



We drive AURIX to success  
**AURIX Services for Automotive & Industrial**

> AURIX Services

HITEX: An AURIX™ Preferred  
Design House (PDH)





Questions about AURIX? Ask us  
**AURIX Services for Automotive & Industrial**

The AURIX architecture combines extreme high performance with advanced safety features“, says Ralf Koedel, Marketing Manager at Infineon Technologies, and adds: „Hitex supports the complete process of a sophisticated development with comprehensive safety know-how. Such an experienced partner is able to deliver complete complex AURIX designs quickly, which in turn shortens time to market.“ This is the reason why Infineon recommend Hitex as Preferred Design House for AURIX.

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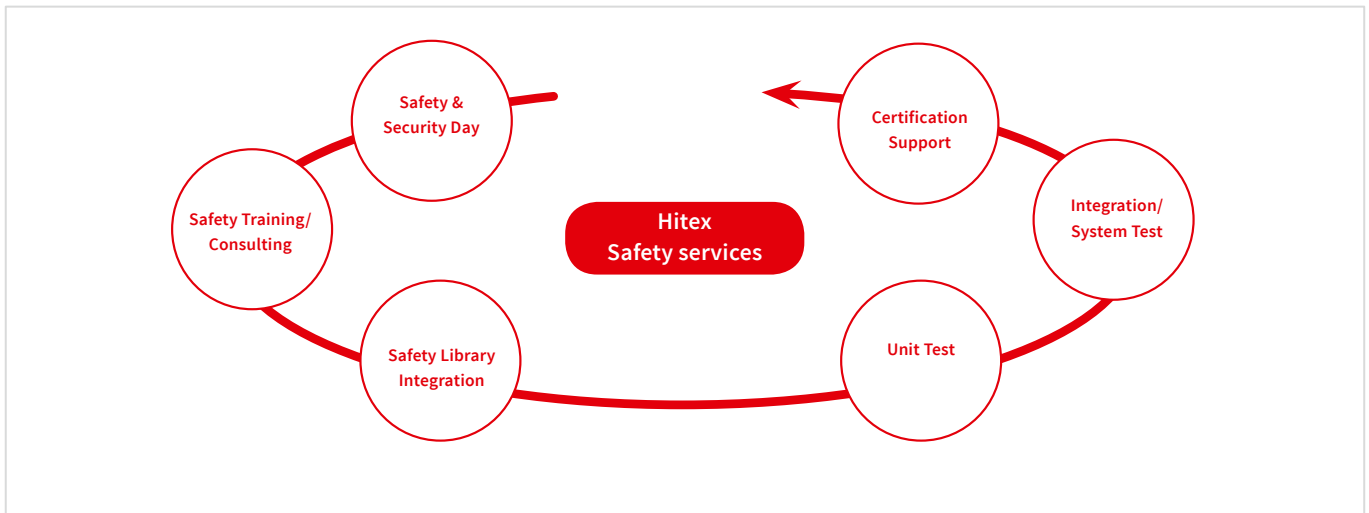
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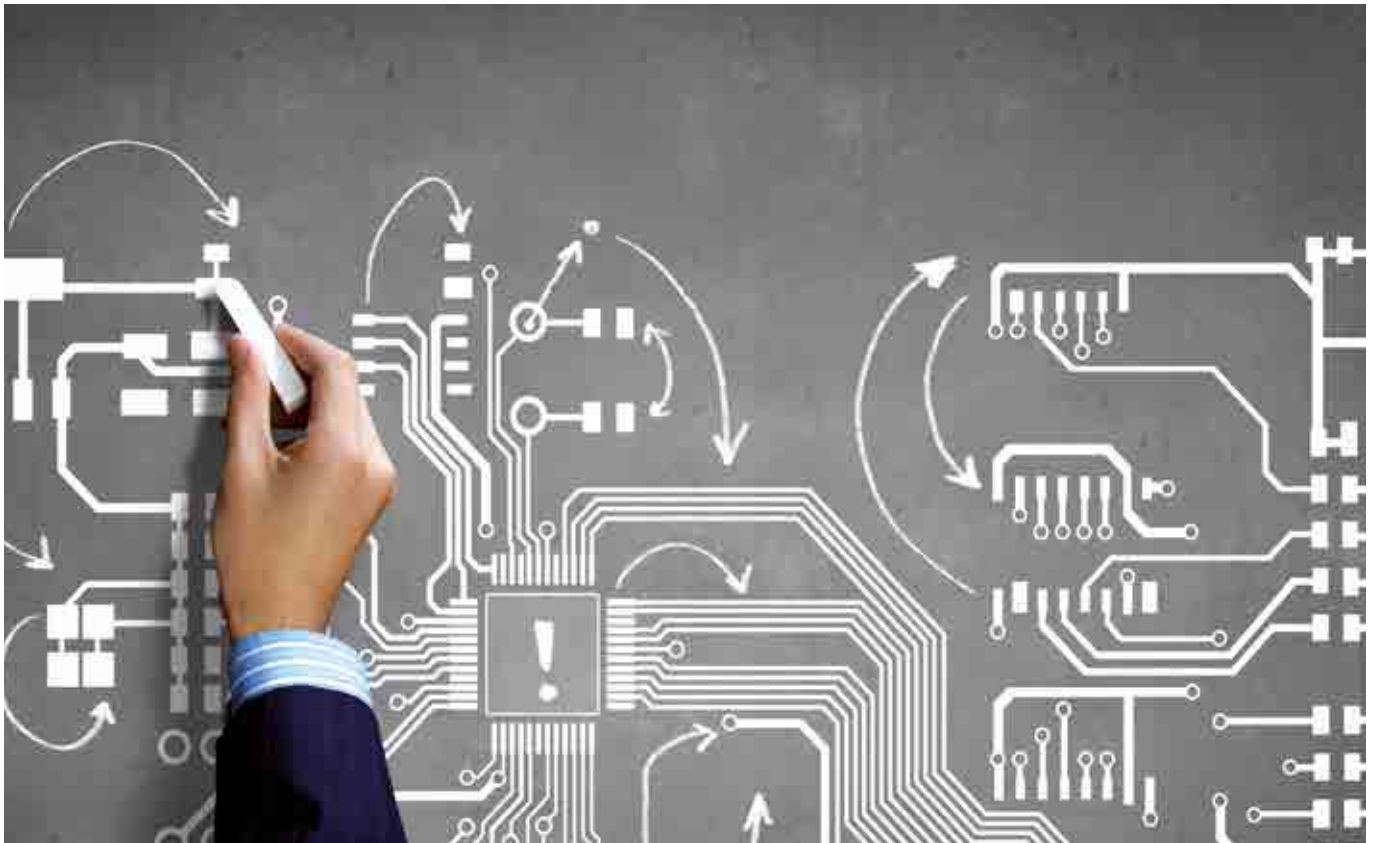
# Hitex

## Consulting and Training

Hitex will provide AURIX microcontroller start-up assistance as well as training and consultancy surrounding tools, middleware, functional safety and security. We can also provide assistance with achieving certification.



- ✓ AURIX  $\mu$ C architecture, peripherals, applications, concepts
- ✓ Tools for AURIX (compiler, evaluation boards, adapters etc.)
- ✓ Middleware (SAFERTOS, SafeTlib, SafeTmon, AUTOSAR MCAL drivers)
- ✓ Functional safety  
(SIL/ASIL, IEC 61508, ISO 26262, ISO25119)
- ✓ Explanation, discussion of safety concepts
- ✓ Introduction, explanation of the FMEDA
- ✓ Security
- ✓ Certification requirements
- ✓ Training and more ...



## Engineering

With a vast array of experience gained from numerous customer projects behind them, the engineering team at Hitex can either take on the whole project, including both software and hardware, or just the AURIX element to speed up the delivery of your project.

### Software

- Software detailed design specification
- Implementation of software (HAL, low-level drivers, AUTOSAR, GUI)
- Test specification
- Unit testing
- Code reviews

### Hardware

- High speed digital design
- Schematic entry (several EDA tools)
- PCB layout
- FPGA design
- Test specification
- Mechanical design (housing, packaging)
- Production of prototypes

Record of successful development projects with:



**BOMBARDIER**

**Rexroth**  
Bosch Group

**Continental**

**DENSO**

 **KNORR-BREMSE**

**BOSCH**



... and many others

## Testing

Unit and Integration Testing is a part of the development which can easily be outsourced. Hitex's test experience ranges from testing according to QM standard up to SIL3/ASIL D.

- ✓ Unit Testing, Integration & System Verification and Validation:  
Perform unit tests of software modules with validated unit test tools (like TESSY)
- ✓ Perform system tests
- ✓ Perform integration tests

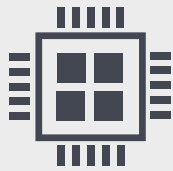




Tools for profit? We have them!  
For Evaluation, Debugging, Testing etc.

# Development Tools

Starting with the humble evaluation board, our range of development tools contains everything you need for a professional result. From compilers and debuggers right up to unit test and static code analysis software tools, we have the right tools for the job every time.



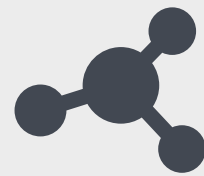
**AURIX  
Evaluation Boards**

Hitex evaluation tools and starter kits make it possible to begin your first software development project quickly and efficiently. Hitex offers a variety of evaluation boards as well as starter kits.



**PLS UDE - Universal Debug  
Engine for AURIX**

The UDE (Universal Debug Engine) is a state-of-the-art development workbench for application development. With UDE you can easily organise your projects.



**Hightec C/C++ multi-architec-  
ture and multi-core suite**

The HighTec Development Platform includes powerful wizards, version controls, optimisation for Auto-Coding and also Multi-core support.



**Break Out Adapter for  
Emulation Devices**

Fast and easy access to detailed trace information with the adapter from Hitex.



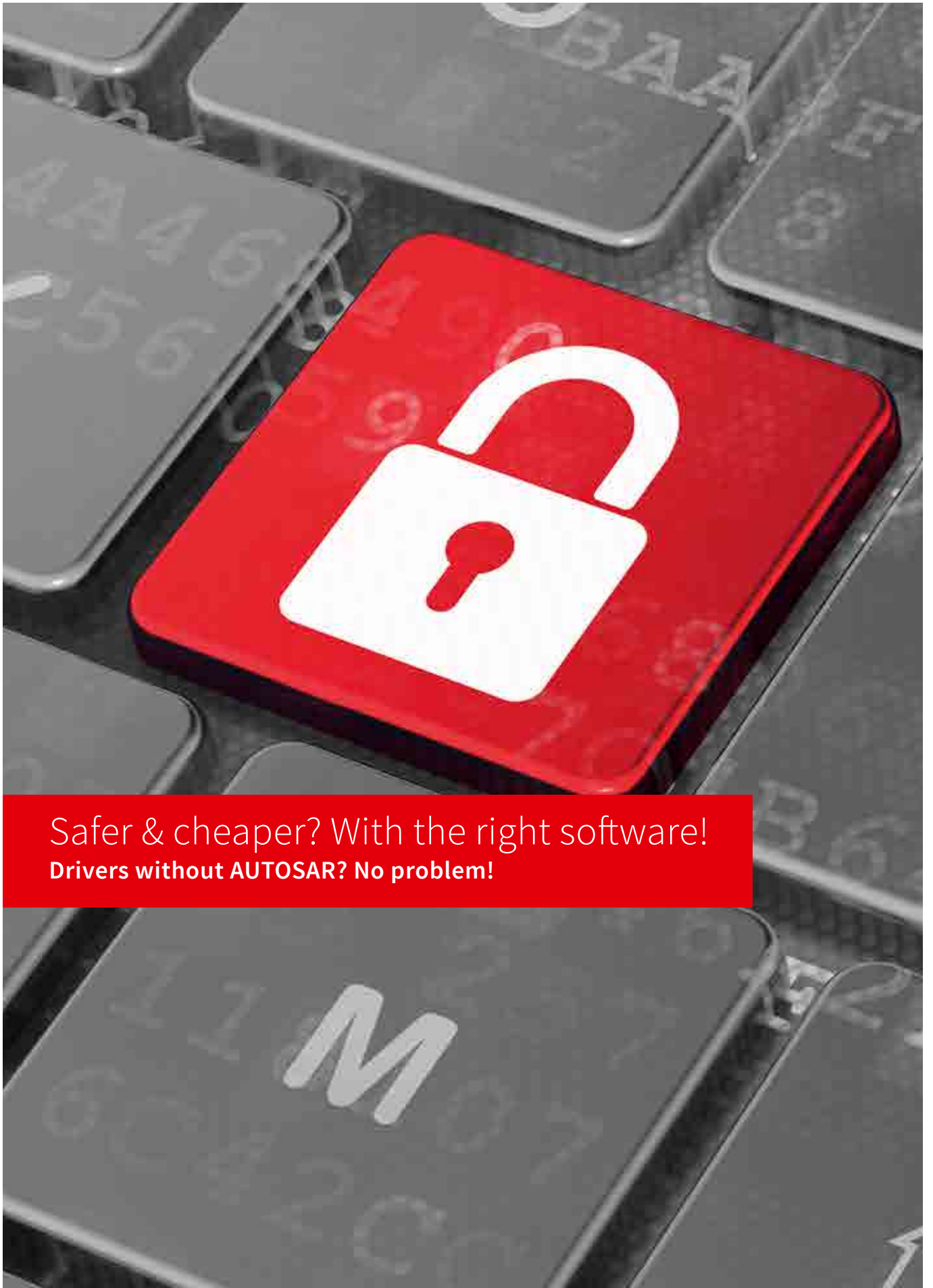
**Unit Test Tool  
TESSY and CTE**

TESSY performs automated dynamic module/unit and integration testing of embedded software and determines the code coverage along the way.



**Static Code  
Analysis Tool Klocwork**

Static code analysis is about analysing source code without executing the code to find potential bugs, vulnerabilities and security threats.



Safer & cheaper? With the right software!  
**Drivers without AUTOSAR? No problem!**



# Software Components

Instead of re-inventing the wheel, professional software components with the ability to achieve certification according to IEC61508 or ISO26262 can speed up your project. Hitex is an embedded software partner/consultant that helps your development team significantly improve their productivity while at the same time shortening development times.



**PXROS multi core operating system**

The current version PXROS-HR improves the concepts of encapsulation and robustness by using fine granular hardware protection mechanisms (MPU), available in modern microcontrollers like the AURIX.



**SAFERTOS**

**SAFERTOS** is a pre-certified real-time operating system (IEC 61508-3 SIL 3 certified). The operating system supports all common 32-Bit microcontrollers.



**SafeTlib safety library and Safe Tmon**

The PRO-SIL™ SafeTlib / SafeTmon package includes everything you need for certification (configurable driver library, user manuals, Safety cases).



**Autosar MCAL device driver**

Hitex provide the AUTOSAR compliant Low Level Driver for Infineon's AURIX and also professional services and support.



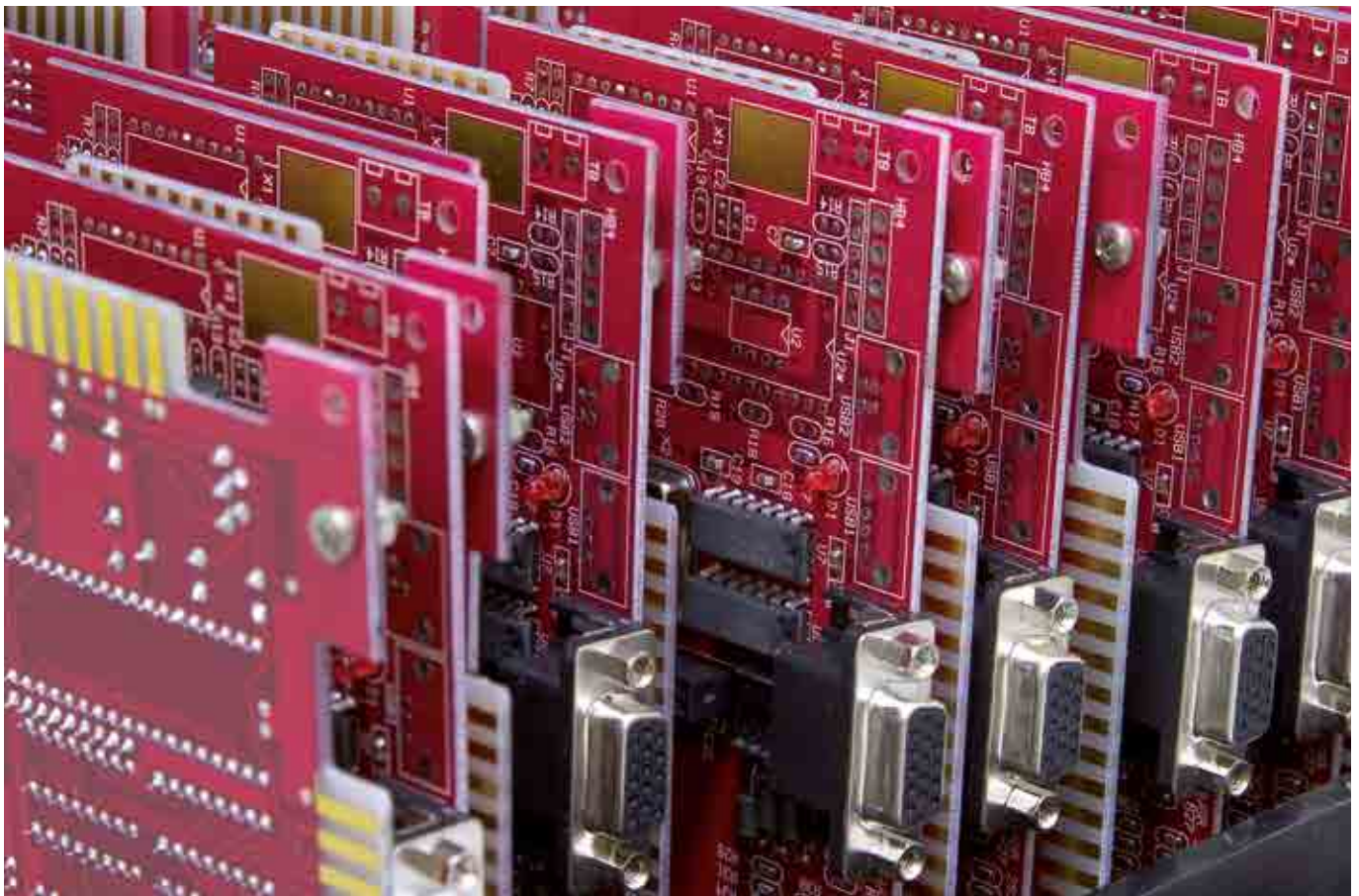
**SHE + Secure Hardware Extension Library**

SHE + driver support SHE security features plus extensions. SHE+ Emulation is executed in HSM (Hardware Security Module).



**Hitex complex drivers for AURIX**

Hitex can assist with driver creation and tool configuration. We have access to in-depth technical information and the experience to allow us to implement drivers rapidly and to a range of quality levels.



## Manufacturing

System Architecture- & Detailed Design Specification and Implementation

### Board Level

- Boards designed by the customer or by Hitex
- Prototype, small or mass-lot production
- Component procurement
- In-house production test

### System Level

- Quality control
- Fulfillment
- Hitex webshop sales platform
- Worldwide logistics
  - Experts in Export-Controlling and Customs
  - Classification of Products according to AL and ECCN
- Maintenance

# Manufacturing

Everything you need under one roof:

## Production of prototypes and series products

With Hitex NPI Services (New Product Introduction) you get your products faster and cheaper to market. Central to NPI processes is early phase prototype development. The aim is to establish from all production facilities the quickest and most efficient route to market entry and the total volume production process promises.

Hitex Electronics Manufacturing Services (EMS) provides all options for the production of standard products from small up to high volume quantities, including SMT production, electrical assembly, THT assembly and issues such as lead-free soldering and traceability.



## Fulfillment (system assembly, logistics, export control)

Hitex advises and supports you in selecting the optimum packaging for the system assembly, whether this is from sustainable or conventional sources. From a simple brown carton box up to the elaborate folding box or any other packaging needed, we can help. Hitex also takes responsibility for the assembly of all prototypes.

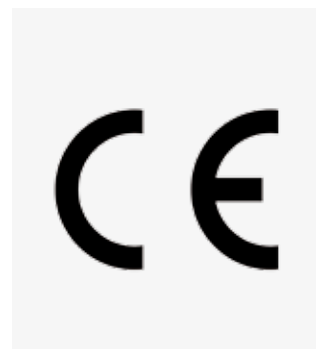
We offer all the logistics services you need for your supply chain: packaging, storage and shipments to bringing the finished products to market.

Hitex not only has the appropriate infrastructures and storage facilities in place, but our shipping terms are competitive. We send worldwide while adhering to the regulations set by export regulation. Customs and export control issues are consistently implemented and monitored.



## CE certification with EMC tests

Our Testing Services for electromagnetic compatibility include interference and emission tests. These tests ensure that an electronic device is not influenced by any other electronic device nearby (interference test) nor shall it influence other devices (emission test).



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Consulting

Engineering

Testing

Training

Tools

Software  
Components

Systems  
Manufacturing