

Assembly Precision

- on-module pT-measurement depends on alignment between both sensors
 - parallel displacement will lead to systematic errors in one direction
 - angular displacement will affect the systematic errors in certain sections of the strips
- misalignment can not be corrected in offline processing
- precise positioning needed already during production of the module
 - aim at alignment of “better than 20 μm ”
 - $< 0.04^\circ$ for 5 cm long strips (PS module)
 - $< 0.02^\circ$ for 10 cm long strips (2S module)
- bond pads on top side and folded bottom side of read-out hybrid must be well aligned
 - better than 100 μm
- read-out hybrids have to be well aligned to sensors
 - better than 100 μm

