

E3
series

The Power of Electrical Engineering

If you want...

the latest in Electrical CAD software for your electrical engineering designs, with a long-term development strategy

object-oriented design with the security of online checks

the ability to begin anywhere in your electrical design workflow

to work online, on the same project, simultaneously with other users

easy operation under Windows® yet optimized for electrical engineering

to generate intelligent fluid schematics for hydraulic and pneumatic systems

to design cables and harnesses in E-CAD

to reduce production wiring costs with preassembled cable modules

to integrate E-CAD with ERP, PDM and other systems directly through a COM interface

... then let us introduce you
to the E³.series



E³.series - Introduction

The E³.series is a modular engineering system for electrotechnical, wiring and wiring harness, pneumatic and hydraulic design.

It supports the user throughout the entire engineering process, from development to manufacturing. By being completely Windows®-based, the E³.series is easy to learn and use.

E³.series uses the latest technology and its success is proven with over 1,400 customers worldwide - making it a safe investment in your E-CAD future.

Object-oriented Architecture

The E³.series is based upon an object-oriented database with all modules feeding back to a single data structure. There is no data transfer between the individual modules, ensuring that errors are avoided while increasing the quality of the results and ensuring any necessary changes are made efficiently.

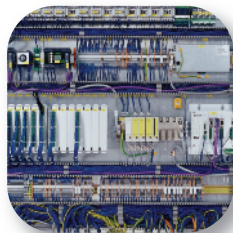
Integration

The bi-directional programming interface permits access to the object-oriented database.

Integrated interfaces make it possible to import and export DXF/DWG, TIFF, GIF, JPG, PDF, DGN, CGM and VRML, STEP AP-214 data. E³.series accepts data from other ECAD systems and is easy to integrate into your existing design environment, with PDM, ERP or 3D M-CAD systems.

Multi-user

The multi-user option of E³.series Enterprise makes simultaneous engineering possible, significantly reducing the lead time of your project.





E³.series Optional Modules

E³.formboard

For manufacturing of harnesses, the E³.formboard option offers additional functions to create a scaled 1:1 drawing of a harness. The formboard drawing is a view of the cables and harnesses defined in the schematic drawing.

- manufacturing length definition on any segment
- automatic segment adjustment
- predefined adjustment direction
- dynamic connector tables
- easy rotation of branches
- wire assignment in connector tables
- addition of cable protection (e.g. shrinking tubes) and fasteners
- addition of nail points and branch attributes

E³.view

Distribute original design data. The intelligent circuit diagrams generated in E³.series are available for viewing. View complete documentation, do a quick search and print as required – a qualified data exchange with production, service, the supplier and the customer is guaranteed. This module is available free of charge.

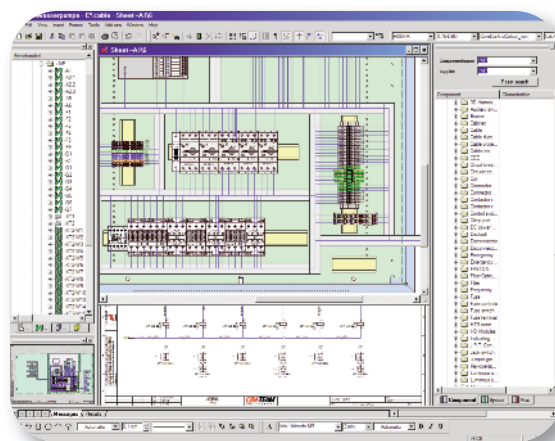
E³.redliner

For use in designing, implementation and production phases. In addition to E³.view functionality, any required modifications to graphics and text can be documented with this module. By exchanging the redliner information, modifications can be completed in the E³.series original drawings. Individual changes are only a mouse click away by using the simple search function.

E³.panel

Connect the panel layout with the corresponding schematics online and generate complete documentation for production. Automatically calculate wires and connection routes enabling preassembly of wires and cables.

- panel layout
- automatic wiring
- cross-section checks
- control wiring machines, drilling machines, etc.



E³.panel

E³.series - Industry Solutions

Aerospace / Defense

E³.cable optimizes the structure of your wirings by managing effectivities. Structured wirings according to ATA Chapter, are also supported. Disconnects can be displayed automatically as plugs or receptacles. Bundles, wire numbers and additional attributes can be visualized more easily. Online and design rule checks guarantee excellent results.

Automobiles

From concept development through system and cable design, E³.cable assists you every step of the way. Plug-ins can be used to run customer-specific programs i.e. to assign specific type and function remarks to the E³.cable object. Direct connection to your integrated design environment eliminates duplicate input and design errors.

E³.cable supports the STEP AP212/KBL- and STEP AP212/ELOG-Standard.

Machinery

E³.schematic and E³.panel offer a comprehensive array of specific functions for the development of machines. Automatic functions in placement of components and the definition of connections make it easy to draw a schematic design. Once created, the terminal plan is always correct – the object-oriented architecture of E³.series makes this possible.

Wires and cables are easily handled within E³.series. In parallel the physical build up of the cabinet can be developed. Cable ducts and mounting rails in addition to snap functions speed up the design process. Automatic routing calculates the exact length of the wires in the cabinet. Interfaces top strip, cut and mark machines, drilling and milling machines offer the data flow into manufacturing. E³.series supports standards – IEC 61246 for electrical design and STEP AP214 for the connection to 3D mechanical systems.

Appliances

Import circuit board connector data directly into your documentation. The complete connector description with corresponding signal information is available at the press of a button. With it you can generate an overview of the association between electronic components. Additional devices can be placed and easily connected using E³.cable.

Commercial Vehicles

E³.cable supplies components with the appropriate mating connectors allowing you to choose from all existing cable harness connector types. Connector pin terminals, single-wire sealing and blind seals are managed down to every single pin. Placing physical objects like hoses, tubes and clips, allows you to define the cable as required.

The E³.cable 3D harness design bridge synchronizes all relevant data with 3D harness design systems.

Railways

E³.cable, together with E³.panel, makes it possible to develop locomotives, railway cars and complete trains. The internal assembly and wiring of junction boxes as well as the overall topology of the different wagons where these junction boxes are placed and routed is covered by E³.series. Using the multi-user environment, multiple engineers are able to work simultaneously in the same project – always under the control of the object-oriented E³.series design kernel. This offers the complete system overview, specific documents for manufacturing and service, up to CNC data for strip, cut and mark machines.



About Zuken

The Challenge

More quality, more functionality, in less time, with less cost; it's a common story in today's market place. The increased competition and requirement to operate on a global scale, makes these end-user demands ever more challenging to meet. So companies need to be innovative and dynamic to stay one step ahead of the game – this is where Zuken can help.

What We Do

Zuken works globally with leading companies to optimize their electrical and electronic engineering design and related manufacturing processes through the provision of leading-edge software and consulting services. Our unique combination of proven experience, technological expertise and agility creates best in class solutions. Our transparent working practices and belief in integrity in all aspects of business produce long lasting and successful customer partnerships.

Security of Solid Foundations

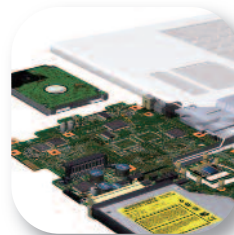
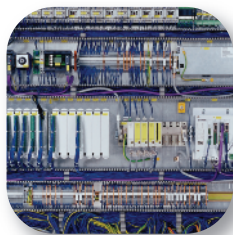
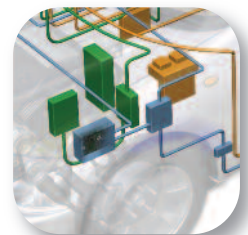
Zuken's robust market position is reinforced by an established position in the industry with over 30 years experience, and solid financial foundations. As a stable multinational company, listed on Tier 1 of the Tokyo Stock Exchange, Zuken is able to remain focused on being a long-term innovation and growth partner.

The security of an investment by partnering with Zuken is further reinforced by the company's people – the foundation of Zuken's success. Coming from a wide range of industry sectors, specializing in many different disciplines and advanced technologies, Zuken's people are able to relate to and understand each company's unique requirements.



Electrical & Electronic Engineering

- Our focus, your benefit



Americas

North America

Zuken USA Inc
Westford, MA 01886, USA
Tel: +1 978 692 4900

Asia

Japan

Zuken (Worldwide Head Office)
Yokohama, Kanagawa 224-8585, Japan
Tel: +81 45 942 1511

China

Zuken Inc. (Beijing Representative Office)
ChaoYang District, Beijing, China, 100027
Tel: +86 10-8447 5076

Korea

Zuken Korea Inc
Seoul 135-283, Korea
Tel: +82 2 564 8031

Singapore

Zuken Singapore Pte Ltd
#22-05 Gateway East, Singapore 189721
Tel: +65 6392 5855

Taiwan

Zuken Taiwan Inc.
Taipei 110, Taiwan
Tel: +88 6 2 7718 1116

Europe

Germany

Zuken GmbH (European HQ)
D-85399 Hallbergmoos, Germany
Tel: +49 89 607696 00

CIM-TEAM GmbH

D-89079 Ulm, Germany
Tel: +49 7305 9309 0

CIM-TEAM GmbH

D-30659 Hanover, Germany
Tel: +49 511 6466 79 0

Switzerland

CIM-TEAM GmbH
CH-5430 Wettingen, Switzerland
Tel: +41 56 4370890

United Kingdom

Zuken UK Ltd
Bristol, BS32 4RF, UK
Tel: +44 1454 207801

France

Zuken S.A.
91974 Les Ulis Cédex, France
Tel: +33 1 69 29 48 00

Italy

Zuken S.r.l.
20090 Milanofiori Assago, Milan, Italy
Tel: +39 02 575921

Netherlands

Zuken B.V.
NL-6002 EE Weert, The Netherlands
Tel: +31 495 583377