

# Areas of Operation

## Plastics for Micro Devices

- Precision tool making
- Micro injection molding
- Two shot injection molding
- Film assisted transfer molding
- Ultra precision machining
- Micro optical and micro fluidic devices

## MID Technologies

- Hot embossing MID technology
- Laser MID technology
- Electroless plating
- Printing technology

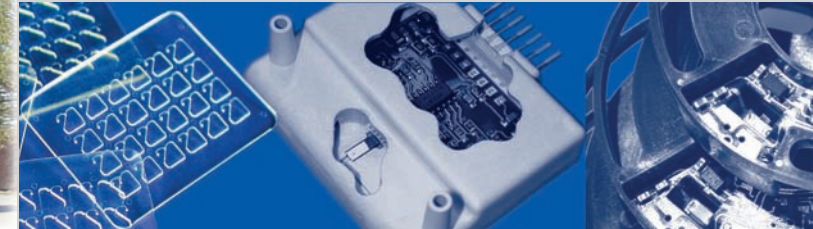
## Chip and SMD Assembly on MID

- Wire bonding
- Flip chip technique
- Lead free SMD assembly (soldering, bonding)

## Sensors and Actuators

- Touch sensors
- Inclination sensors
- Rotary encoders
- Microvalves
- Micropumps

# Contact



IZFM  
Institut für Zeitmesstechnik,  
Fein- und Mikrotechnik



HSG-IMAT is member of the  
Innovationsallianz Baden-Württemberg



HSG-IMAT is member of the  
German Federation of Industrial  
Research Associations  
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# HSG-IMAT

and

# IZFM

Experts in  
Micro Assembly Technology

# The Institute

## Competence in Micro Assembly Technology

Successful products are the results of well directed research and development, practical application of new technologies, and excellent market knowledge. Hahn-Schickard-Institute for Micro Assembly Technology (HSG-IMAT) brings these capabilities into focus and is one of the leading R & D service providers in assembly, housing, and packaging of microsystems as well as in miniaturized systems based on plastic devices, especially Molded Interconnect Devices (MID).

Many enterprises have realized their innovative product ideas with HSG-IMAT. The demand from industry has been increasing continuously. Reasons for this success are:

- Concentration on core competences
- Excellent technical equipment
- Experience in realization of innovations
- Analysis and prognosis of market trends
- Close contact to local and world-wide industry

Teams at HSG-IMAT give advice, check feasibility, develop and build up prototypes.

### HSG-IMAT

#### Institute for Micro Assembly Technology

Service provider for development in the fields of:

- Sensors & Actuators
- SMD Assembly
- MID Technologies
- Plastics for Micro Devices

# The Network

## Strength by Partnership

Networking is our strategy for a fast buildup of know-how. Our advantage: close alliances in South-Western Germany. These merge training, teaching, research, development and production. Besides the close cooperation with HSG-IMIT, HSG-IMAT maintains the collaboration with recognized R & D institutions:

- FEM Schwaebisch Gmuend
- Fraunhofer-Gesellschaft
- FZ Karlsruhe
- IMS Chips
- IMTEK, University of Freiburg
- RWTH Aachen
- University of Erlangen
- University of Magdeburg
- University of Stuttgart

Close cooperation with national and european institutions for technological support facilitates the access to microsystem technology for small and medium-sized enterprises, and fosters their own development projects.



# The Range

## Consistently Market-Oriented

The market demands new technologies with „built-in“ competitive advantages and growth chances. Microsystem technology offers such potentials. HSG-IMAT uses these consistently to develop new products for industrial customers. We concentrate especially on the following target markets:

- Automotive
- Life Sciences
- Industrial and automation engineering

The institute offers a professional service range and infrastructure geared to the industrial needs and requirements.

Our service philosophy:  
„From idea to production – one-stop-services“

Many enterprises are already profiting from the advantages of a cooperation with HSG-IMAT. We carry out development tasks directly and confidentially right up to the start of production. Industrial customers reverting to the competence and infrastructure of HSG-IMAT reduce investment and development risks. In addition, they benefit from the resources of publicly funded co-operation research.

### Your advantages

- More flexibility in your R & D organization
- Utilizing our expertise and contacts
- Simple access to public funds
- Faster realization of your product ideas
- Industry-conform project management
- Consistent range of services - from one source