

## Abstract

MEMS is a miniature device or composition device that combines electrical and mechanical components. The technology of MEMS has emerged since the last few decades, although the utilization is still very limited. In the future, there is certainly a technology that can integrate MEMS into a small bullet or often called a projectile. The integration of MEMS on projectiles will bring the bullet technology to a more advanced level. There are various benefits of integrating MEMS on projectiles, for example the installation of GPS on projectiles or to improve the accuracy of shooting because with the installation of MEMS on projectile shooting path projectile can be arranged at will. There is one problem if you want to integrate MEMS into a projectile, ie MEMS can only last up to 71 degrees Celsius, while the temperature on the projectile when fired can reach a temperature of 267 degrees C. Because of that problem, it is quite difficult to integrate MEMS into a bullet. To solve this problem, modeling is necessary to determine the best location to place MEMS on the projectile using the Gauss-seidel method. By using Gauss-seidel method the MEMS laying problem on the projectile can be solved and can provide the best solution to put MEMS on a projectile.

**Keywords:** Gauss-Seidel, Mems, Projectile.