Tools
Methods
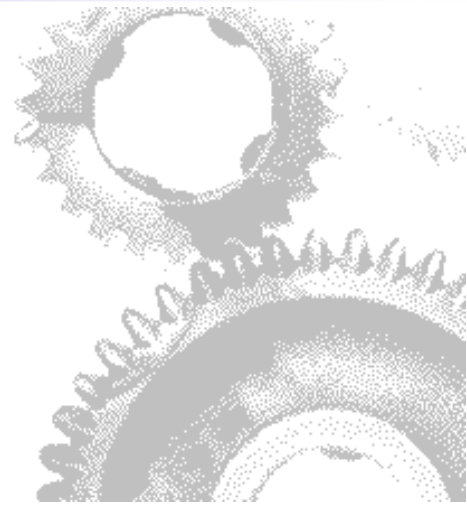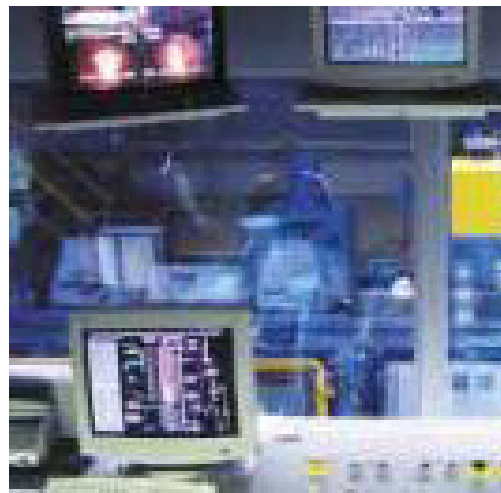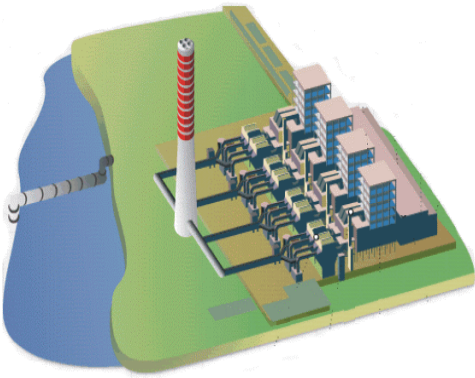**Technologies**
In the IT sector of industry

T&T *SYSTEMS*
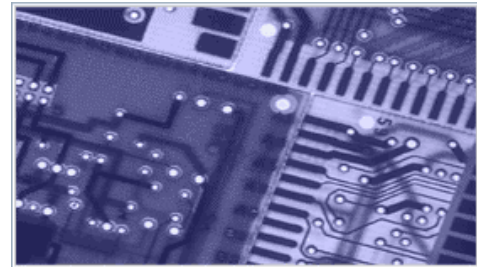
Applied Microsystems
CORPORATION

OSE systems

Mentor Graphics

About us

T&T Systems s.r.l. is a company that specializes in development, the use of tools, and methods of technologies in the IT sector of industry

- We work especially with **controls**, **supervision**, and the **automation of process**
- We concentrate on **software development** of **real-time** application for **firmware**
- We have an extended knowledge of the most widely used systems of **supervisory control and data acquisition** (**SCADA**) on the market
- We have solid experience in **controls and monitoring** for the **production and distribution** of **electrical power**
- We are **up to date** with the **latest** and **most advanced embedded** and **real-time technologies** available in the IT sector
- We base our **work strictly on the International Organization for Standards** (**ISO 9000**) and we have worked with classified material for both military and civil contractors
- We utilize both in-house **standards** and those of our clients thought out the design phase
- We have adopted the **UML** (**Unified Modeling Language**) as the in-house standard for planning and design
- Knowledgeable in issues pertaining to the **standards of safety** (**IEC 61508**, **UL 1998** and their derivatives)

Our clients

T&T Systems proposes to:

Final users	• The design and development of ready to use systems and applications
Businesses that develop and supply software and systems	• Analysis and design that spans entire projects or a single entities • The development of software applications and firmware • Written documentation based on the standard of quality dictated by the ISO 9001 • Testing and certification, which also includes the use of tools, and specifically designed software • The placement of specialized personnel in work groups with the actual customer • We offer specialized courses that cover the latest technologies in design, quality, and safety standards
Businesses that develop hardware	• Design and development of embedded software for testing • Development of applications to fulfill particular needs requested by their clients

Skills

Our technical skill:

- Well versed in programming languages and **real-time operating systems** (RTOS) used in today's market
- Well informed on different **development platforms** for **embedded software**
- Experienced in the handling and the **transmission of data** in **real-time applications**
- Design and development of software for **SCADA systems**
- Knowledgeable in **telecommunications networks** and **data transmissions**
- Software design based on the **ISO/OSI standards** for communication protocol handling that are most frequently used in industry
- Development of applications using **CLIENT/SERVER architecture** in embedded real-time systems
- Design of **firmware for microprocessor cards** (8 bit to 32 bit)
- Knowledgeable in multiple **PLC** family programming languages
- **Software drivers** for numerous series of microcontrollers and intelligent chips
- Working knowledge of the most common **BUS data** used in industry
- Software development and personalized applications on **DCS**
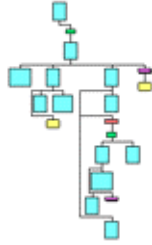- Extremely knowledgeable concerning **safety standard** for programmable electronic systems

Our team

The T&T Systems team is comprised of 20 people. The team is made up of both employees and contract workers of whom 14 of them have degrees in scientific disciplines. Personnel training is done with in the company and the new co-workers are taught about various tools and work methods.

Contacts

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Tax Identification Nbr.	12539930151

T&T SYSTEMS

Specification

■ Understanding the problem along with the client

■ Defining the functionality that is being asked for by the client

■ Defining the requirements for the application

■ The company standards for specification, analysis, and design are governed by the UML paradigm

Study of Feasibility

■ Ascertaining the feasibility of the functionality asked for in relation to the available resource (hardware and software) and time/costs

■ Deciding which platform to use

■ Planning work activity

Architectural Analysis

■ The method of analysis is Object-Oriented (UML)

■ Planning of complex, distributed, parallel, and sequential architectures

■ Utilizing tools (CASE) for software engineering

Software Design

■ Use of a modular design that will allow software to be reused

■ Competence in engineering, physics/mathematics, and information technologies

■ Handling of complex calculation procedures

Implementation

■ Installation, configuration, real-time operating systems, development tools, programming languages.....

■ Accumulated work experience within different work groups, integration and software releases in their different phases

■ The use of debug software, emulators, microcontrollers, peripherals, and simulators

Validation and Verification

■ Defining functionality to be tested and the creation of a test-case scenario for the components of the system

■ Hardware integration and the use of software analyzers for both protocol and performance

■ On site installation and the release of necessary manuals

Maintenance and Modernization

■ Maintenance can extend from a simple fix, to the expansion and updating of the product, and the possibility of porting to another platform

■ Modernization and optimization of the product

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