

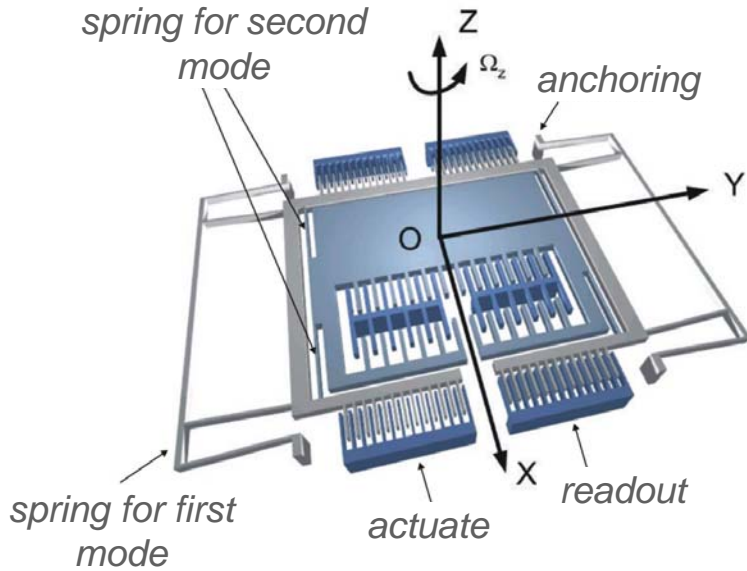


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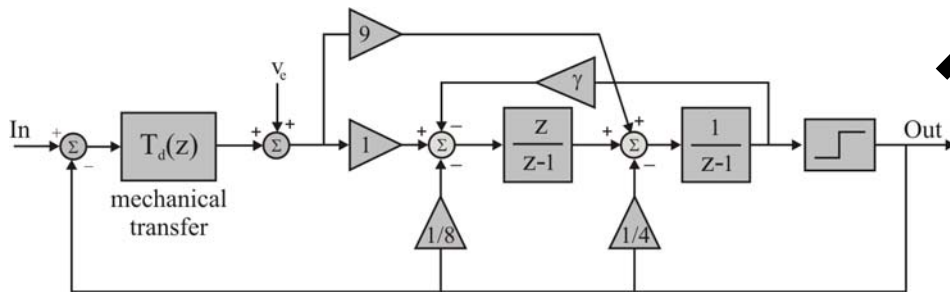
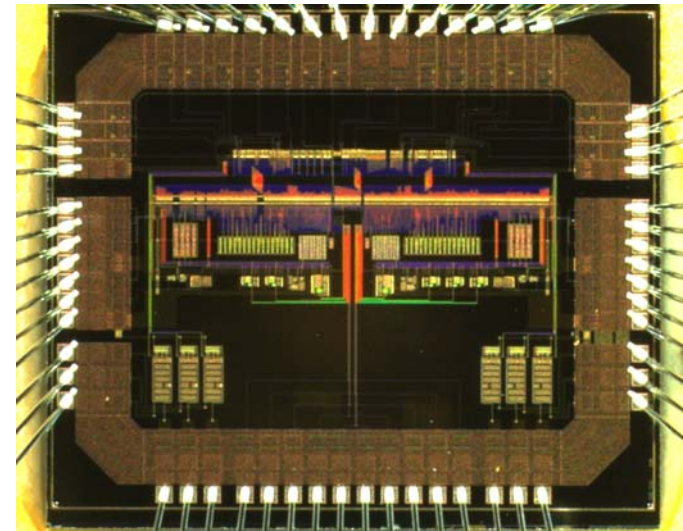
# ***Micro-Electro-Mechanical Systems (MEMS) Inertial Sensors***

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Technology Developer

- can be used to measure accelerations (accelerometers) and rotation speeds (gyroscopes).
- development of a low-cost inertial navigation systems which can take over during GPS blackouts.
- requires a multidisciplinary approach
- unavoidable technological imperfections of the mechanical structure
- appropriate system-level approach has been worked out by CHiTA to tackle these problems



Gyroscope: principle



Sensor readout with Sigma Delta force feedback: principle and implementation

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