



TT General
Crypto





Overview

Established in: 2000

Headquarter: Torino, Italy

Location: Modena/Torino (Italy)

Ownership: Privately owned

Engineers: 200

Sales: €12M: 2022

Sector: Industrial engineering

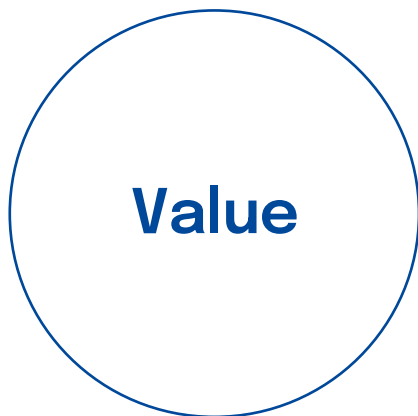
Growth: Avg. 9% annually over 20 years

R&D: 7% of annual sales

Customers: Automotive manufacturers, Supplier industry,
OEM

Competences: Automotive development, Global project
competence, Industry-specific engineering





Customer orientation

Thanks to the expertise of our employees, we work together with our customers along the entire development process chain at a constantly high level.

Flexibility

As a technology-oriented company, we constantly optimize our products and processes to ensure that we can respond proactively and flexibly to current customer needs and meet new global challenges.

Integrity

Those wishing to lead in a forward-looking way and plan carefully must be open to the needs of their customers and staff.

Recognition

Through targeted training and further education, we encourage our staff to achieve outstanding performance and motivate them to accept responsibility for challenging assignments.



SKILL VALUE AND DISTRIBUTION

Exterior / Interior / Underbody / Space Frame/ TAB

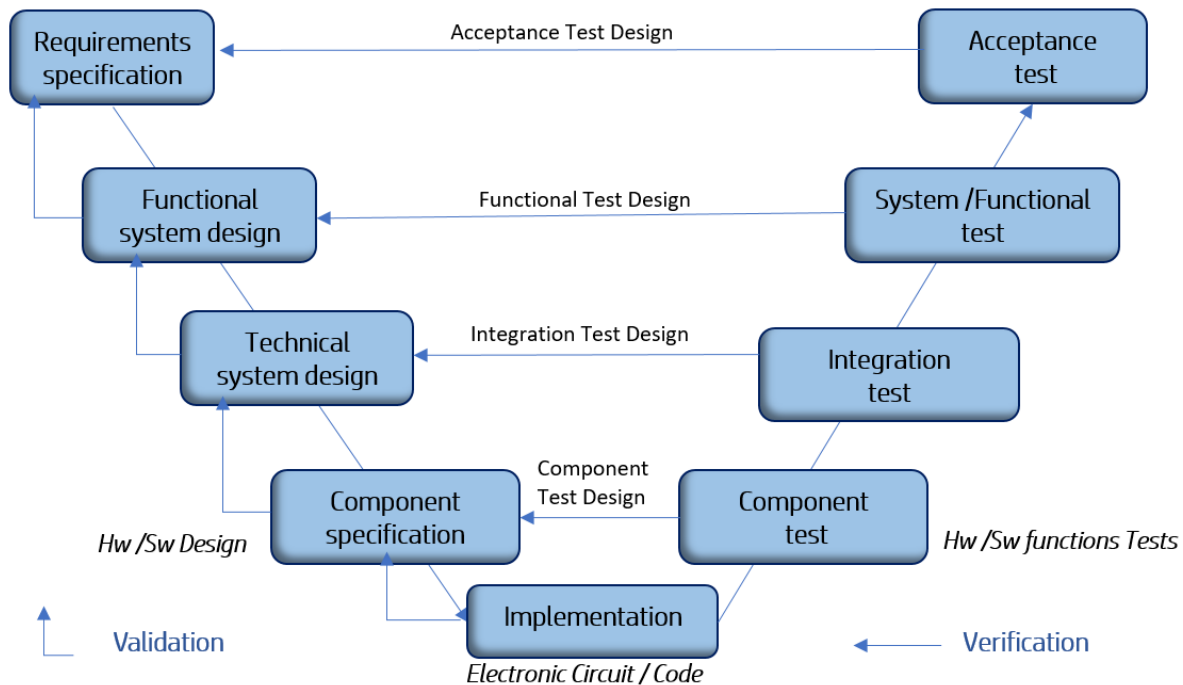


Competences	Value	L1	L2	L3	L4	L5	L6	L7	M1	M2	M3	N1	N2	N3	Super Car	Few off	Show car
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Vehicle level	Project management	Very High High Medium Low																
	Vehicle Concept Evaluation and definition	Very High High Medium Low																
	Vehicle/system Performance definition, management	Very High High Medium Low																
System Level	Dev. Steel syst.	Very High High Medium Low																
	Dev. Alluminium syst.	Very High High Medium Low																
	Dev. Composite syst.	Very High High Medium Low																
	Dev. Plastic Injection syst.	Very High High Medium Low																
	Dev. Thermoforming syst	Very High High Medium Low																
	Tier 1 Component Development (lighting, sealing, glasses, vehicle TAB)	Very High High Medium Low																

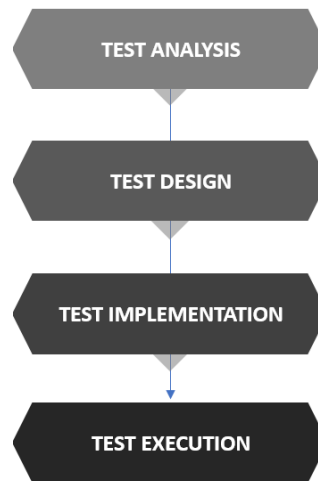


The Activities



Expertise

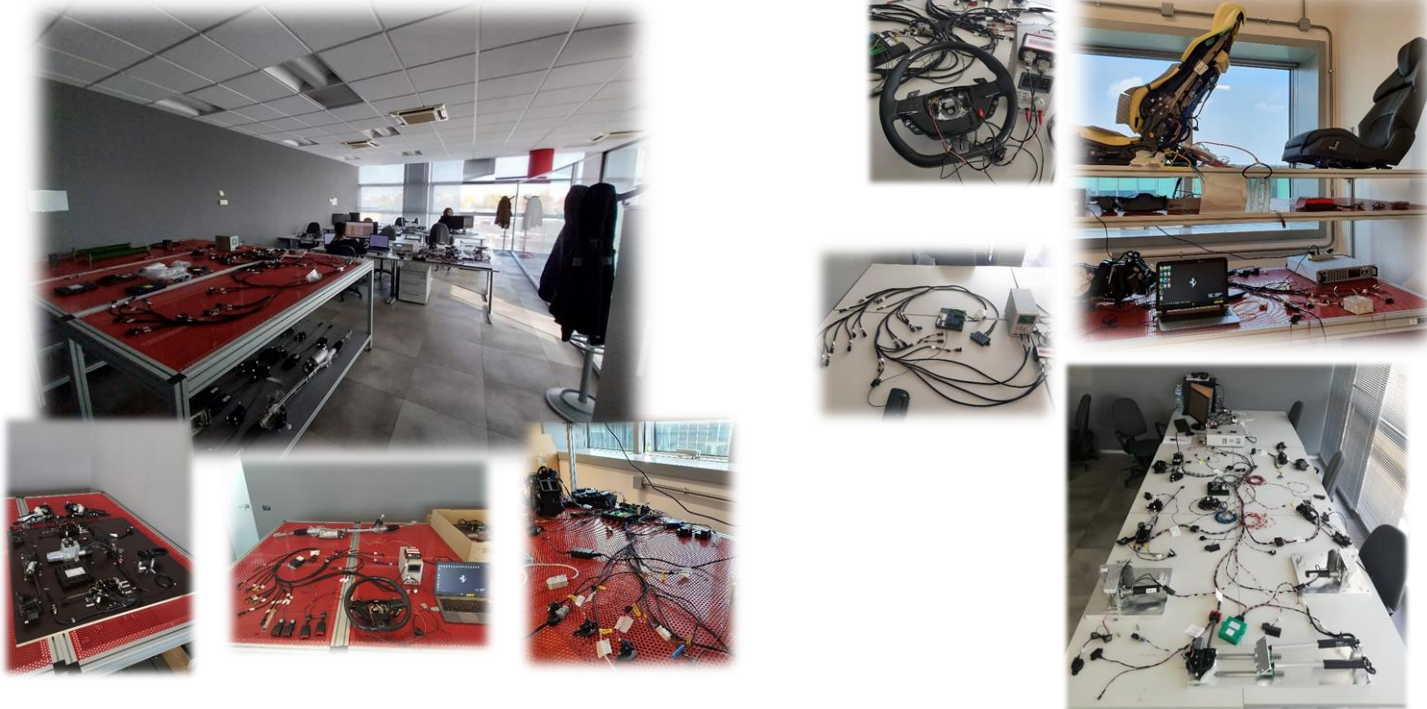
- **REQUIREMENTS & SYSTEM INTEGRATION TESTING:** Functional Tests for Requirements V&V, System Integration Tests, Performance Tests, Robustness Tests, Spike Tests, MIL, HIL, SIL
- **SW UNIT TEST / SW INTEGRATION TESTING:** Cross compiler toolchain validation, Test environment set-up MCDC Coverage, Branch Coverage, Boolean, Decision to Decision Coverage, Functional Black Box Testing, Structure Based Testing (White Box)+
- **HW TESTING:** Analog Signature Analysis, White Box Testing, Hardware Stress Test
- **TEST BENCHES:** External hardware interfaces simulation, Software Development for Board Acceptance Tests and Material Acceptance Tests



- Specific Technical Knowledge (C/C++/C#/Javascrit, and so on...)
- Complex Documentation Management
- Knowledge of common Testing tools
- Software testing knowledge (how-to)

Our Hw&SW Prototyping and Testing LABS

Turin and Modena



Functional Safety Management

Turin Tech provide services for Technical Safety requirements, design, development, and validation of systems in accordance with **ISO-26262** standard for security vehicle architecture, interfaces, gateways and networks. Our engineers support customers to understand the vehicle system aspects in order to propose optimized safety mechanisms at the system, hardware, and software levels without over-engineering the safety mechanisms which could impact the cost and performance of the electronic systems.

➤ Application of **ISO26262** standard :

- High level safety concept
- Safety plan definition
- Safety strategy identification and proposal
- Safety mechanisms identification and proposal
- Safety measure identification and proposal
- Identification of Top Level Functional Safety Requirements/Safety Goals
- Derivation of the Functional Safety Requirements
- Review and support in the derivation of the Technical Safety Requirements
- Review and support in the derivation of HW/SW safety requirements and their allocation
- Review and support in the execution of Safety Analyses (FTA, FMEA, FMEDA, SW-FMEA)
- Functional safety management for integrated Vehicle Control Unit, with ASILs up to D



Embedded Cybersecurity

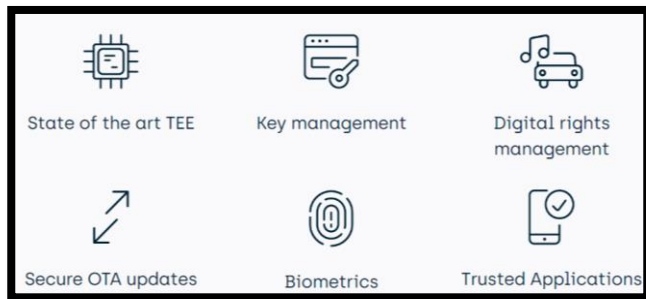
TRUSTONIC

Ensuring hardware and digital services integrity through security for automotive industry, automakers and tier ones

- Implementation of crypto algorithm
- Porting of the OpenSSL C security library as a Trusted Application (TA), to be executed inside the Trustonic's Trusted Execution Environment (TEE)
- Client/Server TCP and SSL connectivity
- Porting of the libcrypto stack, that includes the vast majority of the crypto algorithms available for the market (AES, RSA, EC, DH, etc..)
- Development of a vulnerability assessment tool

Applications:

- Mobile
- Automotive
- Internet of Things
- Technology





Thank you

