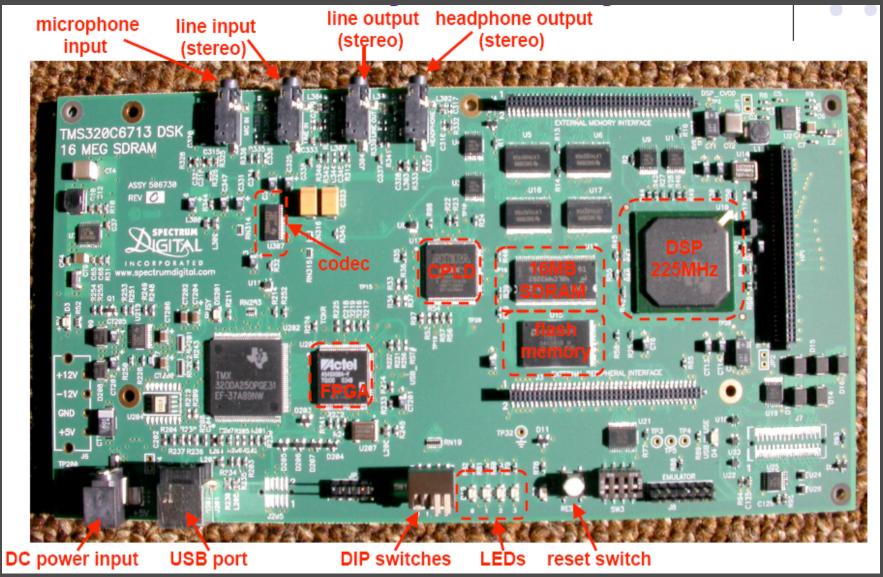


#### C6713 DSK Functional Block Diagram





## C6713 DSK Physical Layout





#### For More Information

- See the TMS320C6713 Technical Reference <a href="http://spinlab.wpi.edu/courses/ece4703/">http://spinlab.wpi.edu/courses/ece4703/</a>
  tms320c6713dsk technical reference.pdf
- See the AIC23 codec datasheet
  <a href="http://spinlab.wpi.edu/courses/ece4703/aic23\_datasheet.pdf">http://spinlab.wpi.edu/courses/ece4703/aic23\_datasheet.pdf</a>
- See other useful links on course website.

