



## Services for electronics

### Tape & Reel packaging

- Packing SMD, axial or radial components with polarisation control
- Drying SMD components acc. to the IPC/JEDEC J-STD-033
- Restoring cover tape
- Changing the arrangement of components on the tape
- Reconstruction of damaged tapes, splicing tapes
- Adding cover tape extender
- Packing into ESD-S and MBB bags in vacuum and in nitrogen atmosphere
- Packaging labeling
- Packaging with visual inspection of pins



Full ESD control in line with **IEC 61340**

Packing in line with **IEC 60286**

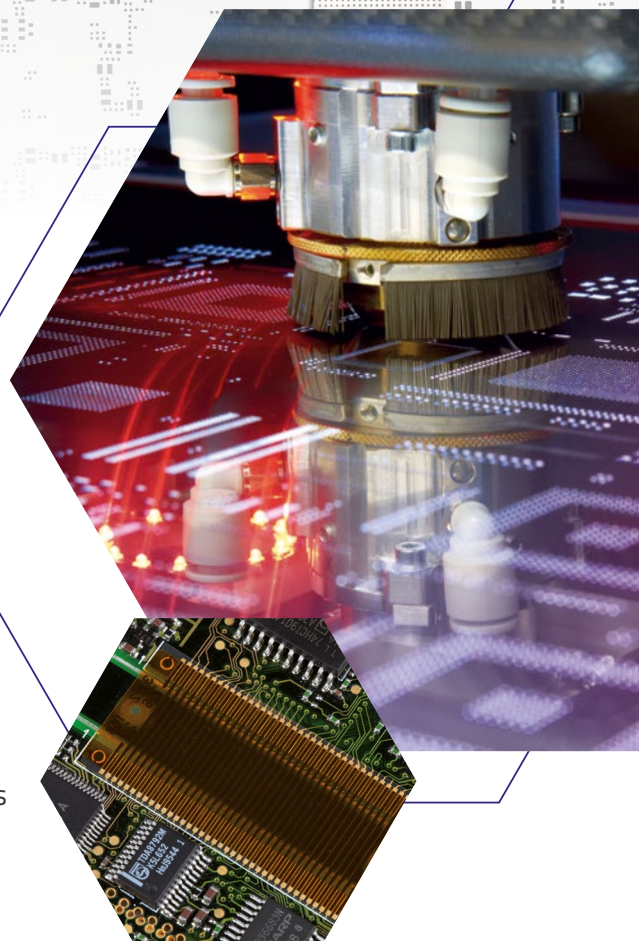
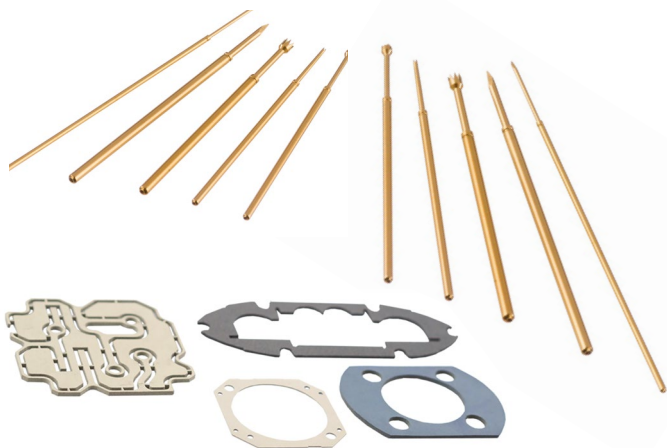
### Consumables:

- Carrier tapes
- 8–72 mm cover tapes
- 7", 13" reels
- ESD packaging materials:
  - ESD-D, ESD-S, MBB bags
  - ESD foils
  - Moisture absorbers and indicators
  - Labels



## Auxiliary EMS services

- Laser cut SMT stencils: step up/down, with nano coatings, nickel, "fine grain", frameless, VectorGuard™, aluminum frame
- X-Ray with analysis – electronic components, connectors, PCBs, others
- Flying Probe electrical testing
- Design and manufacture ICT and FCT testers
- Selective conformal coatings, potting
- Hot-Bar soldering – Flex PCB, LCD
- Wire Bonding – Chip on Board
- PCB cleaning acc. IPC and MIL standards
- Ionic contamination purity measurements
- Tape & Reel packaging
- THT – shortening, straightening and bending connections
- Drying SMD components acc. to the IPC/JEDEC J-STD-033
- PCBA laser depanelization – Flex, Rigid-Flex, Semi-Flex, composites
- Laser selective removal protective layers and copper
- PCBA repairs, including BGA and  $\mu$ BGA reballing
- Wave soldering masks – design and manufacture
- PCB mounting frames
- ESD – safe packaging
- Cutting and pouring gaskets, including EMC
- Cutting thermally conductive pads
- Cutting Kapton tape circles and wave soldering masking elements
- Repacking materials (resins, adhesives, pastes) into smaller containers, also UV-resistant ones: syringes, tubes



## Consumables for EMS

- Materials for joining SMT tapes
  - Splice tapes
  - Extender tapes
  - ESD splice tools
- CircuitMedic PCB repair kits: pads, gold-plated contacts, traces, vias
- ESD cleaning sticks, dust-free
- Dust-free wipes, also soaked in IPA
- ESD cleaning rollers
- Aculon NanoClear nanocoated wipes for SMT stencils
- Inspection arrows
- Temperature indicators
- Materials for packing ESD components into tapes
  - cover and carrier tapes
  - reels, ESD packaging materials, MBB bags
  - JEDEC trays
  - ESD dedicated packaging
- Dispensing needles, syringes, applicators
- Test probes

**Please contact us for further information**

### EMS - Electronic Manufacturing Services

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