Polymer Strain Gage (P-DMS)

- Polymer paste screen printed to a PCB board
- Captures strain and compressive deformations
- Small deformations cause change in the electrical resistance
- Polymer strain gage on populated PCB board
- Direct integration into PCB design
- Cost effective solution

Further information regarding the operating principle can be found in our [video](#) and [website](#).

**Your advantages:**
- Long-term experience in the field of printed electronics
- Integration of the polymer strain gage technology at an early stage of development
- Cost of optimization starts early during the development phase
- In-house development, design and manufacturing
- Joint-development, tailored to customer needs
- Prevention of process critical adhesive bonding of polymer strain gage on substrate
- No contact (bonding) of the polymer strain gage necessary

**Possible applications for pressure-sensitive pastes:**
- As sensor for pressure distribution in shoes
- **Keystroke velocity sensitivity** for electric piano
- **Musical instruments** such as electric guitar or DJ control unit with pressure sensitive keys

**In series:**
**Printed polymer strain gage on PCB**

- Polymer strain gage in a piano (combination of piano and electric piano)
- According to an idea of Mario Aiwasian, Founder of ALPHA Pianos GmbH ([www.alpha-pianos.com](http://www.alpha-pianos.com))
- Integrated in outstanding electronic musical instrument of the highest quality, with unique technical properties and exceptional design

**Development and Innovation:**
**Printed polymer strain gage on spring steel**

- **Smart spring technology** wins innovation award at Blechexpo 2015