Abstract

In this paper design of a two-axis capacitive accelerometer is described. Variation of capacitance of the device with applied acceleration as well as sensitivity of the device is analyzed. The performance analysis of the device is done using ANSYS Multyphysics software. From the analysis results, a capacitive mems accelerometer with enhanced sensitivity has been proposed. The sensitivity of the accelerometer has efficiently been enhanced with the increase of beam length and reduction beam width.
References

- ANSYS Basic Analysis Guide, ANSYS Software version 14. 5, ANSYS INC.

Index Terms

Computer Science

Information Sciences
Keywords
Mems  Sensors  Capacitive  Accelerometer  Sensitivity