# Automotive Engineering 2. Measurement Systems



# **High Speed Camera**

## Photron Fastcam Ultima APX RS, model 250K

- Recording up to 1024 x 1024 px
- At maximum resolution frame rates up to 3000 pictures/s
- Maximum image rates at low resolution of up to 250,000 frames/s
- Sensitivity of the sensor: 6400 ISO / ASA with a digitization of 10 bits and 17  $\mu m$  pixel size
- Exposure times up to 1 µs allow the recording of very bright objects

# Real-Time Systems for Measurement and Control Tasks

## PXI/Compact-PCI (Fa. National Instruments)

### Autobox (Fa. dSpace):

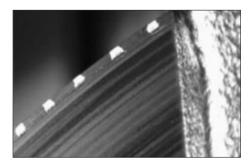
- Prozessor-Board, DAQ-Board, HIL-Board
- 7 slots (AutoBox)
- Operation with 12V, 24V and 48V vehicle wiring

### MicroLabBox (Pr. dSPACE):

- DS1202 Processor-Board
- A/D and D/A I/O Boards
- CAN Communication

### Hardware-in-the-Loop Test Stand (Pr. dSPACE):

- DS1006 Processor-Board
- A/D und D/A I/O Boards
- CAN und FlexRay Communication
- Integrated control of Suspension systhems





Source: Photron



Source: dSpace



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