INTEGRATION OF MICRO-OPTICAL COMPONENTS FOR A BLUE RAY DVD PICKUP SYSTEM

Motivation
- Mobile data storage system, blue ray laser diode @ 407 nm
- Increasing packaging density of the components leads to higher requirements on the assembly and alignment process
- Use of microelectronic system platforms
- Assembly process and alignment procedures for mass production

Our Offer
- Development of assembly and alignment processes
- Realization of high precision assembly devices
- Assembly and alignment of prototypes

Alignment technologies
By means of geometrical characteristics
- Alignment of the components using mechanical stops
- Detection of component geometry - edges and alignment structures using image processing
- Alignment accuracy: 10 – 50 µm

By means of optical functionality
- Measurement of beam parameters and intensity
- Detection of the data signal
- Alignment accuracy: 1 – 10 µm