

66th International Astronautical Congress 2015

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)  
Interactive Presentations (IP)

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A PRACTICAL MODEL OF CMOS INTEGRATED HALL SENSOR

**Abstract**

CMOS Hall-effect sensors are currently used in numerous applications for controlling launch vehicles, such as the measurement of displacement, current and the condition of on-off. An accurate but simple circuit simulation model for hall plate of CMOS Hall-effect Sensor is presented. The traditional model is improved by considering the effect of high frequency, temperature, geometry and packaging stress. The model is tested and verified in condition of Huahong 1.2um CMOS technology and we achieve a much better agreement with simulation result than the traditional one, which shows a relatively high accuracy of the model.