DOMICRO BV



FLEXIBLE HYBRID ELECTRONICS

DOMICRO COMPANY PROFILE

DoMicro BV is a high tech company creating value by additive technologies in electronic manufacturing. As a startup DoMicro is focusing on flexible hybrid electronics market providing innovative and new technology, solutions and applications. Circuitry, transparent conductive films, OPV electrodes, transistors on flexible substrates, OLED, Lab-on-chip, wearables, IC and MEMS integrations. New products find their application into this rapid emerging industries. More information: www.domicro.nl



MEMS

Sensors



MedTech Microfluidics





Semicon Micro Assembly



Printing



Printing



Flexible Electronics Printing

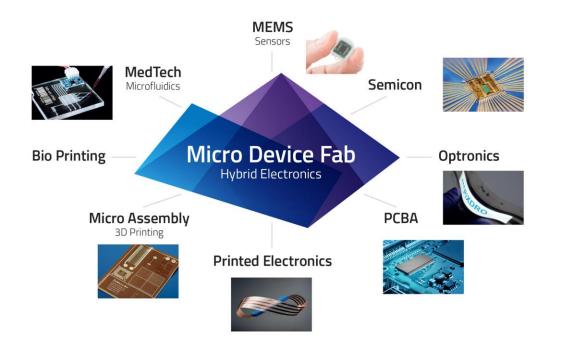
Reducing Time to Market

Lower total costs

Enabling Ramp Up to Volume Manufacturing

Protected IP

TRENDS IN ELECTRONICS



Integration in different field of application

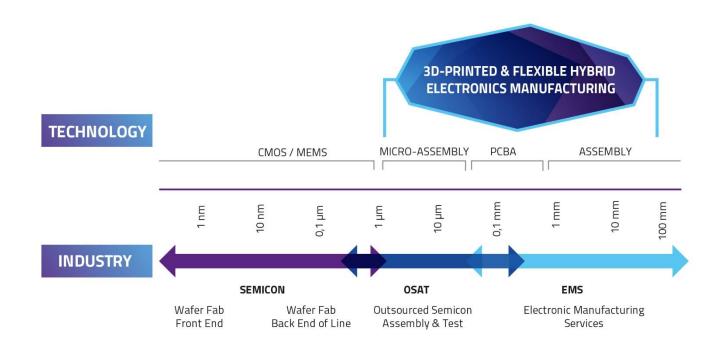
Low volume, High mix

Local versus Global supply

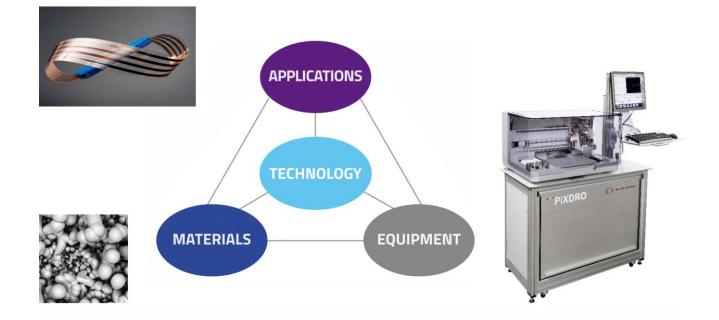
Wireless IoT

Wearables

ELECTRONICS INDUSTRY



TECHNOLOGY INTEGRATION



CONTENT



Integration of electronics in products for IoT Internet of Things:

- make things smart
- make things connected

Development of base technology:

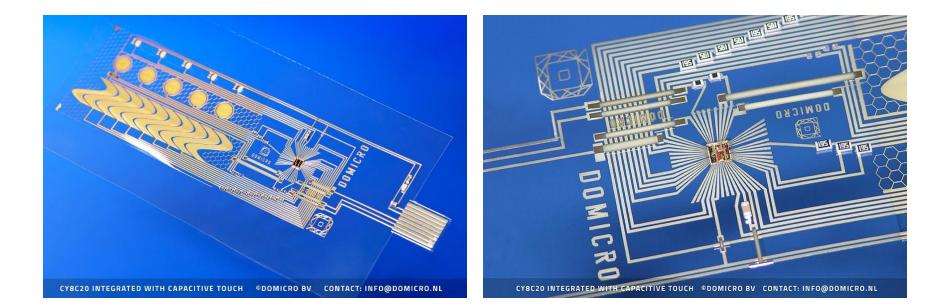
- Interconnect bare dies in foils by inkjet printing





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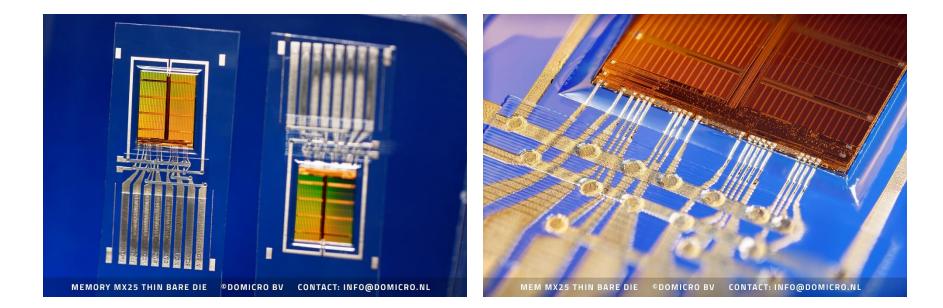
MCU INTEGRATION



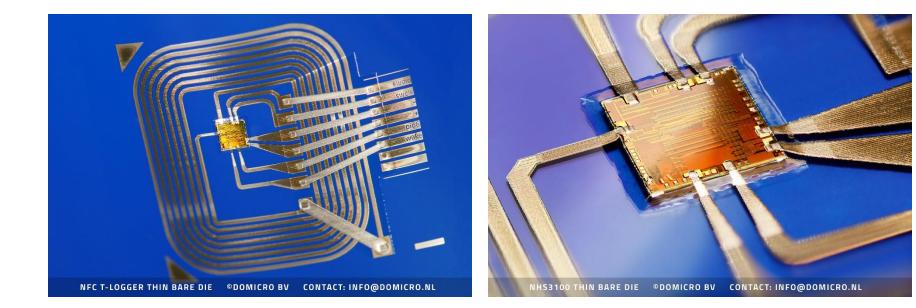




MEMORY INTEGRATION



NFC INTEGRATION



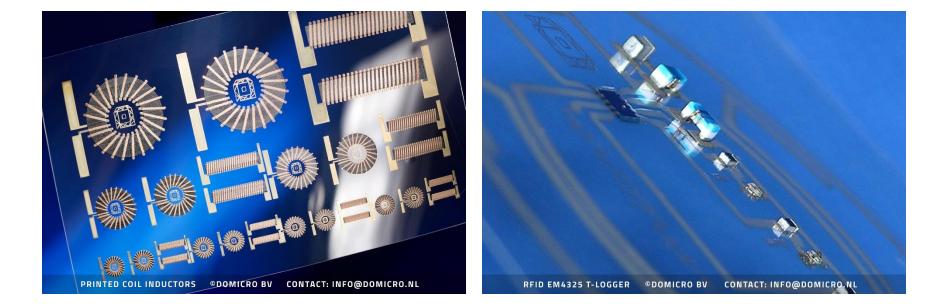




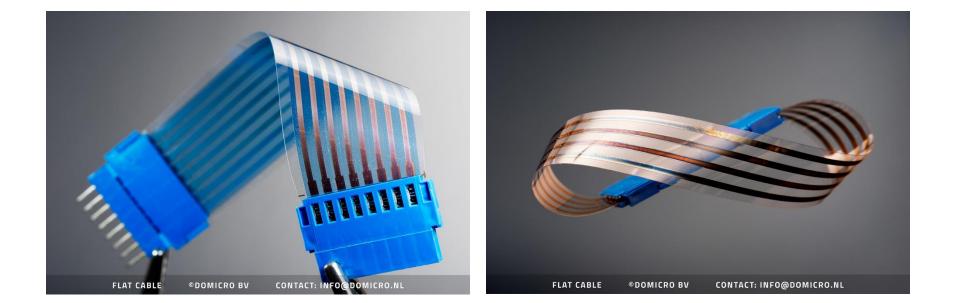
INKJET PRINTED PASSIVES



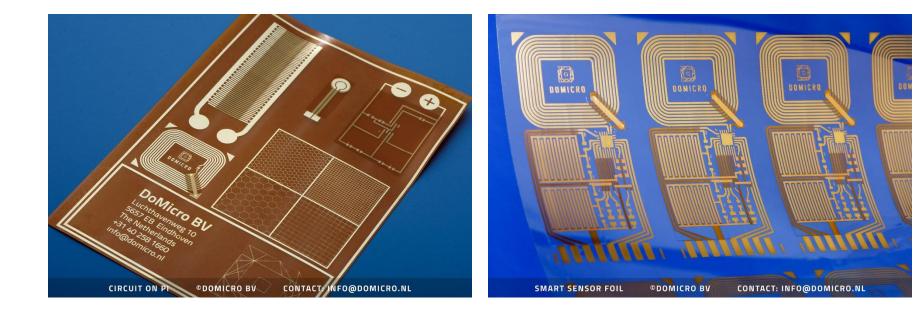
INKJET PRINTED PASSIVES



INKJET ON PEN



MULTILAYER CIRCUITS



BGA INTERCONNECTION





HYBRIDS FOR WIRELESS APPLICATIONS







FLEX BATTERY & ENERGY HARVESTING



TECHNOLOGY READINESS



TECHNOLOGY READINESS LEVEL (TRL)

- TRL 1 Basic research
- TRL 2 Applied research
- TRL 3 Critical function or proof of concept established
- TRL 4 Laboratory Testing / validation of Alpha prototype component / process

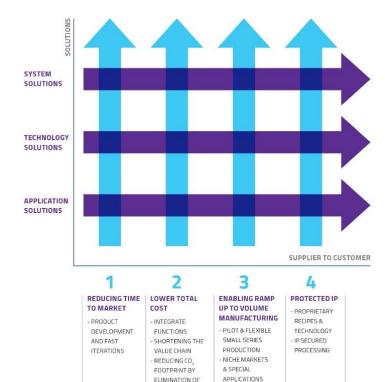
- TRL 5 Laboratory Testing of integrated / semi-integrated system
- TRL 6 Prototype system verified
- TRL 7 Integrated pilot system demonstrated
- TRL 8 System incorporated in commercial design
- TRL 9 System proven and ready for full commercial deployment

MICRO DEVICE FAB

- Integrated and automated process flow & handling
- Multi functional and versatile toolset
- Stand alone availability of tools
- Local clean room
- Shop floor control
- Process tuning

- Multi material substrates Si, Glass, Ceramics, Flexibles
- Fast NPI and ramp up from 10 → 10.000 pieces

VALUE PROPOSITION



GLOBAL LOGISTICS



MICRO DEVICE FAB



AUTOMATED PROCESS SEQUENCE







AUTOMATED TRANSPORT & PROCESSING





BUSINESS RELATIONS

Brainport Eindhoven

St Petersburg Elektrotechnical University











Europäische Unic Europese Unie

Production Technology for Flexible Hybrid Electronics

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