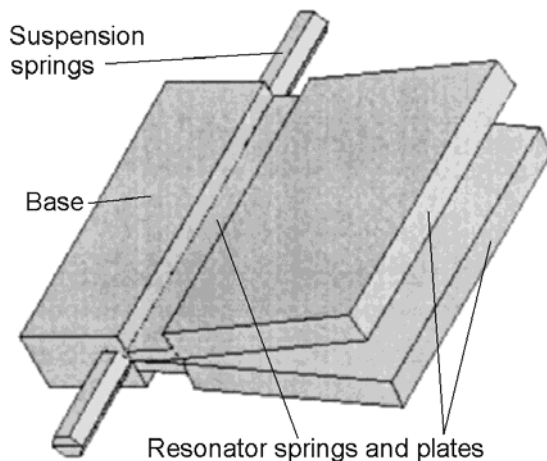
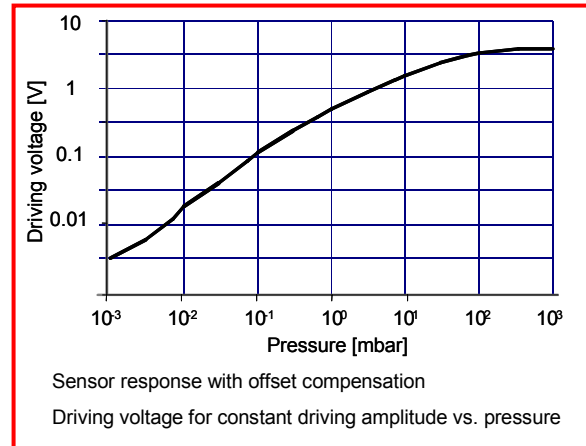
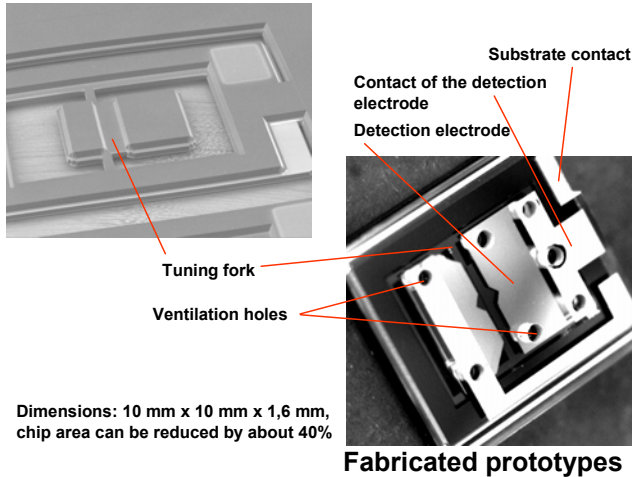


vacuum sensor



Sensor principle:

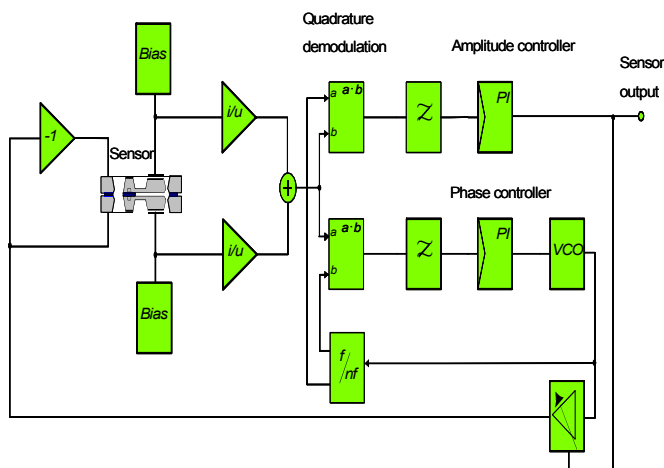
- > Pressure dependence of gas friction acting on a resonator

Resonator:

- > Tuning fork with optimised suspension

Technology:

- > Bulk micromachining



Implemented operations:

- > Generation of an AC drive signal at resonance point
- > Detection of vibration amplitude
- > Phase control loop: frequency control for resonance point
- > Amplitude control loop: voltage control for constant vibration amplitude

Output signal:

- > Amplitude of drive voltage represents the pressure