

# ECD

## Electronic Components

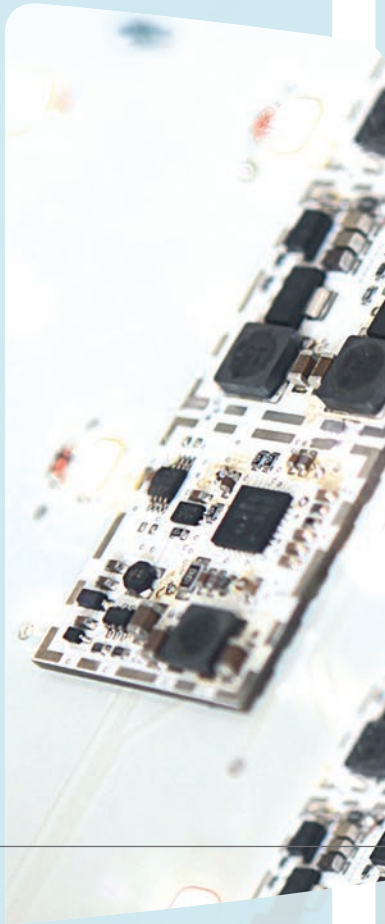
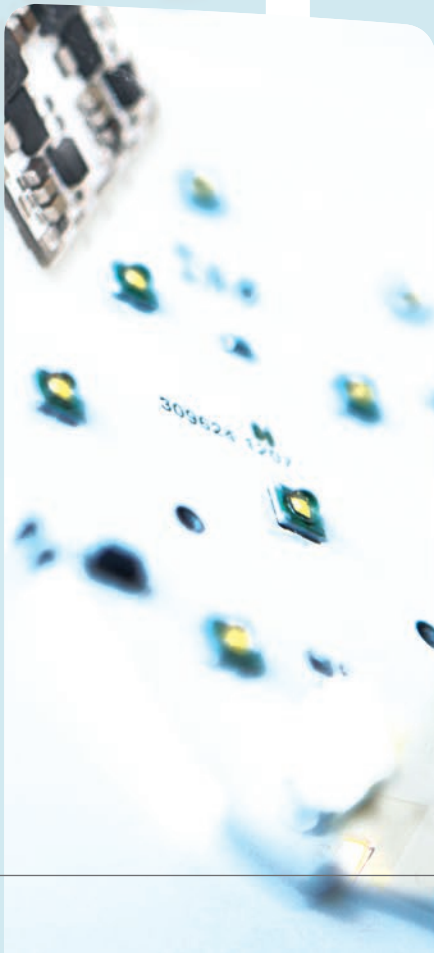
Technological Development



Customized LED Solutions



GPS Tracking Devices





# ECD

## Electronic Components

### Quality with Tradition

ECD Electronic Components GmbH Dresden has emerged from a department of Siemens Nixdorf in 1997. Ever since we keep establishing our position on the global market in the fields of customized cable production, circuit board assembly, LED solutions as well as telematics. Our expertise is based on the long-time experience of our employees and the confidence in the visions of our young generation. Since 2007 we have been developing and manufacturing our own innovative products.

### Lead through Research & Development

In 2014, we added a technical center to our premises of two already existing production halls. Being a place of research, development, and further education, students and trainees benefit from a creative and highly technological environment. Here, solutions for complete and high-level project plans are generated in cooperation with educational institutions and other industrial businesses.

### From Idea to Serial Production

The ideal infrastructure at industry park Dresden-Gittersee makes it possible to meet our customers' requirements at its best. Our primary goal is to realize your production orders as well as complex development projects. In close cooperation, we will turn your ideas into a finished product that may be followed by serial production. Made in Germany.



**Conceptional Draft**

- listing your requests
- costumer consulting
- project handling in superb accordance to the production process
- provision of specification sheet

**Software Development**

- $\mu$ -controller and DSP
- programming languages: C, C++, Windows surface

**Hardware Development**

- circuit design: analog/digital
- circuit simulation
- controller application
- circuit-board layout
- housing construction

**Prototyping**

- laboratory setup
- initial sample
- technical inspection
- sampling
- serial production

**CAD Tools**

- Solid Works
- Auto-CAD
- Altium Designer
- LT-SPIICE

**Thermal Management**

- thermal simulation
- thermal optimization

**Mounting of LED Boards According to Customer Requirements**

- all kinds of conventional LEDs
- different board materials
- mounting of complete LED engine

**Inspection of Your LED board**

- 100% functional testing
- lighting measurement

We also offer a great variety of standard applications.

**Customized LED Solutions**

- advisory service and support from concept until finalized light engine
- light-engineering calculation
- layout development
- adjusting & further development
- serial production

**LED Controlling**

- mounting of already existing WLAN-DMX controllers
- customized adjustments and further developments
- expertise in all conventional control reports (DMX, Dali, KNX, 1...10V, PWM)
- from layout development until serial production

**Extremely Solid Tracking Systems Solid II & Longlife II**

- up to 10 Hz tracking
- integrated antenna
- firmware update "over the air"
- motion & shock sensor included
- offline tracking from up to 100,000 positions
- rechargeable batteries or highly capacitive primary cells
- protection classification: IP68

**Easy**

- up to 10 Hz tracking
- firmware update "over the air"
- motion & shock sensor included
- offline tracking for up to 100,000 positions
- supports SMS-tracking
- large reserve battery for safety

**GPS Tracker for Special Applications Lock**

- combined with manipulant-safe steel rope
- rechargeable and maintenance free

**Rail\***

- device for mileagecounting of freight cars
- extremely solid construction

**Shock\***

- device for shock detection of horizontal and vertical bumps for freight cars on railroads
- extremely solid construction

\* in cooperation with one of our system partner

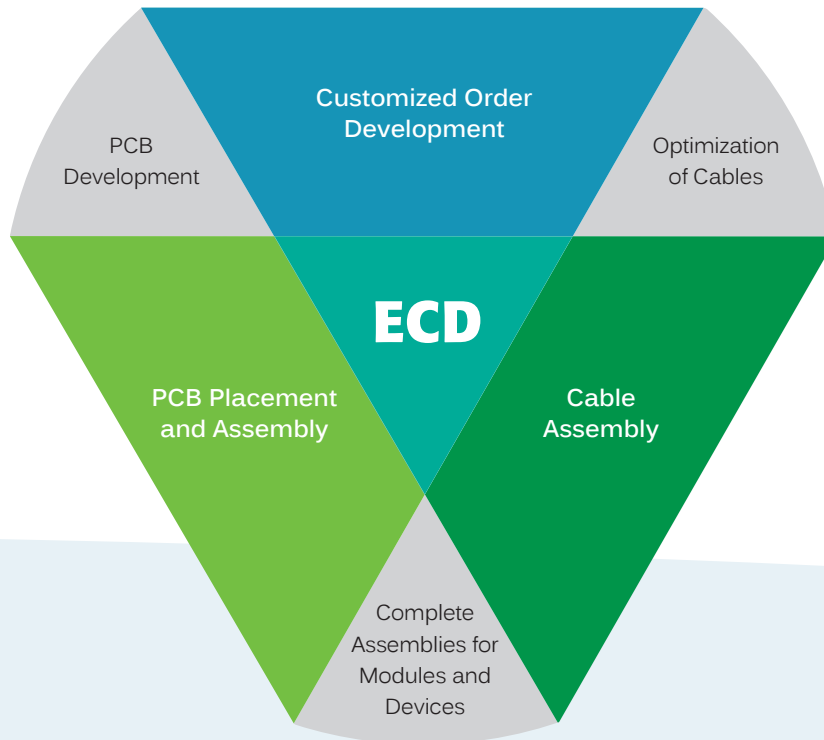
**customized GPS tracking solutions**

- development of requirement analysis
- provision of specification sheet
- advisory regarding desired solution
- concept and draft of boards and firmware
- support at implementing into customer's system
- construction and mounting of complete device

**We guarantee the high quality standards of our products and services.**

All mounting processes are adjusted according to Standard IPC-A-610. Quality checks are being carried out at every step of process according to control and sampling plans, however, also according to our customer's need.

Our company according to after DIN EN 9001:2008 and UL Wiring Harnesses.



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**Directions to our premises**

Find us at industry park Dresden-Gittersee right next to motorway A17, exit Dresden-Südvorstadt.

[www.ecd-online.de](http://www.ecd-online.de)



market proximity  
innovation quality economic efficiency  
on-time service flexibility