Implementation of Poly Crystalline Ferrite Material as Sensor for CO_2 Detection using Cypress CY8C29466 Based on SoC

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Abstract

Nowadays, to keep pace with requirements of smart instrumentation of various sectors and reduce the design time, the use of programmable system on-chip is the best solu array based PSoC would be most suitable to design an embedded system with more preciseness. In present paper, the details regarding hardware and software co-desi dedicated for detection and measurement of CO_2 gas are discussed. CO_2 sensor is prepared using polycrystalline ferrite material and deployed for detection. The system is Cypress PSoC device CY8C29466-24PXI with PSoC Designer 5.1 as IDE. The high input impedance of on-chip PGA supports direct interfacing of CO_2 gas sensor, whereas or in the data. The system is implemented to detect the presence of CO_2 and could be extended to measure the concentration of CO_2 gas in percentage unit.

Keywords

Mixed Signal, PSoC, Polycrystalline Ferrite Material, CO Gas Sensor.

How To Cite This Article?

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