dresden elektronik

Manufacturing technologies

From procurement to quality assurance

From prototype to large-scale production - we fulfill individual customer requirements quickly and reliably. Whether printed circuit board assembly or soldering processes, we deliver optimal results, thanks to flexible production organization.

Excerpt

Printed circuit board assembly

Solder paste printing | SMD | THT | Special technologies

Printed circuit board assembly is the core of our ESD production area. High-quality production technology, qualified personnel and carefully selected „edge technologies" result in top quality for demanding customers. We currently produce with a capacity of up to 320,000 components per shift for batch sizes up to 100,000 pieces.

Automatic and manual soldering

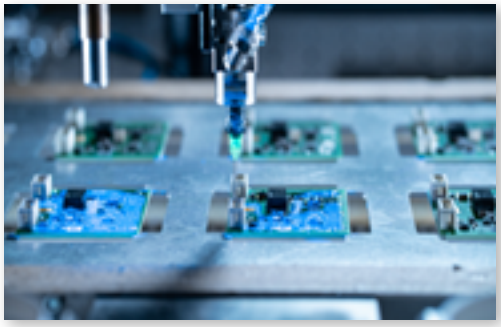
Soldering technologies according to the current state of the art in process engineering

With this almost complete range of services, we are also ideally equipped for complicated assemblies. Our high-tech equipment guarantees the best soldering quality and highly qualified personnel with years of experience makes the (almost) impossible possible. All soldering processes take place under permanent nitrogen enrichment of the air.

Passivation | Lacquer | Potting

Protective coatings for higher quality and longevity of your PCBs

Under harsh operating conditions (e.g. automotive), a partial or full coating or potting considerably extends the service life of your products. We supply assemblies that are optimally adapted and protected to different operating conditions. With our processes, the failure rates of your products thus remain low.



All manufacturing technologies as an overview

Overview of manufacturing technologies at dresden elektronik

Process	Individual steps	Prototyps	Size < 1000 Stück	Size > 1000 Stück
Procurement	Own material purchase	x	x	x
	Provisions from customer	x	x	x
	BE-Substitution / Reliability		x	x
	Special parts		x	x
	Stocking with critical FAs		x	x
BE storage / preparation	Drying of components (MSL)	x	x	x
	Vacuum packaging	x	x	
	Belt service		K	K
	Profiling and cutting	x	x	x
SMD placement of LP	Solder paste screen printing (leaded / lead-free)	x	x	x
	Printing / dispensing of SMD adhesive	x	x	x
	Automated assembly	x	x	x
	Serial numbers / traceability	x	x	x
	Reflow soldering (leaded / lead-free) under nitrogen-atmosphere	x	x	x
	Sample assembly		x	x
THT placement	Manual assembly	x	x	x
	Wave soldering (leaded / lead-free) under nitrogen atmosphere	x	x	x
	Selective soldering (leaded / lead-free) under nitrogen atmosphere		x	x
	Press-in	x	x	
Unit inspection	AOI		x	x
	Functional testing, HF testing	x	x	x
	Electrical safety testing	x	x	x
	Boundary Scan		x	x
	Burn-in	x	x	x
	Flying Probe	x	x	
LP singulation	Debris separator with roller blade	x	x	x
	Bar Separator	x	x	
BG washing / passivation	Ultrasonic / Spray Cleaning	x	x	x
	Spray painting / dip painting	x	x	
	Selective coating	x	x	x
	2K potting	x	x	x
Inspection / Repair	BGA repair	x		
	X-ray / ultrasonic inspection	K	K	K
	Camera inspection	x	x	
Cable assembly	cutting to length / stripping / crimping / pressing	x	x	x
	Cable inspection	x	x	x
Labeling	Engraving	x	x	
	Screen printing / Laser marking	K	K	K
Mechanical processing	3D CNC milling with up to 5 axes	x	x	x
	Deburring	x	x	x
	Engraving	x	x	
	Turning / Drilling / Threading / Sawing	x	x	K
	Sheet metal parts processing	x	K	K
	Injection molding of plastic parts	K	K	K
Device construction	Assembly / adjustment of electronic devices	x	x	x
Quality assurance	Initial sample inspection report	x	x	x
	Acceptance test certificate	x	x	x
	8D report	x	x	x

K: in Kooperation

Quality made in Germany

- Certification according to ISO 9001:2015
- Production according to guideline
- IPC-A-610 (acceptance criteria
- of electronic assemblies)
- Quality control according to sampling standardDIN ISO 2859 and DIN EN 10204-3.1 (independent of production)

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