

FEM Simulation of MEMS Accelerometer

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Abstract. Accelerometers are sensors used to measure the magnitude of acceleration. In our paper, we have discussed a comb MEMS acceleration sensor. These sensors have wide applications in automotive industry. In our work, we have dealt with the eventual use as an impact sensor in airbags. In the first section, we will briefly discuss the airbag system and the working principle of the comb MEMS accelerometer. Then, in the second part, we will simulate the mechanical properties of the proposed sensor using Finite Element Method (FEM).

ACKNOWLEDGMENTS

This work was supported by HORIZON EU "FreeTwinEV" project no. 101159989, and by Grant Agency KEGA, grant No. 006STU-4/2023.