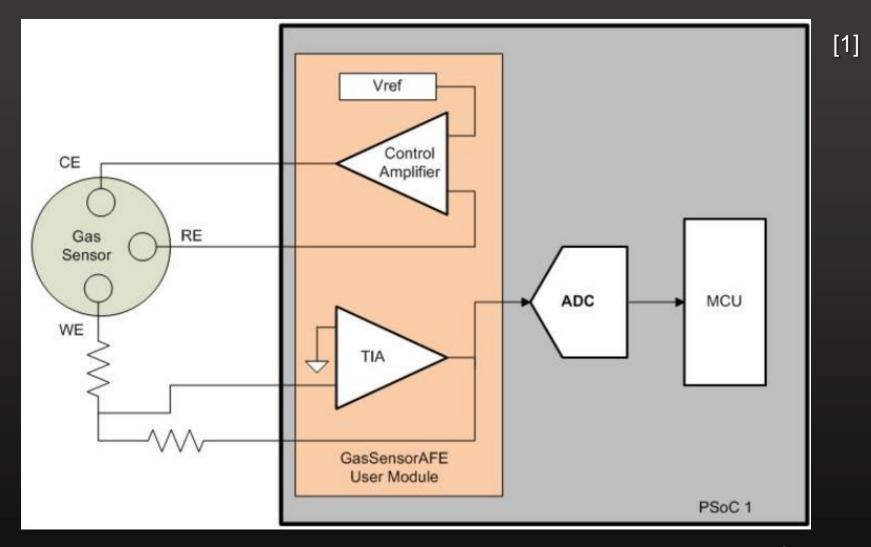
Coursera Specialization on Embedding Sensors and Motors



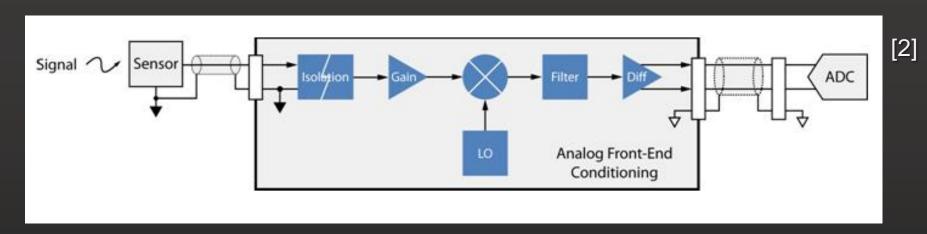
University of Colorado Boulder

Rough Architecture of Sensor System



This gas sensor analog front end uses two amplifiers and an ADC

Sensor System With Signal Conditioning

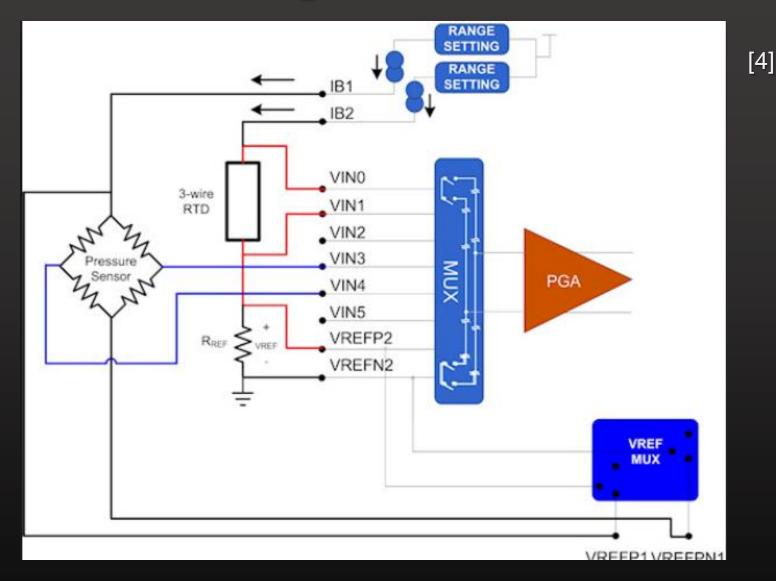


Analog front end



16 bit, 50MSPS Four Channel, Sensor AFE from TI

Signal Conditioning Located Close to Sensor



Analog front end for pressure sensor

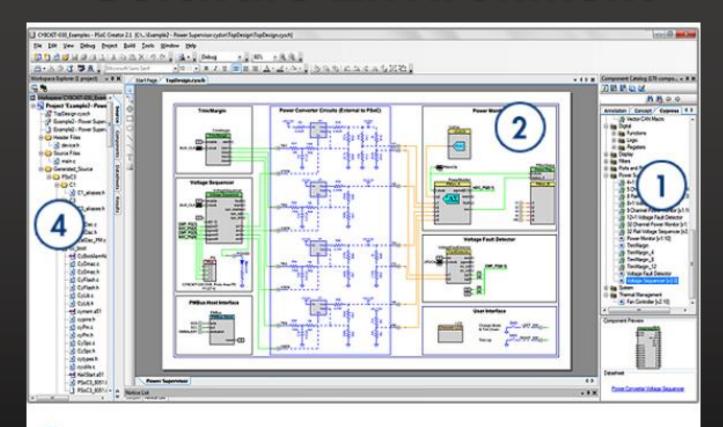
Microprocessor With Built-In ADC



Cypress PSOC5 microcontroller

[5]

Software Environment

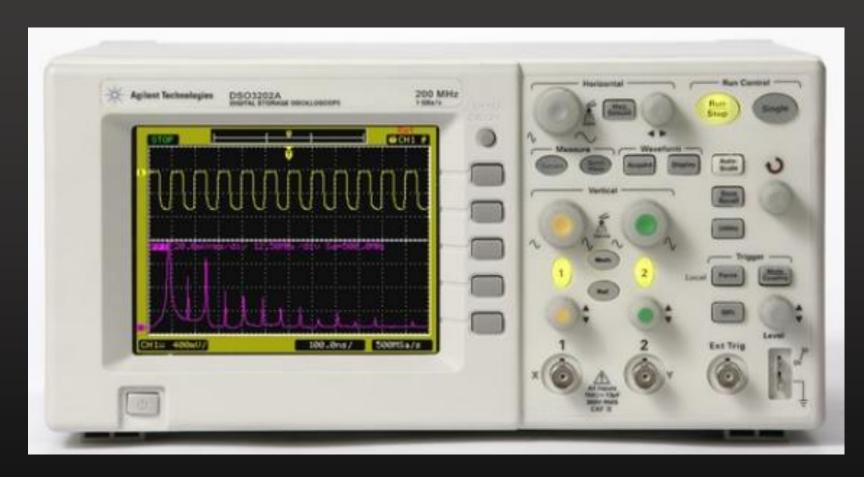


- 1 100+ pre-verified, production- ready Components
- 2 Drag and drop Components onto a schematic design
- 4 Develop, Build and Debug your project

Cypress PSOC Creator software environment

[6]

Typical Data Acquisition Device



Agilent DSO3202A Oscilloscope: 2 Channel, 200 MHz, Color Display

[7]

Citations

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- [2] www.nutaq.com
- [3] www.ti.com
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Be Bouder

